14023 U.S. PTO 071006

PTO/SB/05 (04-05)
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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	DB001229-000
First Inventor	Mark A. Cavicchia
Title	INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Express Mail Label No.	EV 671577835 US

113268 U.S. PTO 11/484510 071006

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☑ **Fee Transmittal Form** (e.g., PTO/SB/17)
   (Submit an original and a duplicate for fee processing)
2. ☑ **Applicant claims small entity status.** See 37 CFR 1.27.
3. ☑ **Specification** [*Total Pages* 32]
   Both the claims and abstract must start on a new page
   (For information on the preferred arrangement, see MPEP 608.01(a))
4. ☑ **Drawing(s)** (*35 U.S.C. 113*) [*Total Sheets* 9]
5. **Oath or Declaration** [*Total Sheets* 2]
   a. ☑ Newly executed (original or copy)
   b. ☐ A copy from a prior application (37 CFR 1.63(d))
   (for continuation/divisional with Box 18 completed)
   i. ☐ DELETION OF INVENTOR(S)
   Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☐ **Application Data Sheet.** See 37 CFR 1.76
7. ☐ **CD-ROM or CD-R** in duplicate, large table or Computer Program *(Appendix)*
   ☐ Landscape Table on CD
8. **Nucleotide and/or Amino Acid Sequence Submission**
   (if applicable, items a. – c. are required)
   a. ☐ Computer Readable Form (CRF)
   b. Specification Sequence Listing on:
      i. ☐ CD-ROM or CD-R (2 copies); or
      ii. ☐ Paper
   c. ☐ Statements verifying identity of above copies

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Alexandria VA 22313-1450

ACCOMPANYING APPLICATION PARTS

9. ☐ **Assignment Papers** (cover sheet & document(s))
   Name of Assignee _____
10. ☐ **37 CFR 3.73(b) Statement** *(when there is an assignee)* ☐ **Power of Attorney**
11. ☐ **English Translation Document** *(if applicable)*
12. ☐ **Information Disclosure Statement** (PTO/SB/08 or PTO-1449)
    ☐ Copies of citations attached
13. ☐ **Preliminary Amendment**
14. ☑ **Return Receipt Postcard** (MPEP 503)
    (Should be specifically itemized)
15. ☐ **Certified Copy of Priority Document(s)**
    (if foreign priority is claimed)
16. ☐ **Nonpublication Request** under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or equivalent.
17. ☐ Other: _____

18. If a CONTINUING APPLICATION, *check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:*

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: .....

Prior application information: *Examiner* _____ *Art Unit:* _____

19. CORRESPONDENCE ADDRESS

☑ The address associated with Customer Number: 24122 *OR* ☐ Correspondence address below

Name					
Address					
City		State		Zip Code	
Country		Telephone		Email	

Signature		Date	10 July 2006
Name (Print/Type)	Carl A. Ronald	Registration No. (Attorney/Agent)	43,057

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FEE TRANSMITTAL
For FY 2006

☑ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 1,225

Complete if Known	
Application Number	
Filing Date	10 July 2006
First Named Inventor	Mark A. Cavicchia
Examiner Name	
Art Unit	
Attorney Docket No.	DB001229-000

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☑ Deposit Account Deposit Account Number: 20-0888 Deposit Account Name: _____

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FEE CALCULATION (All the fees below are due upon filing or may be subject to a surcharge.)

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

	FILING FEES		SEARCH FEES		EXAMINATION FEES		
		Small Entity		Small Entity		Small Entity	
Application Type	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fees Paid ($)
Utility	300	150	500	250	200	100	500
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee ($)	Small Entity Fee ($)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee ($)	Fee Paid ($)
45 - 20 or HP =	25	x 25	= 625

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims	Extra Claims	Fee ($)	Fee Paid ($)
4 - 3 or HP =	1	x 100	= 100

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Multiple Dependent Claims	
Fee ($)	Fee Paid ($)

3. APPLICATION SIZE FEE

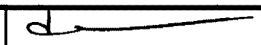
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_____ - 100 =	_____	/ 50 = _____ (round up to a whole number)	x _____	= _____

4. OTHER FEE(S)

	Fees Paid ($)
Non-English Specification, $130 fee (no small entity discount)	
Other (e.g., late filing surcharge): _____	

SUBMITTED BY

Signature		Registration No. (Attorney/Agent) 43,057	Telephone 412-394-7775
Name (Print/Type)	Carl A. Ronald		Date 10 July 2006

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Patent Application of

Mark A. Cavicchia

for an

Interactive Program Guide Application and Device

FIELD OF THE INVENTION

[0001] This invention relates to an interactive program guide (IPG) application and device to receive, access, manage, and view digital entertainment services such as live television, television on demand, and pre-recorded video and audio programming from one on more content sources, via an internet-enabled device, anywhere in the world.

DESCRIPTION OF THE PRIOR ART

[0002] During the 20th century, the advancement of technology has led to the development of "consistent user experience" mobile entertainment devices, starting with the AM radio, that provided a user with a set of specific tasks, that when completed in a certain order, would always yield a similar result within a certain geographic area. For example, an AM radio user could travel from location to location within the City of Los Angeles and access the same radio programming on the same frequency, even if the user traveled 50 or so miles away from Los Angeles but within the sufficient range to receive the radio signal.

[0003] Soon thereafter, the advent of microelectronics led to the development of integrated content presentation components including: AM/FM radio, tape cassette, televisions, and eventually CD players into a single device. In addition to radio and television programming, these devices allowed users to access specific recorded content whenever desired. However, while users could access recorded content on a specific media (i.e. CD, DVD, etc.) anywhere in the world, local radio and television programming was limited to a broadcast signal's range across airwaves.

[0004] The formation of the cable television content consolidator, also known as a Multiple System Operator (MSO), in the United States during the1960s, signaled the birth of a "consistent user

experience" television viewing whereby a user could travel from one location to another (beyond traditional television airwave broadcast ranges) to access identical programming in distant locations. Users, for the first time, could access local content from a remote location.

[0005] For example, a user in New York City could travel to Los Angeles and watch selected local New York television programming on any Los Angeles MSO's cable system that received and broadcast local New York channels. However, assuming the New York content was being broadcast in Los Angeles, the user was forced to determine which channel it was playing on in the Los Angeles MSO system since the New York City channel was not necessarily programmed to be accessible from the same channel on the Los Angeles MSO's system.

[0006] With the introduction of cable television and the large variety of available programming, came the introduction of a second important technology to enhance the television viewing "consistent user experience" – television program guides. These guides listed available programming by channel and time. Television program guides, both printed and electronic/interactive, are well known and found in newspapers, television guide booklets, and as persistent graphical user interfaces on television screens. Cable television listings, as well as public television listings, are now available in the form of IPGs or Electronic Program Guides (EPGs), which are populated and controlled by each MSO.

[0007] A third, but equally important technology in the evolution of the television viewing "consistent user experience", was the introduction of personal video recorders (PVRs) in the 1990's. PVRs allowed television viewers to store television programming as digital files and view programming via a second IPG (independent of the MSO's IPG). In one example of such a PVR system, television users can watch what they want, when they want, by recording television shows from an MSO to create a customized television line-up accessible through the PVR's IPG for viewing at any time. Most recently, a number of MSO's have integrated their proprietary IPG with a PVR so a user can record programming and watch it at a later time through a single interface. It is also currently known to consolidate content in a single physical location so that a user can access MSO and PVR content from a single IPG.

[0008] A fourth technology that has revolutionized the entertainment industry is the portable multimedia device, which includes such exemplar devices as the laptop, PDA, and cellular telephone. These mobile devices allow users to download, stream and access redirected video and audio files from the Internet and are intended to allow for users to download and view individual programs via a traditional computer-based graphical user interface for viewing at a later time.

[0009] Simultaneously with the proliferation of the portable multimedia devices, new consumer-oriented services including television over IP networks (IPTV), multimedia streaming over broadband networks, and personal media redirection are becoming available to meet the growing needs of users in the fields of video on demand, time-shifted television and radio.

[0010] Recently, some major content owners have begun to offer programming via the Internet. This allows users to bypass the traditional MSO subscription and license content directly via the Internet. Additionally, numerous Internet-only television channels and video podcasts have been created by independent content owners and are expected to grow at a tremendous rate over the coming years.

[0011] Presently, there is no application or interface that allows a user to manage multiple subscriptions from multiple content owners in an easy to use format. There are IPTV providers, which essentially are Internet-based MSO's, acting as a "content aggregation middleman" between the content owner and the user, but these all follow the traditional cable-television, content aggregation model where the MSO, rather than the user, is in control of what content is available.

[0012] As all of the previously mentioned technology continues to evolve and converge, user demands and expectations regarding content availability and access continue to increase at a staggering pace. Concurrently, the number of proprietary entertainment devices and platforms also continues to grow, giving the user multiple devices, MSOs, content owners, and IPGs to manage. These disparate systems and devices are making the possibility of a persistent user experience more challenging and complex.

[0013] While attempts have been made to integrate computers and televisions in order to deliver all available content through a single device, these efforts have lacked the necessary synergy to revolutionize the way people watch video content or programming. One reason these efforts have been largely

unsuccessful is that almost all attempts to present television programming on a computer have been too technical for the average user as computers are generally geared toward interactive productivity rather than passive entertainment. This can alternatively be thought of as the difference between a "lean forward" system wherein the user is performing some task through the use of a mouse and keyboard and a "lean back" system that is characterized by the use of a remote control device. Moreover, typical "lean forward" experiences are often only experienced only by a single person; whereas, "lean back" activities are often experienced by groups of people. "Lean back" activities, such as passing a remote control from user to user also provide a "persistent user experience" with minimal effort.

[0014] A second reason that users have not adopted IPTV systems is because they simply replicate the existing television viewing experience or, in some case, decrease the overall television viewing experience by limiting available content or decreasing the overall viewer experience with sub-standard video quality or an extremely small display screen.

[0015] To date, attempts to integrate the traditional television experience with computers and the Internet can be grouped into three categories:

a) In-home media management centers that allow users to share content within a single physical location;

b) "Redirection systems" that allow users to place-shift captive content from one location to another; and

c) Proprietary IPTV systems that replicate existing "single content-provider" cable television features and functionality.

1. In-home Systems.

[0016] The first category of integrated television and computer devices can be found in the current MSO IPGs. Existing MSO set top boxes (STB) were originally designed for stationary use in a single physical location (i.e. a home). Today, even if an MSO wanted to provide a persistent user experience with true mobility, there are several reasons that prevent this from occurring. These include: limitations on

geographical broadcast rights, disparate content offerings between MSOs; stationary STBs; and the inability to use one MSO's STB on a second MSO's system.

[0017] Cable television MSOs do not allow a user to view local content from a distant geographical location via an STB. Each MSO maintains independent cable programming that varies from location to location, with a proprietary IPG that is maintained and configured by each MSO independent of one another. Existing MSOs also limit the user to an IPG organized and controlled by the MSO, hindering the overall user experience and preventing access to and integration with independent content sources, such web-based content providers.

[0018] The user is confined to a specific physical location (i.e. a specific home or hotel room) and is denied a "persistent user experience" beyond the MSO's service area because in this model, the STB is a stationary device that contains the IPG. User access to the system is authenticated through a fixed STB and is maintained and controlled by the MSO.

[0019] The user also has little control over the availability of specific content from a cable television MSO. For example, if the MSO chooses not to purchase rights to broadcast a specific content provider's channel, the user cannot access or integrate that specific content provider's channel onto the STB's IPG even if a separate content access relationship has been established.

[0020] Cable television MSO's also do not allow for inter-system integration, whereby a user would be able to connect an STB from MSO to another MSO's cable television system. The MSO's STB (and the IPG contained therein) are typically connected via a hard wire (e.g. coaxial) to an MSO's system, each of which has unique and disparate content distribution systems such that a user could not connect an STB from a home location (e.g. Los Angeles) at a second MSO's location (e.g. a Las Vegas vacation home or hotel) and expect the STB to work as it does in the user's home location. In most cases, the STB would not be even able to connect to the second MSO's system.

[0021] Lastly, the user is also unable to customize the IPG to reflect personal preferences beyond what content is available either via the MSO's STB and the user's personal media library. And because these systems are fixed and limited in geographic reach, there are no present plans to unify cable system

platforms such that users could use an STB from one MSO in a second MSO's broadcast territory. Therefore, based on the cable industry's content provider-centric mentality, a user can not, and will not anytime in the foreseeable future, be able to easily port an STB from one MSO location to another outside of the MSO's service area.

[0022] Although the abovementioned reasons would prohibit a user from viewing one cable provider's content in a second content provider's geographical location, the last, and most obvious limitation of existing cable television systems is portability. A typical cable television system includes the following components: a stationary Set Top Box with a proprietary IPG that is typically is connected to the cable provider via a hardwire connection e.g. coaxial cable; a remote control; a television, which is typically too large to easily transport; an audio receiver and speakers, which are also too cumbersome to easily transport. Specifically as it related to the present invention, the proprietary IPG cannot be "sent" from one MSO's STB to another MSO's STB so the user could access it and the content to which it refers from a second location.

2. Redirection Systems

[0023] Although current PVR's available today have limited broadband or long-range wireless communication capabilities, users can only remotely program the PVR to record programming over the Internet. There are several new inventions that allow users to "redirect" content from one physical location (i.e. a home) and receive content on a computer device via an Internet connection. The devices allow the user to "place shift" or "space shift" content from one location to another.

[0024] Similar to in-house "remote control" devices mentioned previously that communicate with a stationary television and one MSO's STB in a single physical location (i.e. a house or apartment), a user can access content from a remote location by connecting to a physical piece of hardware known as a "redirection device" that transmits incoming content from an MSO's STB to a remote location designed by the user.

[0025] All of these systems and devices allow a user to remotely access television content from a computer device connected to the user's home television from a remote, Internet-enabled location, as long

as both locations are maintained by the user and connected to the Internet. If either location cannot access the Internet, or if any required component of the home television system (i.e IPG, cable network signal, PVR or home computer) becomes unavailable, these inventions will not function as designed. More importantly, if the user's home cable system or PVR does not offer a specific program channel or content source, these devices will not be able to provide the user with the desired content since it is not available in the home location.

[0026] Additionally, these systems focus on receiving content, but do not address usability requirements between the device and the user, which is the critical difference between a basic IPTV system, which is merely an attempt to replicate the current television viewing experience, versus a user-centric system of the instant invention that improves upon the existing television viewing experience.

[0027] There are several distinct limitations that redirection systems have that would also prevent the user from experiencing true mobility with a persistent user experience. One glaring problem is the lack of content redundancy, such that if the Internet connection between a user's redirection system and the remote location were unavailable, or if the physical location lost power, or if the content source were interrupted or unavailable. The lack of content redundancy, in case the single content source becomes unavailable, is a major disadvantage of these types of systems.

3. IPTV Systems

[0028] Current attempts at providing television programming via an IPG over computers, hand-held computers, and various other mobile devices have merely attempted to replicate, not enhance, the overall user experience associated with television viewing because they have all followed the existing cable television MSO model whereby content availability is controlled by a specific content provider rather than the end-user. Additionally, users are locked into a single content provider and cannot access independent provider content from the IPTV MSO device, nor do these systems manage user authentication across disparate content sources. Other IPTV MSOs limit access to their system by forcing the user to purchase a specific device in order to do so.

[0029] Additionally, existing IPTV IPGs are nearly identical in functionality to traditional cable television MSO IPGs in that each operates independent of one another – content owners versus content aggregators – and are content-owner centric instead of being user-centric. Content cannot be aggregated, consolidated, and managed from disparate content sources into a single IPG like the present invention provides.

[0030] Some existing IPTV systems integrate a media content creator; a media streaming engine with content storage, switching, IP packet routing, and delivering capability; and a billing, user authentication and management, content protection and digital rights management capability, but do not provide explanation for how users would access their system any different than existing TV providers do today. The act of merely making content available in some generic form via the Internet will not be sufficient to influence consumers to modify existing television viewing habits and start watching television on a computer.

[0031] To summarize, all current television programming delivery systems have one or more of the following limitations that restrict the overall user television user experience: a) they do not permit the user to control where and when television programming is viewed; b) they do not permit the user to customize and access a persistent IPG from one location to another or from device to device; c) they do not permit the use to watch live television programming while in motion; and d) they require the user to watch television in what has been characterized as a "lean forward" fashion.

[0032] Today's content user wants to be able to watch or listen to programming wherever and whenever it is convenient, with minimal effort. Many devices allow users to download content onto a portable device, and some even allow users to watch television programming in real-time. But in each case, existing inventions in one way or another limit the user from a "true mobility" experience whereby content sources, IPGs, and disparate MSOs can easily be managed, organized, and viewed from a single application and can easily move from device to device. Additionally, no portable IPG allows for content to be received or orchestrated by a mobile device and then be connected to a television monitor so that a "normal" television viewing experience can be preserved.

[0033] It is anticipated that some of the advantages of the present invention will be to reduce the burden placed on the user and allow true mobility with a persistent user experience independent of device, MSO, or content provider by transforming the concept of an IPG and STB from a physical location or device-centric perspective to an IPG and STB that becomes associated with an individual user, independent of location or device. The present invention is also directed toward providing the user with an enhanced television user experience from any internet-enabled location the user prefers (i.e. mobile or stationary) in the world.

[0034] The present invention allows a user to access and view the same content through an identical IPG anywhere in the world an Internet connection is available and is based on user-defined preferences, not content availability restrictions provided by a content-provider or consolidator, such as an MSO. The present invention provides access directly with content owners, as well as MSOs, so users are not limited to an MSO or content "middleman" who limits or controls what content is available. The present invention is not associated with a specific MSO, although it may be integrated on a data level with one or more MSO IPGs to receive and organize programming content and metadata as the user would experience at home. The user can also manage independent content subscriptions and add, delete programming channels in "real-time" that might not be available through subscribed-to MSO's (i.e. a user with a subscription to Time Warner Los Angeles and Comcast Philadelphia might not have access to China's CCTV5 television, but could subscribe directly with CCTV5 and integrate this channel into the IPG).

[0035] The present invention also consolidates content from disparate sources, manages authentication for each of the content sources, and allows for viewing from a single, customizable IPG. The user does not need to switch from a content-provider's IPG to a PVR's IPG to a Video on-demand (VOD) system's IPG to see multi-sourced content.

[0036] The present invention also makes the requirement of a personal media source optional. The user does not need a physical piece of hardware such as a PVR or a place-shifting or space-shifting device to access content remotely.

[0037] The present invention allows a user to move from location to location and easily acquire, organize and view digital entertainment content from one or more independent content sources (including channel listings, programming information, and saved content) via a "follow me" personalized global IPG that is available on any device that is connected to the Public Internet. The goal is to shift the control of content availability, organization, and access from MSO's, which is today's cable television model, to a new user-centric model where the user can choose whether or not to purchase content from a content consolidator or directly from independent content providers.

[0038] Additionally, the user can also organize channels based on personal preferences. For the Los Angeles user mentioned previously, Channel 8 on the IPG would always present ESPN, no matter what location – Los Angeles, Las Vegas, Shanghai, etc. Programming that is available from independent content providers (i.e. via a website or IP-based subscription service) can also be configured in a similar fashion.

[0039] All authentication services (i.e. user name/password combinations) are managed by the IPG so a user can seamlessly browse from one content source to another in a "lean-back" experience without having to "log-in" to each system as most IPTV services require users to do today. The user would not have to perform a manual authentication process to access each content source since the IPG would automatically authenticate the user, regardless of the service provider. And if the user wanted to add a new channel or subscribe to a specific program, content acquisition and subscriptions can be completed in real-time.

[0040] Content can either be viewed on a portable device or the device can be connected to a television monitor so a normal television viewing experience can be preserved. Video quality is also automatically configured so that lower resolution (i.e. DVB-H) is delivered to a portal device's viewing screen, and is enhanced to a higher quality (i.e. SDTV, HDTV, etc.) signal when the IPG is being viewed on a television monitor

[0041] Finally, unlike current IPTV systems that focus on space shifting or place shifting, where physical hardware must be installed and in working order, the global IPG System can identify and connect with an alternative source of the same content if the content source becomes unavailable.

[0042] Accordingly, the global Interactive Program Guide System and Method of the present invention:

(a) provides a user with an easy to use, "lean backward" IPG and device that can be used to receive and view IPTV or PVR content from one or more content sources anywhere in the world an Internet connection is available;

(b) maintains and presents a persistent, "follow me", content-provider independent, automatically configurable IPG, regardless of physical location or viewing device.

(c) provides a means for accessing programming from an alternative content source if the default content source becomes unavailable (i.e. content redundancy);

(d) allows the user to subscribe, manage, view, and unsubscribe to new content sources or content subscriptions in real-time;

(e) allows for the remote management of digital rights from a one or more disparate sources from a single interface;

(f) allows for time shifting of entire programming without having to program or maintain a PVR or similar device;

(g) allows for an always connected, portable set top box, regardless of Internet service provider or MSO.

(h) provides a user with an easy to use, "lean backward" mobile device that can be used to receive and view IPTV video, PVR, and audio content anywhere in the world; and

(i) filters content, based on content owner, user or regulatory agency preferences, based on the mobile device's geographical location.

[0043] Further advantages of the present invention are to provide a consistent, user friendly experience anytime, anywhere a Public Internet connection is available. Still further advantages will become apparent from a consideration of the ensuing description and drawings.

SUMMARY OF THE INVENTION

[0044] A global interactive program guide system, device, and method for use in conjunction with one or more sources of digital content, including, but not limited to: existing MSO subscriptions (e.g., Adelphia Santa Monica), independent content subscriptions (e.g., NFL Ticket) or personal content devices (e.g., a PVR located the user's home). The global IPG can move and be viewed from device to device or can be viewed on a stationary device that is always available, depending on user preferences.

[0045] In accordance with the present invention, the user would be able to physically move from location to location (e.g., Los Angeles, USA to Shanghai, China) and easily receive live or time-shifted digital content, including, but not limited to IPTV or retrieve other digital content (e.g., PVR content) either directly via a persistent IPG present on a mobile device connected to the Internet.

[0046] One embodiment of the present invention relates to a system allowing the IPG to be continuously present on a mobile device that quickly connects to wired and wireless networks giving users a simple, easy to use "lean backward" solution to meet their time-shifted TV and radio programming, as well as video on demand needs.

[0047] Another embodiment of the present invention relates to a portable "cable card"/C-card (or other portable medium), which is a removable module the size of a network interface card that a user can insert into any internet enabled television or media center that is C-card compatible. The C-card takes the place of the set-top box in the sense that it handles encryption, authentication and other private network features. In this embodiment, the user would normally use the C-card to access content from a local MSO, but using the present invention, the user would be able to use the C-card to access the personalized IPG, which is independent from the local MSO and can be tied to the user's "home" MSO.

[0048] A third embodiment of the present invention relates to a series of viewing devices, including a television, cellular telephone, laptop computer, and handheld wireless device that utilize the same IPG. In this embodiment, the IPG follows the user from one device to another, regardless of physical location or Internet service provider.

[0049] Briefly, the present invention comprises one or more of the following components: (1) a global Interactive Program Guide Application; (2) one or more sources of IP-based digital content with appropriate metadata (i.e. channel, program name, length, digital rights management, etc.); (3) customer data (authentication data, billing data, personal IPG settings data, etc.); and (4) a "lean backward" mobile device that is connected to the public Internet.

[0050] Unique characteristics of the present invention are embodied in a "lean backward" IPG and device that provide a persistent user experience and true mobility. Digital content maybe remotely stored at various distribution facilities or on the mobile device. Metadata related to the remotely stored content is transferred to and locally stored in the device in the form of the global IPG, customized to the user's individual preferences.

BRIEF DESCRIPTION OF THE DRAWINGS

[0051] Preferred embodiments of the present invention are illustrated herein with reference to the following drawings, wherein:

[0052] **FIG. 1** is a diagrammatic illustration of mobile embodiment of the system and method of the present invention.

[0053] **FIG. 2a** is a diagrammatic illustration of an alternative embodiment of the present invention.

[0054] **FIG. 2b** is a diagrammatic illustration of another alternative embodiment of the present invention using a cable card.

[0055] **FIG. 3** is an illustrative matrix showing exisintg IPGs by cable or satellite television providers when compared to global IPG of the instant invention.

[0056] **FIG. 4** is a conceptual architectural diagram of the global IPG application

[0057] **FIG. 5** is a graphical representation of the mobile multimedia device (MMED) of the instant invention.

[0058] **FIG. 6** is a plan view of a preferred embodiment of the MMED of the instant invention.

[0059] **FIG. 7** is a flow chart of the method for presenting the global IPG.

[0060] **FIG. 8** is a flow chart of the method for subscribing to new content using the global IPG of the instant invention.

DETAILED DESCRIPTION

[0061] Referring to **FIG. 1**, an overview of one embodiment of the global IPG **12** System and Method of the instant invention is shown. A user **16** has the option of viewing content on a MMED **14** that is running a global IPG **12** from any internet enabled location, including, but not limited to: a home **18a**, an office **18b**, an automobile **18c**, an airplane **18d**, or a train **18e**, although this invention could be used via any internet-enabled device such as a cell phone, personal digital assistant or laptop, for example.

[0062] The user **16** can seamlessly view content from any licensed content provider **21** without having to manually authenticate after each new channel change. For example, user **16** can watch a traditional television content available from an MSO/content consolidator **24**, such as Comcast or Cablevision, on the MMED **14**, change the channel using the global IPG **12** and view programming from an independent content distributor **22**, such as the NBA **30**, who produces and distributes content, as well as authenticating its own subscribers through a separate content distribution facility **32**. A more detailed flow diagram showing this process is set forth in **FIG. 7**. Similarly, the user **16** could access personal digital subscriptions with the NFL **40** and Fox News **50**, without having to enter a username/password combination for each independent content provider subscription because the system and method of the instant invention handles all authentication and subscription in a way that is transparent to the user at the time of changing the channel on the global IPG **12**. Further, the user **16** could access content previously stored at the user's home or place of business on a Personal Media Manager **26**, which can be a device such as a personal video recorder (PVR), for example.

[0063] **FIG. 2a** shows one embodiment of the invention using a television **102a** that is directly connected to the public internet **20**. In this embodiment, the global IPG **12**, located on the MMED **14**, communicates with a segment of the global IPG code **154** located on a television operating system motherboard **150** in such as way as to optimize data transfer between the internet-connected television **102a** and independent content distributors **22**, MSO / Content Consolidators **24**, and Personal Media Manager **26**. Instead of digital content streaming through the MMED **14** as disclosed and set forth in **FIG. 1**, the MMED **14** and global IPG **12** are used to obtain and present data about available content to the user **16** on the television **102a**. Once the user **16** selects a specific program on the MMED **14**, the global IPG **12** communicates with the global IPG code segment on the television operating system **154** in such a way to route the streaming digital content directly from the licensed content provider **21** to the television **102**. For example, if the user **16** wanted to watch a basketball game via a subscription on NBA.com **30**, the user would browse the global IPG **12**, which would retrieve all relevant content programming data from NBA.com's distribution facility **32**. This content programming data and information would then be sent to the MMED **14** and viewable on the global IPG **12** and, additionally, presented to the user on the television **102a**. Once the user **16** selected a specific game to watch on the MMED **14**, the global IPG **12** would communicate with the global IPG code segment on the television operating system **154** to retrieve and view the selected basketball game from NBA.com's distribution facility **32**. Instead of the digital content broadcast going to the MMED **14** and then being transmitted to the television **102a**, the content would be transmitted directly via the public internet **20** from the NBA.com's distribution facility **32** to the television **102a** through the global IPG code segment on the television operating system **154**. Content programming data from the user's remote personal media manager **26** and MSO / Content consolidator subscriptions **24** would also be routed in a similar manner. Additionally, the global IPG **12** would communicate with the global IPG code segment on the television operating system **154** to control any devices directly connected to the television **102a**, including, for example, a Local Personal Media Manager / Video Recorder **104**.

[0064] **FIG. 2b** shows another embodiment of the invention working in conjunction with a cable card ready television **102b**. In this embodiment, the global IPG **12** is stored on a cable card (C-Card) **100**, which is inserted into a C-Card ready television **102b**. Such cable cards are known in the industry and provide for the feature inherent in a set-top box to be made portable and integrated with televisions. In this embodiment, the global IPG **12** includes the ability to peruse content, but also allows the user to manage subscriptions to content independent of MSO contractual limitations and browse local as well as remote personal media managers and ii) the user can remove the C-Card **100** and take it to a location outside of the MSOs service area (i.e. from a home location in Santa Monica, California to a second location in Shanghai, China), insert the C-Card **100** into a C-Card enabled television **102b**, and have an identical user experience as if the user were at home.

[0065] **FIG. 3** is a conceptual matrix illustrating user interactive program guides (IPGs) by cable or satellite television provider, as well as the global IPG **12** of the present invention. The conceptual matrix **200** shows cable companies and satellite television providers in the far left column **201**. The matrix **200** also compares the present invention to existing television-centric content providers by listing local, national, and international programming, as well as content specific providers and personal content sources across the top row **203** of the matrix **200**.

[0066] The top row details possible content available using the global IPG **12** of the present invention, including: local television content for a hypothetical market (Los Angeles), including a local ABC affiliate, KABC Channel 7 **202a**, a local FOX affiliate, KTTV Channel 11 **202b**, and a local NBC affiliate Channel 5 **202c**.; national channels CNN **210**; content-centric channels, such as professional sports leagues NBA's League Pass **220** and NFL's Season Ticket subscriptions **222**; web-based content, www.yuks.tv **230**; and personal content sources, including an in-home PVR **26**.

[0067] Using the first content column, KABC **202a**, and going down the column, an Adelphia Santa Monica cable subscriber could access KABC **202a** by tuning to channel 7 **204**. Similarly, a Cox Cable Los Angeles subscriber also accesses the same programming on Channel 7 **206**. Due to contractual limitations, a Minato Tokyo cable subscriber can not presently watch local Los Angeles ABC affiliate

KABC on the Minato Tokyo cable system because it is not offered by Minato Tokyo. Consequently, the appropriate box **208** on the matrix is notated "NA" for "Not Available". In the present invention, the user has programmed local television channels to appear in a familiar location, including KABC as Channel 7 **252** on the global IPG **12**, KCBS as Channel 2 **254**, and KNBC as Channel 4 **256**.

[0068] Consequently, television programming owned by an independent content owner, such as the NBA's League Pass **220** season programming subscription or the NFL's Season Ticket **222**, may be available on most US-based cable systems, but a Shanghai Cable subscriber cannot view this programming because it is not offered by the cable provider. In the present invention, the user has programmed NBA content **258** to start at Channel 600 and NFL content **260** to start on Channel 620.

[0069] The next to last column lists an Internet-based content provider, Yuks.TV **230**, which sells monthly subscriptions to digital content accessible via the Public Internet. Presently, no cable or satellite television provider can offer Internet-based content, nor does a technology exist that allows for a "backward leaning" user experience, similar to an Interactive Program Guide, for Internet-based content to be seamlessly integrated with other television channels via a cable or satellite television IPG. However, in the present invention, the user has programmed www.yuks.tv content **232** to appear as Channel 900, and could add other Internet-based content subscriptions via an IPG user administration application.

[0070] The last column lists a remote PVR **26**, such as is currently coupled with the TiVo brand service, which presently cannot be accessed remotely (even without considering implications of integrating this content source with a cable or television provider's IPG). However, in the illustration of the present invention, the user has programmed remote PVR content **260** to be available on Channel 1 of the global IPG **12** application.

[0071] **FIG. 4** is a graphical representation of the functions of the global IPG **12** of the present invention. One embodiment of the global IPG **12** is comprised of eight Core Application Functions **300** and fifteen Core Application Features **320**, which may be used in whole, or in parts, to present content to the user.

[0072] The eight core functions of the global IPG **12** include:

[0073] (i) Content Retrieval and Viewing Management **302** provides the user with the ability to store and view content data such as channel names, channel locations, program name, duration, and description. Additionally, once the user selects a content program to watch, the Content Retrieval and Viewing Management **302** function will locate and present the content to the user;

[0074] (ii) Content Subscription Management **304** is responsible for storing and managing subscription information for each independent content provider, including username, password, and any other information required by content owners to access subscription-based content.

[0075] (iii) Content Organization Management **306** provides the user with the necessary functionality to organize, customize, and personalize the organization of content into specific channels based on user preferences.

[0076] (iv) User Profile Management **308** is responsible for storing and managing one or more user profiles so that more than one person can use, personalize, and customize the features of the global IPG **12**.

[0077] (v) Personal Digital Rights Management **310** stores all necessary digital rights certificates for a user. Personal Digital Rights Management **310** validates whether or not a user has access privileges for specific content. Without valid personal digital rights, the user will not be able to view requested content and will instead be redirected to the Content Subscription Management **304** function in order to obtain the necessary personal digital rights.

[0078] (vi) MSO Default Settings Management **312** integrates with MSO systems in order to facilitate exchange of user data, including, but not limited to, authentication data, MSO channel data, programming data, digital rights data, and IPG data. Through the MSO Management **312**, the user can manage MSO relationships.

[0079] (vii) Device Settings Management **314** integrates with a device running the global IPG **12**. Device Management and is responsible for managing all settings between the application and the global IPG **12**, including: incoming data connection management, display management, and power management.

[0080] (viii) Customer Service Management 316 is the interface between the global IPG **12** and a customer service center to resolve any content reception issues, including, but not limited to, lost connection, stolen or damaged C-Card, and billing issues.

global IPG Core Application Features **320** include:

[0081] (i) Customization **322** is the process that allows the user to manually set programming preferences, including channel order, and start-up global IPG **12** settings based on explicit user selection.

[0082] (ii) Personalization **324** is the process that monitors what programming and content a user views, and provides recommendations for upcoming programming information related to what the user has previously done.

[0083] (iii) MSO Data Integration **326** handles event, messaging, and data exchange between the global IPG **12** and a user's MSO data center **24.**

[0084] (iv) Independent Content Owner Data Integration handles event, messaging, and data exchange between the global IPG **12** and Independent Content Provider data centers **22.**

[0085] (v) Personal Media Source Data Integration handles event, messaging, and data exchange between the global IPG **12** and Personal Media managers **18.**

[0086] (vi) User Authentication **332** is the process of identifying and authenticating a user, based on a username and password.

[0087] (vii) Device Authentication **334** is the process of identifying and authenticating a device, based on a device identification number.

[0088] (viii) GPS Authentication **336** is the process of verifying the location of the global IPG **12**, based on communication with the Standard Positioning Service of the GPS satellite system. GPS Authentication **336** is used to manage geography-based digital access rights, which could be subject to content owner limitations or governmental restrictions.

[0089] (ix) Role-based security **338** is the process of authorizing the user **16** with access rights to specific global IPG **12** resources before access is permitted. Such resources may include software applications, computing facilities, printed data, check printers, or physical access to facilities and materials. Role-

based can be based upon what the user has (a smart card, token, or ID card), what the user knows (a password or PIN), or who the user is (a biometric like a fingerprint or voiceprint), or any combination of the above.

[0090] (x) Messaging and Event Notification **340** is based on a particular measurement variable and has a defined threshold, resulting in the generation of one or more system messages. In one example of Messaging and Event Notification, a content provider makes a new event, program, or channel available to the Messaging and Event Notification service; and the user **16** instructs the Messaging and Event Notification service to deliver notifications of any new events, programs, or channels to the global IPG **12**. Messaging and Event Notification handles all messaging and event notifications for the global IPG **12**.

[0091] (xi) Multi-Language Support **342** supports display formatting, including, but not limited to: date/time, calendar, currency formatting, in either single-byte or double-byte character sets. Multi-language support **342** is based on a user's country and language settings.

[0092] (xii) Multi-currency Support **344** supports multiple currencies to allow a user to choose and buy the desired digital rights in local currency.

[0093] (xiii) Billing and Collections **346** supports billing presentment and payment services to the user 16, including current invoice, as well as historical invoices and payment information.

[0094] (xiv) Connection Optimization **348** is the process of monitoring and measuring content reception parameters, including incoming connection data transfer rate, incoming data transfer rate, alternative source data transfer rates and other factors that are related to the quality of the connection to the content source.

[0095] (xv) Content Failover **350** is the process of automatically switching to an alternative content source of the same program or channel when a content provider's signal is interrupted or is not available. Content Failover **350** is beneficial to user **16**, because it eliminates the need to manually find an alternative source for the same channel or program and provides for an improved user experience.

[0096] **FIG. 5** is a graphical representation of a preferred embodiment of a MMED **14** of the present invention. The MMED **14** comprises both software components **400** and hardware components **450** which may be used in whole, or in parts, to present content to the user.

[0097] Software components **400** include:

[0098] (i) the global IPG **12** that manages user preferences, as well as content subscriptions and related metadata;

[0099] (ii) a Digital Rights Management module **402**, which determines whether or not content can be decrypted and accessed by the user;

[00100] (iii) a TCP/IP stack **404**, which allows the global IPG **12** to speak to other applications over the Internet;

[00101] (iv) Decryption Drivers **406** that work in conjunction with the Digital Rights Module **402** and the Decryption Engine **452** in order to decode encrypted data so that it can be accessed and viewed by the user;

[00102] (v) Audio Drivers **408** that work in conjunction with the Audio Decoder **454** and are used to ensure audio portions of incoming content are presented to the user on the Presentation Components **464** in an optimal manner;

[00103] (vi) Video Drivers **410** that are used to ensure video portions of incoming content are presented to the user in an optimal manner; and

[00104] (vii) a series of Interface Drivers **412** that are comprised of software code that is used to ensure that any external devices connected to the MMED **14** can communicate in an optimal manner.

[00105] Hardware components **450** include:

[00106] (i) a Decryption Engine **452**, that brokers digital rights for specific subscriptions or individual programs;

[00107] (ii) a Audio Decoder **454** that converts incoming audio content from binary data back into its decompressed state;

[00108] (iii) a Video Decoder **456** that converts incoming video content from binary data back into its decompressed state;

[00109] (iv) External Interfaces **458**, including USB, Ethernet and S-Video connections so external peripherals may communicate with the MMED;

[00110] (v) a global Positioning Satellite module **462** that determines the geographic position of the device;

[00111] (vi) Presentation Components **464**, including an LCD screen, speakers and an earphone jack; and

[00112] (vii) a Wireless Module **466** that connects the MMED **14** with the Internet, as well as communicates with external video and audio system components.

[00113] **FIG. 6** is plan view of a preferred embodiment of the Mobile Multimedia Entertainment Device (MMED) **14**. The MMED **14** has two modes including a remote control **14a**; and a Personal Video Recorder/Viewer **14b**. The MMED **600** opens and flips so the device can change between the two modes.

[00114] The remote control **14a** is used when the user is stationary and elects to view programming on a television monitor. The Personal Video Recorder/Viewer **14b** is used when the user is mobile and elects to view programming directly from the MMED **14**.

[00115] In both modes, the Wireless Module **610** is always exposed so that the device can connect with the Internet. Similarly, external connectors **652** are always visible so the user can connect the device via hard wires to a power source, external monitor or a modem connected to the Internet.

[00116] When the MMED **14** is being used as a remote control **14a**, the backside of the MMED **14** is a smooth cover **604**, so the Personal Video Recorder/Viewer **14b** is protected. The user operates the MMED **14** similar to a television remote control, with numeric buttons **612**, channel up/down **614**, volume up/down controls **616**, as well as fast forward **618**, play **620**, rewind **622**, and other buttons required to manage incoming content and the global IPG **12** such as guide **624**, last channel **626** and source **630**. The MMED **14** also contains a one-touch connect button **610** that allows the user to connect directly to the Internet without having to manually enter a username and password.

[00117] Conversely, when the MMED **14** is flipped into the second operating position and is being used as a Personal Video Recorder/Viewer, the MMED **14** contains many of the same buttons as when the MMED **14** is in the remote control mode **14a** including channel up/down **650**, volume up/down controls **652**, as well as fast forward **664**, play **662**, rewind **660**, guide **672**, last channel **674**, and source **676**. In the second operating position, an LCD display **640** is used to view content directly on the MMED **14**. The backside **670** of the MMED **14** is a smooth cover that can be removed in order to access the MMED's battery.

[00118] **FIG. 7** is a flow chart of the logic undertaken by a user viewing the global IPG **12** and selecting a specific program on a specific channel. Commencing at step **700**, the user **16** accesses the global IPG **12**. At step **702**, the user selects a specific program on a specific channel and the global IPG **12** must first determine whether or not the user **16** has the necessary digital rights, which can be seen in step **704**. If the global IPG **12** confirms that the user **16** has sufficient digital rights, Step **708** shows that the global IPG **12** will authenticate the required user information with the content provider.

[00119] However, if required digital rights are not present in step **704**, the user **16** shall be redirected to step **706**, whereby the user **16** will confirm that the IPG should (or should not) purchase digital rights based on the user profile information. If the user **16** confirms that digital rights should be obtained, the necessary digital rights will be obtained from the content provider as shown in Step **710** and stored the digital rights in the global IPG **12**. Should the user decide not to purchase digital rights in step **706**, the user will be redirected via connector **706a** and connector **700b** to Step **700** in order to select another program.

[00120] If the user **16** is viewing a program in Step **712** and the connection is lost at step **714**, the global IPG **12** will first determine whether or not the lost connection is between a result of the content provider or device. When a content provider's connection is interrupted, the global IPG **16** will first try and determine whether the content provider connection is available and will re-authenticate in Step **718**. Once the connection has been re-established at Step **720**, the user will be reconnected to the last channel and program prior to the disconnection at Step **712** via connectors **712c** and **712a**.

[00121] However, if the content provider's connection is not available at step **716**, the global IPG **12** will then determine whether or not an alternate content source is available in step **722**. If the global IPG **12** locates another content provider with the same channel and program as the disconnected program and channel at Step **724** , the global IPG **12**, via connector **724a**, will connect and authenticate with the alternate content provider at Step **718** via connector **718a**. Once the connection has been established at Step **720**, the user will be reconnected via connector **720a** to the last channel and program prior to the disconnection at Step **712** via connector **712a**.

[00122] Should an alternate content provider not be available in step **722**, the global IPG **12** will continue to monitor the content provider's connection via connector **722a** until it becomes available. Once a connection is re-established, the global IPG **12** will re-authenticate with the content provider at Step **718** via connector **718a**. Once the connection has been established at Step **720**, the user will be reconnected via connector **720a** to the last channel and program prior to the disconnection at Step **712** via connector **712a**.

[00123] **FIG. 8** is a flow chart that illustrates the logic undertaken by a user to add a new content source at Step **800**. There are three potential options in step **802** for the new content source that include: a) traditional cable or satellite television services (one or more MSO subscriptions), independent content providers, and personal content located on internet-enabled personal media devices.

[00124] For new independent content providers, the global IPG **12** will verify whether or not the user **16** has digital access rights at step **802a.** If the digital access rights are present, the global IPG **12** will authenticate with the new content source at Step **806** via connectors **806a** and **806b**. The new content source's relevant metadata (i.e. channel listings, program listings, program duration, etc.) is imported from the independent content source into the global IPG **12** at Step **808** The user **16** will then be prompted to assign a channel for each channel of content from the independent content provider at Step **810.**

[00125] If the user **16** does not have digital access rights from the independent content provider in step **802a**, the global IPG **12** will complete the digital rights purchase process at Step **804a**. Once digital rights

are acquired at Step **804a,** the global IPG **12** will authenticate with the independent content provider at Step **806** and relevant data will be obtained as set forth above and the process will proceed.

[00126] For new MSO subscriptions, the global IPG **12** will check to see if the user has digital access rights at step **802b**. If the digital access rights are present, the global IPG **12** will authenticate with the new MSO at Step **806** via connectors **806c** and **806b**. Relevant metadata (i.e. channel listings, program listings, program duration, etc.) from the new content source will be imported from the MSO into the global IPG **12** at Step **808** The user will then be prompted to assign a channel for each channel of content from the independent content provider at Step **810**. If the user **16** does not have digital access rights from the MSO, the global IPG **12** will complete the digital rights purchase process at Step **804a**, based on information contained in the billing and collections module **346** (from **FIG. 4**) of the global IPG **12**. Once digital rights are acquired, the global IPG **12** will authenticate with the new MSO at Step **806**. Relevant metadata (i.e. channel listings, program listings, program duration, etc.) from the new MSO is imported from the independent content source into the global IPG **12** at Step **808.** The user **16** will then be prompted to assign a channel for each channel of content from the independent content provider at Step **810**.

[00127] For new personal media content sources (e.g., personal media managers), the global IPG **12** will authenticate with the new personal content source at Step **806**. The new personal content source's relevant metadata (e.g., channel listings, program listings, program duration, etc.) will be imported from the personal media device into the global IPG **12** at Step **808.** The user will then be prompted to assign a channel for each channel of content from the personal media manager at Step **810**.

[00128] After completing the addition of a new content source, the user will be prompted at step **812**, whether or not another content source is to be added. If the user **16** wants to add another content source, the user **16** will be taken to Step **800** via connectors **800a** and **800b**.

[00129] If the user does not want to add another source at step **812**, then the user will view the IPG at Step **700.**

[00130] It is also within the scope of the present invention to implement a program or code that can be stored on a television or television operating system to permit the television to perform any of the methods described above or work in conjunction with the MMED to acquire, organize, and view content. It is also within the scope of the present invention to acquire content metadata from the content owner or a third party.

[00131] The above description of illustrated embodiments of the invention, including what is described in the Abstract, is not intended to be exhaustive or to limit the invention to the precise forms disclosed. While specific embodiments of, and examples for, the invention are described herein for illustrative purposes, various equivalent modifications are possible within the scope of the invention, as those skilled in the relevant art will recognize.

[00132] These modifications can be made to the invention in light of the above detailed description. The terms used in the following claims should not be construed to limit the invention to the specific embodiments disclosed in the specification and the claims. Rather, the scope of the invention is to be determined entirely by the following claims, which are to be construed in accordance with established doctrines of claim interpretation.

I claim:

1. A portable content manager device for receiving and viewing content comprising:

an acquisition module that obtains content and data that describes said content from a web server over a communications link; and

an interface module that presents the data that describes said content to a user and receives input from said user.

2. The portable content manager device of claim 1, wherein the interface module comprises an interactive program guide.

3. The portable content manager device of claim 1, further comprising a digital rights management module that obtains viewing rights from a source of content.

4. The portable content manager device of claim 1, further comprising a global positioning satellite communicator for determining geographical location.

5. The portable content manager device of claim 1, further comprising a filtering module that blocks content according to jurisdiction..

6. The portable content manager device of claim 1, further comprising a voice recognition module that accepts verbal commands and converts them to digital form.

7. The portable content manager device of claim 1, further comprising a display device.

8. The portable content manager device of claim 1, further comprising a relay module for delivering the content and data to a display device.

9. The portable content manager device of claim 1, further comprising a storage module that stores the content and data.

10. The portable content manager device of claim 1, wherein the communications link is the internet.

11. A content acquisition system for reception of content from one or more user chosen content sources, the system comprising:

a portable device capable establishing and maintaining a connection with a communications link;

an interactive program guide application on a machine readable medium that provides for management and personalization of programming received from one or more content sources based on user preference; said application further allowing the user to view available content; and

remote sources of content that are accessible through the communications link.

12. The content acquisition system of claim 11, wherein the communications link is the internet.

13. The content acquisition system of claim 11, wherein the data communication pathway is a cellular telephone receiving and transmitting device.

14. The content acquisition system of claim 11, wherein the portable device further comprises a display screen.

15. The content acquisition system of claim 11, wherein the interactive program guide application assists the user in managing content rights.

16. The content acquisition system of claim 11, wherein the interactive program guide application obtains redundant content sources in order to assure a constant viewing experience.

17. The content acquisition system of claim 11, wherein the interactive program guide application further provides for synchronization of changes made to the application in order to present a consistent user experience.

18. The content acquisition system of claim 11, further comprising a transmitter for transmitting incoming data and content to a separate viewing apparatus.

19. The content acquisition system of claim 11, further comprising a geograpical positioning device for determining the location of the device.

20. The content acquisition system of claim 19, further comprising a filter module that selectively blocks content.

21. A method for providing an interactive program guide to a user for viewing, selecting and obtaining access to content comprising:

delivering descriptive program data about available content from a web server over a communications link to a device specified by the user;

permitting the user to arrange a display of the descriptive program data as desired by said user on said device; and

providing a selectable option for the user to select the available content to be delivered over the communications link.

22. The method of claim 21, wherein said content sources comprise live television broadcasting, previously recorded content, and content available from a website accessible via the internet.

23. The method of claim 21, wherein said descriptive program data comprises content source identification and program listings for available content.

24. The method of claim 21, wherein the device comprises a display device.

25. The method of claim 21, wherein the content is delivered to a second device specified by the user..

26. The method of claim 21, further comprising automatically authenticating the user to the content sources prior to delivering the content to the device.

27. The method of claim 21, further comprising obtaining a redundant source for said content in the event that one of said content sources becomes unavailable while in use.

28. The method of claim 21, further comprising obtaining viewing rights from said content sources prior to delivering said content to the device.

29. The method of claim 21, further comprising filtering viewing rights from said content sources in accordance with geographical location.

30. The method of claim 21, further comprising synchronizing changes made by the user to the interactive program guide in order to preserve a consistent user experience across all devices.

31. The method of claim 21, wherein the communications link is the internet.

32. An interactive program guide application embodied on a computer readable medium for receiving and managing content comprising code segments:

a. for receiving, organizing and storing data that describes said content;

b. for presenting said data in a preferred order identified by a user;

c. for managing viewing rights for said content; and

d. for ensuring user authentication to the interactive program guide application.

33. The interactive program guide application of claim 32, wherein the data and content are delivered from a web server over a communications link to a device specified by the user.

34. The interactive program guide application of claim 32, further comprising code segments for receiving a request for content from the user and delivering said content to a device specified by the user.

35. The interactive program guide application of claim 34, wherein the data that describes the content is displayed on a first device and a request for said content is made on said first device.

36. The interactive program guide application of claim 35, wherein the content requested using the first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

37. The interactive program guide application of claim 36, wherein the second device is an internet-enabled television.

38. The interactive program guide application of claim 32, further comprising code segments for providing automatic updates in order to minimize user involvement in maintaining the application.

39. The interactive program guide application of claim 32, further comprising code segments for synchronizing changes made by the user across all devices used to access the guide.

40. The interactive program guide application of claim 32, further comprising code segments for enabling control over the application using a remote control device.

41. The interactive program guide application of claim 32, further comprising code segments for providing real-time acquisition of content viewing rights.

42. The interactive program guide application of claim 32, further comprising code segments for filtering content.

43. The interactive program guide application of claim 42, wherein the content is filtered based on the geographic location of the device at the time of viewing said content.

44. The interactive program guide application of claim 32, further comprising code segments for obtaining redundant content in order to reduce interruptions in content delivery to the user.

45. The interactive program guide application of claim 42, wherein the communications link is the internet.

Abstract

A system and device is disclosed that employs a global interactive program guide to receive, access, manage, and view digital entertainment services such as live television, television on demand, and pre-recorded video and audio programming from one on more content sources, via an internet-enabled device, anywhere in the world. As disclosed, the global interactive program guide provides a user with metadata that describes available content and enables the user to access desired content on an a la carte basis and arrange the presentation of that content in any way or order desired. The system of the instant invention can alternatively be practiced with any mobile communications device that is accessible via the internet, cell phone communications or other communications mode. Changes made to content availability are instantly synchronized through the entire system and content redundancy is obtained when available.

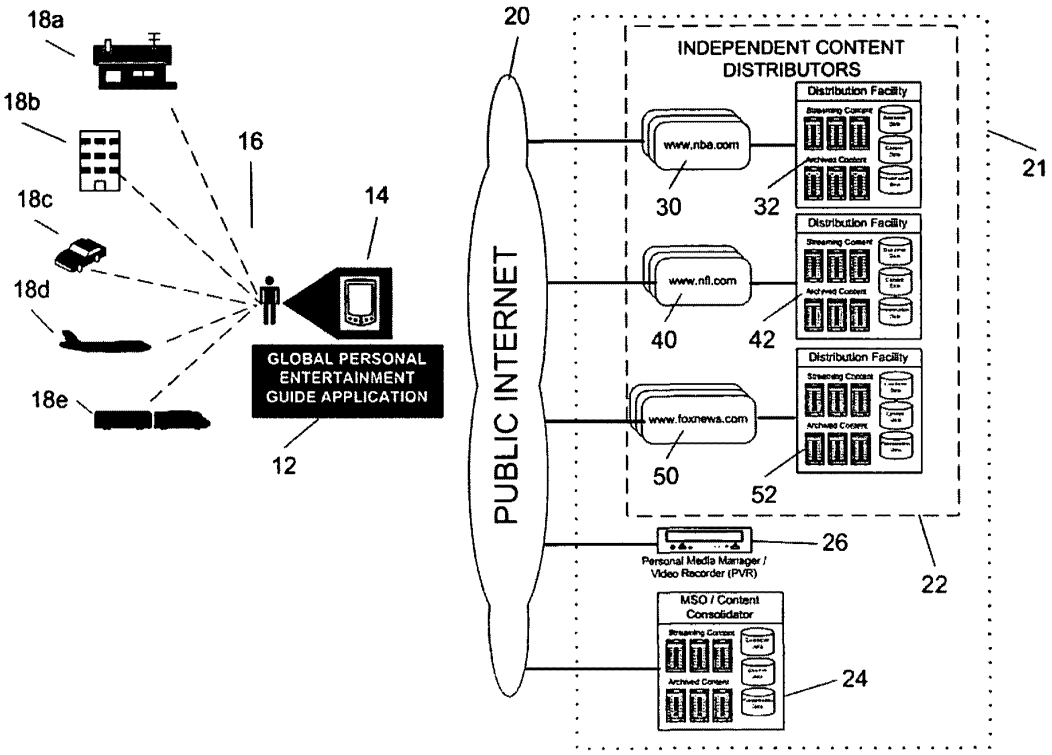


FIG. 1

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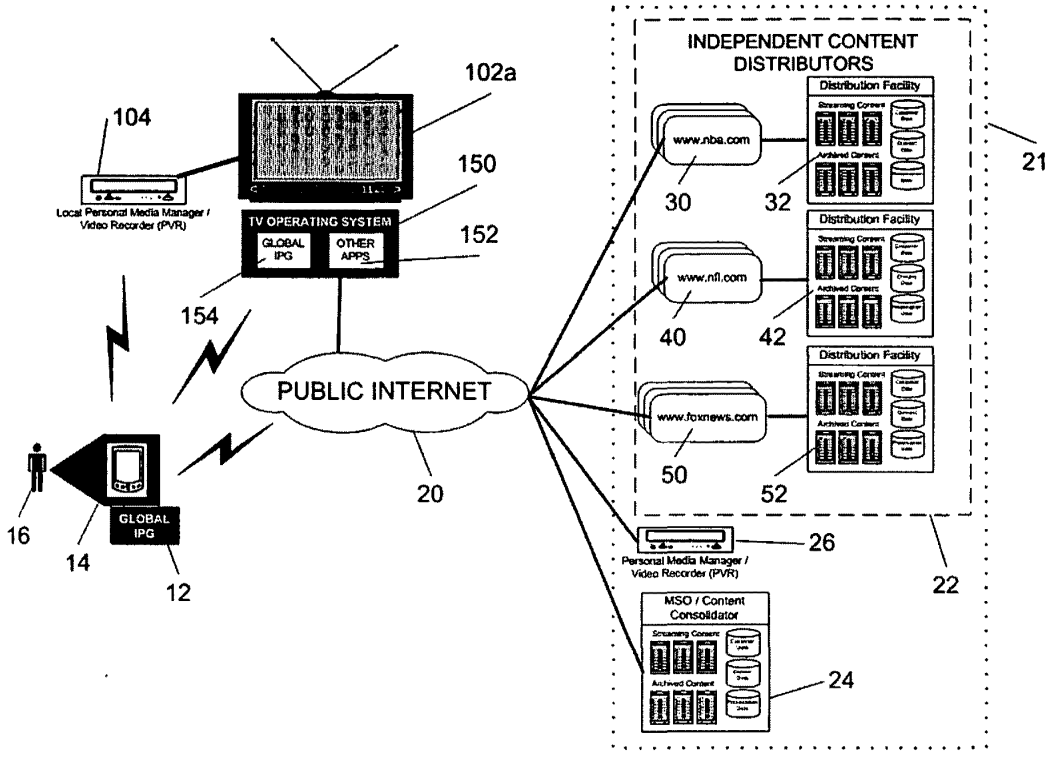


FIG. 2a

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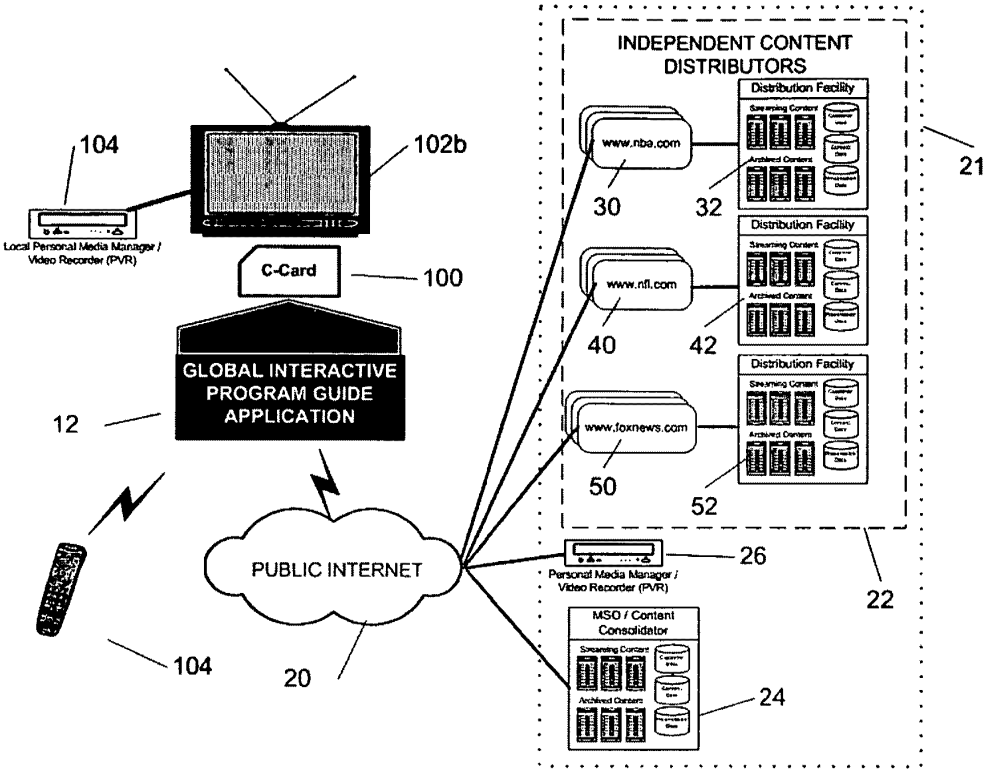
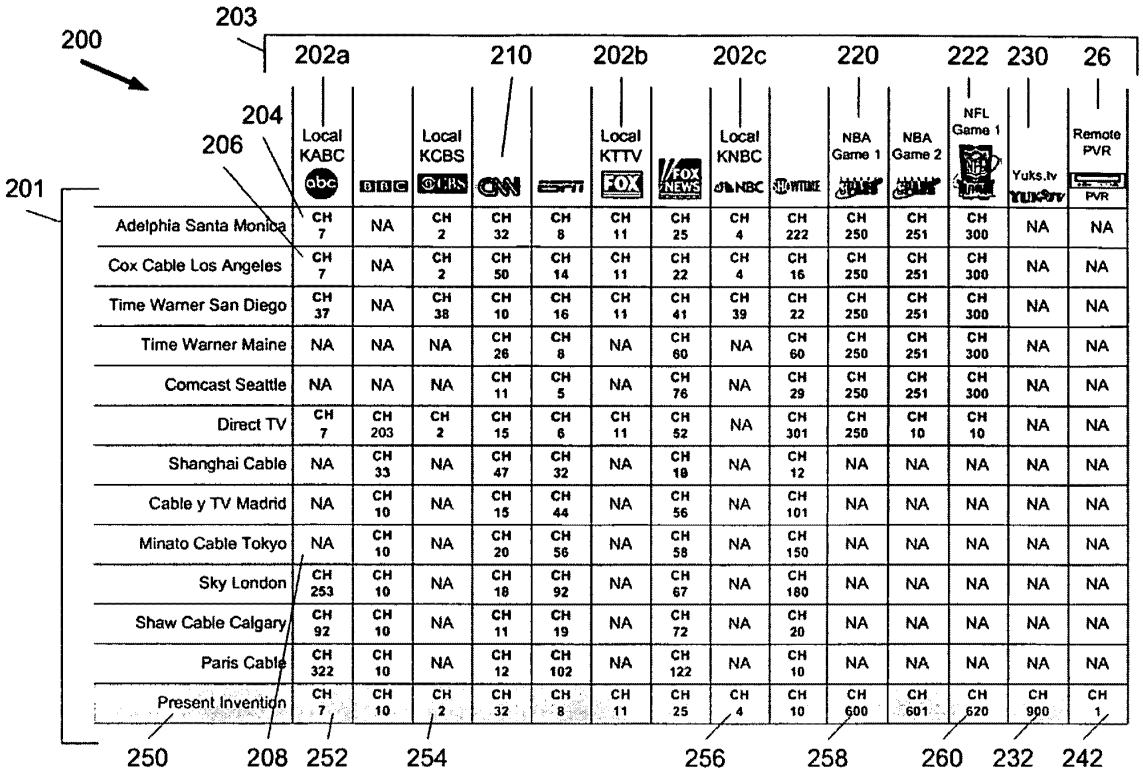


Fig. 02b

FIG. 2b

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	Local KABC	BBC	Local KCBS	CNN	ESPN	Local KTTV	FOX NEWS	Local KNBC	SHOWTIME	NBA Game 1	NBA Game 2	NFL Game 1	Yuks.tv	Remote PVR
Adelphia Santa Monica	CH 7	NA	CH 2	CH 32	CH 8	CH 11	CH 25	CH 4	CH 222	CH 250	CH 251	CH 300	NA	NA
Cox Cable Los Angeles	CH 7	NA	CH 2	CH 50	CH 14	CH 11	CH 22	CH 4	CH 16	CH 250	CH 251	CH 300	NA	NA
Time Warner San Diego	CH 37	NA	CH 38	CH 10	CH 16	CH 11	CH 41	CH 39	CH 22	CH 250	CH 251	CH 300	NA	NA
Time Warner Maine	NA	NA	NA	CH 26	CH 8	NA	CH 60	NA	CH 60	CH 250	CH 251	CH 300	NA	NA
Comcast Seattle	NA	NA	NA	CH 11	CH 5	NA	CH 76	NA	CH 29	CH 250	CH 251	CH 300	NA	NA
Direct TV	CH 7	CH 203	CH 2	CH 15	CH 6	CH 11	CH 52	NA	CH 301	CH 250	CH 10	CH 10	NA	NA
Shanghai Cable	NA	CH 33	NA	CH 47	CH 32	NA	CH 18	NA	CH 12	NA	NA	NA	NA	NA
Cable y TV Madrid	NA	CH 10	NA	CH 15	CH 44	NA	CH 56	NA	CH 101	NA	NA	NA	NA	NA
Minato Cable Tokyo	NA	CH 10	NA	CH 20	CH 56	NA	CH 58	NA	CH 150	NA	NA	NA	NA	NA
Sky London	CH 253	CH 10	NA	CH 18	CH 92	NA	CH 67	NA	CH 180	NA	NA	NA	NA	NA
Shaw Cable Calgary	CH 92	CH 10	NA	CH 11	CH 19	NA	CH 72	NA	CH 20	NA	NA	NA	NA	NA
Paris Cable	CH 322	CH 10	NA	CH 12	CH 102	NA	CH 122	NA	CH 10	NA	NA	NA	NA	NA
Present Invention	CH 7	CH 10	CH 2	CH 32	CH 8	CH 11	CH 25	CH 4	CH 10	CH 600	CH 601	CH 620	CH 900	CH 1

FIG. 3

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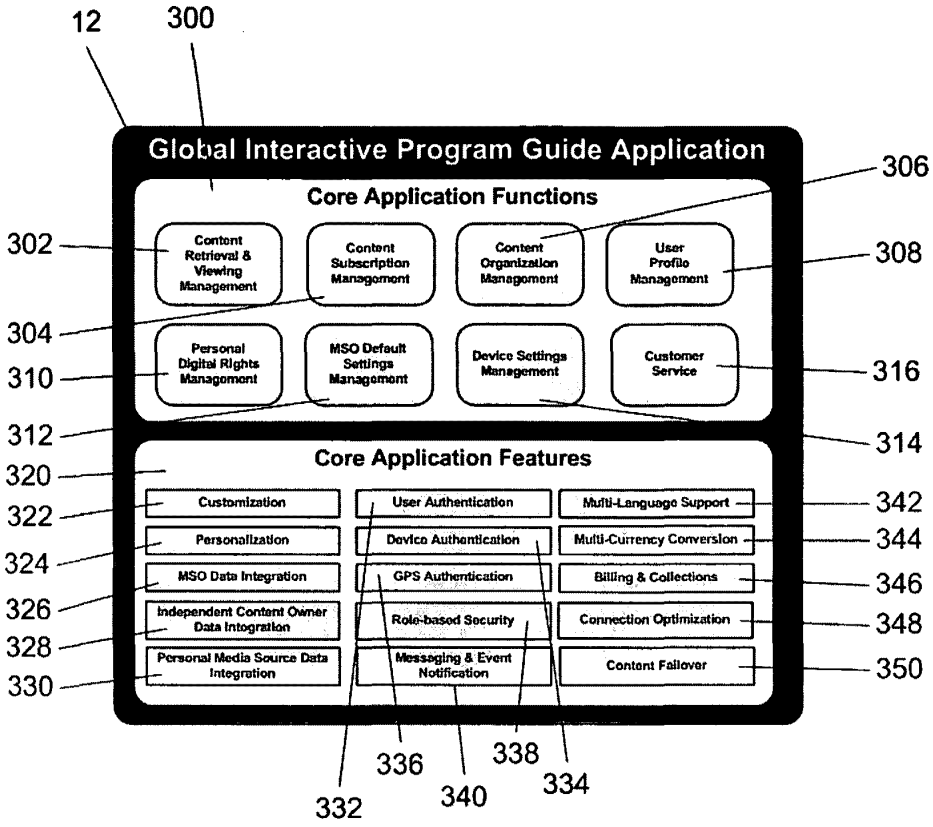


FIG. 4

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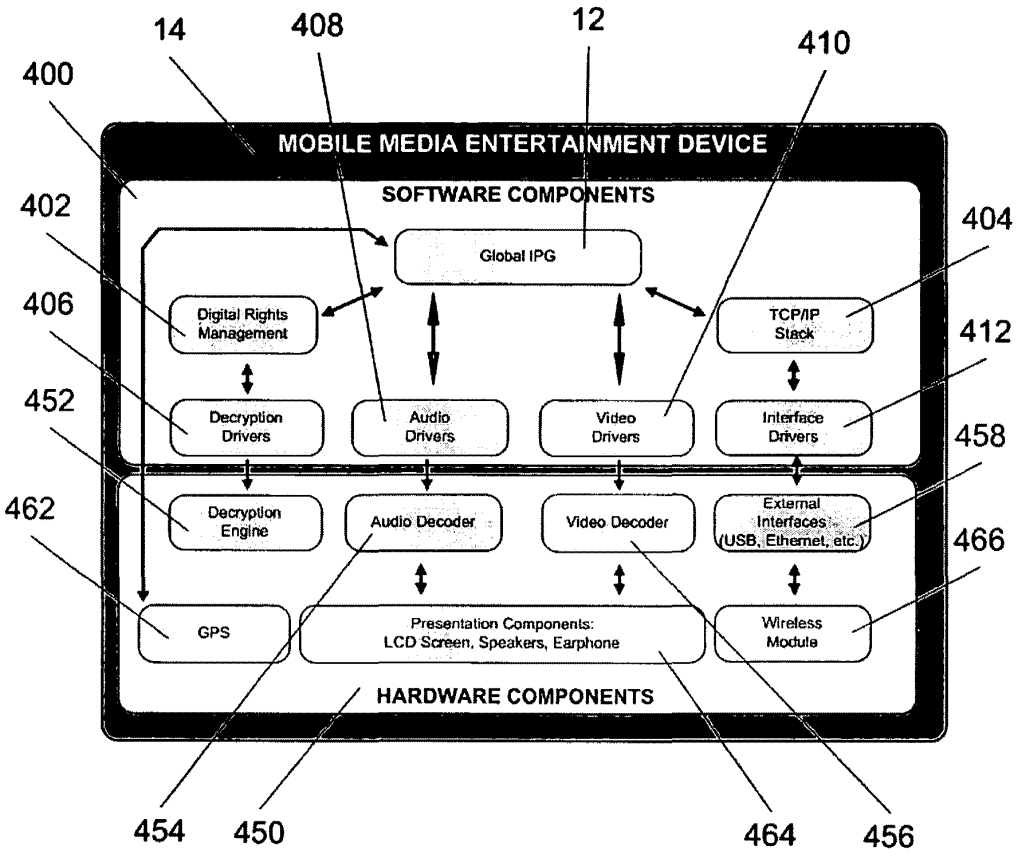
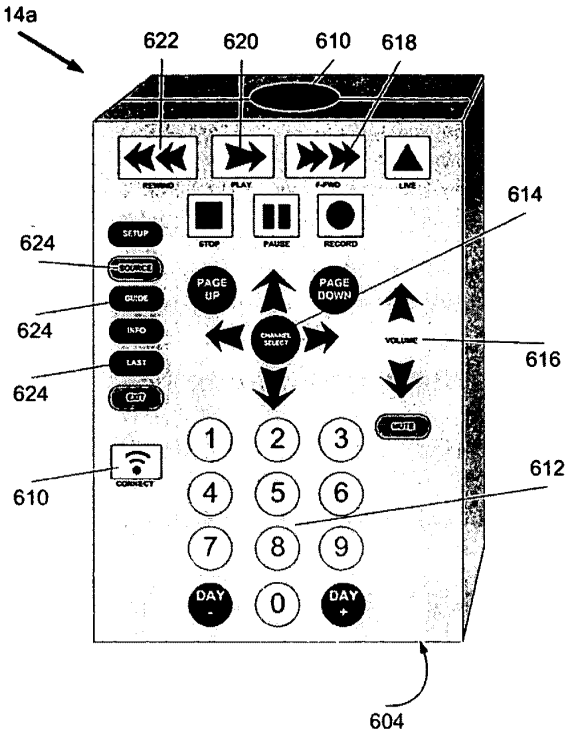


FIG. 5

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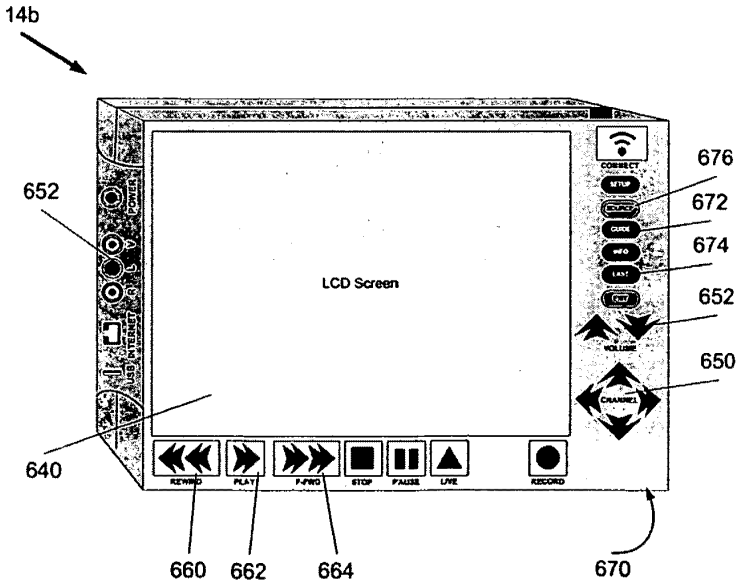


FIG. 6

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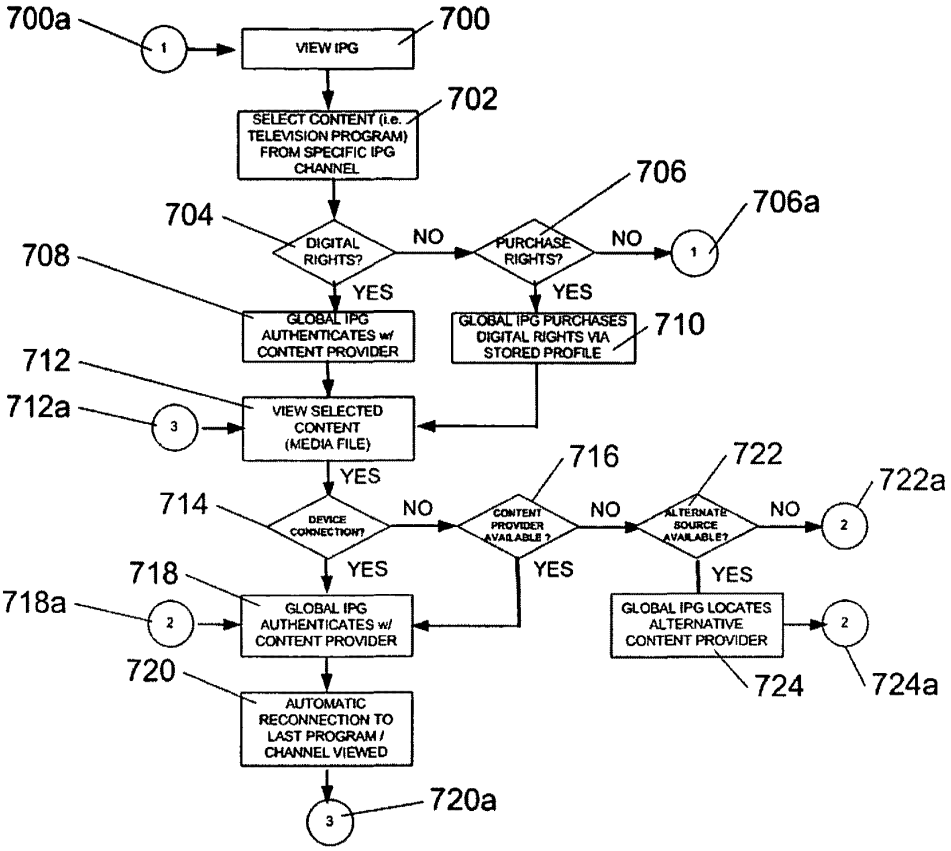

700a
1
VIEW IPG
700
SELECT CONTENT (i.e. TELEVISION PROGRAM) FROM SPECIFIC IPG CHANNEL
702
704
DIGITAL RIGHTS?
NO
PURCHASE RIGHTS?
706
NO
1
706a
YES
YES
708
GLOBAL IPG AUTHENTICATES w/ CONTENT PROVIDER
GLOBAL IPG PURCHASES DIGITAL RIGHTS VIA STORED PROFILE
710
712
712a
3
VIEW SELECTED CONTENT (MEDIA FILE)
YES
714
DEVICE CONNECTION?
NO
CONTENT PROVIDER AVAILABLE ?
716
NO
ALTERNATE SOURCE AVAILABLE?
722
NO
2
722a
YES
YES
YES
718
718a
2
GLOBAL IPG AUTHENTICATES w/ CONTENT PROVIDER
GLOBAL IPG LOCATES ALTERNATIVE CONTENT PROVIDER
2
720
724
724a
AUTOMATIC RECONNECTION TO LAST PROGRAM / CHANNEL VIEWED
3
720a

FIG. 7

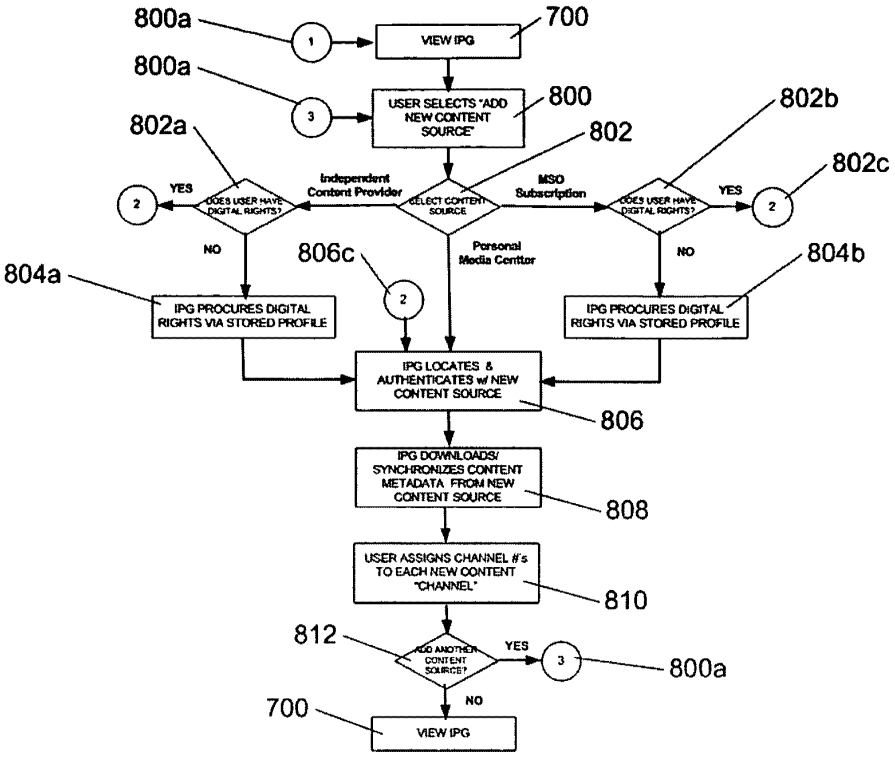

800a
1
VIEW IPG
700
800a
3
USER SELECTS "ADD NEW CONTENT SOURCE"
800
802a
802
802b
802c
2
YES
DOES USER HAVE DIGITAL RIGHTS?
Independent Content Provider
SELECT CONTENT SOURCE
MSO Subscription
DOES USER HAVE DIGITAL RIGHTS?
YES
2
NO
806c
Personal Media Center
NO
804a
804b
IPG PROCURES DIGITAL RIGHTS VIA STORED PROFILE
IPG PROCURES DIGITAL RIGHTS VIA STORED PROFILE
IPG LOCATES & AUTHENTICATES w/ NEW CONTENT SOURCE
806
IPG DOWNLOADS/ SYNCHRONIZES CONTENT METADATA FROM NEW CONTENT SOURCE
808
USER ASSIGNS CHANNEL #'s TO EACH NEW CONTENT "CHANNEL"
810
812
ADD ANOTHER CONTENT SOURCE?
YES
3
800a
NO
700
VIEW IPG

FIG. 8

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DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

☑ Declaration Submitted With Initial Filing **OR** ☐ Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)

Attorney Docket Number	DB001229-000
First Named Inventor	Mark A. Cavicchia
COMPLETE IF KNOWN	
Application Number	
Filing Date	
Art Unit	
Examiner Name	

I hereby declare that:

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE

(Title of the Invention)

the specification of which

☑ is attached hereto

OR

☐ was filed on (MM/DD/YYYY) ☐ as United States Application Number or PCT International Application Number ☐ and was amended on (MM/DD/YYYY) ☐ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached? YES	NO
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

NAME OF SOLE OR FIRST INVENTOR:	☐ A petition has been filed for this unsigned inventor
Given Name (first and middle [if any])	Family Name or Surname
Mark A.	Cavicchia
Inventor's Signature	Date
	July 7, 2006

Residence: City	State	Country	Citizenship
Coraopolis	Pennsylvania	USA	USA

Mailing Address			
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☐ Additional inventors or a legal representative are being named on the _____ supplemental sheet(s) PTO/SB/02A or 02LR attached hereto.

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PATENT APPLICATION SERIAL NO. _____

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE
FEE RECORD SHEET

07/13/2006 STEUMEL1 00000025 200888 11484510

01 FC:2011 150.00 DA
02 FC:2111 250.00 DA
03 FC:2311 100.00 DA
04 FC:2202 625.00 DA
05 FC:2201 100.00 DA

PTO-1556
(5/87)

*U.S. Government Printing Office: 2002 — 489-267/60033

PTO/SB/06 (12-04)
Approved for use through 7/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875 Effective December 8, 2004

Application or Docket Number: 11484510

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY FEE ($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	150.00		N/A	300.00
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A	$250		N/A	$500
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	$100		N/A	$200
TOTAL CLAIMS (37 CFR 1.16(i))	45 minus 20 =	* 25	X$ 25 =	625	OR	X$50 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	4 minus 3 =	* 1	X100 =	100		X200 =	
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))			+180=			+360=	
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	1725		TOTAL	

APPLICATION AS AMENDED – PART II

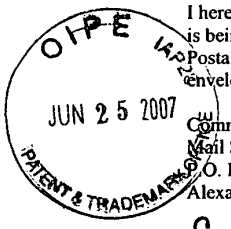
		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE ($)
AMENDMENT A	Total (37 CFR 1.16(i))	*	Minus	**	=	X$ 25 =		OR	X$50 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X100 =		OR	X200 =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					+180=		OR	+360=	
1,11,21,32						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE ($)
AMENDMENT B	Total (37 CFR 1.16(i))	*	Minus	**	=	X$ 25 =		OR	X$50 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X100 =		OR	X200 =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					+180=		OR	+360=	
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: **Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



I hereby certify that this correspondence is being deposited in the United States Postal Services as First Class Mail in an envelope addressed to:

Commissioner for Patents
Mail Stop Non-Fee Amendment
P.O. Box 1450
Alexandria, VA 22313-1450

Attorney for Applicant
Date: 21 June 2007

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	:	11/484,510
Applicant	:	Mark A. Cavicchia
Filed	:	10 July 2006
Titled	:	INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit	:	2623
Examiner	:	Not Yet Assigned
Docket No.	:	DB001229-000
Customer No.	:	24122

TRANSMITTAL LETTER

Commissioner for Patents
Mail Stop Non-Fee Amendment
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Enclosed is the following:

1. Preliminary Amendment.

The Commissioner is hereby authorized to charge any underpayment or credit any overpayment to our Deposit Account No. 20-0888. A copy of this transmittal letter is enclosed.

Also enclosed is a return postcard. Please date stamp and mail the postcard to acknowledge receipt of the above-mentioned correspondence.

Respectfully submitted,

Carl A. Ronald
Reg. No. 43,057
Thorp Reed & Armstrong, LLP
One Oxford Centre, 14th Floor
Pittsburgh, PA 15219
412-394-7775
Attorneys for Applicant

Dated: 21 June 2007

00806431.DOC

OIPE
JUN 25 2007
PATENT & TRADEMARK OFFICE

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Commissioner for Patents
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P.O. Box 1450
Alexandria, VA 22313-1450

Attorney for Applicant
Date: 21 June 2007

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	:	11/484,510
Applicant	:	Mark A. Cavicchia
Filed	:	10 July 2006
Titled	:	INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit	:	2623
Examiner	:	Not Yet Assigned
Docket No.	:	DB001229-000
Customer No.	:	24122

To: Mail Stop Non-Fee Amendment
Honorable Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRELIMINARY AMENDMENT

Sir:

Preliminary to the Examination of the above-identified application, please amend the above-identified application as follows:

Amendments to the Specification begin on Page 2 of this paper.

Amendments to the Claims – None

Amendments to the Drawings - None

Remarks/Argument begin on page 3 of this paper.

Amendments to the Specification:

On page 1, please amend the title as follows:

GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE

REMARKS/ARGUMENTS

It is respectfully submitted that the title of the application be amended to include the word "Global" in order to more accurately reflect the nature of the invention.

Respectfully submitted,

By: _____

Carl A. Ronald
Reg. No. 43,057
THORP REED & ARMSTRONG, LLP
One Oxford Centre
301 Grant Street, 14th Floor
Pittsburgh, PA 15219-1425
Tel.: 412-394-7775
Fax: 412-394-7711

Dated: June 21, 2007

Attorney for Applicant

PTO/SB/06 (12-04)
Approved for use through 7/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875 Effective December 8, 2004

Application or Docket Number: 11484510

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY FEE ($)
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SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A	$250		N/A	$500
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	$100		N/A	$200
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INDEPENDENT CLAIMS (37 CFR 1.16(h))	4 minus 3 =	* 1	X100 =	100		X200 =	
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))			+180=			+360=	
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	1225		TOTAL	

APPLICATION AS AMENDED – PART II

6250T

AMENDMENT A	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 22	Minus	** 20	=	X$ 25 =		OR	X$50 =	
Independent (37 CFR 1.16(h))	* 2	Minus	*** 2	=	X100 =		OR	X200 =	
Application Size Fee (37 CFR 1.16(s))									
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					+180=		OR	+360=	
1,11,21,32					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

AMENDMENT B	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X$ 25 =		OR	X$50 =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X100 =		OR	X200 =	
Application Size Fee (37 CFR 1.16(s))									
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					+180=		OR	+360=	
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450



Carl A. Ronald
Attorney for Applicants

Date: 20 July 2007

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2623
Examiner: Not Yet Assigned

Docket No.: DB001229-000
Customer No.: 24122

To: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL

Enclosed for filing in the above-captioned application, please find the following:

- Information Disclosure Statement;
- Form PTO/SB/08A (4 Sheets).

Also enclosed is a return postcard. Please date stamp and mail the postcard in order to acknowledge receipt of the above-reference correspondence. The Commissioner is hereby authorized to charge any underpayment or credit any overpayment to our Deposit Account No. 20-0888. A duplicate copy of this transmittal is enclosed.

Respectfully submitted,

Carl A. Ronald

Carl A. Ronald
Reg. No. 43,057
Thorp Reed & Armstrong, LLP
One Oxford Centre
301 Grant Street, 14th Floor
Pittsburgh, Pennsylvania 15219-1425
Tel.: 412/394-7775
Fax: 412/394-2555
Attorney for Applicants

Dated: 20 July 2007

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Attorney for Applicant(s)

Date: 20 July 2007

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2623
Examiner: Not Yet Assigned

Docket No.: DB001229-000
Customer No.: 24122

To: Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Information Disclosure Statement

Sir:

Pursuant to the provisions of 37 CFR §§1.56 and 1.97-98, enclosed herewith is:

☒ Form PTO/SB/08A

☐ Form PTO/SB/08B

listing references for consideration by the Examiner.

The filing of this Information Disclosure Statement shall not be construed as a representation regarding the completeness of the list of references, or that inclusion of a reference in this list is an admission that it is "prior art" to this application, or that a search has been made, or as an admission that the information listed is, or may be considered to be, material to patentability as defined in 37 CFR §1.56, or that no other material information exists, and shall not be construed as an admission against applicant(s) interest in any manner.

The Information Disclosure Statement submitted herewith is being filed pursuant to:

☐ 37 C.F.R. §1.97(b)(1); no fee is required;
OR

☐ 37 C.F.R. §1.97(b)(2); no fee is required;
OR

☒ 37 C.F.R. §1.97(b)(3); no fee is required;
OR

☐ 37 C.F.R. §1.97(b)(4); no fee is required;
OR

☐ 37 C.F.R. §1.97(c);
AND either

☐ The fee set forth in §1.17(p) is attached; OR

Applicant certifies pursuant to 37 CFR §1.97(e) that:

☐ each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement; OR

☐ no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this certification after making reasonable inquiry, no item contained in the Information Disclosure Statement was known to any individual designated under 37 CFR §1.56(c) more than three months prior to the filing of this statement;

OR

☐ 37 C.F.R. §1.97(d); the fee set forth in §1.17(p) is attached, AND

☐ each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement; OR

☐ no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this certification after making reasonable inquiry, no item contained in the Information Disclosure Statement was known to any individual designated under 37 CFR §1.56(c) more than three months prior to the filing of this Statement.

Applicants respectfully request that the listed references be considered by the Examiner, and that the Examiner acknowledge consideration of these references by initialing and returning a copy of the attached form(s) with the next Official Action.

Respectfully submitted,

Dated: 20 July 2007

Carl A. Ronald
Reg. No. 43,057
Thorp Reed & Armstrong, LLP
One Oxford Centre, 14th Floor
301 Grant Street
Pittsburgh, Pennsylvania 15219-1425
Tel.: 412/394-7775
Fax: 412/394-2555

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JUL 23 2007
PATENT & TRADEMARK OFFICE

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 4

Complete if Known	
Application Number	11/484,510
Filing Date	10 July 2006
First Named Inventor	Mark A. Cavicchia
Art Unit	2623
Examiner Name	Not Yet Assigned
Attorney Docket Number	DB001229-000

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 7,152,236	12-19-2006	Wugofski, et al.	
		US- 6,557,171	04-29-2003	Sonoda, et al.	
		US- 6,543,053	04-01-2003	Li, et al.	
		US- 6,539,545	03-25-2003	Dureau, et al.	
		US- 6,529,804	03-04-2003	Draggon, et al.	
		US- 6,526,219	02-25-2003	Posa, et al.	
		US- 6,516,466	02-04-2003	Jackson	
		US- 6,504,996	01-07-2003	Na, et al.	
		US- 6,490,432	12-03-2002	Wegener, et al.	
		US- 6,487,722	11-26-2002	Okua, et al.	
		US- 6,473, 903	10-29-2002	Balakrishnan, et al.	
		US- 6,473,128	10-29-2002	Berger	
		US- 6,467,090	10-15-2002	Brodigan	
		US- 6,438,596	08-20-2002	Ueno, et al.	
		US- 6,415,099	07-02-2002	Berger	
		US- 6,400,996	06-04-2002	Hoffberg, et al.	
		US- 6,233,389	05-15-2001	Barton, et al.	
		US- 5,986,720	11-16-1999	Kishigami, et al.	
		US- 2005/0009519	01-13-2005	Yoshinobu Murai, et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]-Number[4]-Kind Code[5] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T[6]

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 4

Complete if Known	
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Art Unit	2623
Examiner Name	Not Yet Assigned
Attorney Docket Number	DB001229-000

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		US- 2004/0034867	02-29-2004	Oleg B. Rashkovskiy, et al.	
		US- 2003/0140343	07-24-2003	Barry P. Falvo, et al.	
		US- 2003/0107675	06-12-2003	Aaron Dew, et al.	
		US- 2003/0110502	06-12-2003	Anthony Lionel Creed, et al.	
		US- 2003/0110491	06-12-2003	Arturo A. Rodriguez, et al.	
		US- 2003/0110490	06-12-2003	Aaron Dew, et al.	
		US- 2003/0110488	06-12-2003	Jung-Won Lee	
		US- 2003/0110486	06-12-2003	Aaron Dew, et al.	
		US- 2003/0097661	05-22-2003	Hua Harry Li, et al.	
		US- 2003/0093815	05-15-2003	Hugh Boyd Morrison	
		US- 2003/0093807	05-15-2003	Nga Marie Nguyen	
		US- 2003/0084448	05-01-2003	Aravind Soundararajan	
		US- 2003/0067535	04-10-2003	Anthony Lionel Creed, et al.	
		US- 2003/0063117	04-03-2003	Mathew Chang, et al.	
		US- 2003/0066085	04-03-2003	Franklin E. Boyer, et al.	
		US- 2003/0055735	03-20-2003	Richard N. Cameron, et al.	
		US- 2003/0023977	01-30-2003	William P. Brown, et al.	
		US- 2002/0188956	12-12-2002	Michael Ficco, et al.	
		US- 2002/0157100	10-24-2002	Tadamasa Kitsukawa, et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]-Number[4]-Kind Code[5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T[6]

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

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Sheet 3 of 4

Complete if Known	
Application Number	11/484,510
Filing Date	10 July 2006
First Named Inventor	Mark A. Cavicchia
Art Unit	2623
Examiner Name	Not Yet Assigned
Attorney Docket Number	DB001229-000

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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APPLICATION NUMBER	FILING OR 371(c) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
11/484,510	07/10/2006	Mark A. Cavicchia	DB001229-000

CONFIRMATION NO. 9918

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THORP REED & ARMSTRONG, LLP
ONE OXFORD CENTRE
301 GRANT STREET, 14TH FLOOR
PITTSBURGH, PA15219-1425

Title: Global Interactive program guide application and device

Publication No. US-2008-0022298-A1
Publication Date: 01/24/2008

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

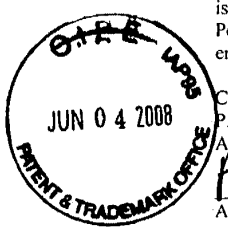
The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently http://www.uspto.gov/patft/.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382, by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, Alexandria, VA 22313-1450 or via the Internet.

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Paul D Bangor
Attorney for Applicant(s)

Date: June 2, 2008

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2623
Examiner: Not Yet Assigned

Docket No.: DB001229-000
Customer No.: 24122

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Information Disclosure Statement

Sir:

Pursuant to the provisions of 37 CFR §§1.56 and 1.97-98, enclosed herewith is:

☒ Form PTO/SB/08A

☐ Form PTO/SB/08B

listing references for consideration by the Examiner. Copies of four (4) cited references along with a copy of the International Search Report are enclosed.

The filing of this Information Disclosure Statement shall not be construed as a representation regarding the completeness of the list of references, or that inclusion of a reference in this list is an admission that it is "prior art" to this application, or that a search has been made, or as an admission that the information listed is, or may be considered to be, material to patentability as defined in 37 CFR §1.56, or that no other material information exists, and shall not be construed as an admission against applicant(s) interest in any manner.

The Information Disclosure Statement submitted herewith is being filed pursuant to:

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Applicant certifies pursuant to 37 CFR §1.97(e) that:

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Applicants respectfully request that the listed references be considered by the Examiner, and that the Examiner acknowledge consideration of these references by initialing and returning a copy of the attached form(s) with the next Official Action.

Respectfully submitted,

Dated: June 2, 2008

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Sheet 1 of 1

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		US- 2006/0080709 A1	04-13-2006	Kwon et al.	
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(71) Applicant: **NTT DoCoMo, Inc.**
Tokyo 100-6150 (JP)

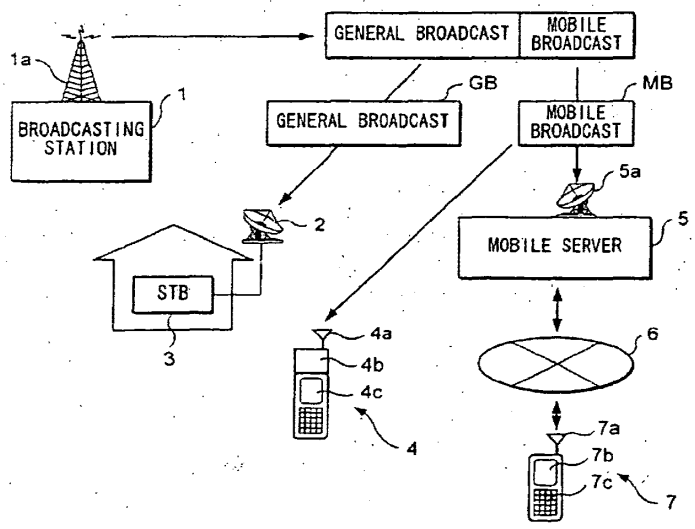
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(54) DATA TRANSFER METHOD AND MOBILE SERVER

(57) A mobile broadcast MB is multiplexed with a general broadcast GB and sent from a broadcasting station 1. The mobile broadcast MB is received by a mobile server 5. The received mobile broadcast MB is converted by the mobile server 5 into data reproducible by a portable terminal 7. The converted data is forwarded to the portable terminal 7 from the mobile server 5 via a mobile communications network 6. The forwarded data is reproduced and displayed on a display screen 7b.

FIG. 1



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EP 1 217 769 A1

Description

TECHNICAL FIELD

[0001] The present invention relates to a mobile server for receiving mobile broadcasts on behalf of a portable terminal and forwarding those mobile broadcasts to the portable terminal, and a data forwarding method for the same.

BACKGROUND ART

[0002] In recent years progress has been made in digitizing broadcasts, while on the other hand the use of portable telephones has become remarkably widespread. This suggests that there is a possibility for the merging of broadcasting and communications, and much attention has been given to the potential that portable telephones have in serving as communication terminals with functions other than that of voice transmission. This means that it is conceivable that portable terminals such as portable telephones could be utilized as receiver terminals for digital broadcasts. However, in this context problems like the following can be anticipated. One such problem is that the portable terminal must be equipped with a relatively large receiver when an attempt is made to use that portable terminal to directly receive mobile broadcasts which are intended for portable terminals and broadcast from a broadcasting station, and thus portable terminals become large and lose their portability, and manufacturing costs are increased. Furthermore, even if a portable terminal includes the function of receiving mobile broadcasts, for example, due geographic conditions and the like, the portable terminal will not necessarily be able to always receive broadcasts from a broadcasting station.

DISCLOSURE OF THE INVENTION

[0003] In view of the above circumstances, it is an object of this invention to enable the reception of mobile broadcasts with a portable terminal without an increase in the size of the portable terminal or increased manufacturing costs and furthermore not susceptible to geographical factors, and to provide a method for forwarding broadcast data from a broadcasting station to the portable terminal and a mobile server for forwarding these data.

[0004] To solve the above problems, in the present invention a mobile server accommodated on a mobile communications network is provided, and this mobile server receives data, which are intended for a mobile terminal accommodated on the mobile communications network, from a broadcasting station and forwards the received data to that portable terminal via the mobile communications network. Thus, the mobile server is made to act as proxy for the reception of the broadcast, which enables the broadcast to be received by the portable terminal.

[0005] Moreover, if the mobile server converts the broadcast data received from the broadcasting station into a format that can be reproduced by the portable terminal to which it is forwarded, and then sends the converted data to that mobile terminal, then the reception of a broadcast corresponding to the feature of the portable terminal is possible.

[0006] Furthermore, it is also possible that firstly the mobile server receives a two-way program that is broadcast by the broadcasting station and sends the two-way program to the portable terminal, secondly the portable terminal sends, via a mobile communications network, the reaction of the user of the portable terminal to the received two-way program to a two-way server which is provided between the broadcasting station and the portable terminal, finally the two-way server receives the reaction of the user that is sent, and sends that received reaction to the broadcasting station. Thus, the user of the portable terminal is able to participate in a two-way program.

[0007] In another preferable embodiment, program selection information that is used when selecting a program broadcast from the broadcasting station is received by the mobile server; the mobile server forwards the received program selection information to the portable terminal; the portable terminal sends a program record command for a program selected by the user of that portable terminal, based on the received program information, to a home server installed in a household, for example, and provided with a function for recording the broadcast program; and the home server records the selected program in accordance with the received program record command. Thus, it is possible for the user when away from the home to make the home server in their home record a desired program, and to view the program after returning home.

[0008] In a further preferable embodiment, the portable terminal makes a request to the mobile server to reserve a broadcast program for recording; the mobile server receives and records the program which has been reserved, and in response to a program reproduction command from the portable terminal, forwards the recorded program from the mobile server to the portable terminal. Thus, a user of the portable terminal, even when away from the home, can view a reserved program with the portable terminal. Moreover, the user is able to view programs stored in the mobile server, which have already been broadcast.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009]

Fig. 1 is a block diagram showing an example of the overall configuration of the first embodiment.
Fig. 2 is a block diagram showing an example of the internal configuration of the mobile server 5.

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Fig. 3 is a flow chart illustrating an example of the operation continually performed by the mobile server 5.

Fig. 4 is a sequence diagram illustrating an example of the operation of the portable terminal 7 and the mobile server 5 when the portable terminal 7 accesses the mobile server 5.

Fig. 5 is a block diagram illustrating an example of the overall configuration of the second embodiment.

Fig. 6 is a block diagram showing an example of the internal configuration of the TMS server 8.

Fig. 7 is a block diagram showing an example of the internal configuration of the broadcasting station 1.

Fig. 8 is a diagram showing an example of the voting form DB 1h.

Fig. 9 is a sequence diagram showing an example of the operation of the second embodiment.

Fig. 10 is a block diagram showing an example of the overall configuration of the third embodiment.

Fig. 11 is a block diagram illustrating an example of the home bus system in which the home server 13 is used.

Fig. 12 is a sequence diagram showing an example of the operation of the third embodiment.

Fig. 13 is a block diagram showing an example of the overall configuration of the fourth embodiment.

Fig. 14 is a diagram illustrating an example of the internal configuration of the reservation management table *tby*.

Fig. 15 is a flow chart illustrating an example of how the mobile server 5 operates during the reservation of a program.

Fig. 16 is a flow chart illustrating an example of how the mobile server 5 operates during the reproduction of a program.

BEST MODE FOR CARRYING OUT THE INVENTION

[0010] The following is a description of embodiments of the present invention.

1. First Embodiment

[0011] In the present embodiment, a mobile server for receiving mobile broadcasts on behalf of a portable terminal is provided, the mobile broadcasts that are received by the mobile server are converted into data reproducible by the portable terminal, and the data is forwarded to the portable terminal over a mobile communications network. The following is a more detailed description.

1-A: Configuration of the First Embodiment

[0012] Fig. 1 is a block diagram showing an example of the overall configuration of the present embodiment. In Fig. 1, a broadcasting station 1 broadcasts a digital satellite broadcast from a dedicated antenna 1a via a satellite (not shown in the drawing). For this digital satellite broadcast, a mobile broadcast MB intended for portable terminals is multiplexed with a general broadcast GB. More specifically, one channel of the digital satellite broadcast, which uses broadcasting satellites and communications satellites, is technically separated into 13 segments. Of these 13 segments, for example ten segments are allocated to the general broadcast GB and the remaining three segments are allocated to the mobile broadcast MB which is broadcast for portable terminals such as a portable terminal.

[0013] The general broadcast GB is received by a STB (set-top box) 3 via a parabolic antenna 2 at each household. The STB 3 is ordinarily installed near a television receiver (omitted from the drawings) within the household. The STB 3 demodulates the signals of the received general broadcast GB, decodes those signals, converts them from digital to analog and then supplies them to the television receiver. This allows for the general broadcast GB to be viewed within the household. It should be noted that this D/A conversion is unnecessary when the television receiver is a digital receiver.

[0014] The digital satellite broadcast is received also by a mobile server 5 via a parabolic antenna 5a. The mobile server 5 separates the mobile broadcast MB from the received digital satellite broadcast and performs a specific conversion. The mobile server 5 then forwards the converted data to a portable terminal 7 via a mobile communications network 6. The mobile server 5 can carry out communications with multiple portable terminals via the mobile communications network 6, although in the configuration shown in Fig. 1 it performs communication with the portable terminal 7.

[0015] The portable terminal 7 receives data sent from the mobile server 5 via an antenna 7a. The portable terminal 7 then reproduces the received data and displays them on a display 7b. The portable terminal 7 is provided with an operating unit 7c, which is made up of an input unit with which numbers and character strings can be keyed in and a selecting unit for selecting items in a menu, for example. The user of the portable terminal 7 uses the operating unit 7c to control the operations of the portable terminal 7. Specifically, reproduction of data forwarded from the mobile sever 5, interruption of reproduction, and scrolling of the screen displayed on the display 7b can be effected by the above operations. The portable terminal 7 does not have the function of directly receiving the mobile broadcast MB. However, by using the mobile server 5 as described above, the portable terminal 7 can indirectly receive the mobile broadcast MB.

[0016] Fig. 2 is a block diagram showing an example of the internal configuration of the mobile server 5. In Fig. 2, a receiving unit 5b, a separating unit 5c, a control unit 5d, a billing unit 5e, a conversion unit 5f, a communication unit 5g, a memory 5h, a decoder 5i, a monitor 5j, an operating unit 5k, and a registration unit 5l are

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connected via a system bus 5m.

[0017] The control unit 5d is for example made up of a CPU (central processing unit), a ROM (read only memory), and a RAM (random access memory), and controls the various units by executing a program stored in the ROM. The receiving unit 5b selects the channel of the digital satellite broadcast via the parabolic antenna 5a, and receives and demodulates the selected digital satellite broadcast. The separating unit 5c separates the multiplexed mobile broadcast MB from the received data. The decoder 5i decodes data compressed for example by a MPEG (moving picture experts group; a standard format for compressing and decompressing color video) format. The communication unit 5g performs communications with the portable terminal 7 via the mobile communications network 6.

[0018] The mobile broadcast MB received by the mobile server 5 is temporarily stored in the memory 5h. The mobile server 5 analyzes the ID of the header of the received data and determines whether it is EPG (electrical program guide) data *de*. If it is determined to be EPG data *de*, the EPG data *de* is stored in a specific EPG area *ar* within the memory 5h. Data stored within the memory 5h are output to the monitor 5j by the person maintaining the mobile server by manipulating the operating unit 5k. It should be noted that when the storage area becomes full, the data in the memory 5h is deleted in order from the oldest data.

[0019] The owner of the portable terminal 7 carries out a predetermined user registration in advance, and user data *dr* registered are stored in the registration unit 51 at this time. For this user data *dr*, information such as user ID, password, address, area of residence, credit card number, payment plan, and terminal data (such as terminal type) are registered. Of these, the "payment plan" includes an "billing method" and a "payment method," for example. The "billing method" can for example be the method of billing a communications fee that corresponds to the amount of communication time, or the method of billing an information supply fee for each access. The "payment method" is for example bank account withdrawal or payment by credit card. The data conversion method *he* necessary for reproducing the mobile broadcast MB with the portable terminal 7 is determined according to the "terminal data" of the user data *dr*, and stored in the conversion unit 5f in association with the user ID.

[0020] This conversion method *he* is a specific algorithm for the conversion of data. More specifically, it is for example an algorithm for converting from MPEG2, which is for the general broadcast GB, to MPEG4, which is for the mobile broadcast MB. It can also be an algorithm for converting a data descriptive language or an algorithm for converting the screen layout, for example.

[0021] The conversion unit 5f converts the inputted data according to this conversion method *he*. For example, if the portable terminal 7 can reproduce only still frames, frames representing scenes of moving pictures are cut out. Or for example if the portable terminal 7 can reproduce only text data, then moving pictures are replaced with detailed program descriptions stored in the EPG data *de*. Thus, the mobile server, after converting data into data that can be reproduced by the portable terminal 7, forwards the converted data, so that a service suited for portable terminals is provided to the user.

[0022] When the portable terminal 7 ends the connection, a predetermined usage fee is generated in accordance with the "payment plan" in the user data *dr*, and the generated usage fee is accumulated in the billing unit 5e. The billing unit 5e then settles the accumulated usage fee according to a predetermined time schedule.

1-B: Operation of the First Embodiment

[0023] The following is an explanation of the operation of the present embodiment.

[0024] The operation of the present embodiment can be broadly divided into a continuous operation and an intermittent operation.

(1) Continuous Operation

[0025] Fig. 3 is a flow chart illustrating an example of the operation continually performed by the mobile server 5. In Fig. 3, first the receiving unit 5b receives the digital satellite broadcast using the parabolic antenna 5a and demodulates the received signal (step Sa1). The demodulated data is output to the separating unit 5c, and the mobile broadcast MB multiplexed with the digital satellite broadcast is separated (step Sa2). The separated mobile broadcast MB is then decoded by the decoder 5i (step Sa3). The decoded data is temporarily stored in the memory 5h (step Sa4). At this time, if the data is EPG data *de*, then they are temporarily stored to the EPG area *ar*. Data stored in the memory 5h or the EPG area *ar* are then output to the monitor 5j when the person maintaining the mobile server 5 carries out a predetermined control using the operating unit 5k (step Sa5).

(2) Intermittent Operation

[0026] Fig. 4 is a sequence diagram illustrating an example of the operation of the portable terminal 7 and the mobile server 5 when the portable terminal 7 accesses the mobile server 5. In Fig. 4, first the portable terminal 7 accesses the mobile server 5 (step Sb1). Then the mobile server 5 opens a channel between the communication unit 5g and the portable terminal 7 (step Sb2). The mobile server 5 sends a signal to the portable terminal 7 requesting the user ID and password, and a screen for inputting the user ID and password is displayed on the display 7b. The user then inputs their user ID and password by operating the operating unit 7c (step Sb3), and the user ID and password are sent to the mobile server 5. The mobile server 5 refers to the user IDs

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and passwords in the user data *dr* and performs an authentication process (step Sb4). When authentication is complete, the mobile server 5 sends data on the services which the user can use to the portable terminal 7, and displays a list of these services on the display 5b (step Sb5).

[0027] Next, when the user selects the "proxy reception/convert/forward service" from the list of displayed services (step Sb6), the data conversion process is performed in the mobile server 5 (step Sb7). More specifically, first the conversion unit 5f searches the conversion methods *he* with the user ID as the key, and reads out the conversion method for that user. Then the control unit 5df reads out the appropriate data from the memory 5h and outputs that data to the conversion unit 5f. Next, the conversion unit 5f converts the inputted data according to that conversion method *he*. A data forwarding process is then performed (step Sb8). The converted data is appropriately forwarded to the portable terminal 7 via the communication unit 5g. The result is that a program made up of data converted to data which can be reproduced by the portable terminal is sent to the portable terminal 7. The portable terminal 7 reproduces the received program and displays it on the display 5b (step Sb9). The user is then able to view that particular program.

[0028] When the user operates the operating unit 7c to perform a predetermined end operation, the mobile server 5 (step Sb10) is notified of this. Next, the communication unit 5g closes the channel and then a billing process is performed by the billing unit 5e (step Sb11). That is, the billing unit 5 bills the usage fee based on the "billing method" that is registered in the "payment plan" of the user data *dr*. The billed usage fee is then settled according to the "payment method" registered in the "payment plan." For example, when the method of payment is by credit card, the usage fee is totaled up each month, the "credit card number" in the user data *dr* is referenced, and the pertinent credit card company is billed.

[0029] As described above, with the present embodiment, the mobile server 5 provides a proxy reception service, a data conversion service, and a data forwarding service. Consequently, even with a portable terminal 7 that does not have the ability to directly receive the mobile broadcast MB from a broadcasting station, or even with one that does have the ability to directly receive the mobile broadcast MB but for geographical or other reasons cannot make the reception, the user can indirectly receive the mobile broadcast MB by accessing the mobile server 5. As a result, users who have finished their user registration can view the mobile broadcast MB when away from the home, for example, any time they wish with their own portable terminal 7 by using the above services.

[0030] Moreover, according to the present embodiment, the mobile broadcast MB is converted into data that can be reproduced by the portable terminal 7 and then sent to that portable terminal, so the user can view the broadcast regardless of the functions of their portable terminal. Consequently, users do not have to modify their existing portable terminal in order to view the mobile broadcast MB, and are able to view the mobile broadcast MB without switching to a terminal type that supports the mobile broadcast MB as long as they are registered for the above services.

1-C: Modified Examples of the First Embodiment

[0031] The following are modifications which are possible with the above-described first embodiment.

(1) In the present embodiment, the mobile server performs user authentication with the user ID and password input by the user, but it is also possible for authentication to be performed using an ID such as a sender number that is preset on the portable terminal 7, or authentication can be performed using fingerprint data or voice pattern data of the user, for example.

(2) In the present embodiment, the mobile broadcast MB is assumed to be conducted over a single dedicated channel, however there is no limitation to this. When the mobile broadcast MB has a plurality of channels, it is possible for example for the mobile server 5 to register the channel desired by the user during registration into the user data *dr* as the standard channel. Then when the user connects to the mobile server 5, that standard channel is read out and the broadcast corresponding to that channel is received and forwarded. It is also possible for the EGP data *de* to be read out from the EPG area *ar* and forwarded to the portable terminal 7 at the request of the user. The mobile server 5 then receives the program for the channel selected by the user and forwards the program to the portable terminal 7. It is also possible to enable the user to freely change channels. It is also possible to make it so that when the user selects a pay channel, a certain usage fee is added by the billing unit 5e.

(3) In the present embodiment, the portable terminal 7 does not have the function of directly receiving the mobile broadcast MB and thus receives the mobile broadcast MB indirectly via the mobile server 5. However, it is also possible for a portable terminal capable of directly receiving a mobile broadcast MB to indirectly receive the mobile broadcast MB via the mobile server 5. In Fig. 1, a portable terminal 4 is an example of a portable terminal capable of directly receiving the mobile broadcast MB. More specifically, the portable terminal 4 receives the mobile broadcast MB with an antenna 4a, and with a receiver 4b decodes and demodulates the received signal. The portable terminal 4 then reproduces the decoded data and displays them on a display 4c. In this case it is not necessary for the mobile server 5

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to convert the data, and it can forward the data of the mobile broadcast MB as is to the portable terminal 4. It is also possible for the mobile server 5 to receive the general broadcast GB, in which case the mobile server 5 for example performs data conversion from MPEG2, which is for the general broadcast GB, into MPEG4, which is for the mobile broadcast MB.

(4) In the present embodiment, a data conversion process is performed, however, when not necessary that data conversion process does not need to be performed. Cases in which data conversion is unnecessary include, for example, when the mobile broadcast MB is forwarded to the portable terminal 4, which supports the mobile broadcast MB. In this case the data can be forwarded as is.

(5) In the present embodiment, the program is reproduced on the portable terminal 7 with an open channel, but it is also possible to download the entire program onto the portable terminal 7 and disconnect the channel, after which the program can be reproduced by a reproduction command from the user.

2. Second Embodiment

[0032] The following is a description of a second embodiment of the present invention. In the present embodiment, a two-way server, which mediates data between the portable terminal 7 and the broadcasting station 1, is provided in addition to the configuration of the above first embodiment, and thus data received by the portable terminal 7 from the mobile server 5 are then forwarded to the broadcasting station 1. The following is a more detailed description.

2-A: Configuration of the Second Embodiment

[0033] With some exceptions, the configuration of the present embodiment is the same as that of the above first embodiment. Consequently, an explanation of components that are shared with the above first embodiment will be omitted from the following description. Furthermore, identical numerals will be used for components that are shared with the first embodiment.

[0034] Fig. 5 is a block diagram illustrating an example of the overall configuration of the present embodiment. In Fig. 5 a TMS (transaction management system) server 8 is a two-way server provided between portable terminals 7P, 7Q, and 7R and the broadcasting station 1, and is for performing two-way communication with the broadcasting station 1 via a dedicated line 9. The TMS server 8 includes an internal DB (database) 8a. The TMS server 8 is connected to the STB 3 within the household over an ordinary telephone network 10, and thus can take the reaction of the viewers watching the general broadcast GB regarding the program and forward that reaction to the broadcasting station 1. Additionally, the TMS server 8 is connected to a payment settling institution 11 with a dedicated line 12, and carries out communication with the payment settling institution 11. The TMS server 8 receives data from the portable terminals 7P, 7Q, and 7R via the mobile communications network 6. The portable terminals 7P, 7Q, and 7R are portable terminals similar to the portable terminal 7 of the first embodiment.

[0035] The payment settling institution 11 is, for example, a credit card company or a bank for settling transactions. Data generated when the user uses a two-way program and which are necessary for settling payment are collected in the TMS server 8 and sent to the payment settling institution 11. This means that the TMS server 8 functions as a payment settling server. For example, the TMS server 8 can settle payment for an online shopping program. Apart from this payment settling function, the TMS server 8 includes functions such as member registration and management.

[0036] The present embodiment illustrates an example of the application of the present invention to an audition program, which is a viewer participation type two-way program. The broadcasting station 1 in Fig. 5 multiplexes a mobile broadcast MB with a general broadcast GB and broadcasts. The audition program is broadcast by this mobile broadcast MB. The audition program is received by the mobile server 5, and after a predetermined data conversion, it is forwarded to the portable terminals 7P, 7Q, and 7R via the mobile communications network 6. The users place their vote regarding the audition using the portable terminals 7P, 7Q, and 7R, and data pertaining to those votes are sent to the TMS server 8 via the mobile communications network 6. The data that are sent are aggregated in the TMS server 8, and the results of that aggregation are transmitted to the broadcasting station 1. The aggregated results transmitted to the broadcasting station 1 can at any time be affected in the audition program. In this way the users can participate in the audition program while away from home using their portable terminal.

[0037] Fig. 6 is a block diagram showing an example of the internal configuration of the TMS server 8. In Fig. 6, a database 8a, an interface 8b, a control unit 8c, and a storage unit 8d are connected via a system bus 8e.

[0038] The interface 8b has the function of communicating with the aforementioned broadcasting station 1, the STB 3, the payment settling institution 11, and the portable terminals 7P, 7Q, and 7R.

[0039] The control unit 8c is for example made up of a CPU (central processing unit), a ROM (read only memory), and a RAM (random access memory), and controls the various units by executing a program stored in the ROM.

[0040] A user wishing to use the services of the present embodiment first accesses the TMS server 8 to complete a certain membership registration. Member registration data *dt* registered at this time is stored in the database 8a. The member registration data *dt* includes

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user ID, password, address, area of residence, credit card number, and payment plan, for example. Of these, the user ID and password can be the same as the user ID and password in the user data *dr* of the first embodiment. This is so that input of the user ID and password can be omitted.

[0041] When a program identification number (for example: eid1), which is the number for identifying the program, the reception completion time (for example: t), which is the time that reception of the registration is completed, and the candidate code of the candidate selected by the user are sent from the portable terminals 7P, 7Q, and 7R to the TMS server 8 via the mobile communications network 6, that program identification number, reception completion time, and candidate code are temporarily stored in the storage unit 8d. Data that are stored in the storage unit 8 are erased in order from the oldest data when the storage area becomes full.

[0042] When the TMS server 8 is accessed from the portable terminals 7P, 7Q, and 7R, it performs the predetermined billing process with respect to this access. More specifically, the TMS server 8 reads out the payment plan from the member registration data *dt*, generates a usage fee in accordance with the payment plan, and accumulates data pertaining to that usage fee in a billing unit *dm* in the database 8a. The TMS server 8 then accesses the payment settling institution 11 and performs a predetermined payment settling process using the data accumulated in the billing unit *dm*. For example, the usage fee is totaled monthly and billed to the user's credit card company using the credit card number in the member registration data *dt*.

[0043] Fig. 7 is a block diagram illustrating an example of the internal configuration of the broadcasting station 1. In Fig. 7, a broadcast control server 1b controls broadcasting. The broadcast control server 1b is connected to a recording unit 1c, a screen 1d, a terminal 1e, a sending unit 1f, a program DB (database) 1g, and a voting form DB (database) 1h. The broadcast control server 1b is also connected to the TMS server 8 with the dedicated line 9. The sending unit 1f is connected to an antenna 1a.

[0044] The recording unit 1c records the audition program and stores that recorded program data in the program DB 1g. The program DB 1g, also stores program data that have already been recorded, in addition to the recorded audition program data. The screen 1d is a large screen set up in the studio for the audition program. The terminal 1e is a command terminal for performing specific commands to the broadcast control server 1b. The sending unit 1f broadcasts the program that is outputted from the broadcast control server 1b via the antenna 1a.

[0045] Fig. 8 is a diagram showing an example of the internal configuration of the voting form DB 1h. The voting form DB 1h includes the program identification number, voting form data, and the reception completion time. The program identification number *eid1*, the voting form data *dy*, and the reception completion time *t* are registered in advance by the program staff operating the terminal 1e, as shown in the Fig. 8. The voting form data *dy* is used for displaying a specific voting form screen on the portable terminal 7P, for example. The voting form data *dy* are written in HTML (hypertext markup language), for example. The voting form data *dy* include a list of the candidates in the audition program and the address of the TMS server 8. They also include the candidate codes corresponding to the candidates. The reception completion time *t* is the time at which the reception of votes for the audition program is over.

2-B: Operation of the Second Embodiment

[0046] The operation of the present embodiment will now be explained next.

[0047] It should be noted that the operation in the present embodiment, with some exceptions, is the same as the operation in the above-described first embodiment. Consequently, an explanation of components that are shared with the above first embodiment will be omitted from the following description. Furthermore, identical numerals will be used for components that are shared with the first embodiment. Also, because the portable terminals 7P, 7Q, and 7R have identical functions, for the sake of convenience the following explanation is only for the portable terminal 7P.

[0048] Fig. 9 is a sequence diagram showing an example of the operation of the present embodiment. In the broadcasting station 1, the broadcast control server 1b is currently recording an audition program with the recording unit 1c and broadcasting it with the sending unit 1f. In Fig. 9, first the user of the portable terminal 7P connects to the mobile server 5 in the same way as in the first embodiment to view the audition program that is being broadcast. Then, when during the broadcast of that program the program staff operates the terminal 1e in accordance with the progress of the program, the program identification number *eid1*, the voting form data *dy*, and the reception completion time *t* are read out from the voting form DB 1h and are multiplexed with the audition program and broadcast (step Sc1).

[0049] Next, the mobile server 5 receives that audition program and separates and extracts the program identification number *eid1*, the voting form data *dy*, and the reception completion time *t*. This is followed by the mobile server 5 adding the user ID and password to the separated and extracted data and forwarding these data to the portable terminal 7P (step Sc2).

[0050] Next, the portable terminal 7P receives these data and by the voting form data *dy* displays the voting form screen on the display 7b (step Sc3). The displayed voting form screen displays the list of the candidates and a message urging the selection of a candidate. The user then uses the operating unit 7c to select a desired candidate and vote. This results in the candidate code corresponding to the selected candidate, together with the

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program identification number *eid1*, the reception completion time *t*, and the user ID and password, being sent to the address of the TMS server 8 that is included in the voting form data *dy* (step Sc4).

[0051] Next, the TMS server 8 receives the sent data via the interface 8b (step Sc5). The TMS server 8 then checks the received user ID and password against the user ID and password of the member registration data *dt* and performs an authentication process (step Sc6). At this time the TMS server 8 discards the received data if the time that the data was received is later than the reception completion time *t*. Next, the TMS server 8 temporarily stores the program identification number *eid1*, the reception completion time *t*, and the candidate code in the storage unit 8d (step Sc7). Then a usage fee is generated in accordance with the payment plan and is accumulated in the billing unit *dm* (step Sc8). The TMS server 8 performs the predetermined payment settling process using these data. For example, each month the TMS server 8 totals these data and bills the usage fee to the payment settling institution 11, which is for example a credit card company, using the credit card number in the member registration data *dt*.

[0052] Next, when it becomes the reception completion time *t*, the TMS server 8 reads out the candidate codes in the storage unit 8d and totals the number of votes for each candidate code (step Sc9). The TMS server 8 then processes the results of this total into audition results of a predetermined format and sends the results to the broadcast control server 1b in the broadcasting station 1 via the interface 8b (step Sc10).

[0053] Next, when the program staff operate the terminal 1e in coordination with progress in the program, the broadcast control server 1b displays the received audition results on the screen 1d (step Sc11). The recording unit 1c records this display and the sending unit 1h broadcasts it, making it possible for the user of the portable terminal 7P to learn of the results of the audition. Thus, members participate in the program, and a two-way program in which viewers can participate is achieved.

[0054] It should be noted that the audition results can also be once again multiplexed into the audition program and broadcast without being displayed on the screen 1d. In this case, these audition results can be displayed over the program which is being displayed on the portable terminal 7P.

2-C: Modified Examples of the Second Embodiment

[0055] The above-described second embodiment can be modified as follows.

(1) It is also possible that the mobile server 5 has the functions of the TMS server 8 in the present embodiment, in which case the authentication process is performed only once and also the payment settlement process can be consolidated. Furthermore, the user has to register only once.

(2) In the present embodiment, the TMS server 8 is connected to the STB 3 and the payment settling institution 11 via the dedicated lines 10 and 12, however, there is no limitation to this. For example, a communications network such as an ordinary telephone network or the Internet can also be used. It is also possible for the mobile communications network accommodating the mobile server and the mobile communications network accommodating the TMS server to be different networks.

(3) In the present embodiment, a case is presented in which the viewer participation type two-way program is an audition program, however, there is no limitation to this. For example, it can also be a quiz program, in which case "answer" can be used in place of "vote." In other words, it is only necessary that the program is a two-way program. It should be noted that as in "vote" and "answer," what is sent from the portable terminal 7P to the TMS server 8 can be a response to the two-way program that is being received.

(4) In the present embodiment, the address of the TMS server 8 can be a telephone number, an E-mail address, or an IP address, for example, corresponding to the TMS server 8. That is to say, it is only necessary that the address for the TMS server 8 is specifiable.

(5) In the present embodiment, the mobile broadcast MB is received indirectly via the mobile server 5, however, it does not necessarily have to be received indirectly. For example, it is also possible that members who view such a viewer participation type two-way program shown on a large screen in town while away from home participate in that program using their portable terminal 7P.

(6) In the present embodiment, the present invention is applied to an audition program, but it is also possible to apply it to a television shopping program or the like, and to leave the settlement of payment to the TMS server 8. In this case it can be expected that many persons will apply for popular products and that a lottery may have to be entered when a certain number of applicants is exceeded, and with the present embodiment, the user can be given of the results of this lottery before the end of the program.

(7) In the present embodiment, it is also possible to accumulate diverse information on viewer transactions and put them into a database. For example, information such as when, during what time period, and what types of products the viewers purchased can be put into a database. Additionally, by using a universal positioning information service that reveals the location of the portable terminals, it is possible to obtain positioning information on where the viewers are watching the program and making such transactions. GPS (global positioning system) can

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be used to obtain this positioning information. A service is also possible in which viewer interests and needs are analyzed from a database in which such information has been gathered and the results of that analysis collected and provided as chargeable or free information. For example, that information could conceivably be provided to program production companies for a fee. In particular, because of the many unpredictable elements in mobile broadcasts there is a great potential for program production companies, for example, to research what kind of programs should be made. From such a viewpoint, this service could become a significant point of reference when making plans for such programs.

(8) In the present embodiment, the reception completion time *t* is supplied from the broadcast control server 1b to the TMS server 8, however, it is also possible to register it in the TMS server in advance. In this case the broadcast control server 1b multiplexes and broadcasts only the program identification number *eid* and the voting form data *dy* with the program, and then broadcasts.

(9) In the present embodiment, the totaling of the votes was performed in the TMS server 8, but it is also possible to perform this totaling in the command terminal 1b in the broadcasting station 1. In this case the TMS server 8 only needs to forward the received candidate codes to the command terminal 1b.

3. Third Embodiment

[0056] A third embodiment of the present invention will now be described next. In the present embodiment, the mobile server obtains the EPG (electrical program guide) multiplexed with the general broadcast GB and sent to the mobile server, and then the mobile server sends it to the portable terminal 7 via the mobile communications network 6. Then the user searches this EPG and selects a program, and with the portable terminal 7 sends a record request command, which includes data regarding the selected program, to a home server installed within the home, and the home server records that program.

3-A: Configuration of the Third Embodiment

[0057] The configuration of the present embodiment is the same as the configuration of the first embodiment, with some exceptions. Consequently, an explanation of components that are shared with the first embodiment will be omitted from the following description. Furthermore, identical numerals will be used for components that are shared with the first embodiment.

[0058] Fig. 10 is a block diagram showing an example of the overall configuration of the present embodiment. As shown in Fig. 10, in this configuration a home server 13 has been provided in place of the STB 3 of the first embodiment. This is a feature that is different from the first embodiment. In Fig. 10 the home server 13 is a server for controlling electrical appliances within the household. The home server 13 includes a receiver function for receiving the general broadcast GB, a communication function for performing communication with the portable terminal 7, and a record function for recording programs. The home server 13 performs communication with the portable terminal 7 via the ordinary telephone network 10 and the mobile communications network 6. In addition, the home server 13 receives the general broadcast GB via the parabolic antenna 2.

[0059] In Fig. 10, the EPG multiplexed with the general broadcast is sent from the broadcasting station 1. The mobile server 5 receives this EPG and forwards the received EPG to the portable terminal 7 via the mobile communications network 6. The portable terminal 7 displays the received EPG on the display 7b. The user searches through this and selects the program he would like to record. Next, the user uses the portable terminal 7 to make a request to the home server 13 to record the program. This results in a record request command, which includes data regarding the program for which a record is scheduled, being forwarded to the home server 13 via the mobile communications network 6 and the ordinary telephone network 10. The home server 13 then records the program in accordance with the record request command that is received.

[0060] Fig. 11 is a block diagram illustrating an example of the home bus system in which the home server 13 is employed. As shown in Fig. 10, the home server 13 and various electrical appliances within the household are connected via the home bus, and a connector for connecting the home bus and the electrical appliances is provided in each room. Moreover, the home server 13 is connected to the parabolic antenna 2, a terrestrial antenna, a cable for CATV or the like. Information that enters the household is first gathered in the home server 13.

[0061] The home server 13 has a function that conforms with the specifications of the existing home bus system (the standard specifications determined regarding the method for connecting and controlling appliances and the procedure for the communication of information from outside the home, so as to uniformly perform the controls for household electrical appliances) such as that shown in the drawing. This function makes it possible for example for household residents to call the home server 13 by telephone from an outside location and control an automatic hot water filling device to fill hot water into the bathtub. It is also possible for the home server 13 to link up with the security system and for example automatically notify a predetermined gas company when a gas leak is detected.

[0062] The home server 13 furthermore has a similar function to that of the STB 3 of the first embodiment. For example, the home server 13 has a receiver function for

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receiving the program of digital satellite broadcasts. The home server 13 also has a communication function for performing communications with the ordinary telephone network 10 via a modem (omitted from the drawings). Moreover, the home server 13 has a recording function for controlling the program recording device shown in the drawing to record programs.

3-B: Operation of the Third Embodiment

[0063] The following is an explanation of the operation of the present embodiment.

[0064] It should be noted that the operation of the present embodiment is the same as the operation of the first embodiment, with some exceptions. Consequently, an explanation of components that are shared with the first embodiment will be omitted from the following description. Furthermore, identical numerals will be used for components that are shared with the first embodiment.

[0065] First, the EPG will be described in detail. EPG data is a type of SI (Service Information). EPG data also includes information (for example: channel, broadcasting time, title, genre, brief program description, detailed program description) regarding programs on the broadcast channel from the current time until after a certain time (24 hours, for example).

[0066] In digital satellite broadcasts, a band is secured for the EPG data, on which only the EPG data is sent. The EPG data is transmitted frequently, thus it is possible to always keep the newest EPG data in the EPG area *ar* of the memory 5h.

[0067] Fig. 12 is a sequence diagram showing an example of the operation of the present embodiment. In the drawing, first the user accesses the mobile server 5 from the portable terminal 7 in the same way as in the first embodiment (step Sd1). Then, the mobile server 5 opens a channel to the portable terminal 7 (step Sd2). Next, the mobile server 5 performs an authentication process with the user ID and password received from the portable terminal 7 (step Sd3). When authentication is complete, the mobile server sends information regarding services available to the user of the portable terminal. A list of those services is displayed on the display 7b (step Sd4). When the user selects the "EPG forwarding service" from this list, the mobile server 5 sends a signal requesting the selection of the genre and broadcast time to the portable terminal 7, and a screen for inputting the selection of the genre and broadcast time is displayed on the display 7b (step Sd5).

[0068] Next, when the user operates the operating unit 7c to select the desired broadcast time and genre, the mobile server 5 reads out the EPG data *de* corresponding to those parameters from the EPG area *ar*. The mobile server 5 then creates an EPG which is based on the read EPG data *de* and restricted to match the selected parameters (hereinafter, simply called the program guide), performs the same conversion process as the data conversion process of the first embodiment, and forwards that program guide to the portable terminal 7 (step Sd6). In this way, a program guide suited to the portable terminal 7 is created. For example, when the EPG data *de* includes still pictures of screens representing the programs, then a visual program guide is created if the portable terminal 7 can handle still pictures. If the portable terminal 7 can handle only text data, a program guide is created that is made from text only.

[0069] Next, the received program guide is displayed on the display 7b (step Sd7). Then, when the user looks through the program guide that is displayed and operates the operating unit 7c to select a program which he would like to record and requests that the program is recorded, the portable terminal 7 sends to the home server 13 a record request command which includes the broadcast time and channel of the selected program (step Sd8). The home server 13 then controls a program recording device based on that received record request command, and records that program (step Sd9).

[0070] It should be noted that the mobile server 5 can also forward the EPG directly to the portable terminal 7 without restricting the EPG according to the genre and broadcast time desired by the user. In this case the selection screen for the genre and the broadcast time is not displayed.

[0071] Furthermore, it is also possible to send the program identification number in the EPG data instead of the broadcast time and channel for the program that is selected. It is also possible to send another program identification code such as the G-Code (also called VCR PLUS; the television program identification code made by Gemstar Development Corporation in the USA).

[0072] According to the present embodiment as explained above, the user is able to utilize an "EPG forwarding service" while away from home, for example. Consequently, the user can let the home server 13 record a desired program from while away from home, for example. Then, after the user returns home he is able to view that recorded program with a television receiver, for example.

[0073] Moreover, with the present embodiment, the mobile server 5 creates a program guide that can be reproduced in one's personal portable terminal 7 and forwards that program guide, thus this "EPG forwarding service" can be used by existing portable terminals.

3-C: Modified Examples of the Third Embodiment

[0074] The following modifications can be made to the third embodiment described above.

(1) In the present embodiment, the EPG is forwarded, but it is also possible to forward G-Codes (also called VCR PLUS; the television program identification codes made by Gemstar Development Corporation in the USA) in place of the EPG. That is to say, it is only necessary that the information that is

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forwarded is program selection information for the selection of broadcast programs. As an example of this case, the EPG is converted into G-Codes in the portable terminal 7, to be sent to the home server 13. Or in another example, it is also possible that this conversion is performed by the mobile server 5 if the conversion is made into an algorithm and registered in advance as the conversion method *he*.

(2) In the present embodiment, the portable terminal 7 receives the EPG from the mobile server 5, however, it is not absolutely necessary that it receive this EPG. In this case, the user for example obtains information on the channels and broadcast times, for example, from a newspaper or other such media, and then operates the operating unit 7c to make a direct input.

(3) It is also possible to let the STB 3 of the first embodiment have the functions of the home server 13 in the present embodiment.

4. Fourth Embodiment

[0075] Next a fourth embodiment of the present invention will now be described. In this embodiment, the mobile server 5 receives reservations for recording programs from the user and records the program in question on behalf of the user. It should be noted that the mobile server 5 according to the present embodiment is different from the mobile servers described in the above embodiments in that it is simultaneously a server accommodated in the mobile communications network 6 and a server on the Internet, whereby programs that are broadcast on the Web can be recorded as well. The following is a more detailed description.

4-A: Configuration of the Fourth Embodiment

[0076] The configuration of the fourth embodiment is the same as the configuration of the first embodiment with some exceptions. Consequently, an explanation of components that are shared with the first embodiment will be omitted from the following description. Furthermore, identical numerals will be used for components that are shared with the first embodiment.

[0077] Fig. 13 is a block diagram showing an example of the overall configuration of the present embodiment. As shown in Fig. 13, the mobile server 5 has the function of connecting to the Internet INT as well, as mentioned above. Also, as shown in Fig. 13, the server 5 is made up of various servers. This is to provide an accompanying hosting service for maintaining various types of servers, including a mail server, a Web server, and a file sever, which are not shown in the drawings, and for proving a user with a storage unit of the server for storing programs that are recorded on behalf of the user. In Fig. 13, a communication server 5s1, a DNS server 5s2, an authentication server 5s3, a billing server 5s4, a receiving server 5s5, a video control server 5s6, and a recording server 5s7 are connected via a system bus 5s8.

[0078] The communication server 5s1 has a similar function as the communication unit 5g of the first embodiment. In addition, the communication server 5s1 also has a function for connecting to the Internet INT. The DNS server 5s2 manages IP addresses and domain names necessary when downloading data through the Internet INT. The authentication server 5s3 performs authentication of users for the above service. The billing server 5s4 has a similar function as the billing unit 5e of the first embodiment. The receiving server 5s5 has a similar function as the units of the mobile server 5 according to the first embodiment besides the communication unit 5g and the billing unit 5e. The recording server 5s7 has a recording DB (database) *ds* made up of a nonvolatile memory. The recording server 5s7 also has a reservation management table *tby*.

[0079] Fig. 14 is a diagram illustrating an example of the internal configuration of the reservation management table *tby*. In Fig. 14, the reservation management table *tby* is made up of the data fields of "user ID", "program identification number k3", "broadcast channel k2", "broadcast time", and "title". "User ID" is the user ID for identifying the user making the reservation. "Program identification number k3" is the number for identifying the program that has been reserved, and is the same as the program identification number k3 in the second embodiment. "Broadcast channel k2" is the channel on which the reserved program is broadcast, and is the same as the broadcast channel k2 of the second embodiment. "Broadcast time" is the time when the reserved program is broadcast. "Title" is the title of the reserved program.

[0080] The recording server 5s7 requests that the receiving server 5s5 receives the reserved program when a timer (not shown in the drawings) indicates the arrival of the broadcast time stored in the reservation management table *tby*. The receiving server 5s5 receives that program and stores the received data in the memory 5h. The recording server 5s7 then stores the program data that is saved in the memory 5h in the recording DB *ds*. In this way, the recording of the reserved program is complete. When new programs are recorded they are accumulated in the recording DB *ds* in order. In the recording DB *ds*, the program identification number k3 is stored together with the recorded program. As mentioned above, the recording DB *ds* is made from a nonvolatile memory, so the stored program is not erased even if the power is turned off. For effective use of the storage of the mobile server 5, it is possible to establish a certain retention period for the recorded programs, and when that storage period has passed, the recorded programs are either deleted or backed up in another storage medium, for example. The video control server 5s6 has the function of accepting reservations from the user for programs to be recorded and controlling the various units such that those programs are received and recorded on behalf of the user.

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4-B: Operation of the Fourth Embodiment

[0081] The following is an explanation of the operation of the present embodiment.

[0082] It should be noted that the operation according to the present embodiment is the same as the operation of the first embodiment, with some exceptions. Consequently, an explanation of components that are shared with the first embodiment will be omitted from the following description. Furthermore, identical numerals will be used for components that are shared with the first embodiment.

[0083] The operation of the present embodiment can be broadly divided into the operation when reserving the program the operation when reproducing the program.

(1) Operation When Reserving Programs

[0084] Fig. 15 is a flow chart illustrating an example of how the mobile server 5 operates when reserving a program. In Fig. 15, first, when accessed by the portable terminal 7, the communication server 5s1 opens a channel with the portable terminal 7 in the same way as the communication unit 5g of the first embodiment (step Se1) does. Then the authentication server 5s3 performs an authentication process (step Se2). That is, the authentication server 5s3 sends a signal requesting the user ID and password to the portable terminal 7 via the communication server 5s1. Specifically, when the communication server 5s1 receives the user ID and password from the portable terminal 7, the authentication server 5s3 references the user data *dr* in the receiving server 5s5 and authenticates that user. When the user is authenticated, a list of the services available to that user is displayed on the display 7b (step Se3).

[0085] Next, when the user operates the operating unit 7c to select the "recording proxy service" from the list of services, a selection menu such as the following is displayed on the display 7b (step Se4).

"1. Request program guide
2. Do not request program guide"

If "2. Do not request program guide" is selected, the video control server 5s6 urges the user to input the broadcast time and the channel of the program for which a reservation is desired (step Se5). When the user responds to this by inputting the broadcast time and channel to reserve the program, the video control server 5s6 obtains the program identification number k3 and the title of that program from the EPG data *de*, the procedure advances to step Se8, and the settings for the program reservation are performed.

[0086] Alternatively, when "1. Request program guide" is selected, the video control server 5s6 requests the receiving server 5s5 to perform a process which is same as the "EPG forwarding service" of the third embodiment (step Se6). This results in a program guide being displayed on the display 7b. At this time, the video control server 5s6 displays a selection menu such as the following on the display 7b (step Se7).

"1. Reserve program
2. Redo"

If the user selects "2. Redo", then the mobile server 5 returns the procedure to step Se3 and once again displays the list of services.

[0087] If the user looks over the displayed program guide, chosen a program, and selects "1. Reserve program," the video control server 5s6 makes a request to the recording server 5s7 regarding the program reservation (step Se8). To be more specific, the video control sever 5s6 correlates the user ID with the program identification number k3, the broadcast channel k2, broadcast time, and title of the reserved program, and stores this information in the reservation management table *tby*. At this time, when the program identification number k3 corresponding to the program has already been saved in the reservation management table *tby*, a flag indicating that the programs has already stored (not shown in the drawings) is added to that information and stored. This is to prevent duplicate recordings of the same program. More specifically, when this already reserved flag is added, the recording server 5s7 ignores reservations to which this flag has been added.

[0088] As an example, if the results that are stored are those indicated by the *a* arrow in Fig. 14, then the video control server 5s6 displays a confirmation screen such as the one below on the display 7b (step Se9).

"CH52 month: A day: B 10:00-12:00 XX News
Reservation has been received."

When the user responds to this by performing a predetermined confirmation operation, the series of processes is ended and the channel is closed (step Se10). It should be noted that it is possible to allow a plurality of reservations with a single access. In this case, the user performs a predetermined successive reservation operation from the display of the confirmation screen in step Se9. This results in the procedure moving to step Se4.

[0089] After this, when it becomes the "broadcast time" stored in the reservation management table *tby*, the recording server 5s7 automatically records the program that has been reserved and stores it to the recording DB *ds*. Thus, a "recording proxy service" is provided.

(2) Operation When Reproducing Programs

[0090] Fig. 16 is a flow chart illustrating an example of how the mobile server 5 operates during the reproduction of a program. In Fig. 16, first, when there is an access from the portable terminal 7, the mobile server 5, like in the operation when reserving a program as explained above, connects to the portable terminal 7 (step Sf1), performs an authentication process (step Sf2), and displays a list of the services (step Sf3).

[0091] Next, when the user operates the operating unit 7c to select the "program reproduction service," the video control server 5s6 uses the user ID as a key and searches the reservation management table *tby* to con-

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firm whether there is a reserved program (steps Sf4, Sf5). When the result is that there is no reserved program, the video control server 5s6 transmits a signal indicating this via the communication server 5s1, which is displayed by the display 7b, and the sequence of processes is ended (step Sf6). This is followed by closing the channel (step Sf7).

[0092] Alternatively, when there is a reserved program, the video control server 5s6 reads from the reservation management table *tby* all of the "program identification number k3", "broadcast channel k2", "broadcast times", and "titles" corresponding to the user ID. Subsequently, the video control server 5s6 displays a list of the reserved programs based on the data that is read out and urges the user to make a selection (step Sf8). Then, when the user selects the program he would like to see, the video control server 5s6 searches the recording DB *ds* for the "program identification number k3" corresponding to the selected program, and reads out the relevant program (step Sf9).

[0093] Next, the video control server 5s6 lets the receiving server 5s5 perform a similar process as the data conversion process of the first embodiment so as to convert the program that has been read out into data which can be reproduced by the user's portable terminal 7 (step Sf10). The video control server 5s6 then lets the communication server 5s1 forward that converted data successively to the portable terminal 7 (step Sf11). As a result, the program is reproduced on the portable terminal 7 and the user is able to view that program. When this forwarding ends (step Sf12), it is determined whether the reproduction of all of the reserved programs is finished (Sf13). If the reproduction is not finished, then the process steps from Sf8 to Sf12 are repeated until the reproduction of the reserved programs is completely finished. On the other hand, when the reproduction is finished, the video control server 5s6 displays a message of completion on the display 7b (step Sf14), after which it closes the channel (step Sf7).

[0094] It should be noted that the user can perform a predetermined operation to return at any time to the screen of step Sf8 with the list of reserved programs. Additionally, the user can perform a predetermined end operation to interrupt reproduction and finish this service at any time.

[0095] Thus, programs that are recorded with the "recording proxy service" are forwarded to and reproduced on the user's portable terminal 7 in accordance with requests from the user. Consequently, the user can utilize this "program reproduction service" to view programs reserved beforehand on their portable terminal 7 even when away from home, for example. As a result, users is able to enjoy past programs stored in the mobile server 5 on demand with the portable terminal 7.

[0096] With the present embodiment, by providing the mobile server 5, which can be shared by numerous portable terminals 7, in the mobile communications network 6, it is possible to consolidate and store those programs among the reserved programs that are duplicate. Consequently, mobile server 5 resources such as capacity can be used effectively.

4-C: Modified Examples of the Fourth Embodiment

[0097] The following modifications can be made to the fourth embodiment described above.

(1) In the present embodiment, the user views programs which he has reserved, but it is also possible for the user to view programs which have been reserved by somebody else. Such a service is possible because all of the recorded programs are stored in the recording DB *ds* and managed collectively. In this case, it is also possible that the mobile server charges a certain usage fee to the user.

(2) It is possible that the above-described STB 3 has functions equivalent to those of the mobile server 5 according to the present embodiment. In this case, it is not necessary to provide functions equivalent to those of the billing server 5s4, the authentication server 5s3, and the DNS server 5s2. Alternatively, it is also possible that the home server 13 has the functions of the mobile server 5.

(3) In the present embodiment, the EPG was obtained from broadcast waves, but it is also possible to obtain the EPG from the Internet INT. Furthermore, it is also possible to obtain and record programs broadcast on the Web from the Internet INT.

(4) Where necessary, it is also possible to let the mobile server 5 of the present embodiment have further functions for altering, erasing, and adding reservations, for example. Additionally, it is also possible that the mobile server 5 has a function for enabling users to confirm the reservations of their own and completion of recording of the reserved programs, for example.

(5) In the present embodiment, the transmission and reception of data was carried out after a channel was established between the mobile server 5 and the portable terminal 7, however, it is also possible to use a packet communications format. In packet communications, charges are made based on the amount of data, thus the usage fee can be reduced. Since the mobile server 5 is provided on the Internet INT, users can use an electronic device which can access the Internet INT so as to connect to the mobile server 5 via the Internet INT and exchange data using HTTP (Hypertext Transfer Protocol), for example.

(6) In the present embodiment, programs are reproduced on the portable terminal 7 while there is a connection between the mobile server 5 has a connection with the portable terminal 7. However it is also possible to download the program completely onto the portable terminal 7, close the channel, and then reproduce that program with a predetermined

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reproduction command from the user.

[0098] In the present embodiment, duplicate programs are not recorded in the recording DB *ds*, however, it is also possible make duplicate recordings, in which case a plurality of the same program will exist in the recording DB *ds*.

5. Other Embodiments of the Invention

[0099] As described in the above embodiments, the mobile server 5 receives the mobile broadcast MB, converts it into data for the portable terminals, and forwards the data to those terminals. However, it is also possible for the mobile server 5 to receive the general broadcast GB and forward it in the same way to the portable terminals. In this case, the mobile server 5 for example performs data conversion from MPEG2, which is for the general broadcast GB, to MPEG4, which is for the mobile broadcast MB.

[0100] Additionally, in the above embodiments a case was described in which the mobile server 5 receives a digital satellite broadcast, however, it is also possible that the mobile server 5 receives terrestrial digital broadcasts. In this case, a parabolic antenna is not necessary. Since transmission of terrestrial digital broadcasts are limited within certain areas in which they can be received, it is often the case that broadcasts which can be received in Tokyo district cannot necessarily be received in Kyushu district. However, in the above embodiments, the communications data is forwarded by communication via the mobile communications network 6. Therefore, a user is able to view a program broadcast within an area which the portable terminal is not located by accessing a mobile server 5 provided in the area. Specifically, a user in Kyusyu district accesses a mobile server 5 in Tokyo district to view programs which is broadcast only in Tokyo district. Besides, a user accesses a mobile server 5 in Japan from overseas, to view domestic broadcasts, for example. Additionally, the broadcast does not have to be a digital broadcast as long as it is a mobile broadcast MB.

[0101] The portable terminal of the above embodiments can be any kind of terminal as long as it can carry out communication with the mobile server 5. For example, it can be a portable telephone, an automobile telephone, or a PDA (personal digital assistant), as long as it is a terminal that can be accommodated on a mobile communications network.

Claims

1. A data forwarding method comprising:

   a step in which a broadcasting station sends data intended for a mobile terminal accommodated on a mobile communications network;

   a step in which a mobile server accommodated on the mobile communications network receives the sent data; and

   a step in which the mobile server forwards the received data to the mobile terminal via the mobile communications network.

2. The data forwarding method according to claim 1, wherein after converting the data received from the broadcasting station into a data format which can be reproduced by the mobile terminal, the mobile server forwards the converted data to the mobile terminal.

3. A data forwarding method comprising:

   a step in which a broadcasting station sends a two-way program;

   a step in which a mobile server accommodated on a mobile communication network receives the sent two-way program;

   a step in which the mobile server forwards the received two-way program to a mobile terminal accommodated on the mobile communications network via the mobile communications network;

   a step in which the mobile terminal receives the forwarded two-way program and via the mobile communications network sends a reaction of a user of the mobile terminal regarding the received two-way program to a two-way server, wherein the two-way server is provided between the broadcasting station and the mobile terminal, performs two-way communication with the broadcasting station, and is accommodated on the mobile communications network; and

   a step in which the two-way server receives the reaction of the user and sends the reaction to the broadcasting station.

4. The data forwarding method according to claim 3, wherein after converting the received two-way program into a data format reproducible by the mobile terminal, the mobile server forwards the converted data to that mobile terminal.

5. A data forwarding method comprising:

   a step in which a broadcasting station sends program selection information that is used when a user of a mobile terminal selects a broadcast program;

   a step in which a mobile server accommodated on a mobile communications network receives the sent program selection information, and forwards the received program selection information to the mobile terminal via the mobile com-

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munications network;
a step in which the mobile terminal receives the forwarded program selection information, and sends a program record command, which requests that a program selected by a user of the mobile terminal based on the received program selection information is recorded, to a home server installed within a home or the like, and provided with a function for recording the broadcast program; and
a step in which the home server receives the program record command, receives the selected program from the broadcasting station, and records the selected program.

6. The data forwarding method according to claim 5, wherein the mobile server creates a program guide, which can be reproduced by the mobile terminal, based on the received program selection information, and forwards the created program guide to the mobile terminal via the mobile communications network.

7. A data forwarding method comprising:

a step in which a broadcasting station sends a program intended for a mobile terminal accommodated on a mobile communications network;
a step in which the mobile terminal accommodated on the mobile communications network sends a signal, requesting that the program is recorded, via the mobile communications network to a mobile server accommodated on the mobile communications network;
a step in which the mobile server receives the request, and receives and records the reserved program from the broadcasting station; and
a step in which the mobile server, in response to a program reproduction request from the mobile terminal which made the record request for the recorded program, forwards the recorded program to that mobile terminal via the mobile communications network.

8. The data forwarding method according to claim 7, wherein after converting the recorded program into a data format which can be reproduced by the mobile terminal, the mobile server forwards the converted data to the mobile terminal.

9. A mobile server which:

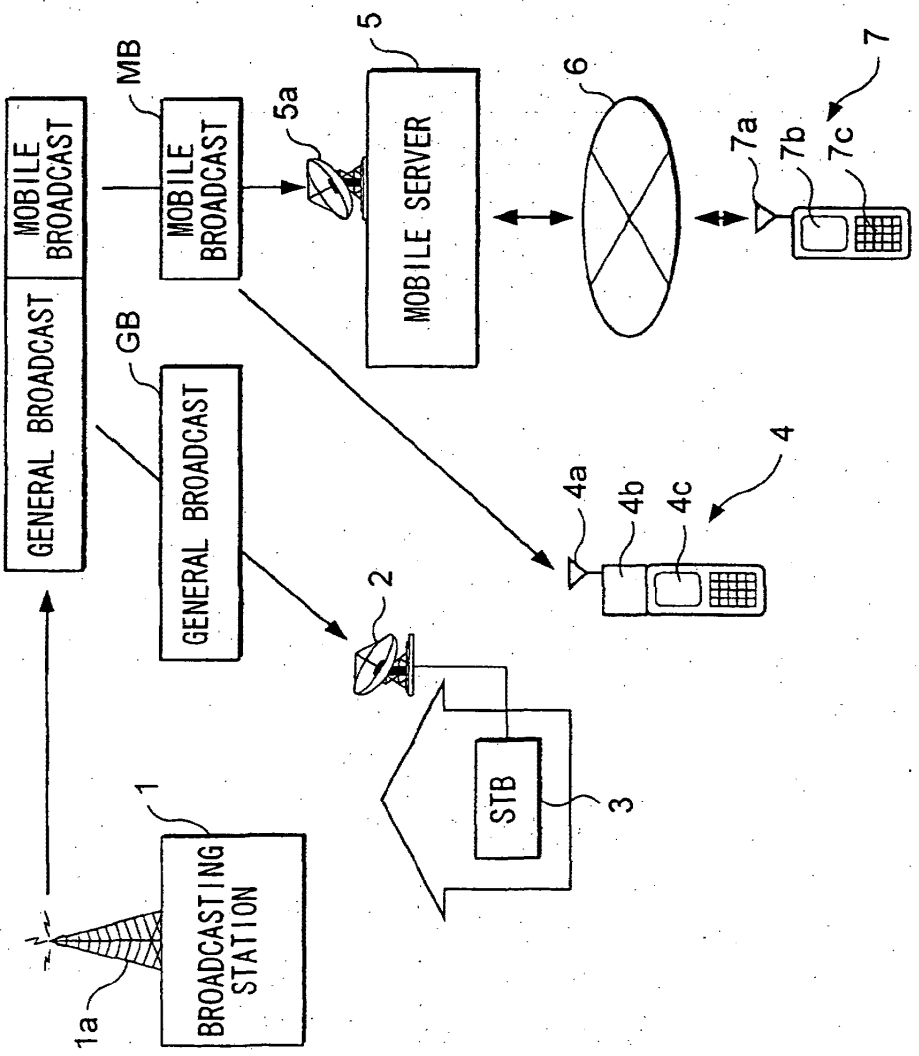
receives data intended for a mobile terminal broadcast by a broadcasting station; and
sends the received data to a mobile terminal accommodated on a mobile communications network via the mobile communications network.

10. The mobile server according to claim 9, wherein after converting the received data into a data format which can be reproduced by the mobile terminal, the mobile server forwards the converted data to the mobile terminal.

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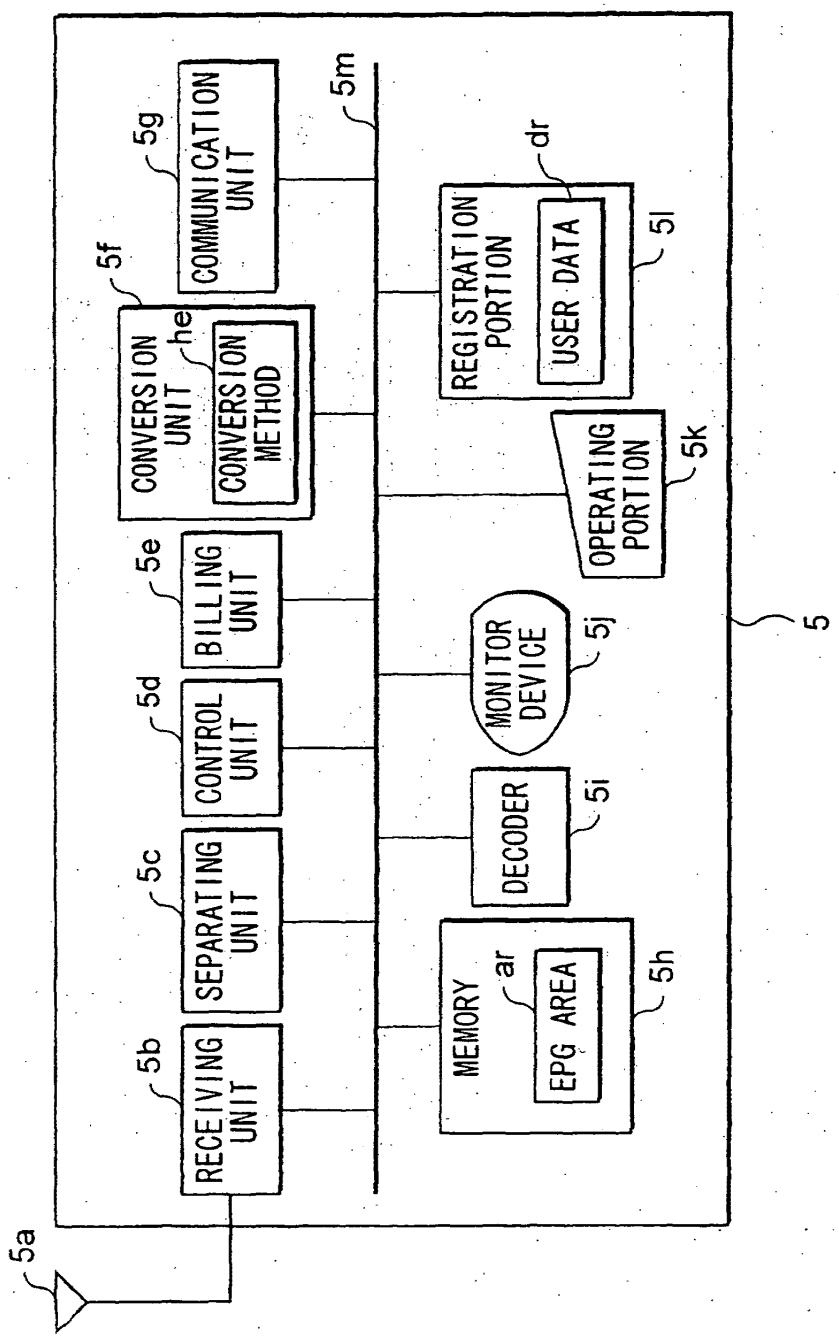
1102.0082

FIG. 1



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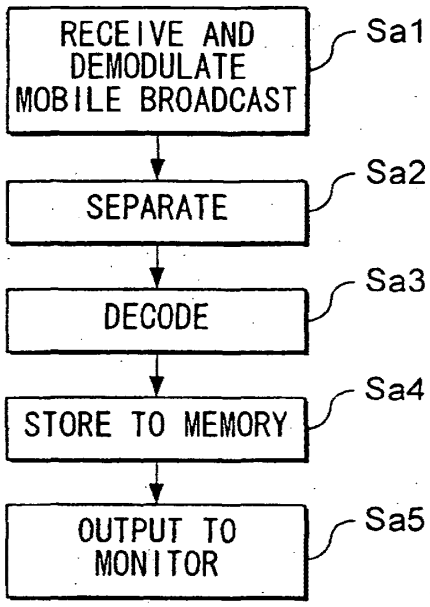
FIG. 2



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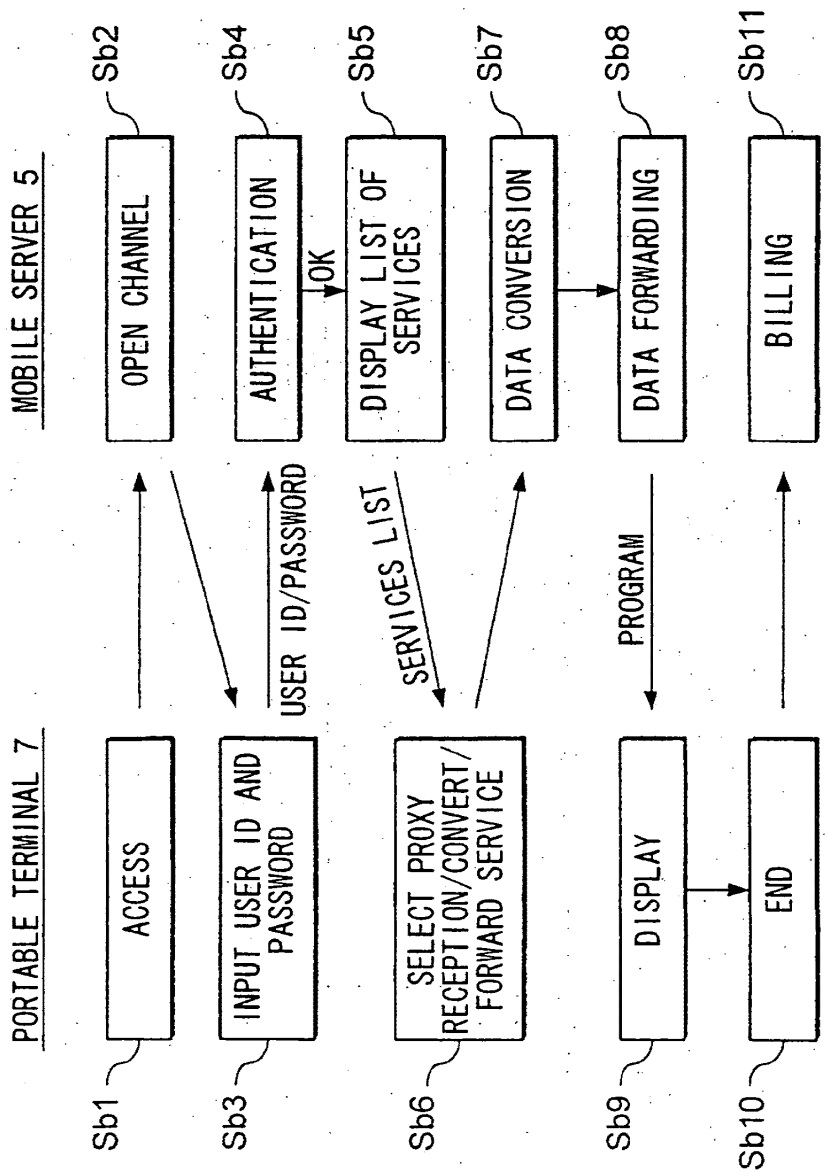
1102.0084

FIG. 3



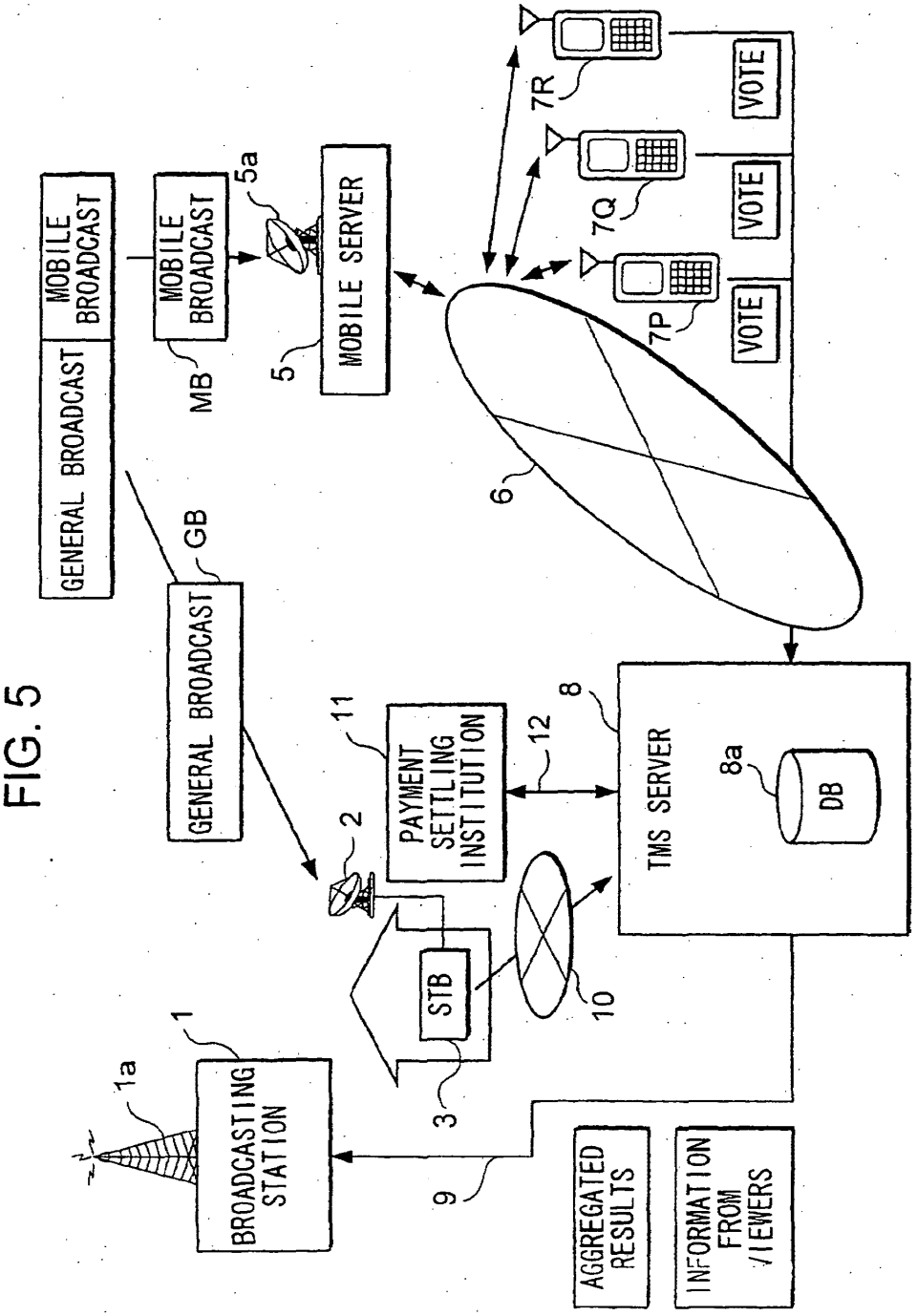
BNSDOCID: <EP_____1217769A1_I_>

FIG. 4



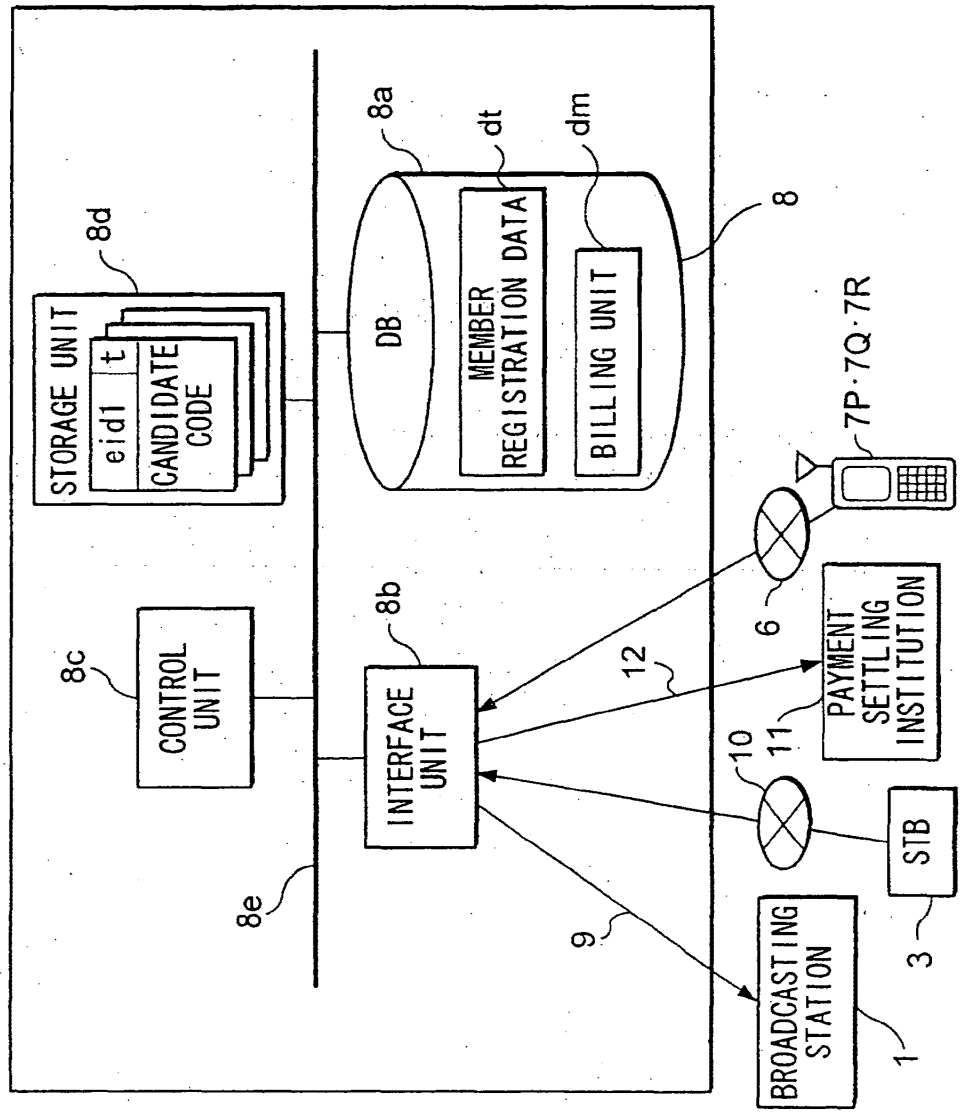
BNSDOCID: <EP_____1217769A1_I_>

FIG. 5



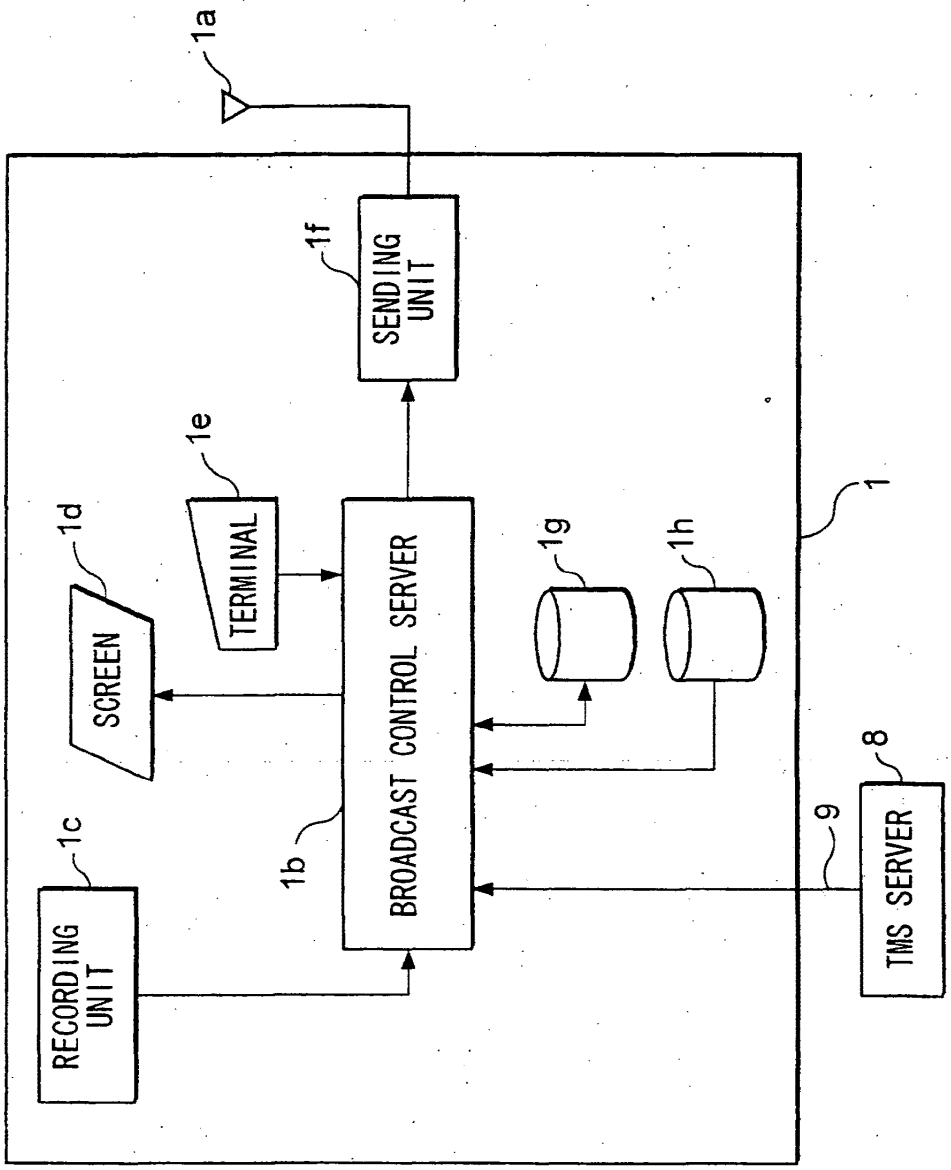
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FIG. 6



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FIG. 7



BNSDOCID: <EP_____1217769A1_I_>

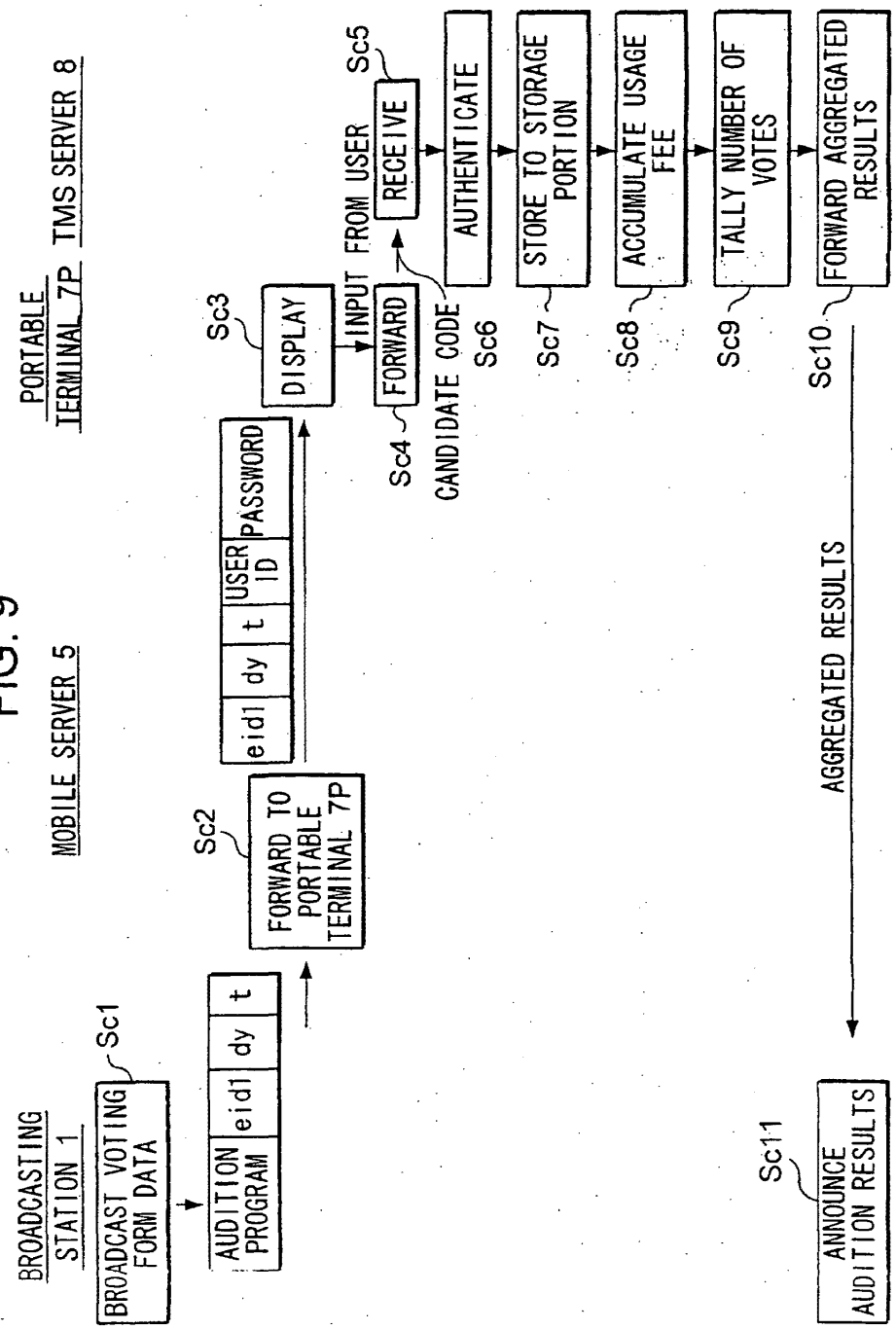
FIG. 8

PROGRAM IDENTIFICATION NUMBER	VOTING FORM DATA	RECEPTION COMPLETION TIME
eid1	dy	t
⋮	⋮	⋮

1h

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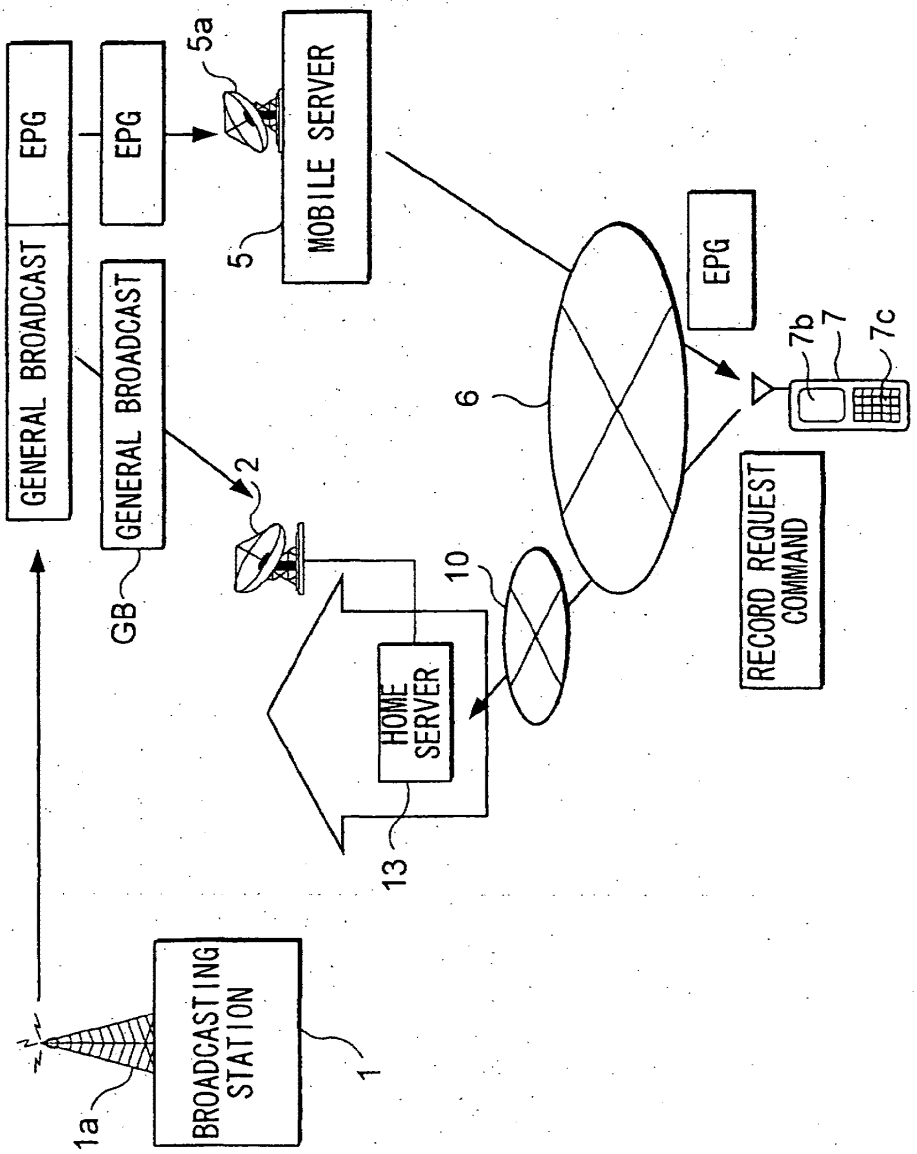
FIG. 9



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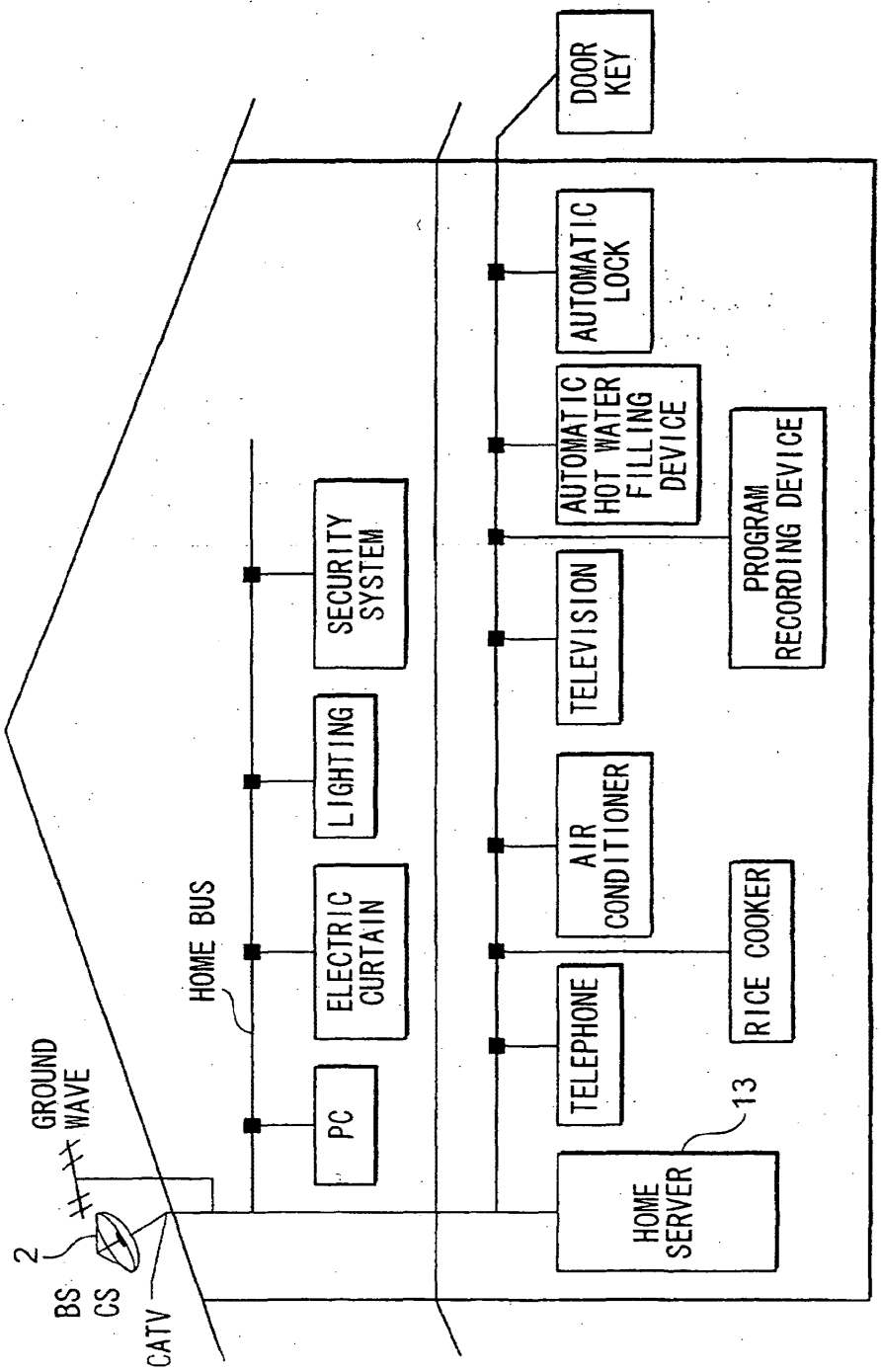
1102.0091

FIG. 10



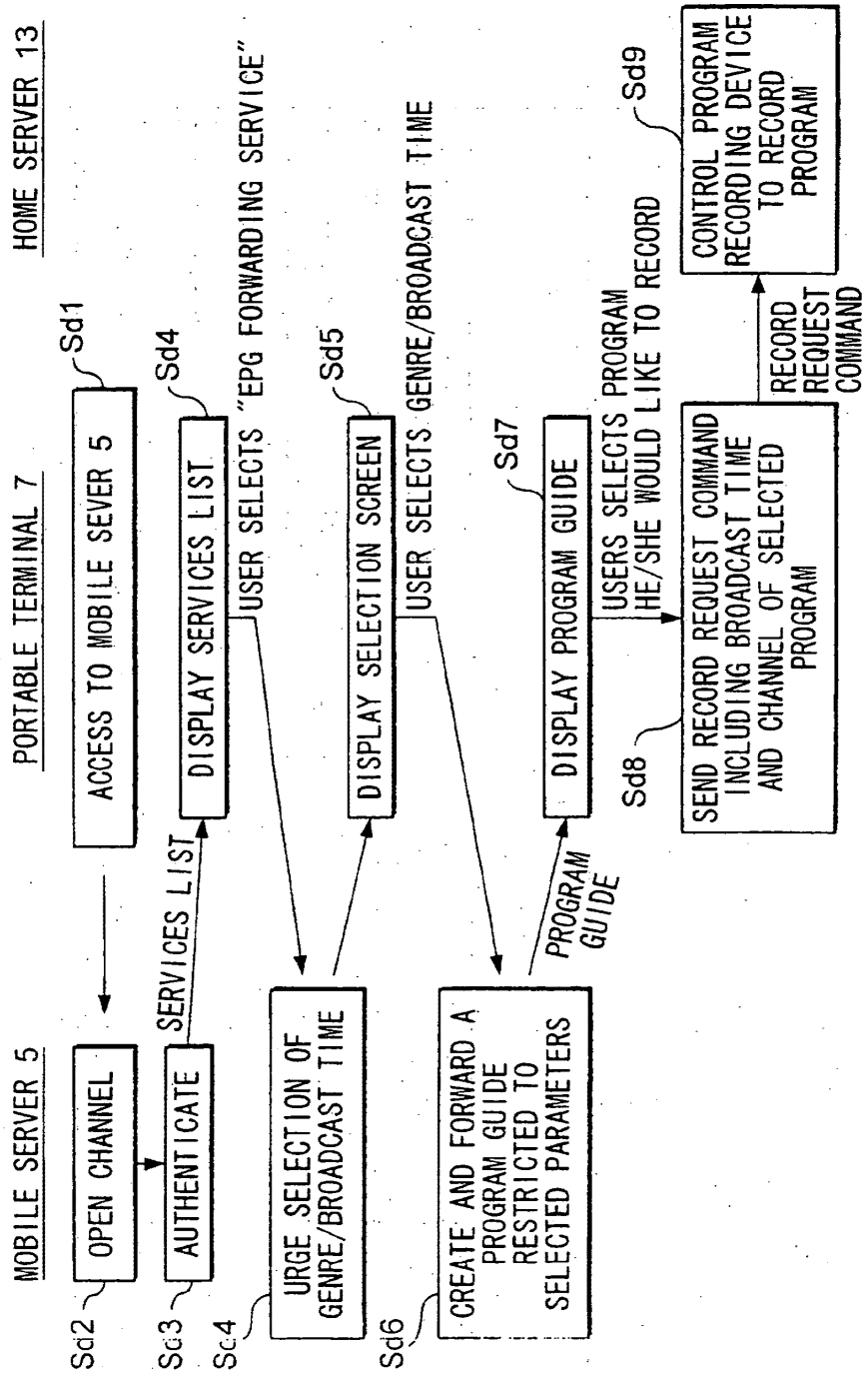
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FIG. 11



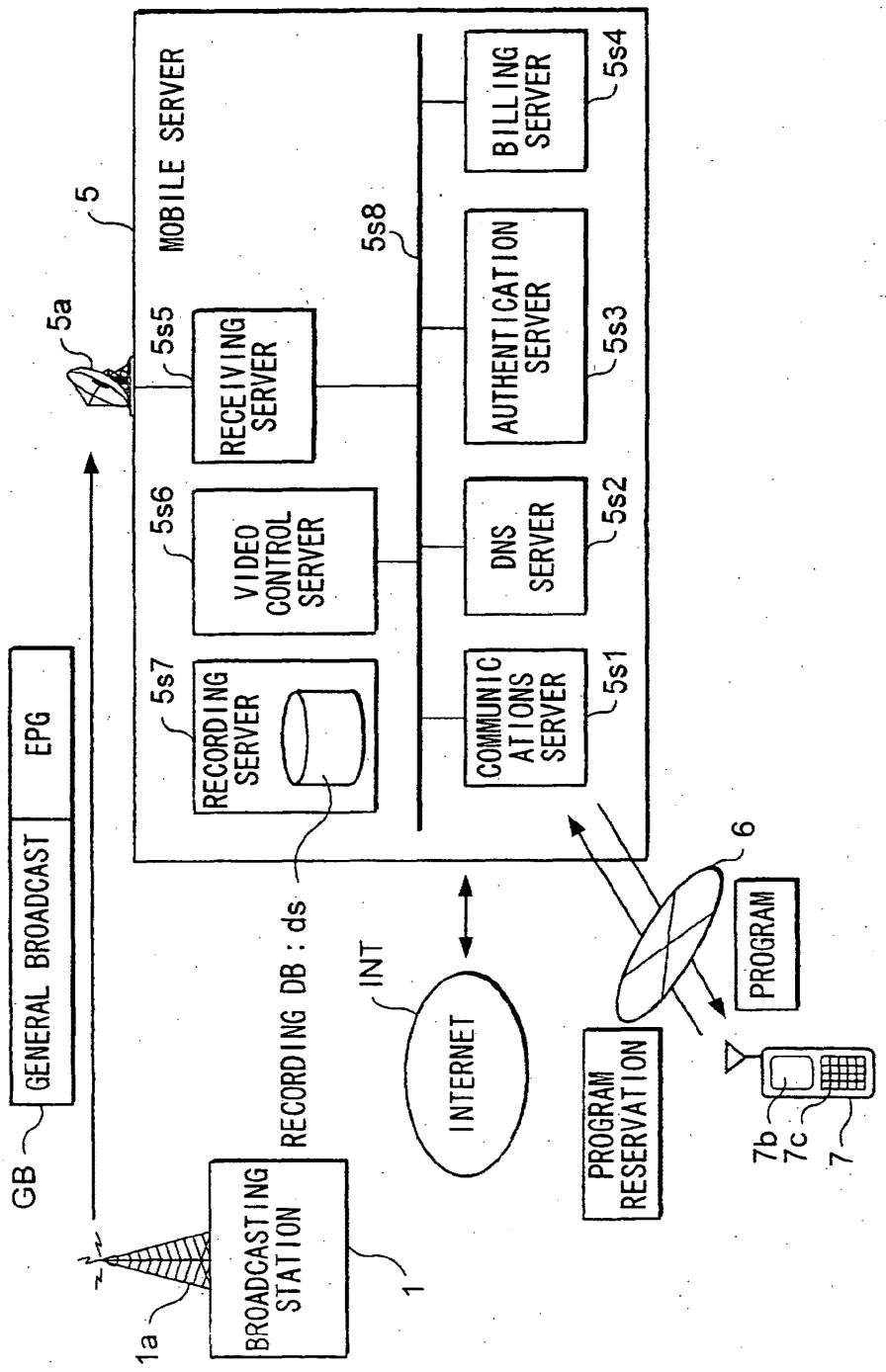
BNSDOCID: <EP_____1217769A1_I_>

FIG. 12



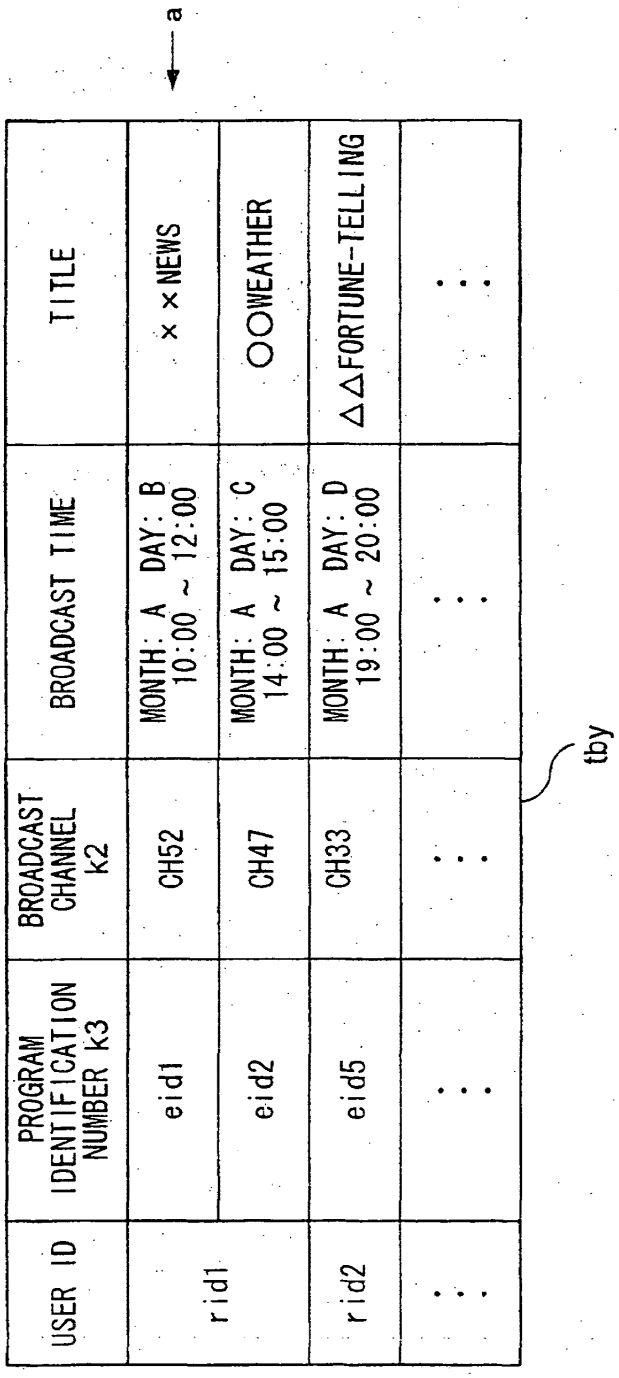
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FIG. 13



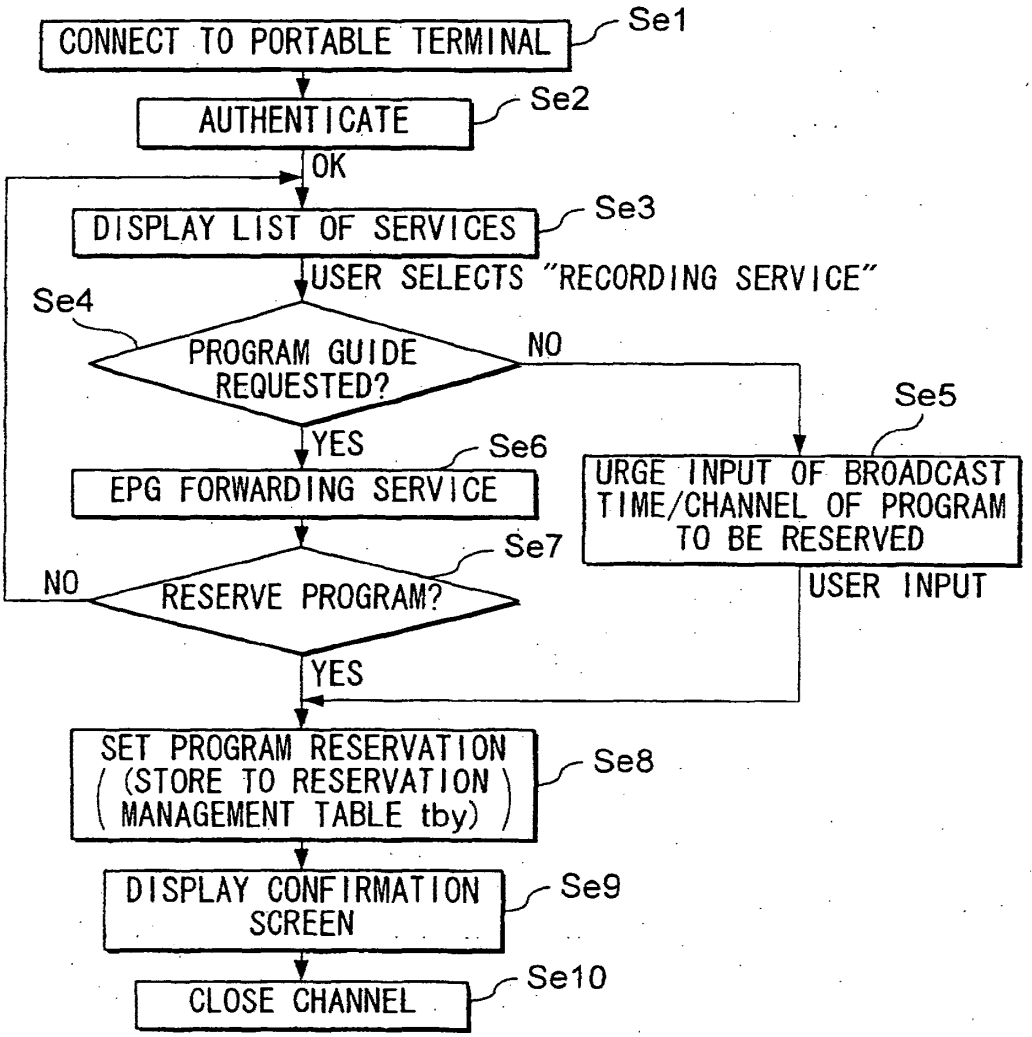
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FIG. 14



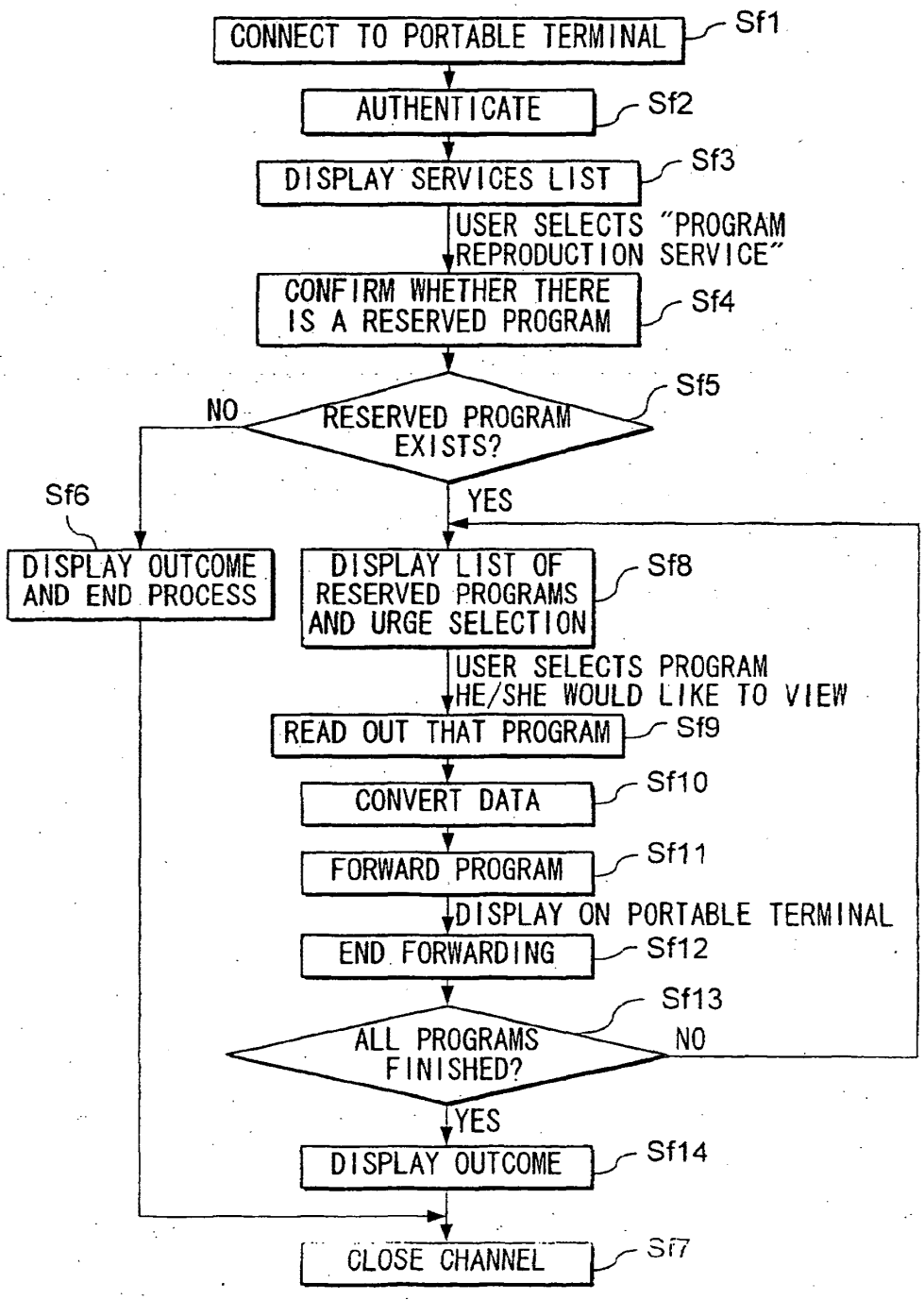
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FIG. 15



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FIG. 16



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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2001
Kokai Jitsuyo Shinan Koho 1971-2001 Jitsuyo Shinan Toroku Koho 1996-2001

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	JP 11-220665 A (Sony Corporation), 10 August, 1999 (10.08.99), Figs. 1, 6; Par. Nos. [0048] to [0053] (Family: none)	1-4,9,10 8
X Y	JP 2000-69381 A (Jisedai Joho Hoso System Kenkyusho K.K.), 03 March, 2000 (03.03.00), Par. Nos. [0013] to [0016], [0020] to [0025] (Family: none)	5-7 8

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:
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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
06 November, 2001 (06.11.01)	20 November, 2001 (20.11.01)
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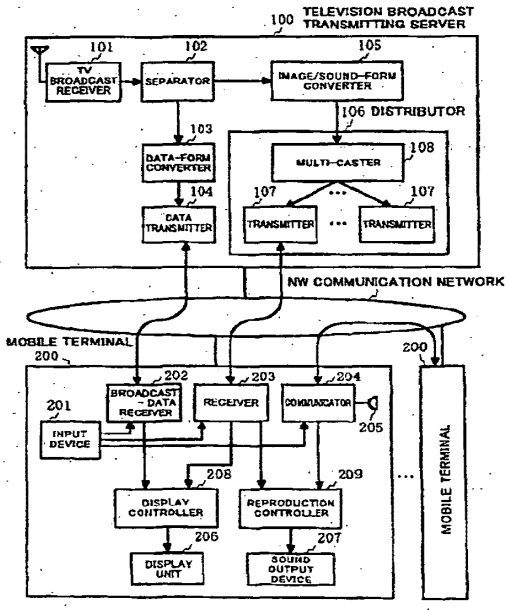
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(54) BROADCAST VIEWING METHOD, BROADCAST TRANSMITTING SERVER, MOBILE TERMINAL, AND MULTI-LOCATION CALLING/BROADCAST CONTROL VIEWING APPARATUS

(57) The broadcast-transmitting server in accordance with the present invention includes a separator for separating one or a plurality of broadcast provided through broadcast-distribution service, into broadcast images and broadcast data, a data transmitter for transmitting the broadcast data separated from the broadcast by the separator, to a mobile terminal, and a distributor which receives a request indicative of desired broadcast image determined based on the broadcast data, from the mobile terminal, and distributes the desired broadcast image among broadcast images separated from the broadcast by the separator, to the mobile terminal which transmitted the request to the distributor. The broadcast-transmitting server in accordance with the present invention makes it possible even for a user who does not have an apparatus for receiving television broadcast, at his or her home to receive broadcast distribution service from a television broadcast transmitting server through his or her mobile terminal, and hence, be able to looking at television programs, while he or she is out of his or her home.

FIG.1



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Description

BACKGROUND OF THE INVENTION

[0001] The invention relates to a method of looking at and listening to broadcast for looking at television broadcast program through a mobile terminal, and further to a broadcast-transmitting server, a mobile terminal and a control apparatus for looking at and listening to broadcast and making communication in multi-point all of which are suitable for a system for looking at and listening to television programs through a mobile terminal.

PRIOR ART

[0002] With digitalization of television broadcast, television programs are transmitted through a plurality of channels. In addition, unlike conventional television broadcast service in which only images and sound are distributed, there is suggested new service which provides television programs to which digital data is multiplexed.

[0003] In the specification, such multiplexed digital data is called broadcast data in order to distinguish from communication image and sound. Broadcast data includes electronic program guide (EPG) and program-related data. Herein, program-related data means an interactive program in which a television viewer can participate, or data indicative of present scores in sport games.

[0004] In order for a user to look at and listen to a desired television program in multi-channeled television broadcast while he or she is free, he or she may bring a portable television set with him or her. However, such a portable television set has to include all parts necessary for receiving television programs, such as a tuner, and as a result, is unavoidably large in a size and expensive. Thus, there have been suggested many systems to make it possible to look at and listen to television programs through the use of a mobile terminal not including parts necessary for receiving television programs, such as a tuner.

[0005] For instance, Japanese Patent Application Publication No. 11-136658 has suggested a combination of an interactive television set and a mobile terminal in which an interactive television program received at a television set located at a user's home is transferred to a user's mobile terminal through a public line network for a user to be able to look at and listen to the interactive television program even while a user is out of his or her home.

[0006] Japanese Patent Application Publication No. 11-346166 has suggested a portable system including a principal apparatus located at a user's home and a mobile terminal. In order to efficiently download television programs having been received and stored in the principal apparatus, to the mobile terminal, a smaller amount of data among data, sound and images constituting a television program is downloaded more early to the mobile terminal, resulting in that a whole of a television program can be downloaded to a mobile terminal in a short period of time.

[0007] Japanese Patent Application Publication No. 2000-183836 has suggested a data-transmission system including a receiver located at a user's home and a mobile terminal. The receiver is designed to be remote-controllable by the mobile terminal and the receiver is designed to transmit various data received from digital satellite broadcast, to the mobile terminal through a communication network in order to make it possible for a user to obtain data transmitted from digital satellite broadcast even while a user is out of his or her home. As data to be transmitted to the mobile terminal, there are listed image and sound signals as well as broadcast data such as EPG. The image and sound signals are transmitted to the mobile terminal without any modification to the received image and sound signals.

[0008] Japanese Patent Application Publication No. 2000-295588 has suggested an apparatus for receiving a digital data program. Even if a user is located away from a television set, the user can automatically receive necessary data among data signals multiplexed to the program, through a telephone line network. In the suggested apparatus, data signals extracted from television broadcast signals are temporarily stored in a memory, and a central processing unit (CPU) checks whether the data signals are grouped into a predetermined genre or whether the data signals include a predetermined keyword. If a predetermined item is found in retrieval in the data signals, the data signals are stored in a memory. Thereafter, if a telephone number of a target person is stored in a user's cellular phone, a call is automatically made to the target person. When it is confirmed that a line between the user and the target person has been established, it is checked which form data to be transmitted has. If data has a form of "sound", the data signals stored in the memory are converted into sound data, and then, transmitted through a modem.

[0009] With a recent increase in radio-signal communication speed, there has been suggested a mobile terminal in the form of a television telephone which terminal enables a user to look at image clips such as advertisement of movies or promotion films of music artists, and to have a chat seeing images of a person with which the user is making communication now.

[0010] As mentioned above, there have been suggested a variety of systems for looking at and listening to television programs through the use of a mobile terminal. However, in all of such conventional systems as mentioned above, it was unavoidable for a user to set his or her television set at a base such as his or her home as a principal apparatus for receiving television programs. Accordingly, the conventional systems were accompanied with a problem that a user who does not have a television set at a base such as his or her home cannot look at and listen to television programs while he

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or she is out of his or her home.

[0011] The conventional mobile terminals were accompanied with a problem that a user cannot look at and listen to television programs while he or she is making communication with others through the mobile terminal, and that a user and a person with whom the user is making communication cannot commonly look at television programs while they are having a chat.

DISCLOSURE OF THE INVENTION

[0012] In view of the above-mentioned problems in the prior art, it is an object of the present invention to enable a user to be able to look at and listen to television programs through a mobile terminal while he or she is out of his or her home, even if he or she does not set a particular equipment for receiving television programs at a base such as his or her home.

[0013] Another object of the present invention is to enable a user to be able to look at and listen to television programs while he or she is having a chat with his or her friend through their mobile terminals, and to join conversation or conference with images of television programs being commonly owned with other participants.

[0014] In the first aspect of the present invention, there is provided a broadcast-transmitting server including a separator for separating one or a plurality of broadcast provided through broadcast-distribution service, into broadcast images and broadcast data, a data transmitter for transmitting the broadcast data separated from the broadcast by the separator, to a mobile terminal, and a distributor which receives a request indicative of desired broadcast image determined based on the broadcast data, from the mobile terminal, and distributes the desired broadcast image among broadcast images separated from the broadcast by the separator, to the mobile terminal which transmitted the request to the distributor.

[0015] For instance, the distributor may be comprised of one or a plurality of transmitter(s) which transmit(s) the desired broadcast image requested by the mobile terminal based on the broadcast data, to the mobile terminal which transmitted the request, and a multi-caster which provides the broadcast image requested by the transmitter among broadcast images separated from the broadcast by the separator, to the transmitter which requested to receive the broadcast image.

[0016] The multi-caster may be designed to distribute the broadcast image separated from the broadcast by the separator, in a multi-casting way, and the transmitter (s) may be designed to select broadcast image or broadcast images among the broadcast images distributed from the multi-caster, in accordance with the request transmitted from the mobile terminal.

[0017] The distributor may be designed to monitor whether the transmitter is in operation or not, and assigns a transmitter not in operation to the mobile terminal on receipt of the request from the mobile terminal.

[0018] It is preferable that the broadcast-transmitting server further includes a data-form converter which converts a form of the broadcast data separated from the broadcast by the separator, into a form suitable for being displayed in the mobile terminal.

[0019] It is preferable that the broadcast-transmitting server may further include a converter which converts a form of the broadcast image separated from the broadcast by the separator, into a form suitable for being displayed or reproduced in the mobile terminal.

[0020] In the second aspect of the present invention, there is provided a broadcast-transmitting server including a separator for separating one or a plurality of broadcast provided through broadcast-distribution service, into broadcast images and broadcast data, a data-transmitter which transmits the broadcast data separated from the broadcast by the separator, to a control apparatus for looking at and listening to broadcast and making communication in multi-point which apparatus receives image and sound from one or a plurality of mobile terminal(s), and synthesizes image and sound, respectively, for producing communication image and communication sound, and a distributor receives a request of transmission of desired broadcast image through the control apparatus which request is determined in the mobile terminal in accordance with the broadcast data transmitted through the control apparatus, and transmits the requested desired broadcast image among the broadcast images separated from the broadcast by the separator, into the control apparatus which transmitted the request.

[0021] The distributor may be designed to be comprised of one or a plurality of transmitter(s) which receive(s) the request of transmission of desired broadcast image through the control apparatus, and transmit (s) the requested desired broadcast image to the mobile terminal which transmitted the request, through the control apparatus, and a multi-caster which distributes broadcast image requested by the transmitter(s) among the broadcast images separated from the broadcast by the separator, to the transmitter(s) which transmitted the request.

[0022] For instance, the multi-caster may be designed to distribute the broadcast image separated from the broadcast by the separator, in a multi-casting way, and the transmitter(s) selects broadcast image or broadcast images among the broadcast images distributed from the multi-caster, in accordance with the request transmitted from the mobile terminal through the control apparatus.

[0023] It is preferable that the broadcast-transmitting server further includes a data-form converter which converts a form of the broadcast data separated from the broadcast by the separator, into a form suitable for being displayed in the mobile terminal making communication with the control apparatus.

[0024] It is preferable that the broadcast-transmitting server further includes a converter which converts a

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form of the broadcast image separated from the broadcast by the separator, into a form suitable for being displayed or reproduced in the mobile terminal making communication with the control apparatus.

[0025] In the third aspect of the present invention, there is provided a control apparatus for looking at and listening to broadcast and making communication in multi-point, including a request receiver which receives requests from mobile terminals, a image/sound receiver which receives image and sound transmitted from the mobile terminals, a broadcast-data receiver which receives, from a broadcast-transmitting server which separates one or a plurality of broadcast provided through broadcast-distribution service, into broadcast images and broadcast data, and distributes the broadcast images and the broadcast data, the broadcast data in accordance with a request transmitted from the mobile terminal, a receiver which receives a request of transmission of desired broadcast image determined by the mobile terminal in accordance with the broadcast data, transmits the request to the broadcast-transmitting server, and receives the desired broadcast image from the broadcast-transmitting server, an image/sound synthesizer which synthesizes image and sound received by the image/sound receiver for producing communication image and communication sound, and, on receipt of a request from the request receiver, synthesizes the broadcast data received by the broadcast-data receiver or the broadcast image received by the receiver and the communication image and sound with each other, and a multi-point image/sound transmitter which transmits the communication image and sound having been synthesized with the broadcast data or the broadcast image in the image/sound receiver, to the mobile terminal.

[0026] It is preferable that the control apparatus further includes a broadcast-data transmitter which transmits the broadcast data received by the broadcast-data receiver, to the mobile terminal transmitting the request, and an image/sound transmitter which transmits the broadcast image received by the receiver, to the mobile terminal transmitting the request.

[0027] It is preferable that the broadcast data is transmitted as packets through packet-switching network or internet network of public line, and the broadcast image, the communication image and the communication sound are transmitted through line-switching network.

[0028] In the fourth aspect of the present invention, there is provided a mobile terminal including a broadcast-data receiver which receives, from a broadcast-transmitting server which separates one or a plurality of broadcast provided through broadcast-distribution service, into broadcast images and broadcast data, and distributes the broadcast images and the broadcast data, the broadcast data, a receiver which transmits a request of transmission of desired broadcast image determined in accordance with the broadcast data, to the broadcasting-transmitting server, and receives the desired broadcast image from the broadcast-transmitting server, and a display controller which displays the broadcast data received by the broadcast-data receiver or the broadcast image received by the receiver.

[0029] It is preferable that the display controller concurrently displays the broadcast data received by the broadcast-data receiver and the broadcast image received by the receiver.

[0030] It is preferable that the receiver receives broadcast sound, and further including a reproduction controller which outputs received broadcast sound.

[0031] It is preferable that the broadcast-data receiver successively transmits a request of transmission of the broadcast data to the broadcast-transmitting server, and successively receives the broadcast data from the broadcast-transmitting server, and the display controller successively displays the broadcast data received by the broadcast-data receiver.

[0032] It is preferable that the mobile terminal works as a cellular phone.

[0033] It is preferable that the mobile terminal has a function of a cellular phone which makes communication with other phones through sound and image, the display controller displays image of a parson with which the mobile terminal makes communication, or the broadcast image, and the reproduction controller outputs voice of a person with which the mobile terminal makes communication, or the broadcast sound.

[0034] In the fifth aspect of the present invention, there is provided a mobile terminal including a communicator which receives, from a control apparatus for looking at and listening to broadcast and making communication in multi-point which apparatus receives images and sound from one or a plurality of mobile terminal (s), and synthesizes the images and the sound with one another, respectively, to thereby produce communication image and communication sound. the communication image and the communication sound, a broadcast-data receiver which transmits a request of transmission of broadcast data to the control apparatus, causes the control apparatus to receive the requested broadcast data from a broadcast-transmitting server which separates one or a plurality of broadcast provided through broadcast-distribution service, into broadcast images and broadcast data, and distributes the broadcast images and the broadcast data, and receives the requested broadcast data from the control apparatus, and a receiver which transmits a request of transmission of desired broadcast image determined in accordance with the broadcast data received by the broadcast-data receiver, to the control apparatus, and receives the desired broadcast image from the broadcast-transmitting server.

[0035] It is preferable that the broadcast-data receiver transmits a request of synthesizing the broadcast data to the communication image to the control apparatus, and causes the control apparatus to synthesize the broadcast data and the communication image to each other and transmit the communication sound and the

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communication image to which the broadcast data has been synthesized, and the communicator receives the communication sound and the communication image to which the broadcast data has been synthesized, from the control apparatus.

[0036] It is preferable that the receiver transmits a request of synthesizing the broadcast image to the communication image to the control apparatus, and causes the control apparatus to synthesize the broadcast image and the communication image to each other and transmit the communication sound and the communication image to which the broadcast image has been synthesized, and the communicator receives the communication sound and the communication image to which the broadcast image has been synthesized, from the control apparatus.

[0037] It is preferable that the receiver receives broadcast sound, and that the mobile terminal further includes a display controller which displays at least one of the broadcast data received by the broadcast-data receiver, the broadcast image received by the receiver, and the communication image received by the communicator, and a reproduction controller which outputs the communication sound received by the receiver or the communication sound received by the communicator.

[0038] It is preferable that the display controller concurrently displays the broadcast data received by the broadcast-data receiver and the communication image received by the communicator in a display unit.

[0039] In the sixth aspect of the present invention, there is provided a method of looking at and listening to broadcast between a broadcast-transmitting server and a plurality of mobile terminals connected to the broadcast-transmitting server through a communication network, including the broadcast-transmitting server separating one or a plurality of broadcast provided through broadcast-distribution service, into broadcast image and broadcast data, and transmitting the broadcast data to the mobile terminal, the mobile terminal receiving the broadcast data, and transmitting a request of transmission of the broadcast image to the broadcast-transmitting server in accordance with the broadcast data, and the broadcast-transmitting server receiving the request from the mobile terminal, and transmitting the requested broadcast image to the mobile terminal.

[0040] In the seventh aspect of the present invention, there is provided a method of looking at and listening to broadcast between a broadcast-transmitting server and a plurality of mobile terminals connected, to the broadcast-transmitting server through a communication network, including the mobile terminal transmitting a request of transmission of broadcast data to the broadcast-transmitting server, the broadcast-transmitting server receiving the request transmitted from the mobile terminal, separating one or a plurality of broadcast provided through broadcast-distribution service, into broadcast image and broadcast data, and transmitting the broadcast data to the mobile terminal which transmitted the request; the mobile terminal receiving the broadcast data, and transmitting a request of transmission of the broadcast image to the broadcast-transmitting server in accordance with the broadcast data, and the broadcast-transmitting server receiving the request from the mobile terminal, and transmitting the requested broadcast image to the mobile terminal.

[0041] In the eighth aspect of the present invention, there is provided a method of looking at and listening to broadcast among a broadcast-transmitting server, a plurality of mobile terminals, and a control apparatus for looking at and listening to broadcast and making communication in multi-point which apparatus is connected to the broadcast-transmitting server and the mobile terminals through a communication network, including the control apparatus receiving images and sound from one or a plurality of mobile terminal(s), synthesizing the images and the sound with one another, respectively, to thereby produce communication image and communication sound, and transmitting the thus produced communication image and communication sound, the mobile terminal receiving the communication image and the communication sound, displaying the communication image, outputting the communication sound, and transmitting a request of transmission of broadcast data to the control apparatus, the control apparatus requested the broadcast-transmitting server to transmit thereto the broadcast data requested by the mobile terminal, the broadcast-transmitting server separating one or a plurality of broadcast provided through broadcast-distribution service, into broadcast image and broadcast data, and transmitting the requested broadcast data to the control apparatus, and the control apparatus receiving the broadcast data and transmitting the thus received broadcast data to the mobile terminal.

[0042] It is preferable that the mobile terminal requests the control apparatus to synthesize the broadcast data received by the control apparatus, the control apparatus synthesizes the broadcast data, the communication image and the communication sound with one another, and transmits them to the mobile terminal, and the mobile terminal receives and outputs the communication image and the communication sound to which the broadcast data has been synthesized.

[0043] In the ninth aspect of the present invention, there is provided a method of looking at and listening to broadcast among a broadcast-transmitting server, a plurality of mobile terminals, and a control apparatus for looking at and listening to broadcast and making communication in multi-point which apparatus is connected to the broadcast-transmitting server and the mobile terminals through a communication network, including the control apparatus receiving images and sound from one or a plurality of mobile terminal(s), synthesizing the images and the sound with one another, respectively, to thereby produce communication image and communication sound, and transmitting the thus produced communication image and communication sound, the mo-

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bile terminal receiving the communication image and the communication sound, displaying the communication image, outputting the communication sound, and transmitting a request of transmission of broadcast image to the control apparatus, the control apparatus requested the broadcast-transmitting server to transmit thereto the broadcast image requested by the mobile terminal, the broadcast-transmitting server separating one or a plurality of broadcast provided through broadcast-distribution service, into broadcast image and broadcast data, and transmitting the requested broadcast image to the control apparatus, and the control apparatus receiving the broadcast image and transmitting the thus received broadcast image to the mobile terminal.

[0044] It is preferable that the mobile terminal requests the control apparatus to synthesize the broadcast image received by the control apparatus, the control apparatus synthesizes the broadcast image, the communication image and the communication sound with one another, and transmits them to the mobile terminal, and the mobile terminal receives and outputs the communication image and the communication sound to which the broadcast image has been synthesized.

BRIEF DESCRIPTION OF THE DRAWINGS

[0045]

FIG. 1 is a block diagram of a system for looking at and listening to television programs through the use of a broadcast-transmitting server and a mobile terminal, in accordance with the first embodiment of the present invention.

FIG. 2 is a flow-chart showing an operation of the system in accordance with the first embodiment of the present invention.

FIG. 3 is a flow-chart showing an operation of a mobile terminal used in the system in accordance with the first embodiment of the present invention.

FIG. 4 is a block diagram of an example of the system in accordance with the first embodiment of the present invention.

FIG. 5 is a block diagram of an example of a mobile terminal having a function of a television telephone.

FIG. 6 is a block diagram of a system for looking at and listening to television programs through the use of a broadcast-transmitting server and a mobile terminal, in accordance with the second embodiment of the present invention.

FIG. 7 is a flow-chart showing an operation of the system in accordance with the second embodiment of the present invention.

FIG. 8 is a flow-chart showing an operation of the system in accordance with the second embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0046] Preferred embodiments in accordance with the present invention will be explained hereinbelow with reference to drawings.

[0047] FIG. 1 is a block diagram of a system for looking at and listening to television programs through the use of a broadcast-transmitting server and a mobile terminal, in accordance with the first embodiment of the present invention.

[0048] As illustrated in FIG. 1, the system for looking at and listening to television programs, in accordance with the first embodiment, is comprised of a television broadcast transmitting server 100, a plurality of mobile terminals 200, and a communication network NW interactively connecting them to each other. The communication network NW may be comprised of a packet-switching network of public line, an internet network or a public line-switching network. The communication network NW includes all networks transmitting data through radio-signals and wires.

[0049] The television broadcast transmitting server 100 connects a television broadcast station (not illustrated) and the mobile terminals 200 to each other. The television broadcast transmitting server 100 receives television programs transmitted from one or more television broadcast station(s), and distributes the received television programs to clients, that is, the mobile terminals 200 for counter value or free of charge. Each of the mobile terminals 200 is owned by a user, and is fabricated in a small size and in a small weight such that a user can readily carry it with him or her. Each of the mobile terminals 200 is designed to be able to receive television broadcast service on making access to the television broadcast transmitting server 100 through the communication network NW through radio-signals, or modulars of public phones and wires.

[0050] The mobile terminals 200 in the first embodiment can be designed to be used as a cellular phone.

[0051] Hereinbelow is explained an example of a structure of the television broadcast transmitting server 100 and the mobile terminals 200.

[0052] For simplification of explanation, the example explained hereinbelow refers to distribution service of BS digital broadcast. However, it should be noted that the present invention may be applied to distribution service of any digital broadcast including ground-wave digital broadcast, as well as distribution service of BS digital broadcast, and that the present invention may be applied to distribution service of analog broadcast which distributes not only images and sound, but also data such as characters. In addition, two or more broadcast may be distributed in the distribution service, which is applied to embodiments mentioned later.

[0053] The television broadcast transmitting server 100 is comprised of a television broadcast receiver 101 which receives BS digital broadcast, a separator 102

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which separates the received BS digital broadcast into image/sound signals and broadcast data in each of channels, a data-form converter 103 which converts a form of the broadcast data into a form suitable for being displayed in the mobile terminal 200, a data transmitter 104 which transmits the broadcast data having been converted by the data-form converter 103 with respect to a form, to the mobile terminal 200, an image/sound-form converter 105 which converts a form of the image/sound signals for each of channels into a form suitable for being reproduced and displayed in the mobile terminal 200, and a distributor 106 which, on receipt of a request from the mobile terminal(s) 200 to transmit the image/sound signals in a particular channel, concurrently distributes the requested image/sound signals among the image/sound signals having been converted by the image/sound-form converter 105 with respect to a form, to all of the mobile terminals 200 having transmitted the request.

[0054] The receiver 101 is comprised of a terminal for receiving BS digital broadcast, set in each home, for instance. Since it is necessary for the receiver 101 to always receive television programs now being broadcast in all channels, the receiver 101 includes a plurality of terminals for receiving BS digital broadcast in each of channels such as BS-1 or BS-2. With the receiver 101 including such a plurality of terminals, the separator 102, the data-form converter 103 and the image/sound-form converter 105 are designed to have a multiplexed structure in order to concurrently carry out separation, conversion of a data form, and conversion of an image/sound form.

[0055] The distributor 106 is comprised of a plurality of transmitters 107 each of which transmits image/sound signals in a channel requested by the mobile terminal 200, to the mobile terminal 200 which transmitted a request of transmission of image/sound signals in a particular channel to the distributor 106, and a multi-caster 108 efficiently distributes image/sound signals in a channel requested by the transmitter 107 among image/sound signals in channels, received from the image/sound-form converter 105, to the transmitter 107 which transmitted a request of transmission of image/sound signals in a particular channel to the multi-caster 108.

[0056] The distributor 106 includes the necessary number of the transmitters 107. The multi-caster 108 monitors whether each of the transmitters 107 is in use or not. On receipt of a request from the mobile terminal 200 to transmit images and sound of a television program to the mobile terminal 200, the multi-caster 108 determines one transmitter 107 among the transmitters 107 not used at that time, and assigns the thus determined transmitter 107 to the mobile terminal 200 having transmitted the request, in order to transmit images and sound to the mobile terminal 200.

[0057] The mobile terminals 200 have a common structure to one another, and each of the mobile terminals 200 is comprised of an input device 201 for receiving inputs from a user, such as a keyboard, a broadcast-data receiver 202 for receiving broadcast data transmitted from the television broadcast transmitting server 100, a receiver 203 which transmits a request of transmission of image/sound signals in a channel indicated by a user, to the television broadcast transmitting server 100, and receives image/sound signals transmitted from the television broadcast transmitting server 100 in response to the request, a communicator 204 which applies a function of a cellular phone to the mobile terminal 200, a sound input device 205 such as a microphone for introducing user's voice to the communicator 204, a display unit 206 such as a liquid crystal display device, a sound output device 207 such as a speaker, a display controller 208 which displays broadcast data received in the broadcast-data receiver 202 and images received in the receiver at the display unit 206, a reproduction controller 209 which outputs both voices received in the receiver 203 and voices of a caller received in the communicator 204 through the sound output device 207, and a power source (not illustrated) feeding power to the above-mentioned parts.

[0058] FIG. 2 is a flow-chart showing an operation of the system including the television broadcast transmitting server 100 and the mobile terminals, in accordance with the first embodiment. Hereinbelow is explained an operation of the system in accordance with the first embodiment, with reference to FIG. 2.

[0059] The television broadcast transmitting server 100 always receives BS digital broadcast through its television broadcast receiver 101, in step S100.

[0060] BS digital broadcast provides television programs in each of channels, and further provides EPG. In addition, the television programs provide images and sound, and an interactive program in which a television viewer can take part and/or data indicative of present score of sport games, multiplexed to the television program, are also transmitted.

[0061] The separator 102 separates the television programs into broadcast image and sound, and broadcast data other than images and sound, specifically, EPG and program-related data, in step S110.

[0062] The broadcast data is described in a broadcast markup language (BML). However, BML is a markup language suitable for being displayed in a television screen, and hence, is frequently not suitable for being displayed in a small screen of the mobile terminal 200. Accordingly, the data-form converter 103 converts a form of the broadcast data into a proper form (an example of a proper data form will be explained later), in step S120.

[0063] The broadcast data having been converted by the data-form converter 103 with respect to a data form is transmitted to the mobile terminal 200 through the data transmitter 104.

[0064] The images and sound separated from the television programs by the separator 102 in each of chan-

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nels are transmitted to the image/sound-form converter 105.

[0065] Images and sound are encoded in accordance with MPEG-2 which is an encoding system as one of ISO standards. However, MPEG-2 is accompanied with problems that a resolution of images is too high and communication volume is too large for an ordinary mobile terminal to look at images and listen to sound. Hence, the image/sound-form converter 105 converts a form of the images and sound into a form suitable for being received by the mobile terminal 200, in step S140.

[0066] For instance, if the images are encoded in accordance with MPEG-4 which is an encoding system as one of ISO standards, a resolution of images is reduced, and the images become suitable for being looked at in the mobile terminal 200. With respect to the sound, it is preferable that the sounds are encoded in accordance with a sound-encoding system such as AMR to reduce a bit rate.

[0067] The images and sound having been converted by the image/sound-form converter 105 with respect to a form in each of channels are concurrently transmitted to a plurality of the transmitters 107 through the multi-caster 108, in step S150.

[0068] The image/sound-form converter 105 converts an image/sound form in a plurality of channels, and the multi-caster 108 transmits the thus converted image and sound in a multi-casting manner. Each of the transmitters 107 selects a channel through which the images and sound are transmitted, in accordance with a request transmitted from the mobile terminal 200, receives proper images and sound from the multi-caster 108, and transmits the images and sound to the mobile terminal 200, in step S160.

[0069] The television broadcast transmitting server 100 operates in the above-mentioned way.

[0070] FIG. 3 is a flow-chart showing an operation of the mobile terminal 200 in the first embodiment. Hereinbelow is explained an operation of the mobile terminal 200 with reference to FIG. 3.

[0071] On receipt of a request of looking at television program from a user through the input device 201 (step S200), the mobile terminal 200 transmits a request of transmission of broadcast data to the data transmitter 104 of the television broadcast transmitting server 100 through the broadcast-data receiver 202 (step S210), and receives broadcast data including EPG or program-related data having been converted into a suitable form (step S220).

[0072] The display controller 208 displays the broadcast data received by the broadcast-data receiver 202, in a screen of the display unit 206 to show the broadcast data to a user (step S230).

[0073] Looking at the displayed broadcast data, a user selects a channel corresponding to an interested program, through the input device 201 (step S240). After a user selected a channel, the receiver 203 transmits a request of transmission of images and sound associated with the selected channel, to the distributor 106 of the television broadcast transmitting server 100 (step S250).

[0074] The distributor 106 assigns one transmitter 107 to the mobile terminal 200 transmitting the request, and then, transmits images and sound associated with the requested channel, through the thus assigned transmitter 107 (step S260).

[0075] The receiver 203 receives the images and sound from the transmitter 107. The received images are displayed at the display unit 206 by the display controller 208, and the sound is output through the sound output device 207 by the reproduction controller 209. Thus, a user can look at and listen to a television program associated with the selected channel (step S270).

[0076] On the other hand, if a dial number is input and a calling step is carried out through the input device 210, a call is made by the communicator 204 similarly to an ordinary cellular phone, and hence, a user can make communication with a dialed person (step S280). In the communication, user's sound is input through the sound input device 205, and sound of a dialed person is output through the sound output device 207 by the reproduction controller 209. A dialed person may have another mobile terminal 200 or a fixed telephone.

[0077] The mobile terminal 200 may be designed for a user to select a function of making communication, a function of looking at and listening to a television program, or both. When the mobile terminal 200 is designed to be able to provide both a function of making communication and a function of looking at and listening to a television program, the reproduction controller 209 mixes sound of a television program received by the receiver 203 and voices of a person with whom a user of the mobile terminal 200 is making communication, received by the communicator 204, to each other, and then, outputs the mixed sound through the sound output device 207.

[0078] FIG. 4 is a block diagram of an example of the above-mentioned first embodiment.

[0079] The television broadcast transmitting server 100 separates received television broadcast into broadcast data including program-related data comprised of EPG, a progress of a program and so on, and images and sound of programs in each of channels. If the broadcast data is described in HTML which is a data form available in World Wide Web (WWW) presently globally used, availability of the broadcast data is increased. It is preferable in particular that the broadcast data is described in compact HTML (C-HTML) for the mobile terminal 200 to be able to look at the broadcast data. Accordingly, it is preferable for the data-form converter 103 of the television broadcast transmitting server 100 to have a function of converting broadcast data described in BAIL, into broadcast data described in C-HTML.

[0080] If hyperlink to images of television programs relating to the broadcast data is used, it would be possible to carry out such data-form conversion that broad-

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cast data and broadcast images are related to each other and a user can readily understand relation between them. The broadcast data in C-HTML form is stored in a memory (not illustrated) to which the data transmitter 104 can make access, and is updated at any time, in which case, the data transmitter 104 is constituted as a WWW server which interprets HTTP protocol and transmits broadcast data including a program list and program-related data both described in C-HTML, in compliance with a request transmitted from the mobile terminal 200 as a client.

[0081] The broadcast-data receiver 202 of the mobile terminal 200 may be designed to have any structure, if it can transmit a request of transmission of broadcast data to the data transmitter 104 acting as a WWW server, receive the requested broadcast data, and display the received broadcast data through the display controller 208. For instance, by virtue of presently popularized "i-mode" of a cellular phone, the mobile terminal 200 can transmit a request to the data transmitter 104 acting as a WWW server to transmit broadcast data including a program list and program-related data through a packet-switching network NW1 available for mobile communication, and display the received broadcast data in the display unit 206 of the mobile terminal 200. In this case, the broadcast data is transmitted in the form of packets.

[0082] By carrying out the above-mentioned steps, a user can look at a program list such as an example of a data-displayed screen 2021, through the mobile terminal 200. If a user selects a program the detail of which he or she would like to see, he or she can look at the detail of the selected program or program-related data indicative of a progress of the program, such as an example of a data-displayed screen 2022.

[0083] In the case that a progress of a program successively varies as a program of a sport game, the data transmitter 104 successively transmits data in so-called pushing manner, and the broadcast-data receiver 202 receives successively transmitted data. Thus, a user can check a progress of a program. Data transmission may be carried out in pseudo-pushing manner in which the broadcast-data receiver 202 successively transmits a request of data transmission to the data transmitter 104.

[0084] Seeing the display screen, a user can select a channel associated with images which he or she would like to see, in a program list. Seeing a progress of a certain program, a user may would like to see not only program-related data, but also images of the program, since he or she has an interest in further progress of the program. In such cases, by selecting a channel through the input device 201, the receiver 203 of the mobile terminal 200 makes communication with one of the transmitters 107 of the television broadcast transmitting server 100, receives a stream of the images and sound of the program from the transmitter 107, displays the received images in the display unit 206 through the display controller 208, and outputs the sound from the sound output device 207 through the reproduction controller 209. For instance, the display controller 208 may display the broadcast data received by the broadcast-data receiver 202, in an upper half of a screen of the display unit 206, and display the images received by the receiver 203, in a lower half of a screen of the display unit 206, so that a user can concurrently look at the broadcast data and the broadcast images.

[0085] A protocol for transmitting and receiving images and sound should not be limited to a particular protocol. However, in a system in which a program is once recorded and stored in a server, and the program is downloaded to the mobile terminal 200 after the program ended, it is not possible to accomplish real-time action in which a user can look at a program now on air at real-time, and in addition, it would take much time to download the program to the mobile terminal 200, and resultingly, a user may not be able to see a program while the program is being downloaded to his or her mobile terminal 200. Accordingly, it is preferable to select a protocol by which images are transmitted picture by picture, and sound is divided into a plurality of sections each having a certain period of time, and then, transmitted section by section, and further by which the mobile terminal 200 joins the pictures and the sections together to thereby provide a user with the images and sound.

[0086] As such a protocol, there may be used H.324 defined by ITU-T for next generation cellular phone, for instance. The protocol H.324 accomplishes a television telephone in which a user transmits his or her image and sound to a dialed person and receives a dialed person's image and sound through a line-switching network for mobile communication to thereby make it possible for a user to make communication with a dialed person, looking at images of a dialed person at real-time. Accordingly, it would be possible to look at and listen to broadcast image and sound at real-time by installing the protocol H.324 into the transmitters 107 of the television broadcast transmitting server 100 and the receiver 203 of the mobile terminal 200, and further by making communication between them through the line-switching network NW2 to be used for mobile communication.

[0087] The images and sound may be transmitted through an internet as well as the line-switching network NW2, in which case, it would be possible to look at and listen to the broadcast images and sound in accordance with the protocol H.323 defined by ITU-T, in which the broadcast images and sound are transmitted as packets similarly to the broadcast data.

[0088] In the first embodiment, the mobile terminal 200 is designed to have a function as a telephone making communication with others through voices. However, the mobile terminal 200 may be designed to have a camera to thereby have a function as a television telephone similar to a next-genexation type cellular phone.

[0089] FIG. 5 is a block diagram of an example of a structure of the mobile terminal 200 having a function of a television telephone.

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[0090] The communicator 204 in the mobile terminal 200 illustrated in FIG. 5 is electrically connected not only to the communicator 205, but also to an image input device 210 such as a digital camera, and hence, the communicator 204 has a function of making communication in not only sound, but also images with another telephone having a function of a television telephone.

[0091] Images of a dialed person, received by the communicator 204, are displayed in the display unit 206 by the display controller 208. The mobile terminal 200 may be designed to carry out looking at and listening to television broadcast or making communication as a television telephone. As an alternative, the mobile terminal 200 may be designed to carry out both. If the mobile terminal 200 is designed to enable a user to both look at and listen to a television program, and make communication with others in the form of a television telephone, the display controller 208 concurrently displays the broadcast images received by the receiver 203 and images of a dialed person received by a function of a television telephone, in a screen of the display unit 206. For instance, a screen of the display unit 206 may be divided into two areas, and the broadcast images and a dialed person's images may be displayed in each of the two areas. In addition, the broadcast data received by the broadcast-data receiver 202 may be displayed together.

[0092] The reproduction controller 209 mixes television sound and communication sound to each other, and outputs the thus mixed sound through the sound output device 207, similarly to the mobile terminal 200 illustrated in FIG. 1.

[0093] The mobile terminal 200 having a function of a television telephone may be used in a multi-point conference in which communication is made among a plurality of points. In such a multi-point conference, it would be quite convenient for participants, if they can look at a television program during a conference, or commonly have images of a television program. Hereinbelow is explained an example in which the present invention is applied to a multi-point conference.

[0094] FIG. 6 is a block diagram of a system for looking at and listening to a television program, in accordance with the second embodiment of the present invention, including a television broadcast transmitting server, a control apparatus for looking at and listening to a television program and making communication in multi-point, and mobile terminals.

[0095] The system for looking at and listening to a television program, in accordance with the second embodiment, is comprised of a television broadcast transmitting server 100, a plurality of mobile terminals 200 each equipped with a camera, a control apparatus 300 for looking at and listening to a television program and making communication in multi-point, and a communication network NW connecting them to one another.

[0096] In comparison with the television broadcast transmitting server 100 illustrated in FIG. 1 in the first embodiment, the television broadcast transmitting server 100 in the second embodiment operates in the same manner as that of the television broadcast transmitting server 100 in the first embodiment except the data transmitter 104 and the distributor 106.

[0097] The data transmitter 104 of the television broadcast transmitting server 100 in the second embodiment transmits the broadcast data not only to the mobile terminal 200 which made direct access thereto, but also to the control apparatus 300. The distributor 106 transmits the broadcast image and sound to the mobile terminal. 200 which made direct access to the television broadcast transmitting server 100, receives a request of transmission of images and sound of a television program from the control apparatus 300, assigns the transmitter 107 which is now not in operation, to the control apparatus 300, and transmits the broadcast images and sound to the control apparatus 300.

[0098] Each of the mobile terminals 200 has an input device 210 comprised of a digital camera, for instance, and hence, can make communication as a television telephone. Thus, the mobile terminal 200 can be used for a conference. The mobile terminal 200 in the second embodiment has the same structure as the structure illustrated in FIG. 5 except that the mobile terminal 200 in the second embodiment can look at and listen to a television program, and concurrently make communication as a television telephone.

[0099] When a plurality of users attend to a conference, each using the mobile terminal 200 having a function of a television telephone, it would be necessary to prepare a multi-point control unit (MCU). In order for a plurality of users attending to a conference to be able to commonly have images transmitted from the television broadcast transmitting server 100 during a conference, the control apparatus 300 in the second embodiment is designed to have not only functions which a conventional control apparatus has, but also functions of causing a plurality of the mobile terminals 200 to have images and sound of a television program.

[0100] The control apparatus 300 in the second embodiment is comprised of a request receiver 301 which receives a plurality of requests from the mobile terminals 200 of participants attending to a conference, an image/sound receiver 302 which receives images and sound of participants transmitted from a plurality of the mobile terminals 200 of participants attending to a conference, a broadcast-data receiver 307 which receives broadcast data from the television broadcast transmitting server 100 in compliance with a request transmitted from the mobile terminal(s) of a participant(s) attending to a conference, a broadcast-data transmitter 308 which transmits the broadcast data received from the television broadcast transmitting server 100, to the mobile terminal(s) 200 which transmitted a request of transmission of the broadcast data, a receiver 305 which receives broadcast images and sound from the television broadcast transmitting server 100 in compliance with the re-

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quests transmitted from the mobile terminals 200 of participants attending to a conference. an image/sound transmitter 306 transmits the broadcast images and sound received from the television broadcast transmitting server 100, to the mobile terminal(s) 200 which transmitted a request of transmission of the broadcast images and sound, an image/sound synthesizer 304 which synthesizes images and sound of a dialed person received by the image/sound receiver 302 to each other, respectively, and further synthesizes the broadcast data received by the broadcast-data receiver 307 or the broadcast images and sound received by the receiver 305 to images and sound of a dialed person, if requested by the request receiver 301, and a multi-point image/sound transmitter 303 which transmits the images and sound having been synthesized by the image/sound synthesizer 304, to the mobile terminals 200 of the participants attending to a conference.

[0101] FIGs. 7 and 8 are flow-charts showing an operation of the system in accordance with the second embodiment including the television broadcast transmitting server 100, the control apparatus 300 and the mobile terminals 200. Hereinbelow is explained an operation of the system with reference to FIGs. 7 and 8.

[0102] The system in accordance with the second embodiment operates in the same way as the first embodiment in the case that each of the mobile terminals 200 makes direct access to the television broadcast transmitting server 100, and receives distribution of a television program. Hereinbelow is explained a case where a plurality of users attend to a conference, each using the mobile terminal 200.

[0103] The control apparatus 300 connects a plurality of the mobile terminals 200 existing at various places, to one another in star-shaped connection through the mobile communication network NW in reservation or instantaneous connection manner. The control apparatus 300 receives images of users and sound of their conversation both transmitted from each of the mobile terminals 200, at the image/sound receiver 302 (step S300), and then, synthesizes a plurality of images of users into one image and mixes sound of a plurality of users to one another (step S310).

[0104] Synthesis of images of a plurality of users may be carried out by dividing a screen into sub-sections by the number of the mobile terminals 200 of participants attending to a conference, reducing a size of images of users, and assigning the reduced images into each of the sub-sections, for instance.

[0105] The synthesized images and sound are transmitted to each of the mobile terminals 200 of participants attending to a conference, through the control apparatus 300 (step S320).

[0106] Each of the mobile terminals 200 receives the images and sound transmitted from the multi-point image/sound transmitter 303, through the communicator 204. The received images are displayed at the display unit 206 by the display controller 208, and the sound is output through the sound output device 207 by the reproduction controller 209 (step S330). Thus, a plurality of users existing at various places can attend to a conference, looking at images of other users.

[0107] If a user attending to a conference transmits a request of transmission of broadcast data thereto to the request receiver 301 of the control apparatus 300 through the broadcast-data receiver 202 by operating the input device 201 of his or her mobile terminal 200 in order to make communication with another person and concurrently look at broadcast data of a television program (step S340), the request receiver 301 transmits the received request to the broadcast-data receiver 307.

[0108] The broadcast-data receiver 307 transmits the request to the television broadcast transmitting server 100 (step S350), receives broadcast data from the television broadcast transmitting server 100 in response to the request, and transmits the broadcast data to the broadcast-data receiver 202 of the mobile terminal 200 which transmitted the request, through the broadcast-data transmitter 308 (step S360).

[0109] The broadcast-data receiver 202 displays the received broadcast data in the display unit 206 through the display controller 208 (step S370). For instance, the display controller 208 causes the display unit 206 to display the images of a dialed person received by the receiver 203, in an upper half of a screen of the display unit 206, and the broadcast data in a lower half of the screen. Thus, the images of a dialed person and the broadcast data are displayed together at the display unit 206. Thus, a user of the mobile terminal 200 can attend to a conference, looking at images of a dialed person, and further can look at broadcast data including EPG and program-related data.

[0110] If a user would like to show the broadcast data to other users, the user transmits a request of doing so to the request receiver 301 through the broadcast data receiver 202 by operating the input device 201 of his or her mobile terminal 200 (step S380). The request receiver 301 instructs the broadcast-data receiver 307 to output the broadcast data to the image/sound synthesizer 304 (step S390), and further instructs the image/sound synthesizer 304 to synthesize the broadcast data.

[0111] In response, the broadcast-data receiver 307 transmits the broadcast data received from the television broadcast transmitting server 100, to the image/sound synthesizer 304 (step S400). The image/sound synthesizer 304 synthesizes the images of a user and sound of conversation both received by the image/sound receiver 302, to each other, and further synthesizes them to the broadcast data, and then, transmits the thus synthesized images, sound and broadcast data to the multi-point image/sound transmitter 303 (step S410).

[0112] In synthesis of the user's images and the broadcast data, images of a plurality of users synthesized to one another are displayed on an upper half of

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a screen, and the broadcast data is displayed in a lower half of the screen, similarly to the case mentioned earlier, for instance.

[0113] The multi-point image/sound transmitter 303 transmits the thus synthesized images and sound to each of the mobile terminals 200 of the users attending to a conference (step S420).

[0114] Each of the mobile terminals 200 of the users attending to a conference receives the images and sound at the communicator 204 from the multi-point image/sound transmitter 303. The received images are displayed at the display unit 206 through the display controller 208, and the sound is output through the sound output device 207 by the reproduction controller 209 (step S430). Thus, users existing at various places can attend to a conference, looking at others users' images, and all of the users can look at the same broadcast data.

[0115] If the broadcast-data receiver 202 of the mobile terminal 200 transmits a request of transmission of only users' images or transmission of only the broadcast data to the request receiver 301, the image/sound synthesizer 304 stops synthesis of the broadcast data, and the multi-point image/sound transmitter 303 transmits only the users' images and sound or only the broadcast data.

[0116] It is assumed that while a user is looking at broadcast data such as EPG, he or she would like to look at and listen to images and sound of a certain television program. In such a case, he or she operates the input device of his or her mobile terminal 200 to transmit a request of looking at a television program together with indication of a channel to the request receiver 301 through the receiver 203 (step S440 in FIG. 8). The request receiver 301 transmits the received request to the receiver 305. The receiver 305 transmits the received request to the television broadcast transmitting server 100 (step S450), and receives images and sound of a requested television program from the television broadcast transmitting server 100 (step S460).

[0117] The receiver 305 transmits the received images and sound to the receiver 203 of the mobile terminal 200 which transmitted the request, through the image/sound transmitter 306 (step S470).

[0118] The receiver 203 displays the received broadcast images at the display unit 206 through the display controller 208, and outputs the received broadcast sound through the sound output device 207 by the reproduction controller 209 (step S480).

[0119] For instance, the display controller 208 displays the images of a dialed person received by the communicator 204, in an upper half of a screen of the display unit 206, and the broadcast images received by the receiver 203, in a lower half of the screen for concurrently displaying the images of a dialed person and the broadcast images at the display unit 206.

[0120] The reproduction controller 209 mixes the voices of a dialed person received by the communicator 204 and the broadcast sound received by the receiver 203 to each other, and outputs the mixed sound through the sound output device 207. Thus, a user can make communication or attend to a conference, looking at images of a dialed person, and further, looking at his or her favorite television program.

[0121] It is assumed that all of users attending to a conference are necessary to look at images of a certain television program because the television program is a theme of the conference. Each of the users operates the input device 201 of his or her mobile terminal 200 to transmit a request of looking at images of a television program to the request receiver 301 through the receiver 203 (step S490). The request receiver 301 transmits an instruction to the receiver 305 to thereby cause the receiver 305 to transmit the images and sound received from the television broadcast transmitting server 100, to the image/sound synthesizer 304. The request receiver 305 further transmits an instruction to the image/sound synthesizer 304 to synthesize the broadcast images and sound.

[0122] In response, the receiver 305 transmits the broadcast images and sound received from the television broadcast transmitting server 100, to the image/sound synthesizer 304. The image/sound synthesizer 304 synthesizes the images of a user and sound of conversation both received by the image/sound receiver 302, to each other, and further synthesizes them to the broadcast data and broadcast sound, and then, transmits the thus synthesized images, sound and broadcast data and sound to the multi-point image/sound transmitter 303 (step S500).

[0123] In synthesis of the user's images and the broadcast images, images of a plurality of users synthesized to one another are displayed on an upper half of a screen, and the broadcast images are displayed in a lower half of the screen, similarly to the case mentioned earlier, for instance. The sound of users' conversation and the broadcast sound are synthesized to each other by being mixed to each other.

[0124] Then, the multi-point image/sound transmitter 303 transmits the thus synthesized images and sound to each of the mobile terminals 200 of the users attending to a conference (step S510).

[0125] Each of the mobile terminals 200 of the users attending to a conference receives the images and sound at the communicator 204 from the multi-point image/sound transmitter 303. The received images are displayed at the display unit 206 through the display controller 208, and the sound is output through the sound output device 207 by the reproduction controller 209 (step S520).

[0126] Thus, users existing at various places can attend to a conference, looking at others users' images, and all of the users can look at the same television program.

[0127] If the receiver 203 of the mobile terminal 200 transmits a request of transmission of only users' imag-

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es or transmission of only the television program to the request receiver 301, the image/sound synthesizer 304 stops synthesis of the broadcast images, and the multi-point image/sound transmitter 303 transmits only the users' images and sound or only the broadcast images and broadcast sound.

INDUSTRIAL APPLICABILITY

[0128] As explained above, the present invention makes it possible even for a user who does not have an apparatus for receiving television broadcast, at his or her home to receive broadcast distribution service from a television broadcast transmitting server through his or her mobile terminal, and hence, be able to looking at television programs, while he or she is out of his or her home.

[0129] In addition, by designing the system in accordance with the present invention to further include a control apparatus for looking at and listening to a television program and making communication in multi-point, users can make communication with each other, looking at a television program, or can have a chat or attend to a conference, looking at common images.

[0130] Specifically, the present invention provided the following advantages.

[0131] First, even a user who does not have an apparatus for receiving television broadcast, at his or her home, can look at and listen to broadcast data and/or a television program.

[0132] This is because a user can receive television broadcast distribution service by making access to a television broadcast transmitting server through his or her mobile terminal while he or she is out of his or her home, and hence, he or she can look at and listen to broadcast data and a television program in an area in which radio-signals can reach at his or her mobile terminal, or in an area covered with public lines.

[0133] Second, a user can readily read broadcast data even in a small screen of a mobile terminal.

[0134] This is because a data-form converter in a television broadcast transmitting server converts a form of broadcast data such as EPG into a form suitable for being displayed in a screen of a mobile terminal.

[0135] Third, a user can look at and listen to a television program even through a mobile terminal which has a small screen and small line capacity.

[0136] This is because an image/sound-form converter in a television broadcast transmitting server converts a form of broadcast image and sound signals in each of channels into a form suitable for being displayed and reproduced in a mobile terminal.

[0137] Fourth, it is possible to efficiently distribute broadcast images and sound to a plurality of mobile terminals.

[0138] This is because a television broadcast transmitting server is designed to include a plurality of transmitters for transmitting broadcast images and sound to a plurality of mobile terminals, and a multi-caster which distributes broadcast image and sound separated from television broadcast by a separator for each of channels and broadcast images and sound output from an image/sound-form converter in each of channels, into a plurality of transmitters in multi-casting manner.

[0139] Fifth, a user can select his or her favorite television program through his or her mobile terminal.

[0140] This is because a television broadcast transmitting server is designed to include transmitters which selects broadcast images and sound in a channel to be received from a multi-caster, in response to a request transmitted from a mobile terminal.

[0141] Sixth, a user can look at and listen to broadcast to which broadcast data and broadcast images are synthesized.

[0142] This is because a mobile terminal is designed to include a display controller which displays received broadcast data and broadcast images concurrently at a display unit.

[0143] Seventh, a user can look at and listen to broadcast contents in which data is dynamically updated.

[0144] This is because a broadcast-data receiver of a mobile terminal successively receives broadcast data successively transmitted from a television broadcast transmitting server, and a display controller successively displays the received broadcast data at a display unit.

[0145] Eighth, a user can make a call by his or her mobile terminal which has a function of looking at and listening to a television program.

[0146] This is because a mobile terminal may be designed to have a function as a cellular phone.

[0147] Ninth, a user can have a chat through a television telephone, looking at a television program.

[0148] This is because a mobile terminal is designed to have functions of synthesizing images of a dialed person and broadcast images to each other and displaying the thus synthesized images at a display unit, and synthesizing voices of a dialed person and broadcast sound to each other and outputting the thus synthesized sound through a sound output device.

[0149] Tenth, a user can look at broadcast data at low cost, and look at and listen to high-quality broadcast images and sound by using line switching which provides broadcast images and sound having constant quality.

[0150] This is because broadcast data can be transmitted as packets through a packet-switching network or an internet network of public line, and broadcast images and sound can be transmitted through a line-switching network.

[0151] Eleventh, a user can look at and listen to not only broadcast data, but also broadcast images and sound at low communication cost.

[0152] This is because users can concurrently have a chat or attend to a conference through their mobile terminals, looking at a television program, or make conversation or attend to a conference, looking at common images.

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[0153] This is because the system in accordance with the present invention may be designed to include a control apparatus for looking at and listening to a television program and making communication in multi-point which apparatus has a function of allowing a plurality of mobile terminals to commonly have images and sound of a television program, as well as functions which a conventional control apparatus has.

Claims

1. A broadcast-transmitting server comprising:

   a separator for separating one or a plurality of broadcast provided through broadcast-distribution service, into broadcast images and broadcast data;
   a data transmitter for transmitting said broadcast data separated from said broadcast by said separator, to a mobile terminal; and
   a distributor which receives a request indicative of desired broadcast image determined based on said broadcast data, from said mobile terminal, and distributes said desired broadcast image among broadcast images separated from said broadcast by said separator, to said mobile terminal which transmitted said request to said distributor.

2. The broadcast-transmitting server as set forth in claim 1, wherein said distributor is comprised of:

   one or a plurality of transmitter(s) which transmit(s) said desired broadcast image requested by said mobile terminal based on said broadcast data, to the mobile terminal which transmitted the request; and
   a multi-caster which provides said broadcast image requested by said transmitter among broadcast images separated from said broadcast by said separator, to said transmitter which requested to receive said broadcast image.

3. The broadcast-transmitting server as set forth in claim 2, wherein said multi-caster distributes said broadcast image separated from said broadcast by said separator, in a multi-casting way, and said transmitter(s) selects broadcast image or broadcast images among said broadcast images distributed from said multi-caster, in accordance with said request transmitted from said mobile terminal.

4. The broadcast-transmitting server as set forth in claim 2 or 3, wherein said distributor monitors whether said transmitter is in operation or not, and assigns a transmitter not in operation to said mobile terminal on receipt of said request from said mobile terminal.

5. The broadcast-transmitting server as set forth in claim 1, 2, 3 or 4, further comprising a data-form converter which converts a form of said broadcast data separated from said broadcast by said separator, into a form suitable for being displayed in said mobile terminal.

6. The broadcast-transmitting server as set forth in claim 1, 2, 3, 4 or 5, further comprising a converter which converts a form of said broadcast image separated from said broadcast by said separator, into a form suitable for being displayed or reproduced in said mobile terminal.

7. Abroadcast-transmitting server comprising:

   a separator for separating one or a plurality of broadcast provided through broadcast-distribution service, into broadcast images and broadcast data;
   a data-transmitter which transmits said broadcast data separated from said broadcast by said separator, to a control apparatus for looking at and listening to broadcast and making communication in multi-point which apparatus receives image and sound from one or a plurality of mobile terminal(s), and synthesizes image and sound, respectively, for producing communication image and communication sound; and
   a distributor receives a request of transmission of desired broadcast image through said control apparatus which request is determined in said mobile terminal in accordance with said broadcast data transmitted through said control apparatus, and transmits the requested desired broadcast image among said broadcast images separated from said broadcast by said separator, into said control apparatus which transmitted said request.

8. The broadcast-transmitting server as set forth in claim 7, wherein said distributor is comprised of:

   one or a plurality of transmitter(s) which receive (s) said request of transmission of desired broadcast image through said control apparatus, and transmit(s) said requested desired broadcast image to said mobile terminal which transmitted said request, through said control apparatus; and
   a multi-caster which distributes broadcast image requested by said transmitter(s) among said broadcast images separated from said broadcast by said separator, to said transmitter (s) which transmitted said request.

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9. The broadcast-transmitting server as set forth in claim 7 or 8, wherein said multi-caster distributes said broadcast image separated from said broadcast by said separator, in a multi-casting way, and said transmitter(s) selects broadcast image or broadcast images among said broadcast images distributed from said multi-caster, in accordance with said request transmitted from said mobile terminal through said control apparatus.

10. The broadcast-transmitting server as set forth in claim 7, 8 or 9, further comprising a data-form converter which converts a form of said broadcast data separated from said broadcast by said separator, into a form suitable for being displayed in said mobile terminal making communication with said control apparatus.

11. The broadcast-transmitting server as set forth in claim 7, 8, 9 or 10, further comprising a converter which converts a form of said broadcast image separated from said broadcast by said separator, into a form suitable for being displayed or reproduced in said mobile terminal making communication with said control apparatus.

12. A control apparatus for looking at and listening to broadcast and making communication in multi-point, comprising:

a request receiver which receives requests from mobile terminals;
an image/sound receiver which receives image and sound transmitted from said mobile terminals;
a broadcast-data receiver which receives, from a broadcast-transmitting server which separates one or a plurality of broadcast provided through broadcast-distribution service, into broadcast images and broadcast data, and distributes said broadcast images and said broadcast data, said broadcast data in accordance with a request transmitted from said mobile terminal;
a receiver which receives a request of transmission of desired broadcast image determined by said mobile terminal in accordance with said broadcast data, transmits said request to said broadcast-transmitting server, and receives said desired broadcast image from said broadcast-transmitting server;
an image/sound synthesizer which synthesizes image and sound received by said image/sound receiver for producing communication image and communication sound, and, on receipt of a request from said request receiver, synthesizes said broadcast data received by said broadcast-data receiver or said broadcast image received by said receiver and said communication image and sound with each other; and
a multi-point image/sound transmitter which transmits said communication image and sound having been synthesized with said broadcast data or said broadcast image in said image/sound receiver, to said mobile terminal.

13. The control apparatus as set forth in claim 12, further comprising:

a broadcast-data transmitter which transmits said broadcast data received by said broadcast-data receiver, to said mobile terminal transmitting said request; and
an image/sound transmitter which transmits said broadcast image received by said receiver, to said mobile terminal transmitting said request.

14. The control apparatus as set forth in claim 12 or 13, wherein said broadcast data is transmitted as packets through packet-switching network or internet network of public line, and said broadcast image, said communication image and said communication sound are transmitted through line-switching network.

15. A mobile terminal comprising:

a broadcast-data receiver which receives, from a broadcast-transmitting server which separates one or a plurality of broadcast provided through broadcast-distribution service, into broadcast images and broadcast data, and distributes said broadcast images and said broadcast data, said broadcast data;
a receiver which transmits a request of transmission of desired broadcast image determined in accordance with said broadcast data, to said broadcasting-transmitting server, and receives said desired broadcast image from said broadcast-transmitting server; and
a display controller which displays said broadcast data received by said broadcast-data receiver or said broadcast image received by said receiver.

16. The mobile terminal as set forth in claim 15, wherein said display controller concurrently displays said broadcast data received by said broadcast-data receiver and said broadcast image received by said receiver.

17. The mobile terminal as set forth in claim 15 or 16, wherein said receiver receives broadcast sound, and further comprising a reproduction controller

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which outputs received broadcast sound.

18. The mobile terminal as set forth in claim 15, 16 or 17 wherein said broadcast-data receiver successively transmits a request of transmission of said broadcast data to said broadcast-transmitting server, and successively receives said broadcast data from said broadcast-transmitting server, and

said display controller successively displays said broadcast data received by said broadcast-data receiver.

19. The mobile terminal as set forth in claim 15, 16 or 17 wherein said mobile terminal works as a cellular phone.

20. The mobile terminal as set forth in claim 17, 18 or 19, wherein said mobile terminal has a function of a cellular phone which makes communication with other phones through sound and image,

said display controller displays image of a person with which said mobile terminal makes communication, or said broadcast image, and said reproduction controller outputs voice of a person with which said mobile terminal makes communication, or said broadcast sound.

21. A mobile terminal comprising:

a communicator which receives, from a control apparatus for looking at and listening to broadcast and making communication in multi-point which apparatus receives images and sound from one or a plurality of mobile terminal(s), and synthesizes said images and said sound with one another, respectively, to thereby produce communication image and communication sound, said communication image and said communication sound;
a broadcast-data receiver which transmits a request of transmission of broadcast data to said control apparatus; causes said control apparatus to receive the requested broadcast data from a broadcast-transmitting server which separates one or a plurality of broadcast provided through broadcast-distribution service, into broadcast images and broadcast data, and distributes said broadcast images and said broadcast data, and receives said requested broadcast data from said control apparatus; and
a receiver which transmits a request of transmission of desired broadcast image determined in accordance with said broadcast data received by said broadcast-data receiver, to said control apparatus, and receives said desired broadcast image from said broadcast-transmitting server.

22. The mobile terminal as set forth in claim 21, wherein said broadcast-data receiver transmits a request of synthesizing said broadcast data to said communication image to said control apparatus, and causes said control apparatus to synthesize said broadcast data and said communication image to each other and transmit said communication sound and said communication image to which said broadcast data has been synthesized, and

said communicator receives said communication sound and said communication image to which said broadcast data has been synthesized, from said control apparatus.

23. The mobile terminal as set forth in claim 21 or 22, wherein said receiver transmits a request of synthesizing said broadcast image to said communication image to said control apparatus, and causes said control apparatus to synthesize said broadcast image and said communication image to each other and transmit said communication sound and said communication image to which said broadcast image has been synthesized, and

said communicator receives said communication sound and said communication image to which said broadcast image has been synthesized, from said control apparatus.

24. The mobile terminal as set forth in claim 21, 22 or 23, wherein said receiver receives broadcast sound, and further comprising:

a display controller which displays at least one of said broadcast data received by said broadcast-data receiver, said broadcast image received by said receiver, and said communication image received by said communicator; and
a reproduction controller which outputs said communication sound received by said receiver or said communication sound received by said communicator.

25. The mobile terminal as set forth in claim 24, wherein said display controller concurrently displays said broadcast data received by said broadcast-data receiver and said communication image received by said communicator in a display unit.

26. A method of looking at and listening to broadcast between a broadcast-transmitting server and a plurality of mobile terminals connected to said broadcast-transmitting server through a communication network, comprising:

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said broadcast-transmitting server separating one or a plurality of broadcast provided through broadcast-distribution service, into broadcast image and broadcast data, and transmitting said broadcast data to said mobile terminal;
said mobile terminal receiving said broadcast data, and transmitting a request of transmission of said broadcast image to said broadcast-transmitting server in accordance with said broadcast data; and
said broadcast-transmitting server receiving said request from said mobile terminal, and transmitting the requested broadcast image to said mobile terminal.

27. A method of looking at and listening to broadcast between a broadcast-transmitting server and a plurality of mobile terminals connected to said broadcast-transmitting server through a communication network, comprising:

said mobile terminal transmitting a request of transmission of broadcast data to said broadcast-transmitting server;
said broadcast-transmitting server receiving said request transmitted from said mobile terminal, separating one or a plurality of broadcast provided through broadcast-distribution service, into broadcast image and broadcast data, and transmitting said broadcast data to said mobile terminal which transmitted said request;
said mobile terminal receiving said broadcast data, and transmitting a request of transmission of said broadcast image to said broadcast-transmitting server in accordance with said broadcast data; and
said broadcast-transmitting server receiving said request from said mobile terminal, and transmitting the requested broadcast image to said mobile terminal.

28. A method of looking at and listening to broadcast among a broadcast-transmitting server, a plurality of mobile terminals, and a control apparatus for looking at and listening to broadcast and making communication in multi-point which apparatus is connected to said broadcast-transmitting server and said mobile terminals through a communication network, comprising:

said control apparatus receiving images and sound from one or a plurality of mobile terminal (s), synthesizing said images and said sound with one another, respectively, to thereby produce communication image and communication sound, and transmitting the thus produced communication image and communication sound;
said mobile terminal receiving said communication image and said communication sound, displaying said communication image, outputting said communication sound, and transmitting a request of transmission of broadcast data to said control apparatus;
said control apparatus requested said broadcast-transmitting server to transmit thereto said broadcast data requested by said mobile terminal;
said broadcast-transmitting server separating one or a plurality of broadcast provided through broadcast-distribution service, into broadcast image and broadcast data, and transmitting said requested broadcast data to said control apparatus; and
said control apparatus receiving said broadcast data and transmitting the thus received broadcast data to said mobile terminal.

29. The method as set forth in claim 28, wherein said mobile terminal requests said control apparatus to synthesize said broadcast data received by said control apparatus,

said control apparatus synthesizes said broadcast data, said communication image and said communication sound with one another, and transmits them to said mobile terminal, and
said mobile terminal receives and outputs said communication image and said communication sound to which said broadcast data has been synthesized.

30. A method of looking at and listening to broadcast among a broadcast-transmitting server, a plurality of mobile terminals, and a control apparatus for looking at and listening to broadcast and making communication in multi-point which apparatus is connected to said broadcast-transmitting server and said mobile terminals through a communication network, comprising:

said control apparatus receiving images and sound from one or a plurality of mobile terminal (s), synthesizing said images and said sound with one another, respectively, to thereby produce communication image and communication sound, and transmitting the thus produced communication image and communication sound;
said mobile terminal receiving said communication image and said communication sound, displaying said communication image, outputting said communication sound, and transmitting a request of transmission of broadcast image to said control apparatus;
said control apparatus requested said broad-

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cast-transmitting server to transmit thereto said broadcast image requested by said mobile terminal;

said broadcast-transmitting server separating one or a plurality of broadcast provided through broadcast-distribution service, into broadcast image and broadcast data, and transmitting said requested broadcast image to said control apparatus; and

said control apparatus receiving said broadcast image and transmitting the thus received broadcast image to said mobile terminal.

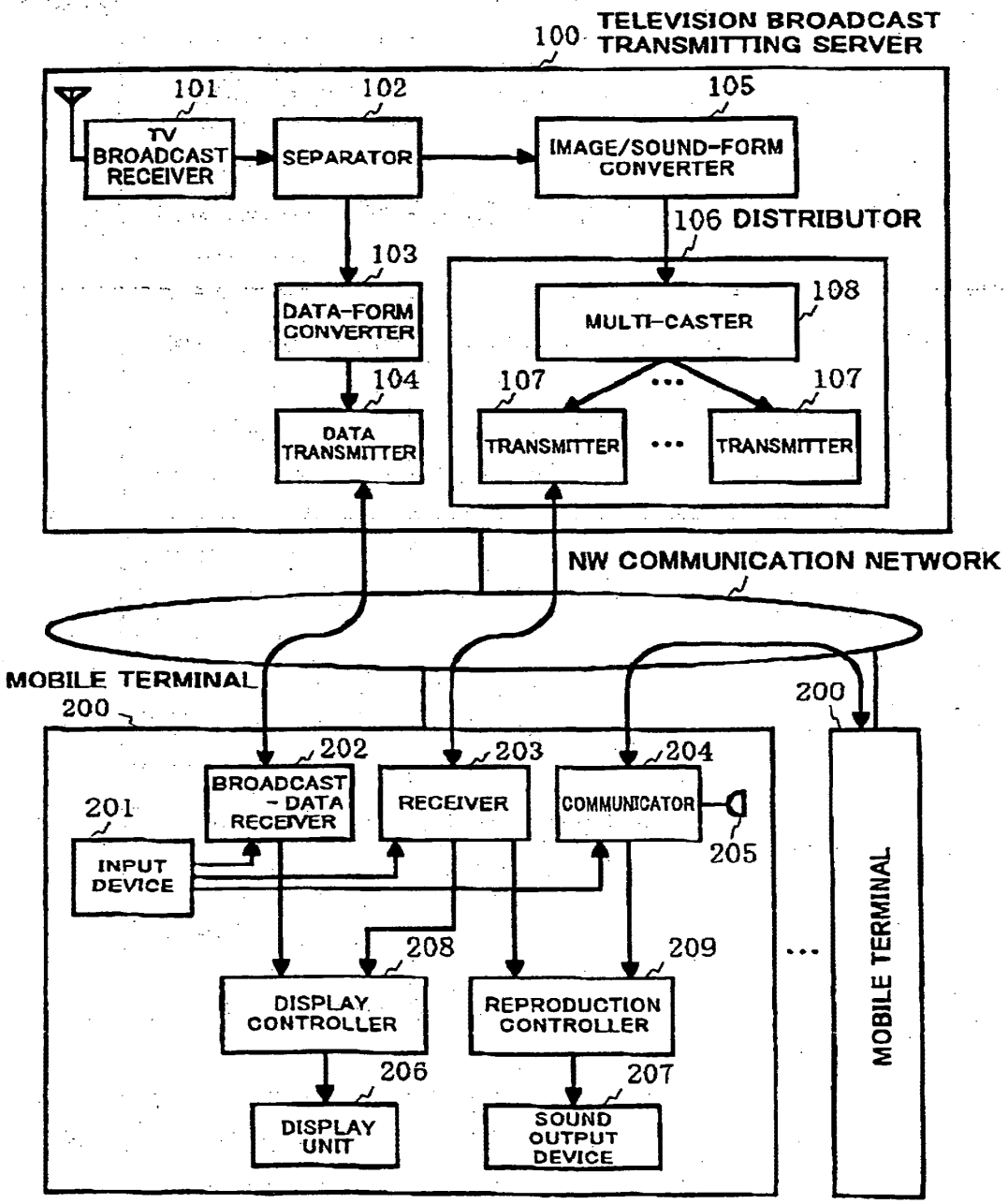
31. The method as set forth in claim 30, wherein said mobile terminal requests said control apparatus to synthesize said broadcast image received by said control apparatus,

said control apparatus synthesizes said broadcast image. said communication image and said communication sound with one another, and transmits them to said mobile terminal, and said mobile terminal receives and outputs said communication image and said communication sound to which said broadcast image has been synthesized.

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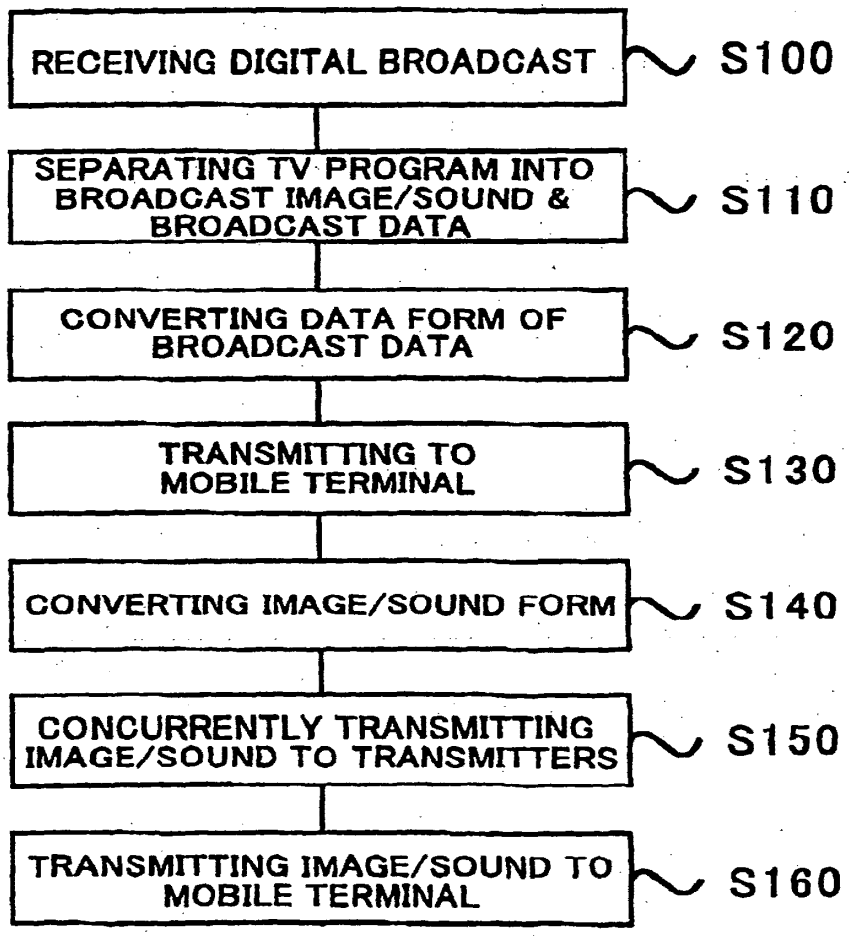
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FIG.1



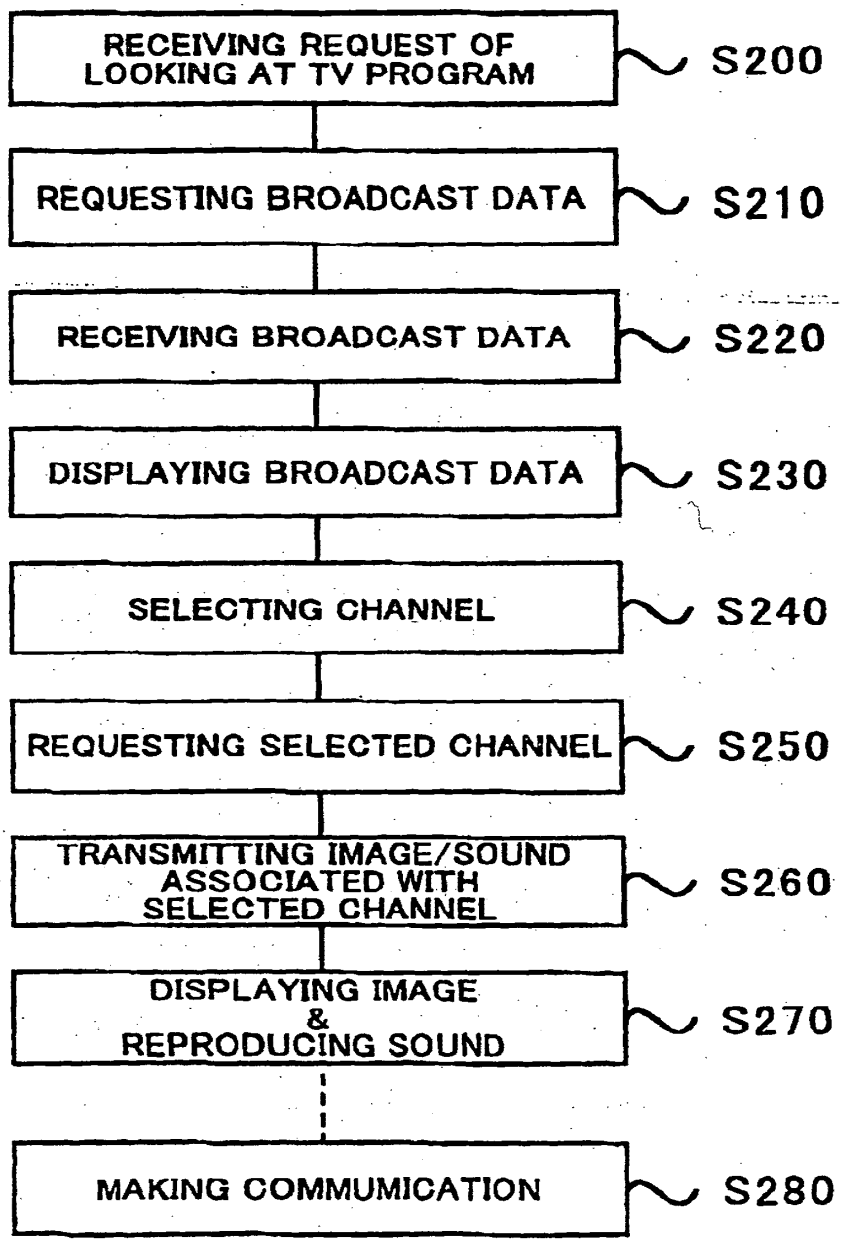
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FIG.2



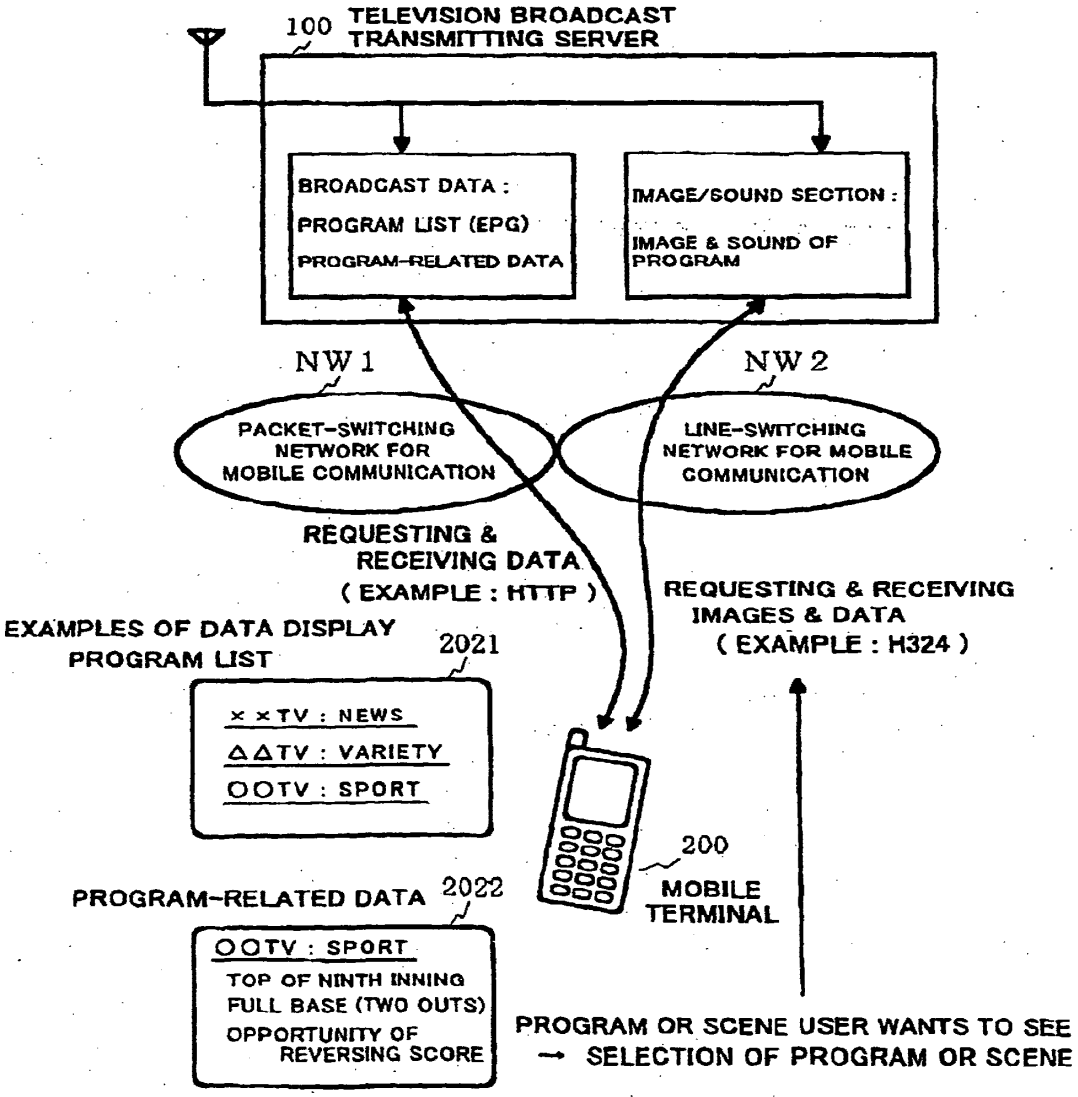
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FIG.3



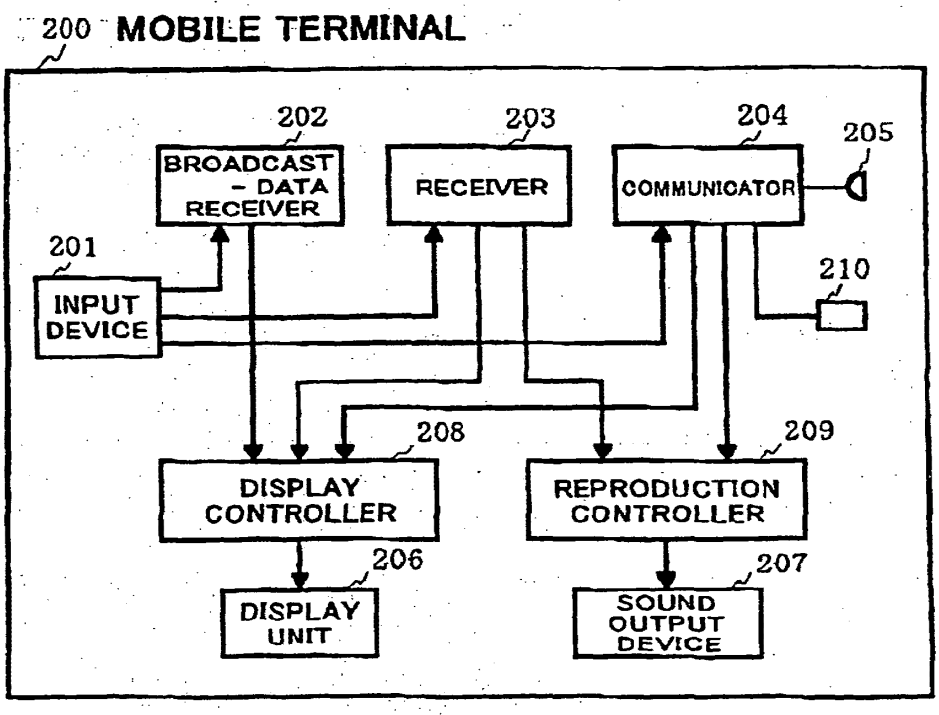
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FIG.4



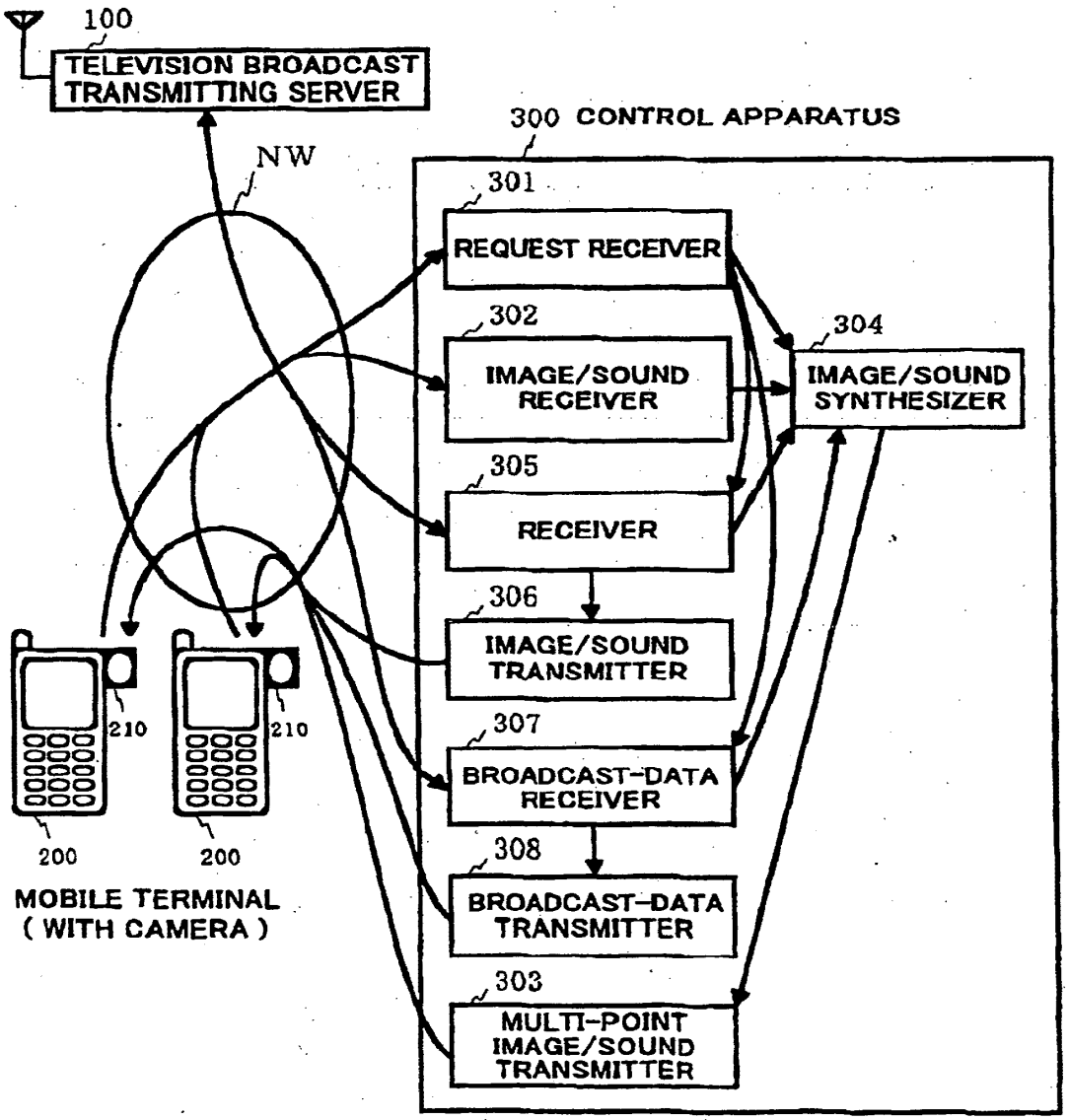
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FIG.5



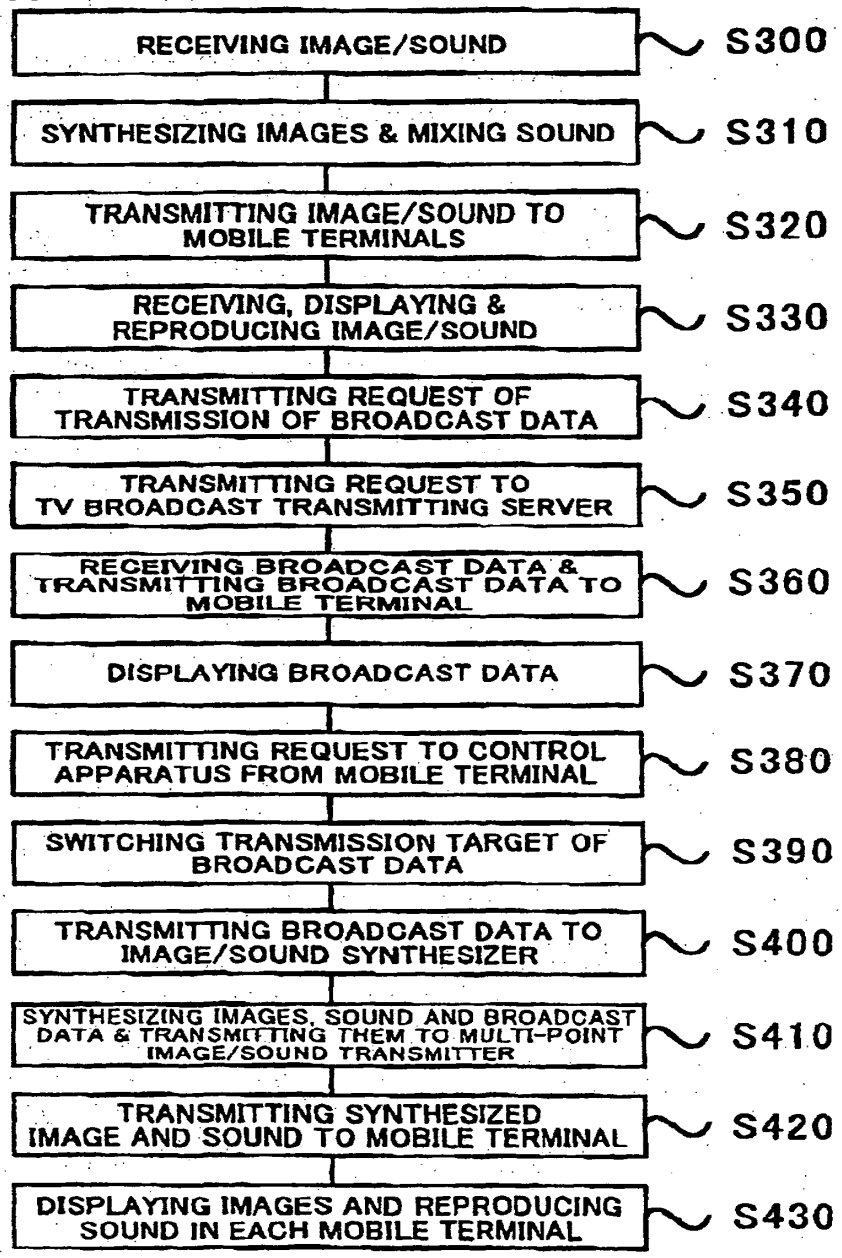
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FIG.6



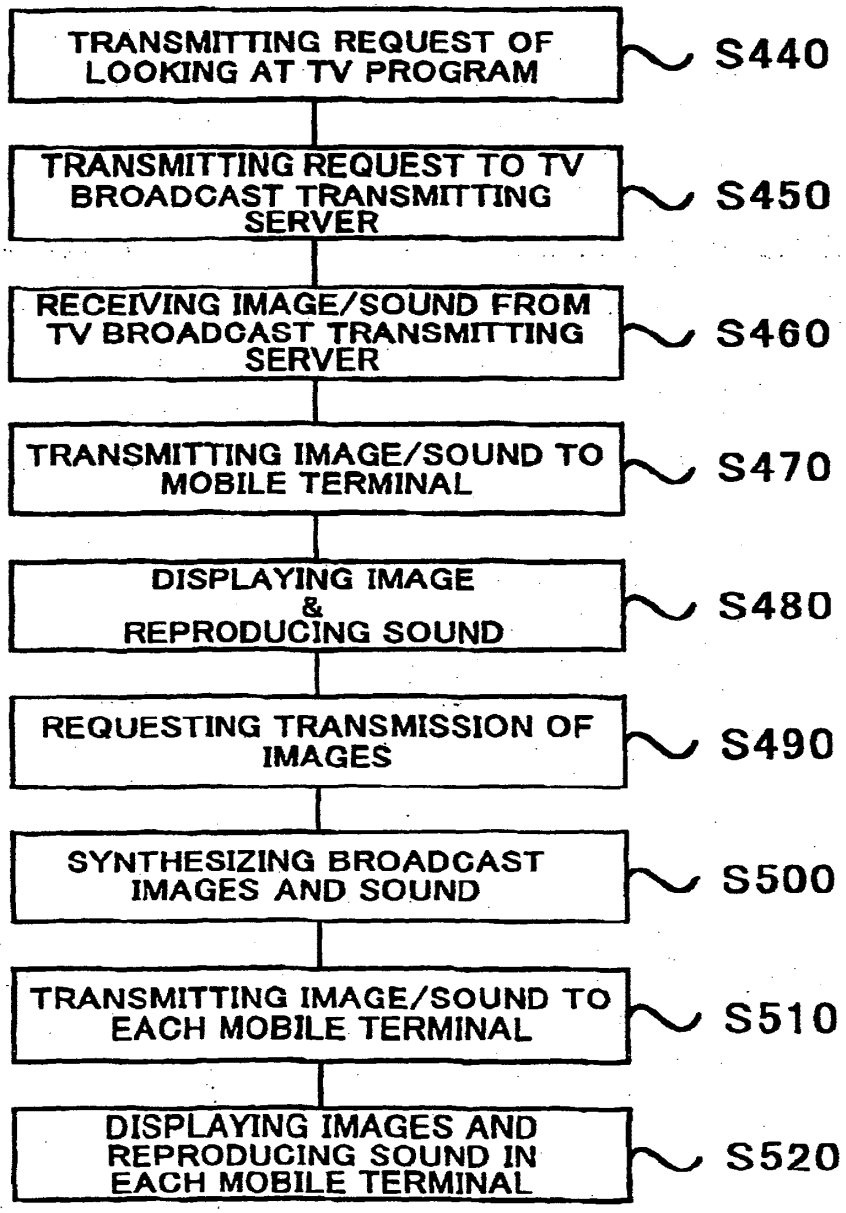
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FIG.7



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FIG.8



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INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP01/10878

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl[7] H04N7/173

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
Int.Cl[7] H04N7/10, 7/14-7/173

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Toroku Jitsuyo Shinan Koho	1994-2002
Kokai Jitsuyo Shinan Koho	1971-2002	Jitsuyo Shinan Toroku Koho	1996-2002

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP, 6-315147, A (Casio Computer Co., Ltd.), 08 November, 1994 (08.11.94), All pages; Figs. 1 to 10 (Family: none)	1-31
A	JP, 8-18933, A (Toshiba Corp.), 19 January, 1996 (19.01.96), All pages; Figs. 1 to 49 (Family: none)	1-31
A	JP, 11-252525, A (Nippon Telegraph And Telephone Corp.), 17 September, 1999 (17.09.99), All pages; Figs. 1 to 20 (Family: none)	1-31
P,A	JP, 2001-111984, A (ADC Technology, Inc.), 20 April, 2001 (20.04.01), All pages; Figs. 1 to 9 & WO 01/11885 A	1-31

[X] Further documents are listed in the continuation of Box C. [ ] See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier document but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
08 March, 2002 (08.03.02)	19 March, 2002 (19.03.02)
Name and mailing address of the ISA/ Japanese Patent Office	Authorized officer
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP01/10878

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,A	JP, 2001-111983, A (Seiko Epson Corp.), 20 April, 2001 (20.04.01), All pages; Figs. 1 to 22 (Family: none)	1-31
E,A	JP, 2001-359076, A (NEC Corp.), 26 December, 2001 (26.12.01), All pages; Figs. 1 to 6 (Family: none)	1-31
E,A	JP, 2002-51285, A (Ricoh Co., Ltd.), 15 February, 2002 (15.02.02), All pages; Figs. 1 to 9 (Family: none)	1-31

Form PCT/ISA/210 (continuation of second sheet) (July 1998)

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(54) A method of remotely storing a broadcast program received by a mobile communication terminal

(57) A mobile communication terminal allows a user to receive broadcast programming. A separate recording unit, which can be remote from the communication terminal, records that programming. One or more signals from the mobile terminal identify the broadcast frequency to which the mobile terminal is tuned and cause the recording unit to tune to the identified broadcast frequency. The signals from the mobile terminal also cause the recording unit to record at least a portion of a program being broadcast on the frequency to which the mobile terminal is tuned. The recording unit may buffer portions of broadcast programming being received on the identified frequency. A portion of the buffer contents can subsequently be transmitted to the mobile terminal, permitting the terminal user to replay the portion and identify a start point for the broadcast program. A signal from the mobile terminal can also cause the recording unit to automatically identify the start point in the buffer contents. After the start point is identified by the user or automatically by the recording unit, the recording unit is able to record substantially an entire broadcast program that is identified by the user after the program begins.

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Description

FIELD OF THE INVENTION

[0001] The present invention relates to recording portions of audio or other broadcasts received on a mobile communication terminal, and more specifically, to recording such broadcast portions at a location that may be remote from the mobile communication terminal.

BACKGROUND OF THE INVENTION

[0002] Mobile communication devices have become an important part of modern life. Originally, many such terminals only offered wireless telephone service (e.g., a cellular telephone). Increasingly, however, such mobile communication devices are being equipped with a wide variety of features, including games, Internet access, e-mail and other types of services and features. One such feature is the ability to receive broadcast programming such as, e.g., music or other audio information. For example, many mobile terminals are now equipped with an AM/FM radio receiver. A mobile terminal user is thereby able to listen to music, news or other conventional broadcast programming with his or her wireless telephone or other type of mobile terminal.

[0003] Although this represents an added convenience for a mobile terminal user, new challenges are presented. One such challenge involves recording a portion of a broadcast. For example, a user may hear a song broadcast by an FM radio station and wish to record the song. However, the primary functions of a mobile terminal (e.g., two-way communication) may require that significant portions of its hardware be dedicated to other uses. The terminal may thus have limited memory and other resources to use for recording. As a general rule, it is also desirable to minimize the size of a mobile terminal so as to enhance its portability and convenience. Without increasing the size of the device, it can be difficult to add significant recording ability to the terminal. Moreover, the quality of audio reception by a mobile terminal can be less than that of a more conventional AM/FM radio. While the decreased audio quality may be acceptable when listening to live programming, the recording process may further degrade the audio quality.

[0004] Recording a broadcast program presents other challenges that are not necessarily unique to mobile terminals. Often, a person may not wish to record a song or other broadcast until it has already begun. A person may begin listening to a song, and subsequently decide that he or she would like to record it. Although the person could commence recording at that point, he or she would not be able to record the entire song.

[0005] In light of these and other challenges, there remains a need for improved systems and methods for recording broadcasts received on a wireless telephone or other mobile communication terminal.

SUMMARY OF THE INVENTION

[0006] The present invention allows a mobile communication terminal user to receive broadcast programming on a mobile terminal, but to record that programming on a separate recording unit. The separate recording unit can be remotely located from the mobile terminal. In one embodiment of the invention, the user receives a broadcast program on his or her mobile terminal. The user can then transmit one or more signals from the mobile terminal that identify the broadcast frequency to which the mobile terminal is tuned, which cause a recording unit to tune to the broadcast frequency, and which cause the recording unit to record at least a portion of the broadcast program which the user is receiving. A signal from the mobile terminal may also cause the recording unit to buffer portions of broadcast programming being received on the identified frequency. In some embodiments, the mobile terminal receives a portion of the buffer contents, and the user then identifies a start point of the broadcast program from within those contents. The start point is then transmitted to the recording unit. In other embodiments, a signal from the mobile terminal causes the recording unit to automatically identify the start point in the buffer contents. After the start point is identified by the user or automatically by the recording unit, the recording unit is able to record substantially an entire broadcast program that is identified by the user after the program begins. Additional features and advantages of the invention are described below and in the drawings, and/or will be apparent from the description and drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] FIG. 1 is a diagram of an architecture for remotely recording audio broadcasts according to one embodiment of the invention.

[0008] FIG. 2 is a block diagram of a recording unit according to one embodiment of the invention.

[0009] FIG. 3 is a block diagram of a mobile terminal according to one embodiment of the invention.

[0010] FIGS. 4A-4F are diagrams explaining recording of a broadcast program according to one aspect of the invention.

[0011] FIGS. 5A-5F are diagrams explaining recording of a broadcast program according to another aspect of the invention.

[0012] FIG. 6 is a diagram of an alternative architecture for remotely recording audio broadcasts according to another embodiment of the invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0013] As used herein, "mobile terminal" includes cellular and other wireless telephones, mobile devices communicating by General Packet Radio Service to

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send and receive data, devices permitting wireless Internet telephony, and any other mobile communication device that facilitates wireless two-way communication between a user of the device and another location. "Broadcast station" refers to a broadcaster of programming over an assigned radio frequency within a particular broadcast band, and includes (but is not limited to) conventional AM and FM radio stations, stations broadcasting in short-wave and other bands, and UHF and VHF television stations. "Broadcast programming" refers to information transmitted by such stations, and includes music, news, commercials, sports and any other type of transmission. In order for a signal from a first device to be "received" by a second device, the signal need not reach the second device in an unaltered form. In other words, the signal may be relayed by one or more intermediate devices which change the format of the signal and/or add additional information.

[0014] FIG. 1 is a diagram of an architecture for a system for remotely recording audio broadcasts according to one embodiment of the invention. Although the invention is described by an example of a system for recording audio broadcasts from an AM or FM radio station, the invention is also applicable to broadcasts that could include video or other components. Mobile terminal 30 communicates via wireless network 10. Wireless network 10 is represented schematically as a cloud, but includes base stations that transmit and receive wireless communications, and may include switching equipment, connections to other networks, and other components. Because these aspects are known in the art, further description is not needed herein. In addition to providing wireless two-way communication, mobile terminal 30 also receives broadcast radio programming from one or more broadcast stations 40. Mobile terminal 30 selects a broadcast station to receive by tuning to the assigned broadcast frequency for that station.

[0015] Also shown in FIG. 1 is a recording unit 20. Recording unit 20 might typically be located in a home, office or other relatively permanent location, although recording unit 20 could also be portable. Recording unit 20 receives communications from mobile terminal 30 via wireless network 10. Recording unit 20 may be directly connected to wireless network 10, but in a preferred embodiment will communicate with wireless network 10 via one or more intermediate networks. Such intermediate networks could include, e.g., wired telephone service and/or the Internet. In some embodiments, recording unit 20 also transmits communications to mobile terminal 30 via wireless network 10 and one or more intermediate networks. Recording unit 20 also receives broadcast programming from broadcast stations 40. In one preferred embodiment, recording unit 20 receives communications from broadcast stations 40 by RF transmission to antenna 22, but in other embodiments may receive such broadcasts via a cable or other wired connection. Network connection 24 may be a conventional telephone connection, an Internet connection, or other communication network connection.

[0016] FIG. 2 is a diagram showing components of recording unit 20 according to one embodiment of the invention. Recording unit 20 includes an AM/FM receiver 202, a processor 204, a network interface 206, a buffer (or temporary) memory 208 and a storage (or long-term) memory 210. In alternate embodiments, recording unit 20 could include a receiver of transmissions over a TV or other band Receiver 202, processor 204, memories 208 and 210 and network interface 206 are interconnected and communicate via one or more data buses 212. Receiver 202 further includes a tuner 214. Tuner 214, under direction from processor 204, tunes to a particular radio band and frequency, and provides an audio output to digitizer 216. Tuner 214 may also include filters, amplifiers and other components to enhance the quality of the received broadcast. Digitizer 216 converts the analog output from tuner 214 into digitized data in a format such as MP3. The digitized data is then stored in buffer 208 and/or storage memory 210, as described in more detail below. Processor 204 also controls operation of digitizer 216, accesses buffer 208 and accesses storage memory 210. Processor 204 operates according to software instructions, which instructions may also be stored on storage memory 210.

[0017] Storage memory 210 is also used for long-term storage of broadcasted music and other programming selected for recording by a user. Buffer 208 is used to temporarily store recent broadcasts (or portions thereof) prior to transferring same to storage memory 210. Storage memory 210 can be a hard disk drive. Buffer 208 may be RAM or other volatile memory, may be a separately partitioned part of storage memory 210, or may be implemented in some other manner. However, the invention is not limited by the type of media in which buffer 208 or storage memory 210 are embodied. Network interface 206 allows recording unit 20 to receive communications from, and optionally transmit communications to, mobile terminal 30. Network interface 206 may be a modem, a network interface card, or other network access device. The particular architecture and arrangement of components shown in FIG. 2 is only one example of a recording unit in accordance with the invention. Additional components may be added, and the above components may be combined and/or perform additional functions. As but one example, receiver 202 may not have a separate digitizer, and processor 204 may digitize the audio output from tuner 214. Additional processors and/or memory could be added, as discussed below.

[0018] FIG. 3 is a functional diagram of a mobile terminal 30 according to one embodiment of the invention. Mobile terminal 30 generally includes a communications interface 302, inputs (e.g., keypad 304 and audio/visual inputs 306), display 308, memory 310, processor 312 and broadcast receiver 314. Communications interface 302 includes components needed to transmit and receive information (whether voice, data or other informa-

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tion) via wireless network 10. Audio/visual inputs 306 may include, e.g., a microphone and/or a camera. A user of the mobile terminal 30 provides input via keypad 304 to access features of mobile terminal 30. Operation of mobile terminal 30 is controlled by a processor 312, which receives instructions and data from, and stores data to, memory 310. Mobile terminal 30 further includes a broadcast receiver 314. Broadcast receiver 314 tunes to a frequency of a desired broadcast station, and provides audio output via a speaker 316 or headset 318. In other embodiments, broadcast receiver 314 could also provide video or other types of output via, e.g., display 308. As with the recording unit in FIG. 2, the mobile terminal shown in FIG. 3 is only one example of a possible mobile terminal in accordance with the invention.

[0019] The system shown in FIG. 1 allows a user of mobile terminal 30 to store AM, FM or other broadcast programming transmissions while listening to that programming on mobile terminal 30. Although the user might be listening to the broadcast on mobile terminal 30, the broadcast is recorded by recording unit 20, which can be remotely located from mobile terminal 30. The user can, while receiving a broadcast transmission via mobile terminal 30, send a notification to the recording unit 20 via wireless network 10. The notification instructs the recording unit to store the current broadcast transmission of a designated broadcast frequency. The broadcasted transmission is stored at recording unit 20, and can be replayed later or transferred to storage on another device. For example, the recording could be transferred over a BLUETOOTH link (as described in, e.g., "Specification of the Bluetooth System," version 1.1, dated February 22, 2001, available from Bluetooth SIG, Inc. at <http://www.bluetooth.com>) to an MP3 player or other device.

[0020] Upon activation of the broadcast receiver 314 of mobile terminal 30, a signal may be sent via wireless network 10 to recording unit 20. That signal informs recording unit 20 that mobile terminal 30 has tuned to a particular broadcast frequency. Recording unit processor 204 then causes recording unit tuner 214 to tune to the same frequency. In one preferred embodiment, mobile processor 312 automatically sends a signal to recording unit 20 upon a user tuning the broadcast receiver 314 to a particular station. For example, mobile processor 312 could, upon the broadcast receiver 314 being tuned to a particular station for a certain time period (e.g., 10 seconds), determine that the user has elected to listen to that station. Mobile processor 312 could then transmit a signal on wireless network 10 containing the identity of recording unit 20 and the identity of the tuned frequency. When the user tunes to a different frequency, a subsequent signal can be transmitted containing the new frequency. Upon receipt of that signal, recording unit 20 then tunes to the new frequency.

[0021] At some point in time while listening to a broadcast, a user may decide that he or she wishes to record the current programming. The user then causes mobile terminal 30 to send a "record" signal via wireless network 10. Upon receipt of the record signal, recording unit processor 204 causes the output from digitizer 216 to be stored in buffer 208 and/or storage memory 210. Subsequently, mobile terminal 30 may send (either automatically or at request of the user) a "stop record" signal. Upon receipt of this signal, recording unit processor 204 causes the output of digitizer 216 to no longer be stored. Optionally, processor 204 may also mark the stored programming with the time of recording and frequency, or with other indicia provided by a user or software instructions.

[0022] Alternatively, recording unit 20 could commence storing broadcast programming upon initial receipt of a notification signal indicating that mobile terminal 30 has been tuned to a particular frequency. Upon receipt of the notification signal, recording unit 20 could tune to the designated frequency, and the output of digitizer 216 could be immediately written into buffer 208. In one embodiment, buffer 208 only stores programming received within a recent time period (e.g., the last 30 minutes). If at the end of that time period no indication is received from mobile terminal 30 that a user would like to record broadcast programming, the output of digitizer 216 overwrites the oldest portion of the programming in buffer 208. If a user does wish to record programming to which he or she is listening on mobile terminal 30, the user may then cause mobile terminal 30 to send a record signal to recording unit 20 via wireless network 10. Upon receipt of the record signal, recording unit processor 204 may then mark the contents of buffer 208 for later storage in storage memory 210. If the length of the program which the user desires to record exceeds the buffer size (i.e., the time from the record signal to the stop record signal is such that one portion of the program to be recorded would overwrite a previously buffered portion), the output of digitizer 216 could be stored directly to storage memory 210. Alternately, the length of the buffer time period could be expanded.

[0023] By automatically buffering the digitizer output prior to receiving a record instruction, a user is also able to "steal time," i.e., commence recording an entire program after the program has begun. For example, a user might tune mobile terminal 30 to a particular radio station and begin listening to a particular song. After the song begins, the user could then decide that he or she likes the song, and would like to record it for future enjoyment. The user could then press an appropriate key (or key combination) on mobile terminal keypad 304, which could cause processor 312 to send a record signal to recording unit 20 over wireless network 10. Upon receipt of the record signal, recording unit 20 then stores the contents of buffer 208 in storage memory 210, as well as all future output of digitizer 216 until a stop record signal is received. The user may then subsequently edit the contents of storage memory 210 to only retain the desired program. Alternatively, the beginning of the program could be identified in the contents of buffer 208.

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Only the desired contents would then be transferred to storage memory 210 and added to the portion of the program received subsequent to the record signal.

[0024] The desired portion of the buffer contents could be identified in various manners. In a "manual" alternative, the recording unit could select a predefined portion of the buffer (e.g., the most recent 30 seconds, 1 minute, 5 minutes, etc.) and transmit that portion to the mobile terminal. This portion is then temporarily stored in mobile terminal memory 310. The user of the mobile terminal could then replay that portion and mark where he or she would like the recording to begin. The marked beginning point is then transmitted via wireless network 10 to recording unit 20 (which has continued to record the program), and the appropriate portion of buffer 208 transferred to storage memory 210. In one embodiment, an ongoing connection between mobile terminal 30 and recording unit 20 would be maintained over wireless network 10 so that the various actions of the devices could be synchronized in real time. This connection could be provided with a GPRS or SIP connection, or in another manner.

[0025] In an "automatic" alternative, the recording unit would automatically locate the start point of the desired program in buffer 208. Upon receiving a record signal from mobile terminal 30, recording unit processor 204 would analyse the contents of buffer 208, locate a discontinuity point corresponding to the beginning of the current program, and mark the buffer contents from that point forward for subsequent transfer to storage memory 210. Optionally, the processor could automatically identify the end of the program.

[0026] Various methods exist for automatically identifying the starting and ending points of an audio program. In particular, much effort has been devoted to developing methods for discriminating between speech and music. A typical speech/music discriminator first splits up the audio signal into short frames (e.g., 20ms-50ms duration). A number of primitive features are extracted from each frame, and a history of these features (e.g., going back 0.5s), is used to determine whether the source signal is most likely speech or music. Examples of time domain primitive features include zero-crossing rate, energy (total or rms), envelope data (related to the smoothed energy-contour), histogram data (related to the probability density function), and peak data (related to the extremas of the wave form). Examples of frequency domain primitive features include spectral centroid (a crude measure of the spectrum's "tilt"), spectral flatness (inversely proportional to the variance), cepstral data, and histogram or peak data extracted from the magnitude spectrum. The variation in the primitive features over a significant number of frames is used to analyze the trends in the audio signal. For example, to a speech/music discriminator a high percentage of low-energy frames is likely to indicate the pauses in speech whereas a high variation in the energy between frames is likely to indicate the transients often found in music. In a similar way other types of program material can also be classified by analysing a number of primitive features extracted from the audio signal. However, the purpose of the analysis is not necessarily to classify the program material. The starting and end points can also be determined by detecting changes within the audio signal. For example, if a slow or mellow music piece is followed by a loud rock song, it is sufficient to know when the transition occurred. In this case there is no need to evaluate the more detailed characteristics of the two music pieces in order to find the starting and ending points.

[0027] FIGS. 4A through 5F illustrate operation of these alternatives. In FIGS. 4A through 5F, two music programs being broadcast (identified as "song A" and "song B") are represented as variable length horizontal bars. As the song is played, the corresponding bar moves to the right. The current time is shown by the leftmost arrowhead and vertical dashed line. The portion of the song A or song B bar to the right of the first arrowhead represents portions of a program that have already been broadcast, while the portion of the bar to the left of the arrowhead represents portions of a program that have yet to be broadcast. The distance from the left arrowhead and vertical line to the rightmost arrowhead and vertical line represents the time period of the broadcast that is stored in buffer 208. Although music programs are used for purposes of illustration in FIGS. 4A through 5F, the invention is applicable to any type of broadcast programming.

[0028] Manual location of a program starting point is shown in FIGS. 4A through 4F. Beginning with FIG. 4A, song B has just begun, and song A has just concluded. Accordingly, the contents of buffer 208 correspond to the portion of song B from the beginning of that song to the left arrowhead, as well as the portion of song A from the end of song A to the right arrowhead. The buffer contents are shown in diagrammatic form as B_2, B_1, A_n, A_{n-1}, etc. In particular, B_1 is the digitized first portion of song B and B_2 is the digitized second portion of song B. A_n is the digitized last portion of song A, A_{n-1} the digitized second-to-last portion of song A, etc. FIG. 4B corresponds to a subsequent point in time. An additional part of song B has been broadcast, and the digitized form of that portion (B_3) placed in buffer 208 so as to overwrite the oldest part of song A in buffer 208. At this moment, the mobile terminal user decides that he or she would like to record song B. The user presses the appropriate key(s) on the mobile terminal, causing a record signal to be sent to recording unit 20. Upon receipt of the record signal, recording unit 20 transmits a portion of the contents of buffer 208 that corresponds to a predetermined amount of time prior to receiving the record signal. In this case, the transmitted portion contains B_1 through B_3 and A_n through A_{n-1}. As shown in FIG. 4C, the recording unit stops overwriting song B into buffer 208 and begins to directly store song B into storage memory 210. The digitized portion B_4 of song B has been stored in storage memory 210. FIG. 4D corresponds to a subse-

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quent point in time in which the user has identified the start of song B and transmitted same to the recording unit. Communication of the location of the beginning of song B is shown as a block labeled "index of B_1." The location of the start of song B is marked, and the remainder of song B continues to be recorded into storage memory 210 (FIGS. 4D and 4E). The location of B_3 would already be known, as it would be at the end of the portion of the buffer contents previously sent to mobile terminal 30 for review by the user. When the user hears the end of song B, he or she may then send a stop record signal to the recording unit. At that time, the portion of song B in buffer 208 is transferred to storage memory 210 and appended to the later portion already stored (FIG. 4F). As also shown in FIG. 4F, the recording unit then resumes writing the most recent portion of the broadcast in buffer 208.

[0029] In one variation on the operation shown in FIGS. 4A through 4F, the recording unit would not directly store the broadcast program into storage memory 210, and would continue to write song B to buffer 208 after sending a portion of the buffer contents to the mobile terminal for review by the user. In this variation, when the end of the buffer is reached (i.e., as the user-marked beginning of song B is neared), the contents of the buffer would be transferred to storage memory 210, and the subsequently-broadcast portions of song B would then be overwritten on the earlier portions. Parallel processors and/or buffers could also be used so that no portion of song B is missed while the contents of buffer 208 are transferred.

[0030] Automatic location of starting and ending points is shown in FIGS. 5A through 5F. FIG. 5A is similar to FIG. 4A, and shows that song B has just begun, as well as the contents of buffer 208. In FIG. 5B, the recording unit receives a record signal from a mobile terminal. From that point in time forward, as shown in FIGS. 5C and 5D, digitized portions of song B are stored directly in storage memory 210. Processor 204 of recording unit 20 continuously analyzes the output of digitizer 216. Upon detecting the end of song B, and as shown in FIG. 5E, processor 204 locates the beginning of song B in buffer 208, and then appends the buffered portion of song B to the portion already stored in storage memory 210 (FIG. 5F).

[0031] In one variation upon the operation shown by FIGS. 5A through 5F, processor 204 could immediately locate the beginning of song B in buffer 208 and transfer the buffered portion of song B to storage memory 210 prior to completion of the broadcast of song B. In another variation, the recording unit can automatically determine the starting point of the song, but be advised of the ending point by a subsequent signal from the user. So as to avoid loss of a program portion while buffer contents are being analyzed or transferred, recording unit 20 could be implemented with parallel processors and/or buffers so that portions of a broadcast could be analyzed or buffered while other portions are transferred to (or originally placed in) storage memory 210.

[0032] FIG. 6 shows another embodiment of the invention. Mobile terminal 30, recording unit 20 and wireless network 10 are substantially similar to mobile terminal 30, recording unit 20 and wireless network 10 as shown in FIG. 1. Also shown in FIG. 6 is a second wireless network 10' connected to wireless network 10 by inter-network connection 11. Recording unit 20' is connected to network 10' by connection 24', and is able to receive transmissions from broadcast stations 40'. As shown in FIG. 6, mobile communication terminal 30 is now located in a region in which mobile terminal 30 is within range of (and able to receive transmissions from) broadcast stations 40', but recording unit 20 is not. If mobile terminal 30 sent a signal to recording unit 20 indicating the station to which mobile terminal 30 is tuned, recording unit 20 would be unable to tune to (or record transmissions from) that station. FIG. 6 represents a situation which could occur if, e.g., a mobile terminal is roaming outside of its home wireless network. Accordingly, another recording unit 20' is temporarily assigned to mobile terminal 30 while operating in wireless network 20'. Recording unit 20' could be assigned by network 10' directly. For example, network 10' could recognize that mobile terminal 30 is roaming and assign a recording unit based on the phone number, IP address or other identifier of the mobile terminal. Alternatively, the home network 10 could, upon recognition that mobile terminal 30 is operating from another network, communicate to network 10' via inter-network connection 11 and request that a recording unit be assigned. Recording unit 20' could record transmissions for mobile terminal 30 in a manner similar to one of the alternatives previously described in connection with FIGS. 1-5F. The previously-described signals between mobile terminal 30 and recording unit 20 would instead be exchanged between mobile terminal 30 and recording unit 20'. When mobile terminal 30 is no longer within network 10', network 10' could transmit the material recorded for mobile terminal 30 by recording unit 20' to network 10, which could then transfer that recorded material to recording unit 20.

[0033] In yet another embodiment, recording unit 20 (or 20') could transmit an entire song or other program to mobile terminal 30, and not just a portion of a song or other program. In this manner, a user of mobile terminal 30 could access pre-recorded programming when he or she is unable to find desirable programming currently be broadcast by a broadcast station.

[0034] Although specific examples of carrying out the invention have been described, those skilled in the art will appreciate that there are numerous variations and permutations of the above-described systems and methods that are contained within the spirit and scope of the invention as set forth in the appended claims. For example, a recording unit and/or mobile terminal could be configured so that a user could choose between the manual and automatic recording modes described above. The various buffer sizes, time periods and other

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operating parameters described above could be configurable by a user. A mobile terminal could further be configured such that, if switched off while a broadcast program is being recorded, the mobile terminal would automatically send a stop record signal to the recording unit. Alternatively, the recording unit could be configured to automatically stop recording a program after a time out period during which no further signal is received from the mobile terminal. As yet another possible alternative, a single recording unit could record transmissions for multiple mobile terminals. As yet a further alternative, a machine-readable medium could have machine-executable instructions stored thereon such that, when the instructions are read and executed by an appropriate device (or devices), steps of a method according to the invention are performed. These and other modifications are within the scope of the invention as defined in the attached claims.

Claims

1. A method of remotely storing broadcast programming received by a mobile communication terminal (30), comprising:

   receiving a broadcast program on the mobile communication terminal (30); and
   transmitting one or more signals from the mobile communication terminal, the signals:

      identifying a broadcast frequency on which the broadcast program is received by the mobile terminal,
      causing a recording unit (20) to tune the broadcast frequency, and
      causing the recording unit to record at least a portion of the broadcast program.

2. A mobile communication terminal (30), comprising:

   a communications interface (302) adapted to provide two-way communication via a wireless network (10) between the mobile communication terminal and other location;
   an input device (304, 306);
   a receiver (314) for tuning to broadcast radio frequencies and receiving broadcast programming; and
   a processor (312) configured to transmit, via the communications interface, one or more signals that:

      identify a broadcast frequency on which a broadcast program is being received by the mobile terminal (30),
      cause a recording (20) unit to tune the broadcast frequency, and
      cause the recording unit (20) to record at least a portion of the broadcast program.

3. The method or mobile communication terminal (30) of claim 1 or 2, wherein the one or more signals comprise an activation signal and wherein the activation signal identifies the broadcast frequency and causes the recording unit (20) to tune to the broadcast frequency.

4. The method or mobile communication terminal (30) of any one of claims 1 to 3, wherein the one or more signals further comprise a recording signal, wherein the activation signal further causes the recording unit (20) to commence writing programming received on the broadcast frequency in to buffer (208) and wherein the recording signal indicates that portion of the buffer contents are to be stored in a separate memory location (210).

5. The method or mobile communication terminal (30) of claim 4 wherein the recording signal is transmitted after commencement of the at least a portion of a broadcast program, and wherein the recording signal causes the recording unit (20) to identify a start point in the buffer contents, the start point corresponding to the commencement of the at least a portion of a broadcast program.

6. The method or mobile communication terminal (30) of claim 5 wherein the recording signal further causes the recording unit (20) to store in the separate memory location buffer contents written subsequent to the writing of the start point.

7. The method or mobile communication terminal (30) of claim 5 or 6 wherein:

   the recording signal causes the recording unit (20) to identify the conclusion of the at least a portion of a broadcast program, and
   the recording signal causes the recording unit to store in the separate memory location (21) substantially the entire at least a portion of a broadcast program.

8. The method of any one of claims 4 to 7 further comprising:

   receiving a portion of the buffer contents at the mobile communication terminal (30),
   identifying within the buffer contents portion a starting point for the at least a portion of a broadcast program; and
   transmitting a second recording signal containing the starting point.

9. The method of any one of claims 4 to 8, further com-

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prising transmitting a stop recording signal, the stop recording signal indicating to the recording unit (20) that no additional portions of the broadcast program are to be stored in the separate memory location.

10. The method of claim 9 wherein the stop recording signal is transmitted upon receipt of a user instruction.

11. The method of any one of claims 3 to 8, further comprising transmitting a stop recording signal automatically upon deactivation of the mobile terminal (30), the stop recording signal causing the recording unit (20) to cease recording the at least a portion of the broadcast program.

12. The method according to any one of claims 3 to 11, further comprising

tuning the mobile terminal (30) to a second broadcast frequency; and

transmitting a second activation signal, the second activation signal identifying the second broadcast frequency and causing the recording unit (20) to tune to the second broadcast frequency.

13. The method according to any one of claims 1 and 3 to 12 wherein identifying a broadcast frequency comprises determining that the mobile communication terminal (30) has been tuned to the frequency for a predetermined time period.

14. The method according to any one of claims 1 and 3 to 13 further comprising sending a transfer signal causing the recording unit (20) to transfer the recorded at least a portion of the broadcast program to a second recording unit (20').

15. The method of claim 14 wherein sending a transfer signal comprises sending a signal indicative of the mobile communication terminal (30) no longer operating within a first wireless network (10), and wherein the transfer signal causes the recording unit (20) to transfer the recorded at least a portion of the broadcast program to a second recording unit (20') in a second wireless network (10').

16. The method of any one of claims 4 to 15 further comprising transmitting a play signal causing at least a portion of a broadcast program stored in the separate memory location (210) to be played by the mobile communication terminal (30).

17. The mobile communication terminal of any one of claims 2 to 7 wherein the processor (312) is further configured to carry out the method as claimed in at least one of the claims 8 to 16.

18. The mobile communication terminal (30) of claim 4, where in the processor (312) is further configured to transmit multiple types of recording signals, and wherein the processor is further configured to:

transmit a manual recording signal, the manual recording signal causing transmission of at least a portion of the buffer contents to the mobile communication terminal,

replay on the mobile communication terminal, in response to a user instruction, a portion of the at least a portion of a broadcast program corresponding to the portion of the buffer contents,

transmit, in response to a user instruction, a second manual recording signal containing a starting point for the at least a portion of a broadcast program from within the buffer contents portion, and

transmit an automatic recording signal after commencement of a broadcast program, the automatic recording signal causing the recording unit to automatically identify a start point in the buffer contents.

19. A recording unit (20) for remotely recording broadcast programming in response to signals received from a mobile communication terminal (30), comprising:

an interface (206) adapted to provide a communication link to a wireless communication network (10);

a receiver (202) for tuning to broadcast radio frequencies and receiving broadcast programming;

a memory (208, 210); and

a processor (204) configured to, in response to one or more signals transmitted by a mobile communication terminal via the wireless communication network:

tune the receiver (202) to a broadcast frequency identified by the mobile communication terminal, and

store in the memory (208, 210) at least a portion of a broadcast program being transmitted on the broadcast frequency.

20. A machine-readable medium having a machine-executable instructions for performing steps comprising:

tuning, in response to one or more signals transmitted by a mobile communication terminal via a wireless communication network, a receiver (202) of a recording unit (20) to a broadcast frequency identified by the one or more signals; and

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storing in a memory (208, 210) at least a portion of a broadcast program being transmitted on the identified broadcast frequency.

21. The recording unit or machine-readable medium of claim 19 or 20, wherein the one or more signals comprise an activation signal, and wherein the processor (202) is configured to tune to the identified broadcast frequency in response to the activation signal.

22. The recording unit of claim 21, wherein the memory (208, 210) comprises a buffer memory (208), and wherein the processor (204) is configured to commence, in response to the activation signal, writing programming received on the broadcast frequency in to the buffer memory (208).

23. The recording unit of claim 22, wherein the one or more signals further comprise first and second recording signals, and wherein the processor (208) is further configured to:

transmit to the mobile communication terminal (30), in response to the first recording signal and via the communication link, a portion of the buffer memory contents, and
mark, in the buffer memory (208) and in response to the second recording signal, a starting point for the at least a portion of a broadcast program.

24. The recording unit of claim 22, wherein the processor (204) is further configured to automatically identify, in response to a recording signal transmitted by the mobile communication terminal (30) subsequent to commencement of the at least a portion of a broadcast program, a start point in the buffer memory contents, the start point corresponding to the commencement of the at least a portion of a broadcast program.

25. The recording unit of claim 24, wherein the memory (208, 210) further includes a storage memory (210), and wherein the processor (204) is further configured to automatically store in the storage memory (210) a portion of the buffer memory contents written subsequent to the writing of the start point.

26. The recording unit of claim 24, wherein the memory (208, 210) further includes a storage memory (210), and wherein the processor (204) is further configured to

automatically identify the conclusion of the at least a portion of a broadcast program, and

store in the storage memory (210) substantially the entire at least a portion of a broadcast program.

27. The machine-readable medium of claim 20 and 21 further storing machine-executable instructions for causing the processor (204) of the recording unit (20) to behave as claimed in any one of claims 22 to 26.

28. A system for remotely recording audio broadcast, comprising a mobile communication terminal (20) as claimed in any one of claims 2 to 7, 17 and 18, and a recording unit for remotely recording broadcast programming received by the mobile communication terminal as claimed in any one of claims 19 and 21 to 26.

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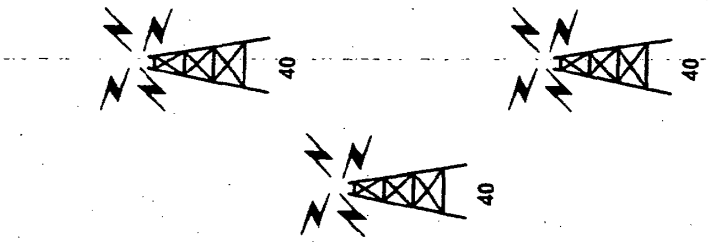
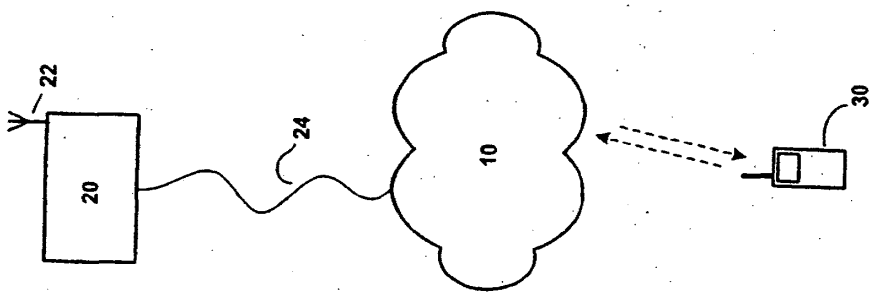
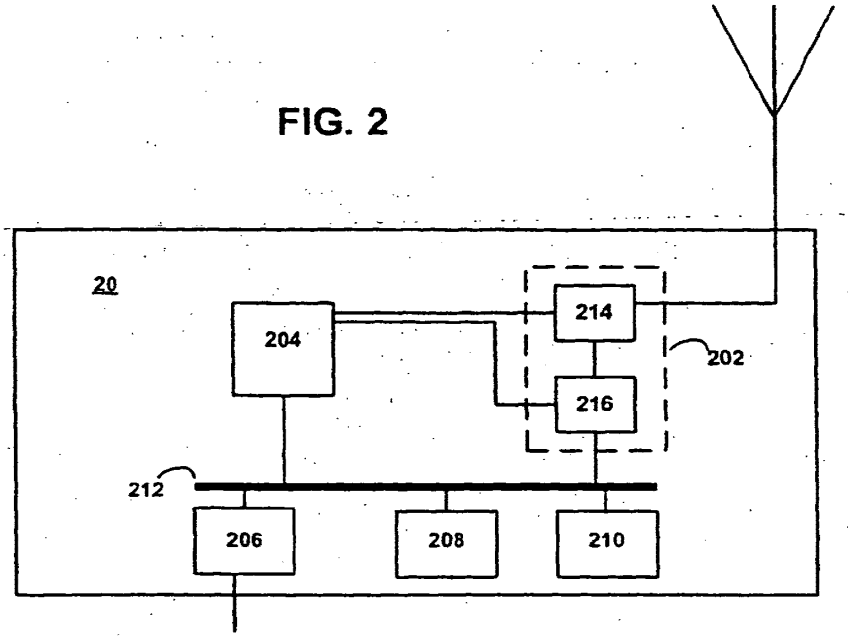


FIG. 1



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FIG. 2



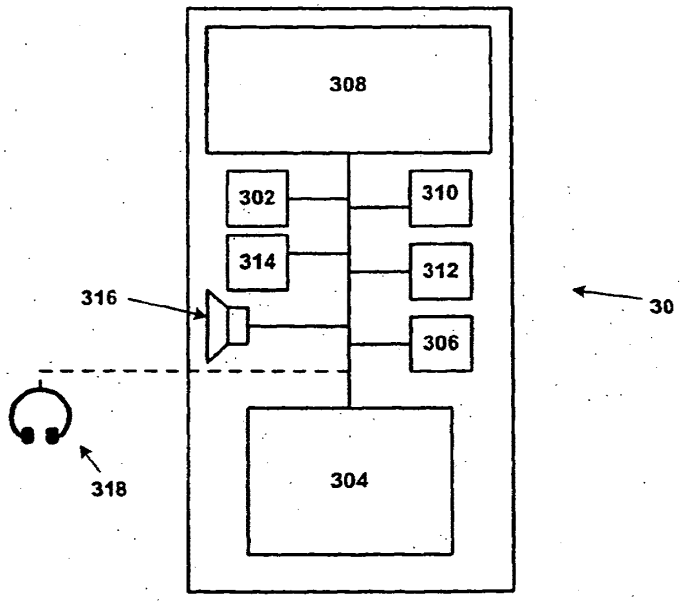


FIG. 3

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FIG. 4A

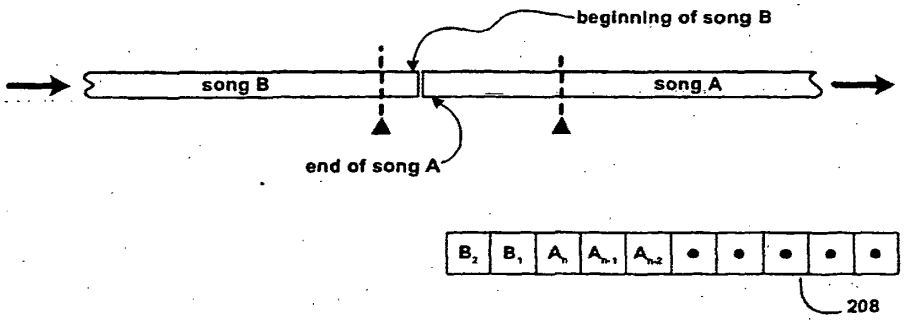
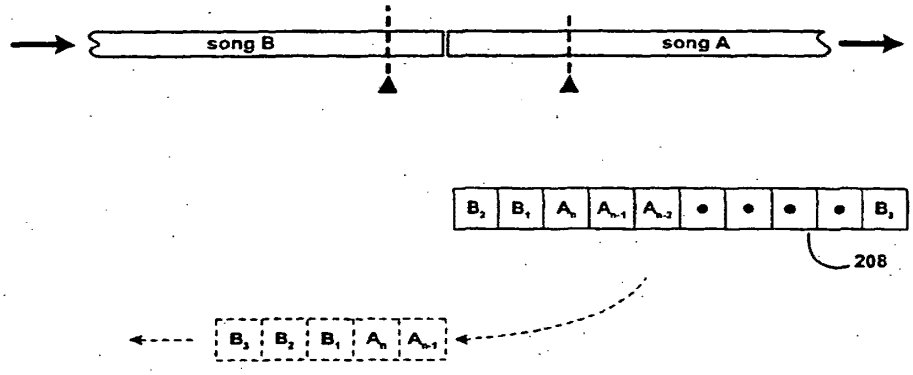


FIG. 4B



BNSDOCID: <EP_____1471672A2_I_>

FIG. 4C

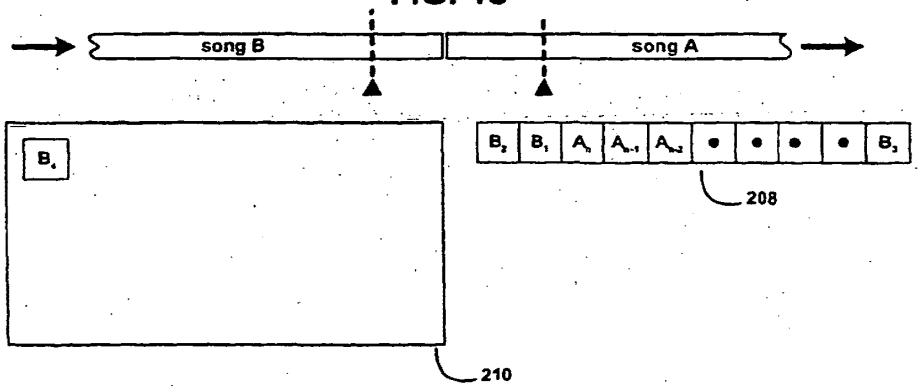
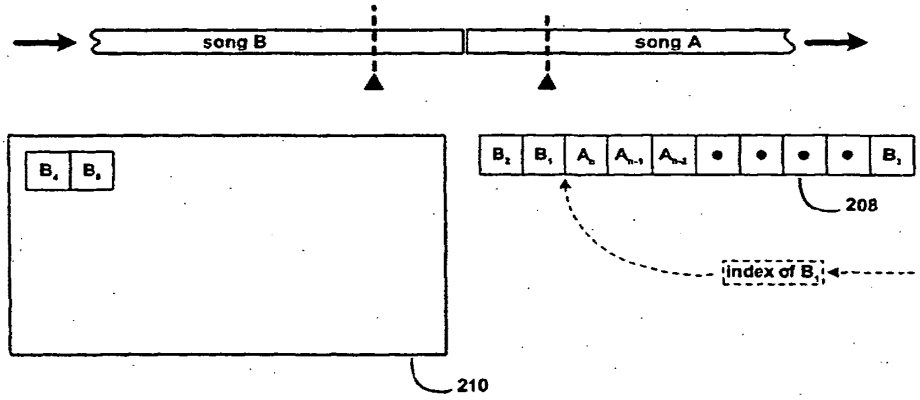


FIG. 4D



BNSDOCID: <EP_____1471672A2_I_>

FIG. 4E

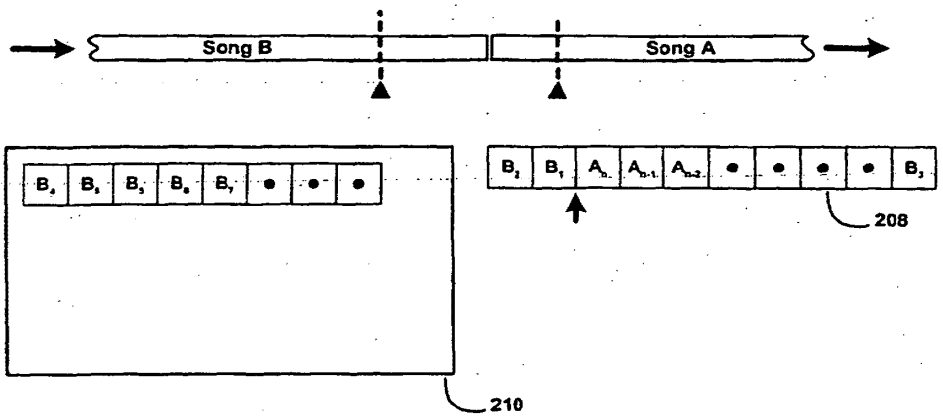
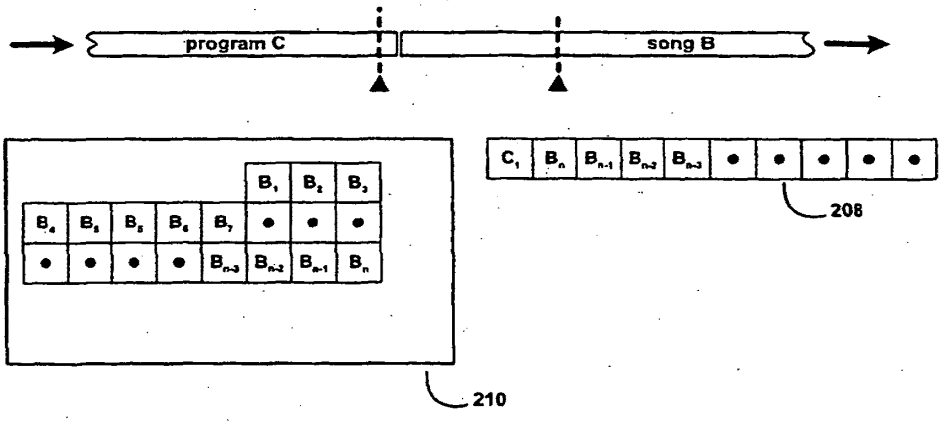


FIG. 4F



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FIG. 5A

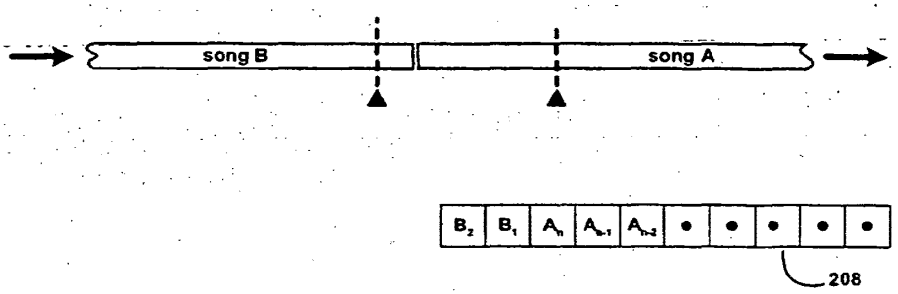
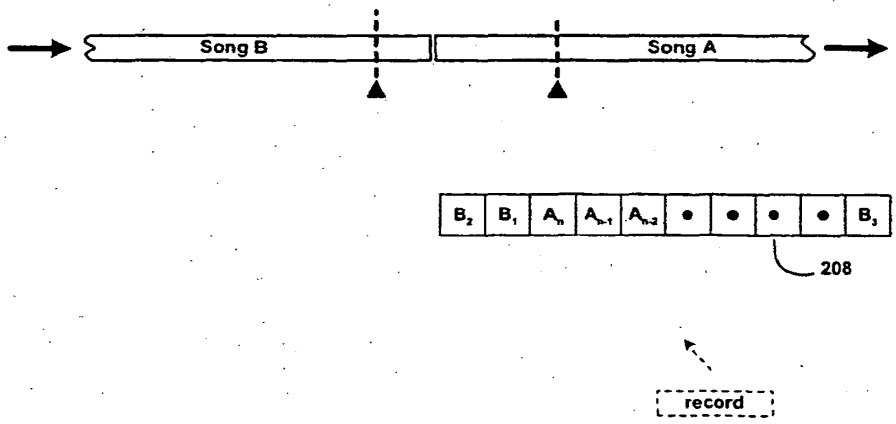


FIG. 5B



BNSDOCID: <EP_____1471672A2_I_>

FIG. 5C

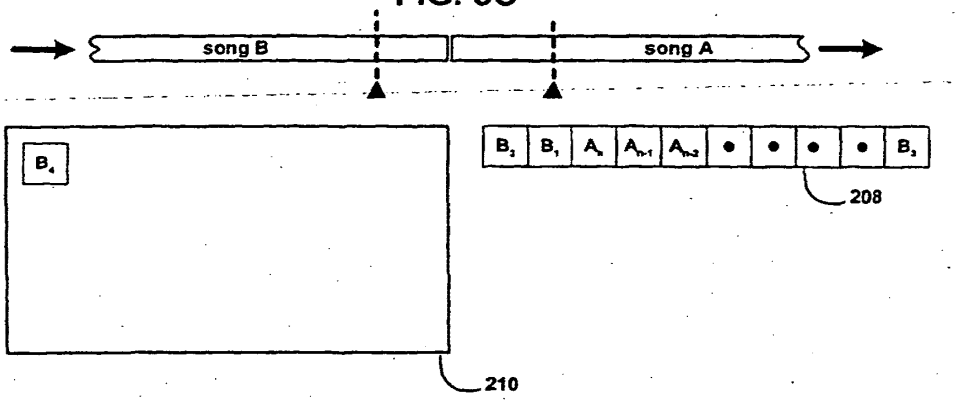
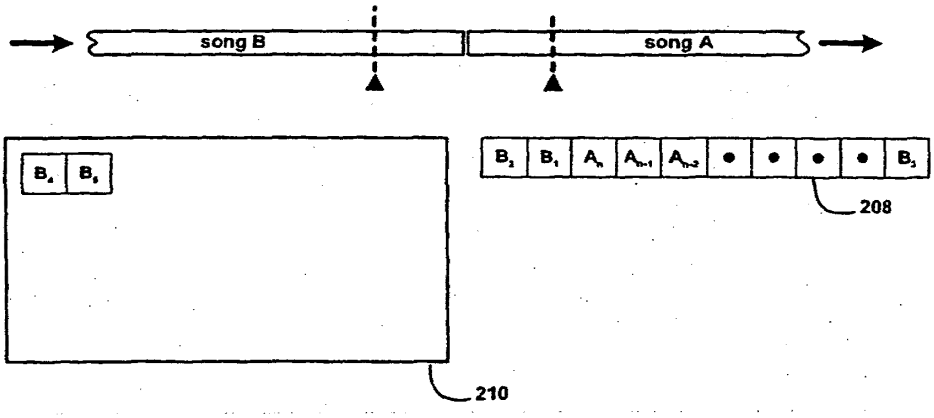


FIG. 5D



BNSDOCID: <EP_____1471672A2_I_>

FIG. 5E

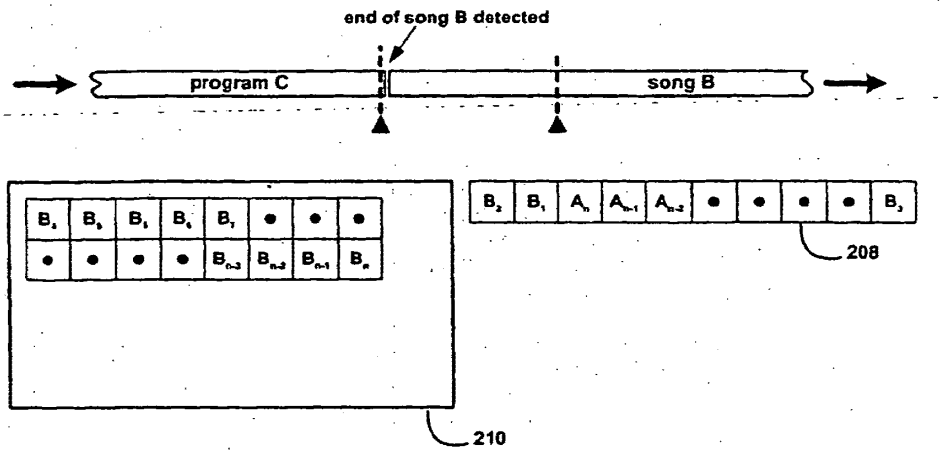
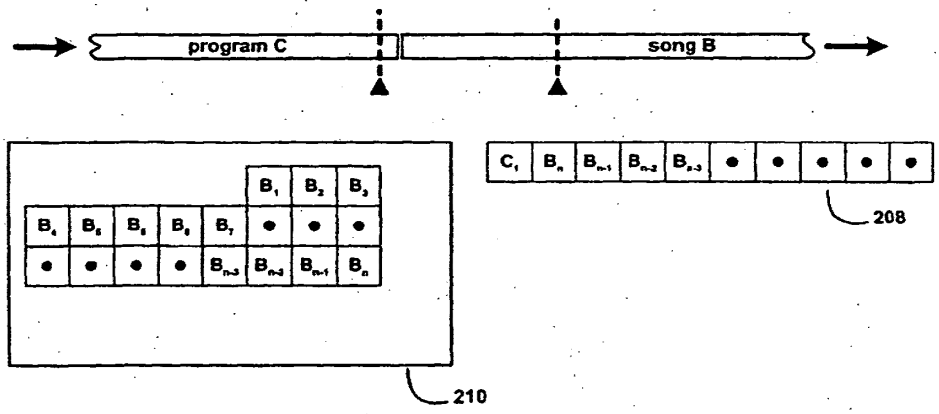
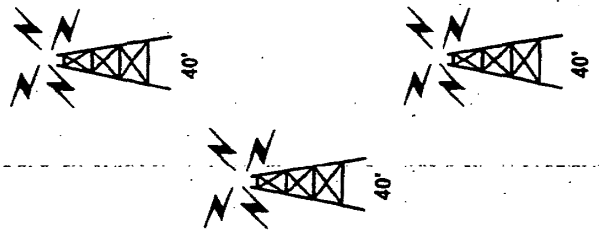


FIG. 5F



BNSDOCID: <EP_____1471672A2_I_>



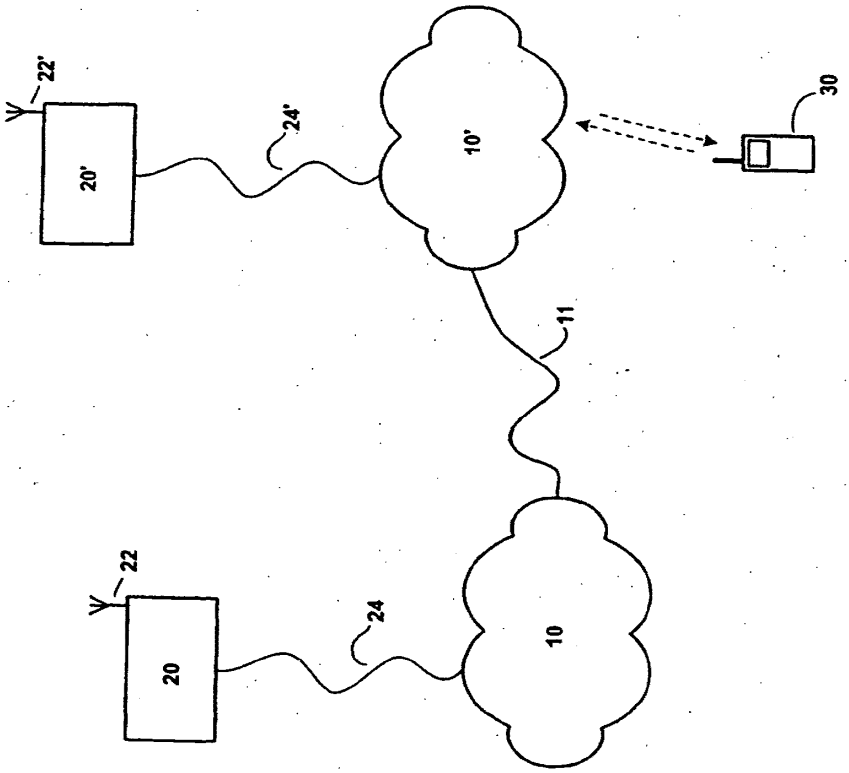


FIG. 6

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(54) A method of remotely storing a broadcast program received by a mobile communication terminal

(57) A mobile communication terminal allows a user to receive broadcast programming. A separate recording unit, which can be remote from the communication terminal, records that programming. One or more signals from the mobile terminal identify the broadcast frequency to which the mobile terminal is tuned and cause the recording unit to tune to the identified broadcast frequency. The signals from the mobile terminal also cause the recording unit to record at least a portion of a program being broadcast on the frequency to which the mobile terminal is tuned. The recording unit may buffer portions of broadcast programming being received on the identified frequency. A portion of the buffer contents can subsequently be transmitted to the mobile terminal, permitting the terminal user to replay the portion and identify a start point for the broadcast program. A signal from the mobile terminal can also cause the recording unit to automatically identify the start point in the buffer contents. After the start point is identified by the user or automatically by the recording unit, the recording unit is able to record substantially an entire broadcast program that is identified by the user after the program begins.

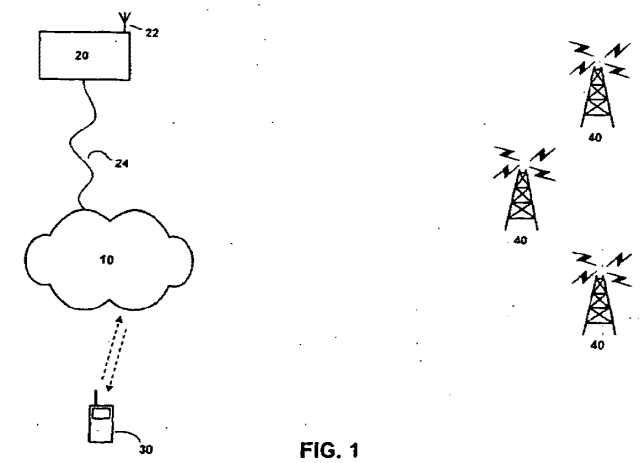


FIG. 1

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European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 04 25 1555

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X Y	EP 1 217 769 A (NTT DOCOMO INC [JP]) 26 June 2002 (2002-06-26) * paragraphs [0002] - [0008], [0027] - [0031], [0069], [0074], [0080] *	1-3, 9-13, 16-21,28 4-8, 22-27	INV. H04H1/00
Y	US 2002/168177 A1 (KAJITANI ICHIRO [JP]) 14 November 2002 (2002-11-14) * paragraphs [0002] - [0015], [0030] - [0041] *	4-8, 22-27	
A	DE 100 61 452 A1 (GRUNDIG AG [DE]) 19 April 2001 (2001-04-19) * the whole document *	1-28	

TECHNICAL FIELDS SEARCHED (IPC)

H04N
H04B
H04M
H04Q
H04H
G11B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	12 December 2006	van Hoorick, Jan

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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P : intermediate document

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D : document cited in the application
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& : member of the same patent family, corresponding document

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 04 25 1555

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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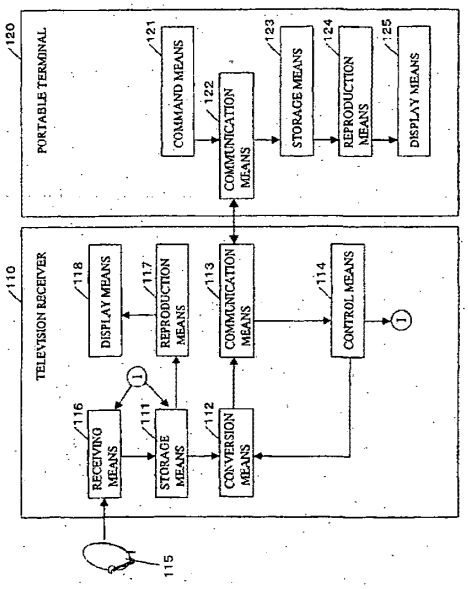
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(54) RECEIVER APPARATUS, MOBILE TERMINAL, AND RECEIVING SYSTEM

(57) A receiving system for the purpose of making it possible to receive radio wave broadcast with high sensitivity irrespective of the location of a portable terminal, and comprising a receiver and a portable terminal. If command means of the portable terminal issues a specific command, control means of the receiver at least selects a signal which communication means sends on the basis of that command information. Furthermore, conversion means of the receiver converts information of a specific form into information of another specific form adapted for reproduction at the portable terminal. Hereby, the portable terminal can receive from the receiver information adapted for the portable terminal and reproduce the information.

FIG.1



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Description

Technical Field

[0001] The present invention relates to a system for receiving and reproducing radio wave broadcast.

Background Art

[0002] In recent years, a technology for receiving and reproducing radio wave broadcast by portable terminals having a communication function such as portable phone etc. has been proposed.

[0003] That is, a television program broadcast with radio wave are received via antenna of a portable terminal. And the television program etc. thus received are displayed on a liquid display or the like.

[0004] However, the prior art technology has a shortcoming that radio wave broadcast can not be received with a high sensitivity in some places where the portable terminal is. Needless to say, this problem can be solved if the place where the portable terminal is used is limited. But if such a restriction is imposed, that could jeopardize the advantage that the portable terminal can be used anywhere.

[0005] Meanwhile, a simple receiving system made up of a receiver that can receive television broadcast and a monitor connected with this receiver through a wireless communication is marketed. This simple receiving system seems to solve the above problem.

[0006] However, with the simple receiving system, it is assumed that the television broadcast is watched on a monitor having characteristics like a specific resolution. That is, it is not assumed that television broadcast is watched on a portable terminal having unspecified characteristics. Therefore, even if a portable terminal that can communicate with the receiver adopted in the simple receiving system, the following problem arises if the resolution of the monitor of this portable terminal is different from that of the monitor adopted by the simple receiving system.

[0007] That is, the problem is that if a broadcast is reproduced by a monitor higher than the monitor used in the simple receiving system in resolution, the moving picture quality will drop. If, on the other hand, a broadcast is reproduced by a monitor lower than a monitor used in the simple receiving system in resolution, a moving picture within a certain scope alone can be reproduced and furthermore faulty reproduction can occur and the reproduction can not be made.

[0008] But in a state where it is known in advance that broadcast is to be reproduced with a low resolution monitor, a small moving picture with small data size according to that must be used. That is, if reproduction is made with a monitor with resolution lower than that of the monitor adopted in the simple receiving system, another problem arises that the data size of a moving picture, an object to be reproduced, will be larger than the data size required intrinsically.

[0009] The present invention has been proposed in view of the above circumstances, and it is an object of the present invention to make it possible to reproduce a broadcast program irrespective of the location of this portable terminal even if unspecific portable terminals having unspecified characteristics are adopted.

Disclosure of Invention

[0010] To achieve the foregoing object, the present invention is based on a receiver system made up of television receiver 110 and portable terminal 120 as shown in FIG. 1.

[0011] The television receiver 110 is provided with the following means.

[0012] That is, conversion means 112 converts a signal of a specific form into a signal of another specific form (the expression "signal" used herein means moving picture information and/or sound information, multimedia information and monomedia information by data broadcasting, program information such as script, and mixed information of them). Communication means 113 sends signals converted by conversion means 112 to portable terminal 120 and receives a command signal from portable terminal 120. Furthermore, control means 114 at least selects signals sent from the communication means 113 on the basis of a command signal received by the communication means 113 from portable terminal 120.

[0013] Meanwhile, the portable terminal 120 has the following means,

[0014] That is, command means 121 issues a specific command. Furthermore, communication means 122 sends command signals from command means 121 to the receiver and receives signals from receiver 110. In addition, display means 125 displays the signal reproduced by said reproduction means 124.

[0015] Here, the receiver 110 is installed at a place where radio wave broadcast can be received with high sensitivity. This way, the radio wave broadcast can be received with high sensitivity irrespective of the location of the portable terminal 120.

[0016] Meanwhile, if conversion means 112 in the receiver 110 is limited to one conversion method, some problem arises, that is, the moving picture quality decreases because of difference in resolution of display means 125 that portable terminal 120 has. Therefore, the present invention is so configured that communication means 113 in receiver 110 receives from portable terminal 120 terminal information on the characteristics or state of portable terminal 120, and the conversion means 112 effects conversions according to the terminal information.

[0017] It is noted that the above-mentioned terminal information indicates at least one out of the following: the resolution of display means 125 of portable terminal 120, total capacity of storage means 123 in portable ter-

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minal 120 and available capacity of storage means 123 in portable terminal 120, the number of colors to be displayed by display means 125 in the portable terminal and data format adapted for the portable terminal.

Brief Description of Drawings

[0018]

FIG. 1 is a block diagram of a television receiving system to which the present invention is applied.
FIG. 2 is a flow chart explaining the operation of the television receiver to which the present invention is applied.
FIG. 3 is a flow chart explaining the operation of the portable terminal to which the present invention is applied.
FIG. 4 is a block diagram of the prior art portable terminals

Best Mode for Carrying out the Invention

[0019] FIG. 1 is a block diagram of a television receiver system to which the present invention is applied.

[0020] The present television receiver is formed of television receiver 110 and portable terminal 120. Now operation on the television receiver 110 side will be explained. This television receiver 110 is installed in a place where radio wave broadcast (in this case, BS digital broadcast) can be received with high sensitivity.

[0021] First, if communication means 113 in television receiver 110 receives a command signal from portable terminal 120 (FIG. 2, Step S 201), control means 114 controls conversion means 112 or receiving means 116 on the basis of the command signal.

[0022] The expression "command signal" as used herein means any kind of command signal issued from portable terminal 120 to television receiver 110. To be specific, the command signals include "terminal information," "communication path information," "information to specify a program" etc. which will be described later.

[0023] Receiving means 116 selects a radio wave for an object channel from the radio waves received via antenna 115 and inputs it in storage means 111 such as hard disk as MPEG 2 format signal. Hereby, a plurality of data are stored in storage means 111 and, therefore, on the basis of command signals received as above, control means 114 decides on a specific moving picture data or audio data among the plurality of data (hereinafter these shall be merely referred to "moving picture A") in a technique which will be described later (FIG. 2, Step S 202).

[0024] It is noted that necessary information for deciding on the above moving picture A may be set in advance from operating means (not shown) of television receiver 110. Under this arrangement, even if no command signal from portable terminal 120 is present or even if it is impossible to decide on moving picture A from this command signal alone, control means 114 can decide on moving picture A by the above operating means on the basis of setting information.

[0025] Then, control means 114 judges whether moving picture A decided as above is stored in storage means 111 or not (FIG. 2, Step S 203). If it is judged that the moving picture is not stored, processing ends. Needless to say, arrangements may be so made that before processing ends, portable terminal 120 is informed that the specified moving picture A is not stored.

[0026] Meanwhile, control means 114, which judges that moving picture A is stored in storage means 111, acquires a parameter from this moving picture A (FIG. 2, Step S 204).

[0027] The above mentioned parameter is information on moving picture A, such as, for example, moving picture resolution, number of frames per second, compression ratio, capacity and time. Here, it is assumed that a one-hour television program by BS digital broadcast is received by MPEG 2 format signal. The moving picture resolution of moving picture A is 720 x 480, number of frames per second is 30 frames/sec., the picture quality is high picture quality (low compression ratio), and capacity is 2.0 GB.

[0028] Then, control means 114 acquires terminal information from portable terminal 120 via communication means 113 (FIG. 2, Step S 205), and gives this terminal information to conversion means 112.

[0029] The term "terminal information" as used herein means information on the characteristics or state about portable terminal 120 such as, for example, resolution of display means 125 (for example, display) of portable terminal 120, total capacity or available capacity of storage means 123 (for example, hard disk) of portable terminal 120, furthermore, number of colors to be displayed by display means 125 of portable terminal 120, data format (for example, MPEG 4) adapted for portable terminal 120, type of portable terminal 120 etc.

[0030] In the following, an example will be explained where the resolution of display means 125 is 180 x 120 pixels, and conversion means 112 receives from control means 114 terminal information showing that the available capacity of the storage means 123 is 32 MB.

[0031] First, conversion means 112 acquires a method of converting moving picture A according to terminal information (FIG. 2, Step S206). As mentioned above, the capacity of moving picture A is 2.0 GB, while the available capacity of storage means 123 that portable terminal 120 has is 32 MB. If, therefore, moving picture A is sent to portable terminal 120 without being converted, the moving picture can not be normally stored in storage means 123 that portable terminal 120 has.

[0032] In such a case, therefore, "a method of converting to moving picture resolution 180 x 120 pixels, number of frames per second 3 frames/sec., low picture quality (high compression ratio), capacity 30 MB" for example is adopted as a method of converting moving pic-

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ture A. That is, conversion means 112 in this case is to find a method of converting the capacity of moving picture A into not higher than available capacity (that is, 32 MB) by adjusting the number of frames per second and picture quality (compression ratio).

[0033] If, on the other hand, no suitable method is found, specific failure processing is done as informing portable terminal 120 to the effect (FIG. 2, Steps S 207→ S 210).

[0034] Finally, conversion means 112 converts moving picture A into moving picture B by the method found above, and further converts this moving picture B in a format adapted for portable terminal 120 such as MPEG 4 format (FIG. 2, Step S 208).

[0035] If, as mentioned above, moving picture A of a specific form is converted into moving picture B of another specific form, this moving picture B is to be sent to portable terminal 120 via communication means 113 (FIG. 2, Step S 209). Needless to say, conversion of "form" includes not only conversion of format, but also the number of frames per second etc. Now, the operation on the side of portable terminal 120 will be explained with reference to FIG. 3.

[0036] First, if information (time, channel etc., for example) to specify a program is inputted using buttons or the like that portable terminal 120 has, then command means 121, which accepts this input signal, instructs television receiver 110 via communication means 122 to send the program (FIG. 3, Step S 301).

[0037] That is, through that operation, a command signal is sent from portable terminal 120 to television receiver 110. The term "command signal" as used herein is not limited to only information to specify a program as mentioned above. For example, a signal to control to power on/off television receiver 110 is included in the above-mentioned command signal.

[0038] Then, command means 121 sends to television receiver 110 terminal information held in advance via television receiver 110 (FIG. 3, Step S 302). Needless to say, the present invention is not limited to the form that command means 121 holds terminal information. For example, the same results can be obtained if terminal information is held in terminal information holding means (not shown) in advance and command means 121 refers to the contents in this terminal information holding means.

[0039] After that, moving picture B converted into a format adaptable to this portable terminal 120 is received from television receiver 110 (FIG. 3, Step S 303), then this moving picture B is stored into storage means 123. And moving picture B thus stored is reproduced by reproduction means 124, and displayed by display means 125 such as liquid crystal display (FIG. 3, Step S 304).

[0040] As described, this invention is so configured that television receiver 110 is interposed, and therefore radio wave broadcast can be received with high sensitivity irrespective of the location of portable terminal 120.

[0041] It is also noted that the present invention is so configured that conversion is effected according to terminal information, and therefore there arises no problem that it is only specific portable terminal 120 having specific characteristics that can be adopted. There arise no problems, either, that moving pictures can not be normally stored in storage means 123 that portable terminal 120 has and that the moving picture quality deteriorates because of the difference in resolution of display means 125 that portable terminal 120 has.

[0042] In the above description, after a command signal is acquired (FIG. 2, Step S 201), terminal information is acquired (FIG. 2, Step S 205). But the same results can be obtained as long as the step of acquiring this terminal information (FIG. 2, Step S 205) is placed before the finding of conversion method (Step S 206). For example, if not only the command signal but also terminal information are acquired in Step S 201, one communication between television receiver 110 and portable terminal 120 will do, thus improving processing efficiency.

[0043] Furthermore, between communication means 113 of television receiver 110 and communication means 122 of portable terminal 120, processing related to copyright protection and charging fee may be performed. By so doing, contents having copyrights by rights can be handled by the present invention.

[0044] In the above description, furthermore, hard disk is exemplified as storage means 111 of television receiver 110 and storage means 123 of portable terminal 120. These storage means 111 and 123 may be any means if moving picture or audio data can be stored. For example, the same results can be obtained by means that can be removed from television receiver 110 or portable terminal 120 as semiconductor cards like SD card. In this case, needless to say, the television receiver 110 side/the portable terminal 120 side should be provided with SD card slot.

[0045] Furthermore, any communication means 113 of television receiver 110 and communication means 122 of portable terminal 120 will do as long as they are means that permit at least giving and receiving of information, and their concrete forms are not restrictive in particular.

[0046] For example, a semiconductor card like SD card may be moved between television receiver 110 and portable terminal 120. By so doing, the same results can be obtained even if special communication means are not provided as long as the terminal is one provided with an SD card slot.

[0047] Or, the function of giving and receiving information and function of command means 121 may be held by a charger of portable terminal 120. In this arrangement, if portable terminal 120 is set in the charger, this portable terminal 120 automatically communicates with television receiver 110 by power line for charging, other communication circuit or wireless, and therefore that eliminates the need for the user to operate for com-

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munication by using buttons etc. provided on portable terminal 120 as mentioned above.

[0048] Furthermore, the method of sending terminal information from portable terminal 120 to television receiver 110 is not limited to the above-mentioned method. For example, arrangements are so made that a table in which the values terminal information can assume are related to (numerical strings) are held in advance on the side of television receiver 110, and the code is sent from portable terminal 120 instead of the values of terminal information. And in television receiver 110, the values of terminal information are obtained from the above-mentioned related table on the basis of the codes received. Through this, the quantity of communication can be reduced. In addition, processing for deciding on a method of converting moving pictures in television receiver 110 is simplified.

[0049] In the above description, furthermore, television broadcast is received via antenna 115. The form of broadcasting may be wireless broadcasting such as broadcasting satellite, ground broadcasting, wire broadcasting such as cable television broadcasting, or broadcasting using public circuit or LAN (Local Area Network). Needless to say, the form of broadcasting also may be broadcasting using the Internet.

[0050] Furthermore, the television receiver 110 may be home server or server outside home that controls moving picture or audio data in a unified manner. Needless to say, the television receiver 110 may be provided with reproduction means 117 to reproduce moving pictures A stored in the storage means 111 and display means 118 to display moving pictures A reproduced by the reproduction means 117.

[0051] In the above description, furthermore, a configuration in which television receiver 110 and portable terminal 120 are both exemplified, but the present invention is not limited to this. That is, in a state where received signal is not stored but may be immediately reproduced, the storage means 111 and 123 are not needed.

[0052] In the above description, furthermore, only programs specified by a user of portable terminal 120 is stored in storage means 111 of television receiver 110, but the present invention is not limited to that. That is, the invention may be so configured that the whole or part of a program to be broadcast is automatically stored in storage means 111 of television receiver 110 (in addition, in storage means 123 of portable terminal 120 via communication means 113 and 122). Through this, it is possible to automatically store only the broadcasting of a professional baseball, for example, hereby increasing convenience.

[0053] In the above description, furthermore, no reference is made to at which point of time the reproduction of moving picture is started on the side of portable terminal 120, but this point of time when reproduction is started is not restrictive in particular. That is, reproduction may be started after the whole of moving picture B is stored in storage means 123 or reproduction may be started when part of moving picture B (one tenth, for example) is stored in storage means 123 of portable terminal 120.

[0054] However, in case a configuration is adopted in which reproduction starts when part of moving picture B is stored in storage means 123 of portable terminal 120, it is desirable to make a conversion according to communication path information instead of the conversion according to the terminal information (or making the conversion according to the terminal information at the same time). Communication path information is information on characteristics or state of the communication path such as communication speed and communication quality level as explained below.

[0055] That is, arrangements are so made that communication path information is given from portable terminal 120 to television receiver 110 via communication means 122 and 113. Through this, conversion means 112 of television receiver 110 converts moving picture A so that the number of frames per second becomes 10 frames/sec. when communication path information is received that the communication speed is 64 kbps or so that the number of frames per second become 5 frames /sec. when communication path information is received that the communication speed is 32 kbps.

[0056] Through this arrangement, an object frame can be sent to portable terminal 120 irrespective of the communication speed. Arrangements are so made that if the communication speed drops, the number of frames per second will be reduced. But the present invention is not limited to that. That is, arrangements may be so made that if the communication speed drops, the picture quality of moving picture A will be lowered (compression ratio will be raised).

[0057] In the present invention, as described, since a configuration is adopted in which a television receiver is interposed, radio wave broadcast can be received with high sensitivity irrespective of the location of the portable terminal.

[0058] In the present invention, furthermore, a configuration is adopted in which conversion is made according to terminal information, and therefore there arises no problems that it is only specific portable terminal 120 having specific characteristics that can be adopted. No problems occur, either, that moving pictures can not be normally stored in storage means that the portable terminal has or that the moving picture quality drops because of the difference in resolution of display means the portable terminal has.

[0059] In describing the present invention, a television receiver is exemplified, but the apparatus to which the present invention is applicable is not limited to the television receiver. That is, the present invention is applicable to any apparatus that can receive moving picture information and/or sound information, multimedia information and monmedia information by data broadcasting, program information such as script, and mixed in-

BNSDOCID: <EP_____1367734A1_I_>

1102.0153

formation of those etc. by broadcasting or communication.

[0060] Also, in the above description, television receiver is provided with storage means 111 of television receiver 110, and a plurality of data can be stored in storage means 111, but the present invention is not limited to that. That is, the present invention may be so configured that data can be sent to portable terminal 120 realtime by using storage means 111 of television receiver 110 as data cash of buffer.

Claims

1. A receiver which comprises:

   conversion means for converting information of a specific form into information of another specific form,
   communication means for sending to a portable terminal the information converted by said conversion means and receiving a command information from the portable terminal, and
   control means for at least selecting information sent by said communication means on the basis of a command information from the portable terminal received by said communication means.

2. The receiver of claim 1 wherein said communication means receives terminal information on characteristics or state of the portable terminal and said conversion means makes a conversion according to said terminal information.

3. The receiver of claim 2 wherein said terminal information indicates at least one out of the resolution of display means of the portable terminal, the total capacity of storage means of the portable terminal, the available capacity of storage means of the portable terminal, number of colors to be displayed by display means of the portable terminal, and data format adapted for the portable terminal.

4. The receiver of claim 1 wherein said communication means receives communication path information on characteristics or state of a communication path from the portable terminal and said conversion means makes a conversion according to said communication path information.

5. The receiver of claim 4 wherein said communication information indicates at least one out of the communication speed and communication quality level.

6. The receiver of claim 1 which further comprises storage means for storing information of a specific form and sending said stored information to said conversion means.

7. A portable terminal which comprises:

   command means for issuing a specific command,
   communication means for sending the command information from said command means to the receiver and receiving information from the receiver, and
   reproduction means for reproducing the information from the receiver which is received by said communication means, and
   display means for displaying the information reproduced by said reproduction means.

8. The portable terminal of claim 7 wherein said communication means sends to the receiver terminal information on the characteristics or state about said portable terminal.

9. The portable terminal of claim 8 wherein said terminal information indicates at least one out of the resolution of display means of said portable terminal, the total capacity of storage means of said portable terminal, the available capacity of storage means of said portable terminal, the number of colors to be displayed by display means of the portable terminal, and data format adapted for the portable terminal.

10. The portable terminal of claim 7 wherein said communication means sends to the receiver communication path information on the characteristics or state about the communication path.

11. The portable terminal of claim 10 wherein said communication path information indicates at least one out of the communication speed and the communication quality level.

12. The portable terminal of claim 7 which further comprises storage means for storing the information received by said communication means and sending the stored information to said reproduction means.

13. A receiving system comprising a receiver and a portable terminal wherein said receiver comprises:

   conversion means for converting information of a specific form into information of another specific form,
   communication means for sending to the portable terminal the information converted by said conversion means and for receiving command information from the portable terminal, and
   control means for at least selecting information sent by said communication means on the basis of the command information received by

BNSDOCID: <EP_____1367734A1_I_>

1102.0154

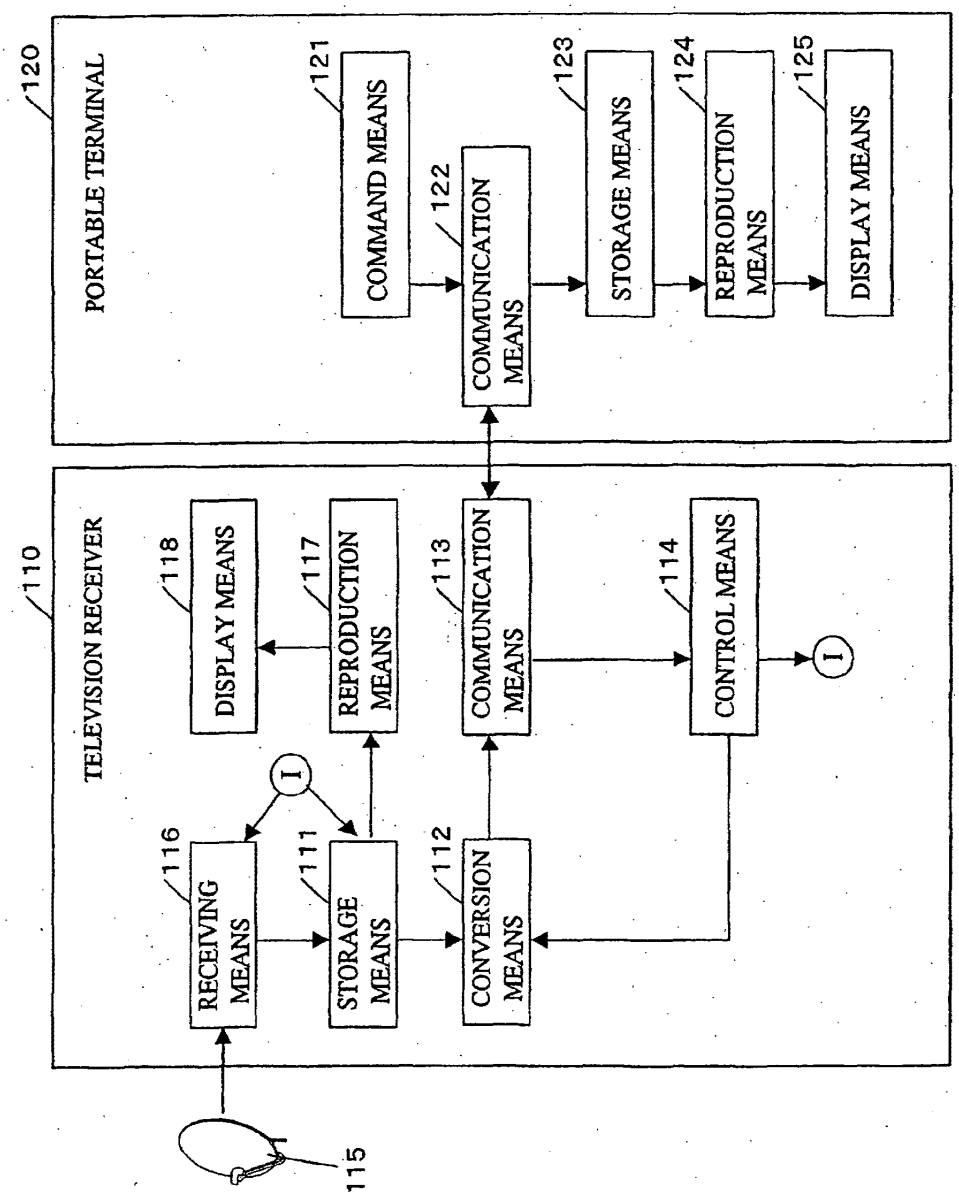
said communication means from the portable terminal, and
said portable terminal comprises:

command means for issuing a specific command,
communication information for sending to the receiver a command information from said command means and for receiving information from the receiver, and
display means for displaying information reproduced by reproduction means.

BNSDOCID: <EP_____1367734A1_I_>

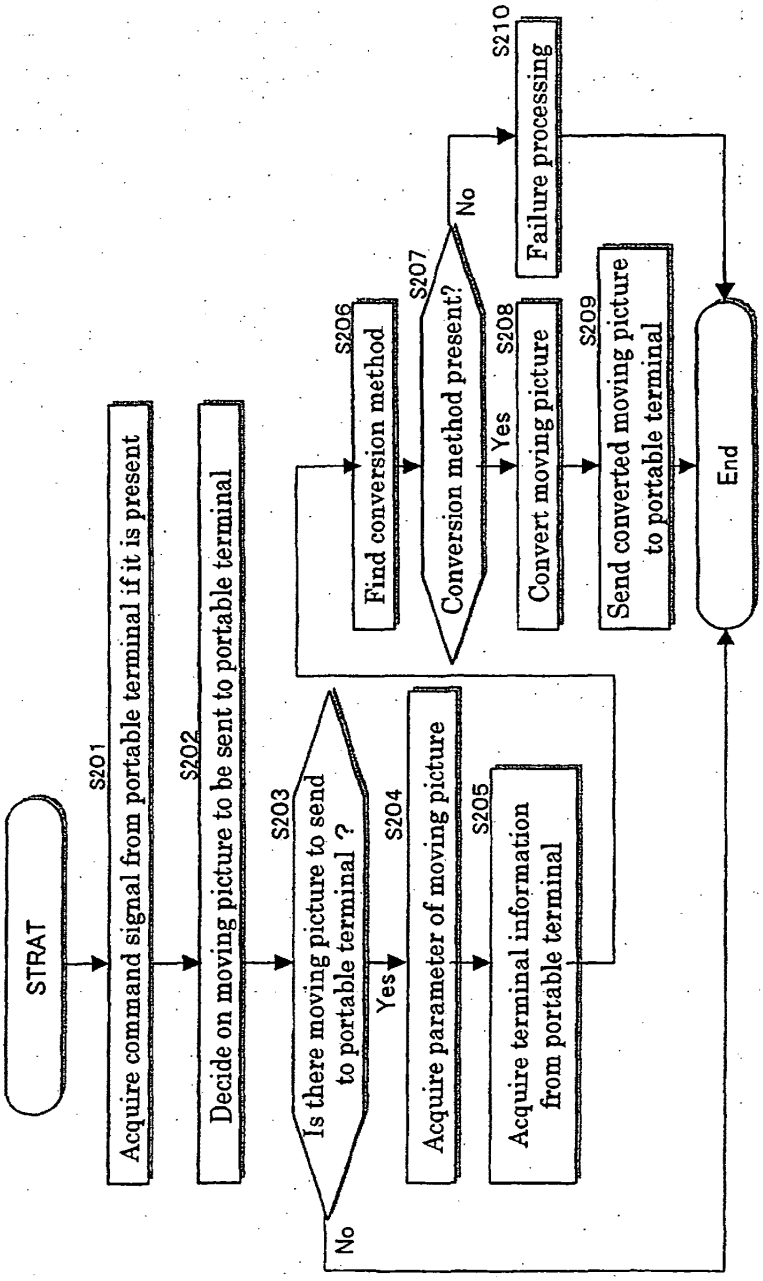
1102.0155

FIG.1



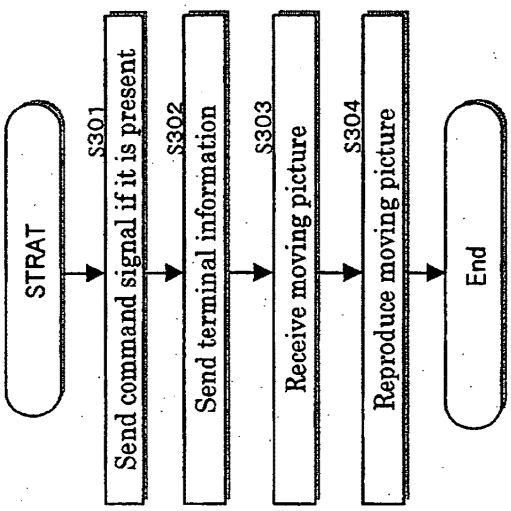
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FIG.2



BNSDOCID: <EP_____1367734A1_I_>

FIG.3



BNSDOCID: <EP:_____1367734A1_I_>

INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP02/00209

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 10-13320 A (TDK Corp.), 16 January, 1998 (16.01.98), Full text; Figs. 1 to 4 (Family: none)	1-13
A	JP 11-220665 A (Sony Corp.), 10 August, 1999 (10.08.99), Full text; Figs. 1 to 13 (Family: none)	1-13
A	JP 11-27312 A (Toshiba Corp.), 29 January, 1999 (29.01.99), Full text; Figs. 1 to 8 (Family: none)	1-13
A	JP 2000-183836 A (Funai Electric Co., Ltd.), 30 June, 2000 (30.06.00), Full text; Figs. 1 to 7 (Family: none)	1-13

Form PCT/ISA/210 (continuation of second sheet) (July 1998)

BNSDOCID: <EP_____1367734A1_I_>

INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP02/00209

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl[7] H04B1/16, H04N7/173, H04N5/44, H04Q7/38

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
Int.Cl[7] H04B1/16, H04N7/173, H04N5/44, H04Q7/38

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2002
Kokai Jitsuyo Shinan Koho 1971-2002 Jitsuyo Shinan Toroku Koho 1996-2002

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	JP 7-143475 A (Hitachi, Ltd.), 02 June, 1995 (02.06.95), Full text; Figs. 1 to 6 (Family: none)	1-3,6,7-9,12, 13 4,5,10,11
X A	JP 2000-250503 A (Canon Inc.), 14 September, 2000 (14.09.00), Full text; Figs. 1 to 49 & EP 1032201 A2	1-3,6,7-9,12, 13 4,5,10,11
Y	JP 11-177518 A (Kokusai Electric Co., Ltd.), 02 July, 1999 (02.07.99), Par. No. [0063]; Figs. 1 to 8 (Family: none)	4,5,10,11
A	JP, 2000-78558, A (Canon Inc.), 14 March, 2000 (14.03.00), Full text; Figs. 1 to 11 (Family: none)	4,5,10,11

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier document but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
09 April, 2002 (09.04.02)	23 April, 2002 (23.04.02)
Name and mailing address of the ISA/ Japanese Patent Office	Authorized officer
Facsimile No.	Telephone No.

Form PCT/ISA/210 (second sheet) (July 1998)

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P.O. Box 1450
Alexandria, VA 22313-1450

Paul D Bangor
Attorney for Applicants

Date: June 2, 2008

JFW

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2623
Examiner: Not Yet Assigned

Docket No.: DB001229-000
Customer No.: 24122

To: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL

Enclosed for filing in the above-captioned application, please find the following:

- Information Disclosure Statement;
- Form PTO/SB/08A; and
- Copies of four (4) cited references along with a copy of the International Search Report.

Also enclosed is a return postcard. Please date stamp and mail the postcard in order to acknowledge receipt of the above-reference correspondence. The Commissioner is hereby authorized to charge any underpayment or credit any overpayment to our Deposit Account No. 20-0888. A duplicate copy of this transmittal is enclosed.

Respectfully submitted,

Paul D Bangor

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Attorney for Applicants

Dated: June 2, 2008

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Paul D Bangor

Attorney for Applicants

Date: June 2, 2008

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2623
Examiner: Not Yet Assigned

Docket No.: DB001229-000
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TRANSMITTAL

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Dated: June 2, 2008

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/484,510	07/10/2006	Mark A. Cavicchia	DB001229-000	9918

24122 7590 08/13/2008

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EXAMINER	
MENDOZA, JUNIOR O	
ART UNIT	**PAPER NUMBER**
2623	

MAIL DATE	DELIVERY MODE
08/13/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	11/484,510	CAVICCHIA, MARK A.	
	Examiner	Art Unit	
	JUNIOR O. MENDOZA	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07/10/2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1 – 15, 18 – 26, 28, 29, 31 – 37, 39 – 43 and 45** are rejected under 35 U.S.C. 102(b) as being anticipated by Tatsuji et al. (Pub No US 2002/0151271). Hereinafter referenced as Tatsuji.

Regarding **claim 1**, Tatsuji discloses a portable content manager device for receiving and viewing content (Paragraphs [0003] – [0006], fig 1) comprising:

an acquisition module that obtains content and data that describes said content from a web server over a communications link (Paragraphs [0121] [0124] fig 13);

and an interface module that presents the data that describes said content to a user and receives input from said user (Paragraphs [0035] [0126] fig 14).

Regarding **claim 2**, Tatsuji discloses the portable content manager device of claim 1; moreover, Tatsuji discloses that the interface module comprises an interactive program guide (Paragraphs [0035] [0126] fig 14).

Regarding **claim 3**, Tatsuji discloses the portable content manager device of claim 1; moreover, Tatsuji discloses a digital rights management module that obtains viewing rights from a source of content (Paragraph [0033] [0148]-[0150], figs 2 and 16; user ID identifies the viewer where the user is connected to billing unit 5e).

Regarding **claim 4**, Tatsuji discloses the portable content manager device of claim 1; moreover, Tatsuji discloses a global positioning satellite communicator for determining geographical location (Paragraph [0092]).

Regarding **claim 5**, Tatsuji discloses the portable content manager device of claim 1; moreover, Tatsuji discloses a filtering module that blocks content according to jurisdiction (Paragraph [0166]).

Regarding **claim 6**, Tatsuji discloses the portable content manager device of claim 1; moreover, Tatsuji discloses a voice recognition module that accepts verbal commands and converts them to digital form (Paragraph [0053]).

Regarding **claim 7**, Tatsuji discloses the portable content manager device of claim 1; moreover, Tatsuji discloses a display device (Paragraph [0032], fig 1).

Regarding **claim 8**, Tatsuji discloses the portable content manager device of claim 1; moreover, Tatsuji discloses a relay module for delivering the content and data to a display device (Paragraph [0151], fig 1).

Regarding **claim 9**, Tatsuji discloses the portable content manager device of claim 1; moreover, Tatsuji discloses a storage module that stores the content and data (Paragraph [0150], recording DB).

Regarding **claim 10**, Tatsuji discloses the portable content manager device of claim 1; moreover, Tatsuji discloses that the communications link is the internet (Paragraph [0087] [0121]).

Regarding **claim 11**, Tatsuji discloses a content acquisition system for reception of content from one or more user chosen content sources (Paragraphs [0003] – [0006], [0159], fig 1), the system comprising:

a portable device capable establishing and maintaining a connection with a communications link (Paragraphs [0121] [0124] fig 13);

an interactive program guide application on a machine readable medium that provides for management and personalization of programming received from one or more content sources based on user preference (Paragraphs [0035] [0126] fig 14);

said application further allowing the user to view available content; and remote sources of content that are accessible through the communications link (Paragraphs [0151] [0153] [0159] fig 14).

Regarding **claims 12, 14, 15, 19 and 20,** Tatsuji discloses all the limitations of claims 12, 14, 15, 19 and 20; therefore, claims 12, 14, 15, 19 and 20 are rejected for the same reasons as in claims 10, 7, 3, 4 and 5, respectively.

Regarding **claim 13**, Tatsuji discloses the content acquisition system of claim 11; moreover, Tatsuji discloses that the data communication pathway is a cellular telephone receiving and transmitting device (Paragraphs [0032] [0167]; fig 1).

Regarding **claim 18**, Tatsuji discloses the content acquisition system of claim 11; moreover, Tatsuji discloses a transmitter for transmitting incoming data and content to a separate viewing apparatus (Paragraphs [0099] – [0103], [0113]; fig 10).

Regarding **claim 21**, Tatsuji discloses a method for providing an interactive program guide to a user for viewing, selecting and obtaining access to content (Paragraphs [0003] – [0006], [0159], fig 1) comprising:

delivering descriptive program data about available content from a web server over a communications link to a device specified by the user (Paragraphs [0035] [0126] fig 14);

permitting the user to arrange a display of the descriptive program data as desired by said user on said device (Paragraphs [0109] [0110] fig 12; user is allow the arrange the EPG by genre and broadcast time);

and providing a selectable option for the user to select the available content to be delivered over the communications link (Paragraphs [0151] [0153] [0159] fig 14).

Regarding **claim 22**, Tatsuji discloses the content acquisition system of claim 21; moreover, Tatsuji discloses that said content sources comprise live television broadcasting ([Paragraphs [0003] – [0004]),

previously recorded content (Paragraphs [0124] [0127] fig 13; recording server 5s7), and content available from a website accessible via the internet (Paragraphs [0124] [0159]).

Regarding **claim 23**, Tatsuji discloses the content acquisition system of claim 21; moreover, Tatsuji discloses that said descriptive program data comprises content source identification and program listings for available content (Paragraphs [0107]-[0108] fig 14).

Regarding **claims 24, 25, 28, 29, and 31,** Tatsuji discloses all the limitations of claims 24, 25, 28, 29 and 31; therefore, claims 24, 25, 28, 29 and 31 are rejected for the same reasons as in claims 7, 18, 3, 5 and 10, respectively.

Regarding **claim 26**, Tatsuji discloses the content acquisition system of claim 21; moreover, Tatsuji discloses automatically authenticating the user to the content sources prior to delivering the content to the device (Paragraph [0148] fig 16).

Regarding **claim 32**, Tatsuji discloses an interactive program guide application embodied on a computer readable medium for receiving and managing content comprising code segments (Paragraphs [0003] – [0006] [0035] [0126], fig 1):

a. for receiving, organizing and storing data that describes said content (Paragraphs [0107] – [0114]);

b. for presenting said data in a preferred order identified by a user (Paragraphs [0110] – [0111] fig 12);

c. for managing viewing rights for said content (Paragraphs [0033] [0148]-[0150], figs 2 and 16; user ID identifies the viewer where the user is connected to billing unit 5e).; and

d. for ensuring user authentication to the interactive program guide application (Paragraph [0148] fig 16).

Regarding **claim 33**, Tatsuji discloses the content acquisition system of claim 32; moreover, Tatsuji discloses that the data and content are delivered from a web server over a communications link to a device specified by the user (Paragraphs [0035] [0099] – [0103] [0113] [0126]; figs 10 and 14).

Regarding **claim 34**, Tatsuji discloses the content acquisition system of claim 32; moreover, Tatsuji discloses code segments for receiving a request for content from the user and delivering said content to a device specified by the user (Paragraphs [0099] – [0103], [0113]; fig 10).

Regarding **claim 35**, Tatsuji discloses the content acquisition system of claim 33; moreover, Tatsuji discloses that the data that describes the content is displayed on a first device and a request for said content is made on said first device (Paragraphs [0099] – [0103], [0113]; fig 10).

Regarding **claim 36**, Tatsuji discloses the content acquisition system of claim 35; moreover, Tatsuji discloses that the content requested using the first device is delivered to a second device having code segments installed for managing the reception and viewing of said content (Paragraphs [0099] – [0103], [0113]; fig 10).

Regarding **claim 37**, Tatsuji discloses the content acquisition system of claim 36; moreover, Tatsuji discloses that the second device is an internet-enabled television (Paragraphs [0099] – [0103], [0113]; figs 10 and 11).

Regarding **claim 39**, Tatsuji discloses the content acquisition system of claim 32; moreover, Tatsuji discloses code segments for synchronizing changes made by the user across all devices used to access the guide (Paragraphs [0126] – [0127]; fig 14).

Regarding **claim 40**, Tatsuji discloses the content acquisition system of claim 32; moreover, Tatsuji discloses code segments for enabling control over the application using a remote control device (Paragraphs [0107] – [0114]; fig 12, portable device controls the program guide).

Regarding **claims 41, 44 and 45,** Tatsuji discloses all the limitations of claims 41, 44 and 45; therefore, claims 41, 44 and 45 are rejected for the same reasons as in claims 3, 16 and 10, respectively.

Regarding **claims 42 and 43,** Tatsuji discloses all the limitations of claims 42 and 43; therefore, claims 42 and 43 are rejected for the same reasons as in claim 5.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 16, 17, 27, 44, 30 and 38** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tatsuji in view of Potrebic et al. (Pub No US 2006/0253867). Hereinafter, referenced as Potrebic.

Regarding **claim 16**, Tatsuji discloses the content acquisition system of claim 11; however, it is noted that Tatsuji fails to explicitly disclose that the interactive program guide application obtains redundant content sources in order to assure a constant viewing experience.

Nevertheless, in a similar field of endeavor Potrebic discloses that the interactive program guide application obtains redundant content sources in order to assure a constant viewing experience (Paragraph [0047]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tatsuji by specifically providing the elements mentioned above, as taught by Potrebic, for the purpose of decreasing the chances of a total system failure which provides reliability and stability for the users.

Regarding **claim 17**, Tatsuji discloses the content acquisition system of claim 11; however, it is noted that Tatsuji fails to explicitly disclose that the interactive program guide application further provides for synchronization of changes made to the application in order to present a consistent user experience.

Nevertheless, in a similar field of endeavor Potrebic discloses that the interactive program guide application further provides for synchronization of changes made to the application in order to present a consistent user experience (Paragraphs [0026] [0053] [0055]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tatsuji by specifically providing the elements mentioned above, as taught by Potrebic, for the purpose providing the most current information to the users.

Regarding **claims 27 and 44,** Tatsuji and Potrebic disclose all the limitations of claims 27 and 44; therefore, claims 27 and 44 are rejected for the same reasons as in claim 16.

Regarding **claims 30 and 38,** Tatsuji and Potrebic disclose all the limitations of claims 30 and 38; therefore, claims 30 and 38 are rejected for the same reasons as in claim 17.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUNIOR O. MENDOZA whose telephone number is (571)270-3573. The examiner can normally be reached on Monday - Friday 9am - 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571)272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Junior O Mendoza
Examiner
Art Unit 2623

/J. O. M./
August 8, 2008

/Andrew Y Koenig/
Supervisory Patent Examiner, Art Unit 2623

Notice of References Cited	Application/Control No. 11/484,510	Applicant(s)/Patent Under Reexamination CAVICCHIA, MARK A.	
	Examiner JUNIOR O. MENDOZA	Art Unit 2623	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2002/0151271 A1	10-2002	Tatsuji et al.	455/3.05
*	B	US-2006/0253867 A1	11-2006	Potrebic et al.	725/050
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	378	725/62.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/08 20:43
S1	1	11/484510.app.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/07 20:10
S2	19	US-7152236-$.DID. OR US-6557171-$.DID. OR US-6543053-$.DID. OR US-6539545-$.DID. OR US-6529804-$.DID. OR US-6526219-$.DID. OR US-6516466-$.DID. OR US-6504996-$.DID. OR US-6490432-$.DID. OR US-6487722-$.DID. OR US-6473903-$.DID. OR US-6473128-$.DID. OR US-6467090-$.DID. OR US-6438596-$.DID. OR US-6415099-$.DID. OR US-6400996-$.DID. OR US-6233389-$.DID. OR US-5986720-$.DID. OR US-20050009519-$.DID.	US-PGPUB; USPAT; USOCR	OR	ON	2008/08/07 20:11
S3	16	US-20030140343-$.DID. OR US-20030107675-$.DID. OR US-20030110502-$.DID. OR US-20030110491-$.DID. OR US-20030110490-$.DID. OR US-20030110488-$.DID. OR US-20030110486-$.DID. OR US-20030097661-$.DID. OR US-20030093815-$.DID. OR US-20030093807-$.DID. OR US-20030084448-$.DID. OR US-20030067535-$.DID. OR US-20030063117-$.DID. OR US-20030066085-$.DID. OR US-20030055735-$.DID. OR US-20030023977-$.DID.	US-PGPUB; USPAT; USOCR	OR	ON	2008/08/07 20:17

S4	18	US-20060095471-$.DID. OR US-20060230427-$.DID. OR US-20020133822-$.DID. OR US-6993721-$.DID. OR US-7047547-$.DID. OR US-20060101498-$.DID. OR US-6507951-$.DID. OR US-6724403-$.DID. OR US-6978471-$.DID. OR US-7194753-$.DID. OR US-20030177495-$.DID. OR US-20040040036-$.DID. OR US-20040034865-$.DID. OR US-20030149981-$.DID. OR US-20040019908-$.DID. OR US-20020144269-$.DID. OR US-20030226147-$.DID. OR US-20030084452-$.DID.	US-PGPUB; USPAT; USOCR	OR	ON	2008/08/07 20:18
S5	6	US-6510557-$.DID. OR US-6757707-$.DID. OR US-20030115612-$.DID. OR US-20020059642-$.DID. OR US-20030059197-$.DID. OR US-20030118322-$.DID.	US-PGPUB; USPAT; USOCR	OR	ON	2008/08/07 20:18
S6	2	"EP"$4"1217769"$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/07 20:20
S7	2	"20020151271"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/07 20:41
S8	4	"2006080709"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/07 20:43
S9	2	"20060080709"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/07 20:43
S10	2	"EP"$4"1343322"$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/07 20:44

S11	0	"200400031063"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/07 20:44
S12	2	"20040031063"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/07 20:44
S13	7047	samsung.as. and (tv television program$4 channel) with (cell telephone phone portable)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/08 18:10
S14	1463	samsung.as. and (tv television) with (cell telephone phone portable)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/08 18:10
S15	35	samsung.as. and (tv television) with (cell telephone phone portable) and redundan$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/08 18:10
S16	18691	"725"/$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/08 18:13
S17	114	S13 and S16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/08 18:13
S19	209	(updat$4) with (EPG GUI IPG UPG ((program tv television grid interactive) near3 (menu schedule$3 list $3 guide table))) and redundan$4 with (source server)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/08 18:49

S20	16	S16 and S19	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/08 18:49

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 1

Complete if Known	
Application Number	11/484,510
Filing Date	10 July 2006
First Named Inventor	Mark A. Cavicchia
Art Unit	2623
Examiner Name	Not Yet Assigned
Attorney Docket Number	DB001229-000

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/J.M./		US- 2006/0080709 A1	04-13-2006	Kwon et al.	
		US-			
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]-Number[4]-Kind Code[5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T[6]
/J.M./		EP 1 217 769 A1	06-26-2002	NTT DoCoMo, Inc.		
/J.M./		EP 1 343 322 A1	09-10-2003	NEC Corporation		
/J.M./		EP 1 471 672 A2	10-27-2004	Nokia Corporation		
/J.M./		EP 1 367 734 A1	12-03-2003	Matsushita Electric Ind.		

Examiner Signature	/Junior Mendoza/	Date Considered	08/08/2008

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2623

SEARCHED			
Class	Subclass	Date	Examiner
725	62	8/8/2008	JM

SEARCH NOTES		
Search Notes	Date	Examiner
EAST Text Search	8/8/2008	JM
Class 725 Plus Text Search	8/8/2008	JM
Inventor Search	8/8/2008	JM
Spoke to Andrew Koenig	8/8/2008	JM

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2623

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	08/08/2008								
	1	✓								
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	4	✓								
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	34	✓								
	35	✓								
	36	✓								

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2623

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	08/08/2008								
	37	✓								
	38	✓								
	39	✓								
	40	✓								
	41	✓								
	42	✓								
	43	✓								
	44	✓								
	45	✓								

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Carl A. Ronald
Attorney for Applicants

Date: 20 July 2007

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2623
Examiner: Not Yet Assigned

Docket No.: DB001229-000
Customer No.: 24122

To: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL

Enclosed for filing in the above-captioned application, please find the following:

- Information Disclosure Statement;
- Form PTO/SB/08A (4 Sheets).

Also enclosed is a return postcard. Please date stamp and mail the postcard in order to acknowledge receipt of the above-reference correspondence. The Commissioner is hereby authorized to charge any underpayment or credit any overpayment to our Deposit Account No. 20-0888. A duplicate copy of this transmittal is enclosed.

Respectfully submitted,

Carl A. Ronald

Carl A. Ronald
Reg. No. 43,057
Thorp Reed & Armstrong, LLP
One Oxford Centre
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Attorney for Applicants

Dated: 20 July 2007

00812980.DOC



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Alexandria, VA 22313-1450

Attorney for Applicant(s)

Date: 20 July 2007

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2623
Examiner: Not Yet Assigned

Docket No.: DB001229-000
Customer No.: 24122

To: Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Information Disclosure Statement

Sir:

Pursuant to the provisions of 37 CFR §§1.56 and 1.97-98, enclosed herewith is:

☒ Form PTO/SB/08A

☐ Form PTO/SB/08B

listing references for consideration by the Examiner.

The filing of this Information Disclosure Statement shall not be construed as a representation regarding the completeness of the list of references, or that inclusion of a reference in this list is an admission that it is "prior art" to this application, or that a search has been made, or as an admission that the information listed is, or may be considered to be, material to patentability as defined in 37 CFR §1.56, or that no other material information exists, and shall not be construed as an admission against applicant(s) interest in any manner.

00812985.DOC

Application No.: 11/484,510
Date: 20 July 2007
Information Disclosure Statement

The Information Disclosure Statement submitted herewith is being filed pursuant to:

☐ 37 C.F.R. §1.97(b)(1); no fee is required;
OR

☐ 37 C.F.R. §1.97(b)(2); no fee is required;
OR

☒ 37 C.F.R. §1.97(b)(3); no fee is required;
OR

☐ 37 C.F.R. §1.97(b)(4); no fee is required;
OR

☐ 37 C.F.R. §1.97(c);
AND either

☐ The fee set forth in §1.17(p) is attached; OR

Applicant certifies pursuant to 37 CFR §1.97(e) that:

☐ each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement; OR

☐ no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this certification after making reasonable inquiry, no item contained in the Information Disclosure Statement was known to any individual designated under 37 CFR §1.56(c) more than three months prior to the filing of this statement;

OR

Application No.: 11/484,510
Date: 20 July 2007
Information Disclosure Statement

☐ 37 C.F.R. §1.97(d); the fee set forth in §1.17(p) is attached, AND

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Applicants respectfully request that the listed references be considered by the Examiner, and that the Examiner acknowledge consideration of these references by initialing and returning a copy of the attached form(s) with the next Official Action.

Respectfully submitted,

Dated: 20 July 2007

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One Oxford Centre, 14th Floor
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Tel.: 412/394-7775
Fax: 412/394-2555

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.M./
11484510 - GAU: 2623

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PTO/SB/08A (04-07)
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 4

Complete if Known	
Application Number	11/484,510
Filing Date	10 July 2006
First Named Inventor	Mark A. Cavicchia
Art Unit	2623
Examiner Name	Not Yet Assigned
Attorney Docket Number	DB001229-000

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 7,152,236	12-19-2006	Wugofski, et al.	
		US- 6,557,171	04-29-2003	Sonoda, et al.	
		US- 6,543,053	04-01-2003	Li, et al.	
		US- 6,539,545	03-25-2003	Dureau, et al.	
		US- 6,529,804	03-04-2003	Draggon, et al.	
		US- 6,526,219	02-25-2003	Posa, et al.	
		US- 6,516,466	02-04-2003	Jackson	
		US- 6,504,996	01-07-2003	Na, et al.	
		US- 6,490,432	12-03-2002	Wegener, et al.	
		US- 6,487,722	11-26-2002	Okua, et al.	
		US- 6,473, 903	10-29-2002	Balakrishnan, et al.	
		US- 6,473,128	10-29-2002	Berger	
		US- 6,467,090	10-15-2002	Brodigan	
		US- 6,438,596	08-20-2002	Ueno, et al.	
		US- 6,415,099	07-02-2002	Berger	
		US- 6,400,996	06-04-2002	Hoffberg, et al.	
		US- 6,233,389	05-15-2001	Barton, et al.	
		US- 5,986,720	11-16-1999	Kishigami, et al.	
		US- 2005/0009519	01-13-2005	Yoshinobu Murai, et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]-Number[4]-Kind Code[5] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T[6]

Examiner Signature	/Junior Mendoza/	Date Considered	08/08/2008

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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11484510 - GAU: 2623

PTO/SB/08A (04-07)
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2 of 4

Complete if Known	
Application Number	11/484,510
Filing Date	10 July 2006
First Named Inventor	Mark A. Cavicchia
Art Unit	2623
Examiner Name	Not Yet Assigned
Attorney Docket Number	DB001229-000

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 2004/0034867	02-29-2004	Oleg B. Rashkovskiy, et al.	
		US- 2003/0140343	07-24-2003	Barry P. Falvo, et al.	
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Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]-Number[4]-Kind Code[5] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T[6]

Examiner Signature	/Junior Mendoza/	Date Considered	08/08/2008

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 3 of 4

Complete if Known	
Application Number	11/484,510
Filing Date	10 July 2006
First Named Inventor	Mark A. Cavicchia
Art Unit	2623
Examiner Name	Not Yet Assigned
Attorney Docket Number	DB001229-000

U. S. PATENT DOCUMENTS

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Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]-Number[4]-Kind Code[5] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T[6]

Examiner Signature	/Junior Mendoza/	Date Considered	08/08/2008

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(Use as many sheets as necessary)

Sheet 4 of 4

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Application Number	11/484,510
Filing Date	10 July 2006
First Named Inventor	Mark A. Cavicchia
Art Unit	2623
Examiner Name	Not Yet Assigned
Attorney Docket Number	DB001229-000

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		US- 6,510,557	10/03/1997	Thrift	
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BIB DATA SHEET

CONFIRMATION NO. 9918

SERIAL NUMBER	FILING or 371(c) DATE RULE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
11/484,510	07/10/2006	725	2623	DB001229-000

APPLICANTS
Mark A. Cavicchia, Coraopolis, PA;

**** CONTINUING DATA **************************

**** FOREIGN APPLICATIONS **************************

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED **** ** SMALL ENTITY **
08/02/2006

Foreign Priority claimed ☐ Yes ☑ No 35 USC 119(a-d) conditions met ☐ Yes ☑ No Verified and Acknowledged /JUNIOR O MENDOZA/ Examiner's Signature	☐ Met after Allowance Initials	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
		PA	9	45	4

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PITTSBURGH, PA 15219-1425
UNITED STATES

TITLE

Global Interactive program guide application and device

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Attorney for Applicants

Date: 13 February 2009

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2623
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
Customer No.: 24122

To: Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE AND AMENDMENT

Sir:

In response to the Office action of 13 August 2008, please amend the above-identified application as follows:

Amendments to the Specification; none

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 9 of this paper.

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Currently Amended) A ~~portable~~ content manager of audio and/or video content from a plurality of independent content sources, ~~device for receiving and viewing content~~ comprising:

a device capable of establishing and maintaining a connection with a communications link;

an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) listing a plurality of channels, wherein each of the channels is selectable for receiving audio and/or video programming from one of the plurality of independent content sources via the communications link, wherein the application allows for customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

~~an acquisition module that obtains content and data that describes said content from a web server over a communications link; and~~

~~an interface module that presents the data that describes said content to a user and receives input from said user~~.

2. (Currently Amended) The ~~portable~~ content manager ~~device~~ of claim 1, wherein the application allows for customization of the IPG by the user with respect to a description of each of the channels contained in the IPG and/or a first one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received. ~~the interface module comprises an interactive program guide.~~

3. (Currently Amended) The ~~portable~~ content manager ~~device~~ of claim 1, further comprising a digital rights management module that obtains viewing rights from one or more of the plurality of independent content sources ~~a source of content~~.

4. (Currently Amended) The ~~portable~~ content manager ~~device~~ of claim 1, further comprising a GPS receiver and a filtering module that blocks content according to jurisdiction. ~~global positioning satellite communicator for determining geographical location.~~

5. (Currently Amended) The ~~portable~~ content manager ~~device~~ of claim 1, wherein at least one of the plurality of independent content sources comprises a multiple system operator or live television or previously recorded content accessible via the internet ~~further comprising a filtering module that blocks content according to jurisdiction~~.

6. (Currently Amended) The ~~portable~~ content manager ~~device~~ of claim 1, further comprising a voice recognition module that accepts verbal commands and converts them to digital form.

7. (Currently Amended) The ~~portable~~ content manager ~~device~~ of claim 1, further comprising a display device.

8. (Currently Amended) The ~~portable~~ content manager ~~device~~ of claim 1, further comprising a relay module for delivering the IPG~~content~~ and data to a display device.

9. (Currently Amended) The ~~portable~~ content manager ~~device~~ of claim 1, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received~~further comprising a storage module that stores the content and data~~.

10. (Currently Amended) The ~~portable~~ content manager ~~device~~ of claim 1, wherein the communications link is the internet.

11. (Currently Amended) A content acquisition system for reception of audio and/or video content from a plurality of independent content sources, ~~one or more user chosen content sources~~, ~~the system~~ comprising:

a ~~portable~~ device capable of establishing and maintaining a connection with a communications link;

an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) listing a plurality of channels, wherein each of the channels is

selectable for receiving audio and/or video programming from one of the plurality of independent content sources via the communications link, wherein the application allows for customization of the IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received. ~~for management and personalization of programming received from one or more content sources based on user preference; said application further allowing the user to view available content; and remote sources of content that are accessible through the communications link.~~

12. (Original) The content acquisition system of claim 11, wherein the communications link is the internet.

13. (Currently Amended) The content acquisition system of claim 11, further comprising a ~~wherein the~~ data communication pathway to the communications link comprising ~~is~~ a cellular telephone receiving and transmitting device.

14. (Currently Amended) The content acquisition system of claim 11, wherein the ~~portable~~ device further comprises a display screen.

15. (Currently Amended) The content acquisition system of claim 11, wherein the interactive program guide application assists the user in obtaining and/or managing ~~content~~ rights to receive the audio and/or video content from one or more of the plurality of independent content sources.

16. (Currently Amended) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received. ~~obtains redundant content sources in order to assure a constant viewing experience.~~

17. (Currently Amended) The content acquisition system of claim 11, wherein the interactive program guide application further provides for synchronization of changes made to the IPG~~application~~ in order to present a consistent IPG. ~~user experience.~~

18. (Original) The content acquisition system of claim 11, further comprising a transmitter for transmitting incoming data and content to a separate viewing apparatus.

19. (Currently Amended) The content acquisition system of claim 11, further comprising a GPS receiver ~~geograpical positioning device~~ for determining the location of the device and a filter module that selectively blocks content.

20. (Currently Amended) The content acquisition system of claim 11~~19~~, wherein at least one of the plurality of independent content sources comprises a multiple system operator or live television or previously recorded content accessible via the internet. ~~further comprising a filter module that selectively blocks content.~~

21. (Currently Amended) A computer-implemented method for providing an interactive program guide to a user for viewing, selecting and obtaining access to audio and/or video content from a plurality of independent content sources, comprising:

displaying an interactive program guide (IPG) listing a plurality of channels, wherein each of the channels is selectable for receiving audio and/or video programming from one of the plurality of independent content sources via a communications link;

allowing the user to customize the IPG with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received.

~~delivering descriptive program data about available content from a web server over a communications link to a device specified by the user;~~

~~permitting the user to arrange a display of the descriptive program data as desired by said user on said device; and~~

~~providing a selectable option for the user to select the available content to be delivered over the communications link.~~

22. (Currently Amended) The method of claim 21, wherein at least one of the plurality of independent content sources comprises a multiple system operator or live television or previously recorded content accessible via the internet ~~said content sources comprise live television broadcasting, previously recorded content, and content available from a website accessible via the internet~~.

23. (Currently Amended) The method of claim 21, wherein said description ~~descriptive program data~~ comprises information identifying content source ~~identification~~ and/or programming summaries ~~listings for available content~~.

24. (Currently Amended) The method of claim 21, further comprising:

allowing the user to customize the IPG with respect to a second, redundant one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received ~~wherein the device comprises a display device~~.

25. (Currently Amended) The method of claim 21, further comprising:

delivering ~~wherein~~ the content ~~is delivered~~ to a ~~second~~ device specified by the user.

26. (Currently Amended) The method of claim 25~~21~~, further comprising automatically authenticating the user to one or more of the content sources prior to delivering the content to the device.

27. The method of claim 21, further comprising obtaining a redundant source for said content in the event that one of said content sources becomes unavailable while in use.

28. (Currently Amended) The method of claim 25~~21~~, further comprising obtaining viewing rights from one or more of ~~said~~ content sources prior to delivering said content to the device.

29. (Currently Amended) The method of claim 21, further comprising filtering viewing rights from one or more of ~~said~~ content sources in accordance with a geographical location.

30. (Currently Amended) The method of claim 21, further comprising synchronizing changes made by the user to the interactive program guide in order to preserve a consistent IPG ~~user experience~~ across a plurality of ~~all~~ devices.

31. (Original) The method of claim 21, wherein the communications link is the internet.

32. (Currently Amended) An interactive program guide application embodied on a computer readable medium for receiving and managing audio and/or video content from a plurality of independent content sources comprising code segments:

a. for receiving, organizing and storing data that describes said content;

b. for presenting said data in a preferred order identified by a user;

c. for managing viewing rights for said content; and

d. for ensuring user authentication to the interactive program guide application.

33. (Original) The interactive program guide application of claim 32, wherein the data and content are delivered from a web server over a communications link to a device specified by the user.

34. (Original) The interactive program guide application of claim 32, further comprising code segments for receiving a request for content from the user and delivering said content to a device specified by the user.

35. (Original) The interactive program guide application of claim 34, wherein the data that describes the content is displayed on a first device and a request for said content is made on said first device.

36. (Original) The interactive program guide application of claim 35, wherein the content requested using the first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

37. (Original) The interactive program guide application of claim 36, wherein the second device is an internet-enabled television.

38. (Original) The interactive program guide application of claim 32, further comprising code segments for providing automatic updates in order to minimize user involvement in maintaining the application.

39. (Original) The interactive program guide application of claim 32, further comprising code segments for synchronizing changes made by the user across all devices used to access the guide.

40. (Original) The interactive program guide application of claim 32, further comprising code segments for enabling control over the application using a remote control device.

41. (Original) The interactive program guide application of claim 32, further comprising code segments for providing real-time acquisition of content viewing rights.

42. (Original) The interactive program guide application of claim 32, further comprising code segments for filtering content.

43. (Original) The interactive program guide application of claim 42, wherein the content is filtered based on the geographic location of the device at the time of viewing said content.

44. (Original) The interactive program guide application of claim 32, further comprising code segments for obtaining redundant content in order to reduce interruptions in content delivery to the user.

45. (Original) The interactive program guide application of claim 42, wherein the communications link is the internet.

Remarks/Arguments

Applicants have filed simultaneously herewith a Petition for a Three-Month Extension of Time for responding to the Office Action of August 13, 2008 (the "Office Action"), up to and including February 13, 2009.

On Pages 2-9 of the Office Action, the Examiner rejected claims 1-15, 18-26, 28, 29, 31-37, 39-43 and 45 under 35 U.S.C. 102(b) as being anticipated by Tatsuji et al. (Pub No US 2002/0151271). Applicant respectfully traverses these rejections.

Regarding claim 1, Tatsuji fails to teach or suggest a content manager of audio and/or video content from a plurality of independent content sources, comprising:

an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) listing a plurality of channels, wherein each of said channels is selectable for receiving audio and/or video programming from one of the plurality of independent content sources via said communications link, wherein said application allows for customization of said IPG by a user with respect to an order of said listing of said channels in said IPG.

Clearly the Tatsuji EPG provides access only to content made available from the operator of the mobile server 5 of Tatsuji and not from a plurality of independent content sources, as required by all of the pending claims as currently amended. Furthermore, the information provided by the Tatsuji EPG is also set by the operator of the mobile server 5 of Tatsuji and cannot be modified by a user of the portable terminal 7 of Tatsuji. Thus, no customization of the order in which channels are listed in the Tatsuji EPG can be made by a user. For these reasons, Tatsuji does not anticipate claim 1 as currently amended.

Regarding claim 2, Tatsuji also fails to teach or suggest an IPG that is customizable by a user of the IPG with respect to a description of each of said channels contained in the IPG and/or a first one of said independent content sources to be linked to one or more of said channels from which the audio and/or video programming may be received. For these additional reasons, Tatsuji does not anticipate claim 2 as currently amended.

Regarding claim 3, Tatsuji fails to teach or suggest a content manager of audio and/or video content from a plurality of independent content sources, comprising an interactive program guide application an comprising a digital rights management module that obtains viewing rights from one or more of the plurality of independent content sources. For these additional reasons, Tatsuji does not anticipate claim 3 as currently amended.

Regarding claim 9, Tatsuji fails to teach or suggest a content manager of audio and/or video content from a plurality of independent content sources, wherein the interactive program guide

application allows for customization of the IPG by a user with respect to a second, redundant one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received. For these additional reasons, Tatsuji does not anticipate claim 9 as currently amended.

Regarding claims 11-15, 18-20, Tatsuji fails to teach or suggest a content acquisition system for reception of audio and/or video content from a plurality of independent content sources comprising:

an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) listing a plurality of channels, wherein each of the channels is selectable for receiving audio and/or video programming from one of the plurality of independent content sources via the communications link, wherein the application allows for customization of the IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received.

Again, the Tatsuji EPG provides access only to content made available from the operator of the mobile server 5 of Tatsuji and not from a plurality of independent content sources, as required by all of the pending claims as currently amended. Furthermore, the information provided by the Tatsuji EPG is also set by the operator of the mobile server 5 of Tatsuji and cannot be modified by a user of the portable terminal 7 of Tatsuji. Thus, no customization of the order of listing, description or content source of the channels in the Tatsuji EPG can be made by a user. For these reasons, Tatsuji does not anticipate any of claims 11-15 or 18-20 as currently amended.

Regarding claims 21-26, 28, 29and 31, Tatsuji fails to teach or suggest a computer-implemented method for providing an interactive program guide to a user for viewing, selecting and obtaining access to audio and/or video content from a plurality of independent content sources, comprising:

allowing the user to customize the IPG with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received

The Tatsuji EPG provides access only to content made available from the operator of the mobile server 5 of Tatsuji and not from a plurality of independent content sources, as required by all of the pending claims as currently amended. Furthermore, the information provided by the Tatsuji EPG is also set by the operator of the mobile server 5 of Tatsuji and cannot be modified by a user of the portable terminal 7 of Tatsuji. Thus, no customization of the order of listing, description or content source of the

channels in the Tatsuji EPG can be made by a user. For these reasons, Tatsuji does not anticipate any of claims 21-26, 28, 29 or 31 as currently amended.

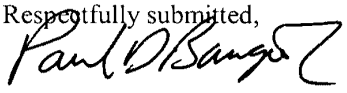
Regarding claims 32-37, 39-43 and 45, Tatsuji fails to teach or suggest an interactive program guide application embodied on a computer readable medium for receiving and managing audio and/or video content from a plurality of independent content sources comprising code segments for presenting said data in a preferred order identified by a user; or for managing viewing rights for said content. The Tatsuji EPG provides access only to content made available from the operator of the mobile server 5 of Tatsuji and not from a plurality of independent content sources, as required by all of the pending claims as currently amended. Furthermore, the information provided by the Tatsuji EPG is also set by the operator of the mobile server 5 of Tatsuji and cannot be modified by a user of the portable terminal 7 of Tatsuji. Thus, no customization of the data found in the Tatsuji EPG can be changed by a user according to his/her preferences. The Tatsuji EPG also does not allow or provide for the managing viewing rights for the content. For these reasons, Tatsuji does not anticipate any of claims 32-37, 39-43 or 45 as currently amended.

On Page 10 of the Office Action, paragraph 4, the Examiner rejected dependent claims 16, 17, 27, 30, 38 and 44 under 35 U.S.C. 103(a) as being unpatentable over Tatsuji in view of Potrebic (Pub No. US 2006/0253867). Applicant respectfully traverses these rejections due to the deficiencies of the teachings of Tatsuji as set forth in detail above with respect to independent claims 11, 21 and 32.

Applicants have made a diligent effort to place the instant application in condition for allowance. Accordingly, a Notice of Allowance for claims 1-45 is respectfully requested. If the Examiner is of the opinion that the instant application is in condition for disposition other than through allowance, the Examiner is requested to contact the undersigned attorney of record at the telephone number listed below.

Dated: February 13, 2009

Respectfully submitted,



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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Paul D Bargen
Attorney for Applicant(s)

Date: February 13, 2009



Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2623
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
Customer No.: 24122

To: Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Information Disclosure Statement

Sir:

Pursuant to the provisions of 37 CFR §§1.56 and 1.97-98, enclosed herewith is:

☐ Form PTO/SB/08A

☒ Form PTO/SB/08B

listing references for consideration by the Examiner. Copies of five (5) cited references are enclosed.

The filing of this Information Disclosure Statement shall not be construed as a representation regarding the completeness of the list of references, or that inclusion of a reference in this list is an admission that it is "prior art" to this application, or that a search has been made, or as an admission that the information listed is, or may be considered to be, material to patentability as defined in 37 CFR §1.56, or that no other material information exists, and shall not be construed as an admission against applicant(s) interest in any manner.

Application No.: 11/484,510
Date: 13 February 2009
Information Disclosure Statement

The Information Disclosure Statement submitted herewith is being filed pursuant to:

☐ 37 C.F.R. §1.97(b)(1); no fee is required;
OR

☐ 37 C.F.R. §1.97(b)(2); no fee is required;
OR

☐ 37 C.F.R. §1.97(b)(3); no fee is required;
OR

☐ 37 C.F.R. §1.97(b)(4); no fee is required;
OR

☒ 37 C.F.R. §1.97(c);
AND either

☒ The fee set forth in §1.17(p) is attached; OR

Applicant certifies pursuant to 37 CFR §1.97(e) that:

☐ each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement; OR

☐ no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this certification after making reasonable inquiry, no item contained in the Information Disclosure Statement was known to any individual designated under 37 CFR §1.56(c) more than three months prior to the filing of this statement;

OR

Application No.: 11/484,510
Date: 13 February 2009
Information Disclosure Statement

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Applicants respectfully request that the listed references be considered by the Examiner, and that the Examiner acknowledge consideration of these references by initialing and returning a copy of the attached form(s) with the next Official Action.

Respectfully submitted,

Dated: February 13, 2009

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 2

Complete if Known	
Application Number	11/484,510
Filing Date	July 10, 2006
First Named Inventor	Mark A. Cavicchia
Art Unit	2623
Examiner Name	Junior O. Mendoza
Attorney Docket Number	DB001229-000

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 7,395,514	03/13/2003	Stern	
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]-Number[4]-Kind Code[5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T[6]
	1	WO 0114981 A1	01-01-2001	Audiobase Inc		

Examiner Signature		Date Considered	

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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Sheet 2 of 2

Complete if Known	
Application Number	11/484,510
Filing Date	10 July 2006
First Named Inventor	Mark A. Cavicchia
Art Unit	2623
Examiner Name	Junior O. Mendoza
Attorney Docket Number	DB001229-000

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	2	PCT "Notification of Transmittal of The International Preliminary Report on Patentability" for International Application No. PCT/US2007/015736, mailed November 3, 2008.	
	3	PCT "International Preliminary Report on Patentability" for International Application No. PCT/US2007/015736, mailed November 3, 2008.	
	4	Form PCT/ISA/220, PCT Noticfication of Transmittal of the International Search Report and the Written Opinion of the International Searching Authority, or the Declaration for International Application No. PCT/US2007/015736, mailed April 2, 2008.	
	5	PCT "International Search Report" for International Application No. PCT/2007/015736, mailed April 2, 2008.	
	6	PCT "Written Opinion of the International Searching Authority" for International Application No. PCT/US2007/015736, mailed April 2, 2008.	

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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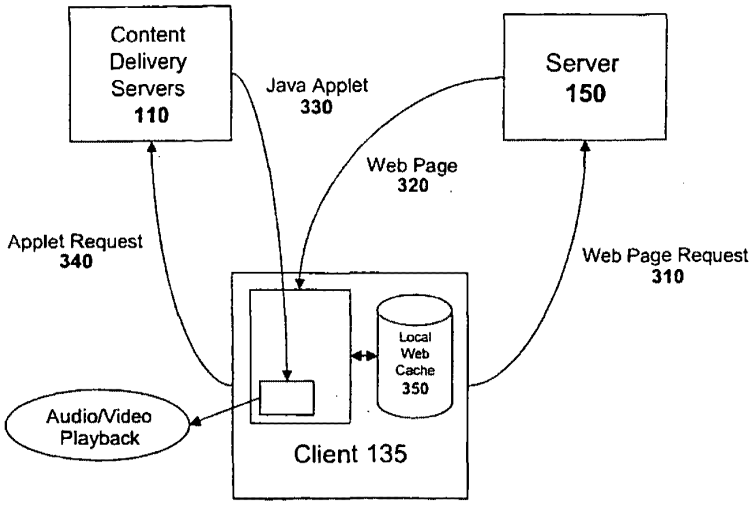
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A SYSTEM AND METHOD FOR PROVIDING AUDIO/VIDEO CONTENT DELIVERY OVER A NETWORK



(57) Abstract: A method is disclosed for delivering audio/video content over a network comprising: providing hosting services including storing audio/video content (110); and providing audio/video streaming services including transmitting a Java applet (330) to an end user (135) in real-time, the Java applet (330) including an audio/videoplayer module, and streaming the audio/video content to the end user (135) in real time. In addition, the system and method provides audio and video content production services, supports transmission of content to multiple destinations, and gathers statistics for reporting on various consumer behaviors.

WO 01/14981 A1

A System and Method for Providing Audio/Video Content Delivery Over a Network

BACKGROUND OF THE INVENTION

Field of the Invention

This invention relates generally to the field of digital audio and video delivery systems. More particularly, the invention relates to an improved system and method for delivering audio and video content over a network.

Description of the Related Art

Streaming is a technique for transmitting real time audio and/or video over a network. The purpose of streaming is to provide clients with uninterrupted audio/video content over a connection with limited bandwidth (e.g., a 56K-modem connection). A few seconds of the digital audio/video stream is buffered at the client side before the signal is played back. This buffering technique compensates for momentary delays in packet delivery.

Traditionally, in order to provide clients with a service for streaming audio and/or video data (i.e., audio/video "content"), the end users receiving the audio/video content must have a Web browser (e.g., Netscape Navigator™ or Microsoft Internet Explorer™) with an appropriate browser plug-in installed. A "plug-in" is a supplemental program, generally installed after installation of the Web browser, which provides some additional functionality to the browser. For example, if an audio/video content provider streams audio content to clients using Real Media's™ Real Audio™ streaming format, then before an end user can receive and play back the content, the end user must install a Real Audio Player plug-in designed for his/her Web browser.

There are several problems associated with the foregoing arrangement. First, in order to install a plug-in, a user must first select the one which is compatible with his/her system. A plug-in which runs on one browser will not typically run on a different browser. Even for users who are knowledgeable about computers, this process can be somewhat of an annoyance (especially if the user simply wanted to retrieve some quick information from a Web page). In addition, once the user selects the appropriate browser plug-in, the download process for that

plug-in may take a significant amount of time, particularly if the user does not have a high-speed connection to the Internet (e.g., 56k-baud or less).

Another problem with current audio and video content providers is that no single provider offers a comprehensive system which focuses on all aspects of content delivery. More specifically, audio and video content delivery services may be broken into the following categories: content generation services; encoding services; hosting/streaming services; codec application services; player technology services; multiple destination/delivery media services; and reporting/extraction services. Each of these services will be described in greater detail below. While particular content providers offer some limited number of these services (e.g., encoding services, hosting services, and codec services), no comprehensive centralized business computing model exists for dealing with all of a client's audio/video content needs.

As will be described in more detail below, one of the reasons that no such comprehensive systems exist is because of the underlying technology used in current systems as well as the underlying business model used by current audio/video content providers.

Accordingly what is needed is an audio and/or video content delivery system which may be implemented on currently existing hardware and software platforms without the need for additional upgrading. What is also needed is a content delivery system which provides clients with a comprehensive content delivery service. What is also needed is an audio/video content delivery service which will provide end users with audio/video content through a variety of different delivery mechanisms and communication channels.

SUMMARY OF THE INVENTION

A system and method is disclosed for delivering audio/video content over a network comprising: providing hosting services including storing audio/video content; and providing audio/video streaming services including transmitting a Java applet to an end user in real-time, the Java applet including an audio/video player module, and streaming the audio/video content to the end user in real time. In addition, the system and method provides audio and video content

production services, supports transmission of content to multiple destinations, and gathers statistics for reporting on various consumer behaviors.

BRIEF DESCRIPTION OF THE DRAWINGS

A better understanding of the present invention can be obtained from the following detailed description in conjunction with the following drawings, in which:

FIG. 1 illustrates an exemplary network architecture used to implement elements of the invention.

FIG. 2 illustrates an exemplary computer architecture used to implement elements of the invention.

FIG. 3 illustrates one embodiment of a system for providing audio/video content over a network.

FIG. 4 illustrates a Java applet used for streaming audio and/or video according to one embodiment of the invention.

FIG. 5 illustrates an audio/video content hosting network configuration according to one embodiment of the invention.

FIG. 6 illustrates audio/video content production offered in various embodiments of the invention.

Fig. 7 illustrates each of the functions enabled by the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

A SYSTEM AND METHOD FOR PROVIDING AUDIO/VIDEO CONTENT DELIVERY OVER A NETWORK

An improved system and method is described for providing audio and video content

delivery. In the following description, for the purposes of explanation, numerous specific details are set forth in order to provide a thorough understanding of the invention. It will be apparent, however, to one skilled in the art that the invention may be practiced without some of these specific details. In other instances, well-known structures and devices are shown in block diagram form to avoid obscuring the underlying principles of the invention.

Embodiments of the invention include various steps, which will be described below. The steps may be embodied in machine-executable instructions. The instructions can be used to cause a general-purpose or special-purpose processor which is programmed with the instructions to perform certain steps. Alternatively, these steps may be performed by specific hardware components that contain hardwired logic for performing the steps, or by any combination of programmed computer components and custom hardware components.

Elements of the present invention may be provided as a computer program product which may include a machine-readable medium having stored thereon instructions which may be used to program a computer (or other electronic device) to perform a process. The machine-readable medium may include, but is not limited to, floppy diskettes, optical disks, CD-ROMs, and magneto-optical disks, ROMs, RAMs, EPROMs, EEPROMs, magnet or optical cards, propagation media or other type of media/machine-readable medium suitable for storing electronic instructions. For example, the present invention may be downloaded as a computer program product, wherein the program may be transferred from a remote computer (e.g., a server) to a requesting computer (e.g., a client) by way of data signals embodied in a carrier wave or other propagation medium via a communication link (e.g., a modem or network connection).

AN EXEMPLARY NETWORK ARCHITECTURE

Elements of the present invention may be included within a client-server based system 100 such as that illustrated in **Figure 1**. According to the embodiment depicted in **Figure 1**, one or more servers 110, 150 communicate to one or more clients 130-133, 135. The clients 130-133, 135 may transmit and receive data from the servers 110, 150 over a variety of communication media including (but not limited to) a local area network 140 and/or a larger network 125 (e.g., the Internet). Alternative communication channels such as wireless communication via satellite broadcast (not shown) are also contemplated within the scope of the present invention.

The servers 110, 150 may include one or more databases for storing digital audio and/or video data. The databases may also store specific client data (e.g., information on how frequently a particular client logs in to server 110 and that client's preferences) and/or more general data. The database in one embodiment runs an instance of a Relational Database Management System (RDBMS), such as Microsoft™ SQL-Server, Oracle™ or the like.

A client may interact with and receive feedback from servers 110, 150 using various different communication devices and/or protocols. In one embodiment, the client logs in to servers 110, 150 via client software. The client software may include a browser application which supports Java such as Netscape Navigator™ or Microsoft Internet Explorer™ on the client's personal computer and may communicate to servers 110, 150 via the Hypertext Transfer Protocol (hereinafter "HTTP"). In other embodiments included within the scope of the invention, clients may communicate with servers 110, 150 via cellular phones and pagers (e.g., in which the necessary software is embedded in a microchip), handheld computing devices, and/or touch-tone telephones. In addition, the present invention can be used with any device connectable to the Internet in a direct or wireless connection.

AN EXEMPLARY COMPUTER ARCHITECTURE

Having briefly described an exemplary network architecture which employs various elements of the present system and method, a computer system 200 representing exemplary clients 130-135 and/or servers 110, 150, and 151 in which elements of the system and method may be implemented will now be described with reference to **Figure 2**.

One embodiment of a computer system 200 comprises a system bus 220 for communicating information, and a processor 210 coupled to bus 220 for processing information. Computer system 200 further comprises a random access memory (RAM) or other dynamic storage device 225 (referred to herein as main memory), coupled to bus 220 for storing information and instructions to be executed by processor 210. Main memory 225 also may be used for storing temporary variables or other intermediate information during execution of instructions by processor 210. Computer system 200 also may include a read only memory (ROM) and/or other static storage device 226 coupled to bus 220 for storing static information and instructions used by processor 210.

A data storage device 227 such as a magnetic disk or optical disc and its corresponding drive may also be coupled to computer system 200 for storing information and instructions. Computer system 200 can also be coupled to a second I/O bus 250 via and I/O interface 230. A plurality of I/O devices may be coupled to I/O bus 250, including a display device 243, an input device (e.g., an alphanumeric input device 242 and/or a cursor control device 241).

The communication device 240 may comprise a modem, a network interface card, or other well known interface device, such as those used for coupling to Ethernet, token ring, or other types of networks. In any event, in this manner, the computer system 200 may be coupled to a number of servers via a conventional network infrastructure, such as a company's local area network 140 and/or a larger network 125, for example.

ONE EMBODIMENT OF A SYSTEM AND METHOD FOR PROVIDING AUDIO/VIDEO CONTENT DELIVERY OVER A NETWORK

In one embodiment of the system and method, the owner/operator of server 150 is a customer of the owner/operator of content delivery servers 110, and client 135 is an end user (e.g., a user dialing out to the Internet from home or connecting via an office network). In this embodiment, the owner of server 150 may contract with the owner of content delivery servers 110 to provide all of his/her audio and video content delivery needs. For example, server 150 may represent an e-commerce client such as Ticket Master™ Online.

With the foregoing business relationship in mind, **Figure 3** illustrates client 135 communicating over network 125 to content delivery servers 110 and server 150. In one embodiment of the system and method, client 135 initially makes a Web page request 310 from server 150 (e.g., by clicking on a link to that Web page) and, in response, server 150 transmits the requested Web page 320 to client 135. The Web page request 310 may contain more information than a simple Web page address. For example, if client 135 has previously visited server 150, then cookie data identifying client 135 may also be transmitted to server 150. Server 150 may then transmit a Web page 320 to client 135 which contains information uniquely tailored to client 135's preferences. For example, server 150 may be a Ticket Master server from which client 135 has purchased numerous tickets to alternative rock concerts. As such, the Web page 320 transmitted to client 135 may contain specific information relating to upcoming

alternative rock concerts, shows, or featured artists.

Web page 320 in one embodiment includes embedded Web objects such as audio or video applets or players which are automatically transmitted to the client 135 when the Web page is downloaded. This is illustrated in **Figure 3** as applet request 340 from client 135 to content delivery server 110, and subsequent Java applet 330 download. The Java applet 330 of one embodiment is an applet for playing or for streaming audio and/or video content to client 135. Alternatively, the licensed applet or player can be downloaded from server 150 with web page 320.

This embodiment is illustrated in greater detail in **Figure 4**, in which the Java applet is comprised of an audio/video player module 410, a streamer module 411, a codec module 412 as well as the underlying audio/video content 420 (e.g., the song or movie). Codec module in one embodiment uses an advanced pulse code modulation ("ADPCM") codec for compressing/ decompressing audio/video content. Accordingly, when audio/video content is to be delivered to a particular end-user, the codec is transmitted along with the content. In one embodiment, the player 410 is transmitted to client 135 in a first network transaction. Secondly, the codec 412 and streamer 411 are transmitted to the client 135. Finally, the content 420 is transmitted to the client 135 for decompression by codec 412.

This embodiment solves many of the problems associated with prior audio/video content delivery systems. For example, because the player 410 and related modules 411-412 are written in Java, these programs are architecture-neutral. Accordingly, they can be executed on any system which includes a Java virtual machine (virtually all Web browser-equipped machines do). In contrast, browser plug-ins used in prior audio and video streaming systems are platform-dependent (e.g., a plug-in developed for Internet Explorer will not necessarily run on Netscape Navigator and a plug-in developed for a Macintosh™ computer will not run on a PC).

In addition, because Java was designed to create compact programs, Java applet 330 may be quite small. In one embodiment, Java applet 330 is slightly more than 4k-bytes in size, making it ideal for streaming applications where a short transmission time is necessary. [One embodiment of the player module 410, streamer module 411, and codec module 412 is described in the co-pending U.S. Patent Application entitled "A System and Method for Streaming Data in

Java," which is incorporated herein by reference and which is assigned to the assignee of the present application.]

Another benefit of the claimed system and method is that, because the underlying player technology is a Java applet, a continuous connection is not required between the content delivery servers 110 and the end-user client 135. The content delivery servers 110 simply transmits the Java applet followed by the associated audio/video content in a single burst, and it is up to the Java streamer module 411, codec module 412 and player module 410 running on the client 135 to stream, decode and play the incoming content, respectively. In contrast, for prior plug-in streaming players such as the "Real Player" a continuous network connection must be maintained between the player and the content delivery server. The server transmits a few thousand bytes of content and then the player must signal when it needs more. This connection-oriented technology has several drawbacks, including the way in which it is affected by network congestion. If network bandwidth suddenly decreases, then the audio/video transmission will become garbled or completely interrupted.

In one embodiment of the system, the owner/operator of content delivery servers 110 provides a customer outsource business model for its customers, offering a variety of different content delivery services. Each of these services will now be described in detail.

Content Production Services

Content production is the first step in one embodiment of the content delivery business model and system described herein. The customer (e.g., the owner/operator of server 150) may produce his/her own content. Alternatively, the owner/operator of content delivery servers 110 may produce the content or the customer may use a voice-back feature to originate content.

As shown in Fig. 6, in one embodiment, the owner/operator of content delivery servers 110 licenses a variety of libraries 650 of pre-recorded (i.e., "stock") content to be offered to its customers. Accordingly, smaller customers who may not be able to afford the studio time required to record a personalized piece of music or audio content, will be able to select from thousands of pre-recorded, pre-licensed works. Pre-licensing in this manner also helps clients who may not understand complex music or audio content rights (e.g., copyright) issues.

Alternatively, the owner/operator of content delivery servers 110 will produce a custom audio/video work 660 for the customer, either alone or by outsourcing the work to a professional recording and/or voice-over agency.

In a third content production service, content delivery server 110 provides a voice-back service 670 in which customers may establish a live network connection with the content delivery server 110 and transmit live video or audio content directly to content delivery server 110.

As shown in Fig. 6, voice-back service 670 allows end-users and/or customers to place audio content on a network using a network connection and a standard telephone line. A user/customer will initially select a "voice-back" option from a Web page on one of the content delivery servers 110 and will then be provided with a unique identification code. The user will call a phone and will be asked to type in the identification code through his phone keypad. The user will then be prompted to enter an audio message. This may be accomplished, for example, using a CTI VOX system. When he is completed with his message, the message may be automatically embedded in a specified portion of the user/customer's web page. Alternatively, the customer may request that the message be e-mailed to selected end users. Accordingly, the voice back feature gives customers and users the ability to place instant audio content on a network.

Regardless of how the underlying audio/video work is produced, the next step in the process is to encode the work so that it may be stored on content delivery servers 110.

Content Encoding

The step of encoding comprises converting the audio/video content to a particular digital format which may then be stored as a file or database object on content delivery servers 110. Various encoding algorithms may be used to encode content at this step. In one particular embodiment the JASD encoding format is used.

Hosting/Streaming Content

Encoded content is then stored on one or more of content delivery servers 110 to be used in various ways (described in more detail below) by customers. A more detailed layout of one

embodiment of content delivery servers 110 is illustrated in **Figure 5**. As illustrated, audio/video content may be stored redundantly across multiple servers 520-524. A back door publication channel 540 may be used for publication. This is done in part so that the bandwidth across network 125 is not diminished. A load balancer 510 receives requests for audio/video content from end users (e.g., client 135) and customers (e.g., server 150) and transmits the requested content from one of the plurality of redundant servers 520-524 depending on how busy each of the servers are.

In one embodiment of the system and method, a second group of content delivery servers 525-529 is employed. This second group of servers 525-529 may be set up in a different area of the world from the first group 520-524. For example, the first group of servers 520-524 may be set up in California while the second group 525-529 may be set up in Japan.

In this embodiment when new audio/video content is published through content publishing channel 540 it may also be sent across network 125 via a virtual private network 530 to a second content publishing channel 541 which stores the content on each of the second group of redundant servers 525-529. In this manner, audio/video content may published at a single location and then geographically dispersed.

Customers who sell products or services in different geographical locations may take advantage of the foregoing network configuration. For example, Chrysler™ motor company might publish audio/video content for both American and a Japanese end users. This content would then be published out across both sets of geographically dispersed servers 520-524 and 525-529. The Japanese audio/video content would be transmitted to those end users located in Japan from the second set of severs 525-529 and the English audio/video content would be transmitted to those end users located in America from the first set of servers 520-524.

Codec, Streaming and Player Technology

Various aspects of the Java applet player and related codec and steaming modules used in one embodiment of the system and method have been described above in detail.

Multiple Content Destinations Services

Many of the services offered by the owner/operator of content delivery servers 110 were

described above. These and some additional services are set forth in **Figure 6**.

Using the architecture and methods of the present invention, banner ad services 610 may be offered to customers. Returning to the previous example, if Ticket Master were a customer, and some end user executed a search on Yahoo for "concert tickets," one of the content delivery servers 110 would transmit a produced audio and/or video banner advertisement to be embedded in the Yahoo Web page search results.

Web site services 620 are directed at providing customers with all of the audio and/or video needs for their Web site. For example, if Ticket Master owned an online Web site, then content delivery servers 110 would provide audio/video streaming services for that Web site. These services might include, for example, a message from a particular musician following the purchase of a ticket to that musician's concert by an end user, or the purchase of that musician's compact disk. In another example, web site services 620 may provide a music previewing service. A music previewing service is directed specifically at allowing users to listen to high quality music clips online. These services are primarily for users who are interested in purchasing actual digital music works online rather than user who are interested only in music-related goods/services in the previous example.

E-mail services 640 will allow audio/video content to be embedded in e-mail messages and transmitted to end-users. One embodiment would embed the Universal Resource Locator ("URL") to one of the content delivery servers 110 into the body of the e-mail message, rather than actually embedding the content in the message. In any case, this service could be used as a follow-up to end users. For example, once the user attended a concert, he might receive an audio e-mail which includes audio tracks from an unreleased album, or future concert dates. Because the underlying player technology in one embodiment of the system is Java-based (as described above) there will be no need to know exactly what the end-user's configuration is (e.g., what kind of plug-ins the user has installed, what kind of browser . . . etc). In another example of e-mail services 640, an e-card service may be supported.

E-card services would be used to e-mail an electronic card to an end user. As in the previous example, this might be done following a purchase by the end user. In operation, the user would click on an e-card link and receive audio/video content as well as additional

information about the goods and/or services he purchased.

Non-PC device service 630 may be used to download audio/video content into various types of non-PC devices such as but not limited to phones, pagers, and hand-held devices. These devices may be audio or video enabled using the present invention.

Reporting/Extraction/Statistics

In one embodiment of the system and method, content delivery servers 110 will maintain statistics on end-users who received audio/video content. This information may then be transmitted to customers (e.g., to customer server 150).

The types of information to be recorded may be determined by the needs of each customer. This may include, for example, the number of times an end user accessed particular audio/video content, the length of time that the user accessed the content, the number of times the content was repeated . . . etc.

To preserve the confidentiality of its end users, the customer may simply pass a user identification code to one or more of the content delivery servers 110. The content delivery servers will then use this code to keep track of individual user statistics as set forth above (i.e., without actually knowing who the users are).

Fig. 7 illustrates a set of business/technology functions enabled by the present invention. This set of functions supports the full realm of audio/video creation, delivery, and consumption via the Internet. Each of the functions 710-760 was described in the sections above.

Throughout the foregoing description, for the purposes of explanation, numerous specific details were set forth in order to provide a thorough understanding of the invention. It will be apparent, however, to one skilled in the art that the invention may be practiced without some of these specific details. For example, **Figure 3** illustrates two servers and a single client for implementing specific aspects of the invention. However, one of ordinary skill in the art will recognize that any number of servers (i.e., one or more) and/or clients may implement aspects of the invention. The systems herein are merely a few exemplary embodiments. In addition, while the foregoing description focused on the Java programming language being used for the

underlying audio/video player, other platform-independent programming languages may be used without departing from the underlying principles of the invention. Accordingly, the scope and spirit of the invention should be judged in terms of the claims which follow.

CLAIMS

What is claimed is:

1. A method for delivering audio/video content over a network comprising:

providing hosting services for customers including storing audio/video content; and

providing audio/video streaming services for customers, said streaming services comprising

transmitting a Java applet to an end user in real-time, said Java applet including an audio/video player module, and

streaming said audio/video content to said end user in real time.

2. The method for delivering audio/video content over a network as claimed in claim 1 wherein said Java applet further comprises a streaming module and a codec module.

3. The method for delivering audio/video content over a network as claimed in claim 2 wherein said codec module is an ADPCM codec module.

4. The method for delivering audio/video content over a network as claimed in claim 1 wherein said Java applet is used to provide an advertisement banner to said end user.

5. The method for delivering audio/video content over a network as claimed in claim 1 wherein said Java applet is enabled in an e-mail message of an end-user.

6. The method for delivering audio/video content over a network as claimed in claim 1 wherein said Java applet is used to audio/video enable a Web page.

7. The method for delivering audio/video content over a network as claimed in claim 1 wherein said Java applet is used to audio/video enable a non-PC device.

8. The method for delivering audio/video content over a network as claimed in claim 1 including the additional step of providing audio/video content production services for said customers.

9. The method for delivering audio/video content over a network as claimed in claim 8 wherein said content production services includes pre-licensing a plurality of content libraries to be offered to customers.

10. The method for delivering audio/video content over a network as claimed in claim 8 wherein said content production services includes recording a custom audio/video content for said customers.

11. The method for delivering audio/video content over a network as claimed in claim 8 wherein said content production services includes a voice-back service.

12. The method for delivering audio/video content over a network as claimed in claim 1 wherein said hosting and streaming services are provided on a plurality of redundant content delivery servers.

13. The method for delivering audio/video content over a network as claimed in claim 12 wherein two groups of content delivery servers are located in different geographical locations and content is added to at least one of said two groups over a virtual private network ("VPN").

14. The method for delivering audio/video content over a network as claimed in claim 1 including the step of recording statistics on end users to whom the audio/video content was transmitted.

15. The method for delivering audio/video content over a network as claimed in claim 14 wherein the step of recording statistics on end users is accomplished using an end-user identification number provided by one of said customers.

16. A business method for providing audio and video services over a network comprising:

recording and encoding audio/video content for a customer;

hosting said content on one or more servers;

transmitting said content to one or more end users; and

recording statistics on said end users.

17. The business method for providing audio and video services over a network as claimed in claim 16 wherein said step of transmitting is comprised of transmitting a Java applet to said end users in real-time, said Java applet including an audio/video player module, and streaming said audio/video content to said end users in real time.

18. The business method for providing audio and video services over a network as claimed in claim 17 wherein said Java applet further comprises a streaming module and a codec module.

19. The business method for providing audio and video services over a network as claimed in claim 18 wherein said codec module is an ADPCM codec module.

20. The business method for providing audio and video services over a network as claimed in claim 16 wherein said step of recording is accomplished by providing said client with pre-licensed, pre-recorded audio or video content.

21. The business method for providing audio and video services over a network as claimed in claim 16 wherein said step of recording statistics on said end users is accomplished using an end-user identification provided by said customer.

22. A computer data signal embodied in a carrier wave comprising:

a first source code segment which transmits a Java applet to an end user in real-time, said Java applet including an audio/video player module; and

a second source code segment which streams said audio/video content to said end user in real time.

23. The computer data signal embodied in a carrier wave as claimed in claim 22 wherein said Java applet further comprises a streaming module and a codec module.

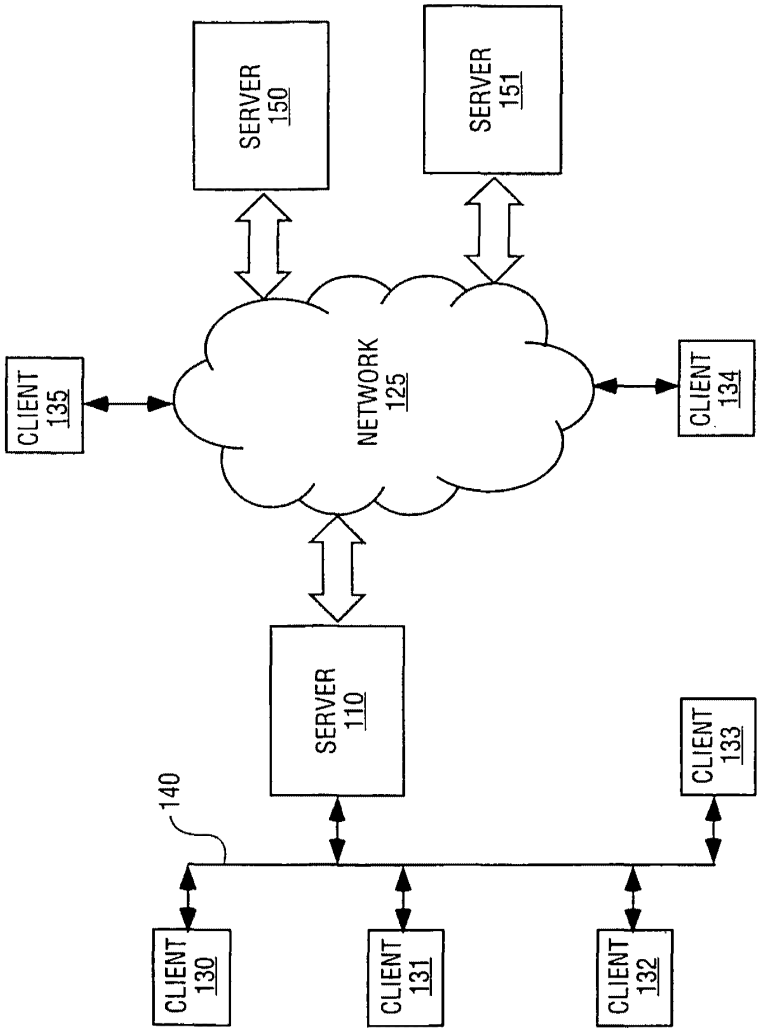

SERVER 150
SERVER 151
NETWORK 125
CLIENT 135
CLIENT 134
SERVER 110
CLIENT 133
140
CLIENT 130
CLIENT 131
CLIENT 132

FIG. 1

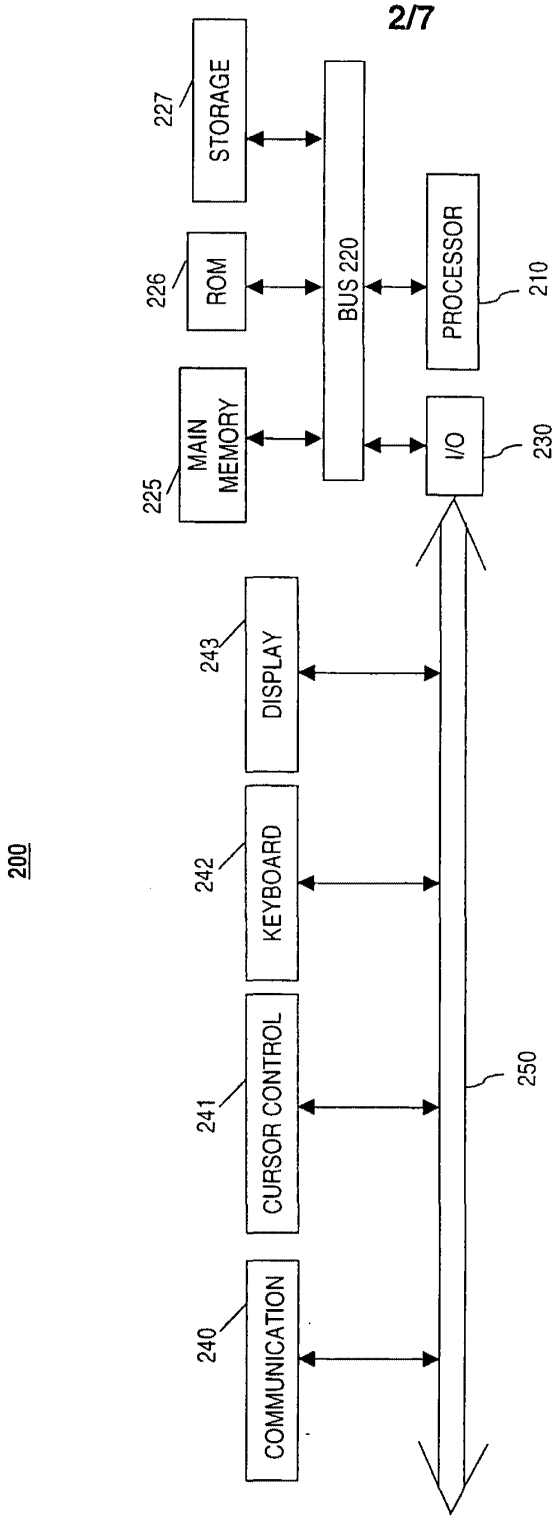

200
227
STORAGE
226
ROM
225
MAIN MEMORY
BUS 220
PROCESSOR
210
I/O
230
243
DISPLAY
242
KEYBOARD
241
CURSOR CONTROL
240
COMMUNICATION
250

FIG. 2

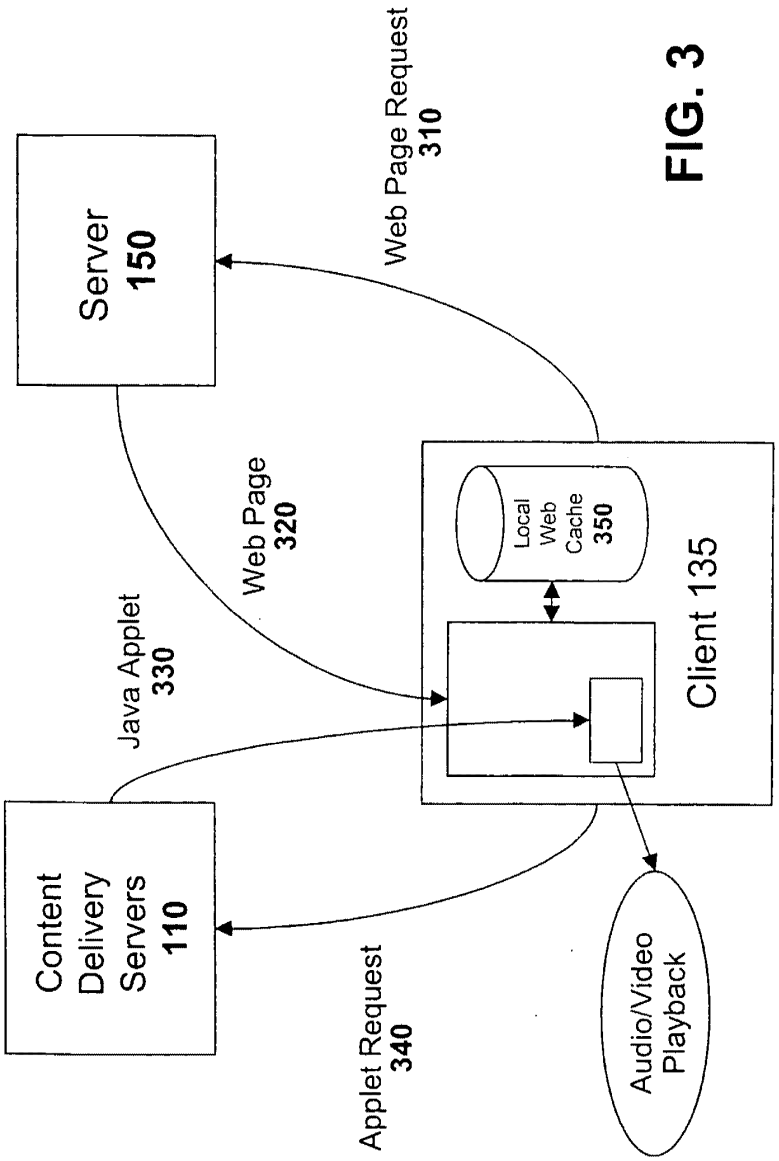

Server
150
Web Page Request
310
Web Page
320
Java Applet
330
Local
Web
Cache
350
Client 135
Content
Delivery
Servers
110
Applet Request
340
Audio/Video
Playback

FIG. 3

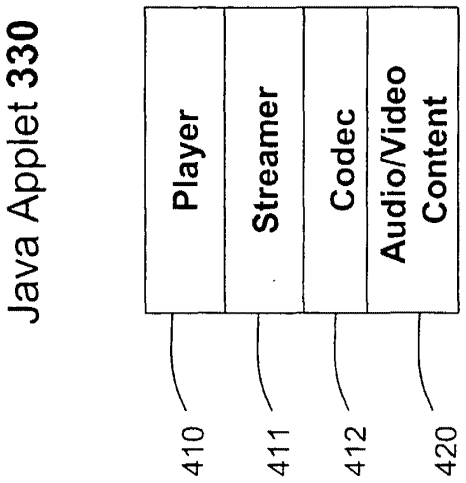

Java Applet 330
Player
Streamer
Codec
Audio/Video Content
410
411
412
420

FIG. 4

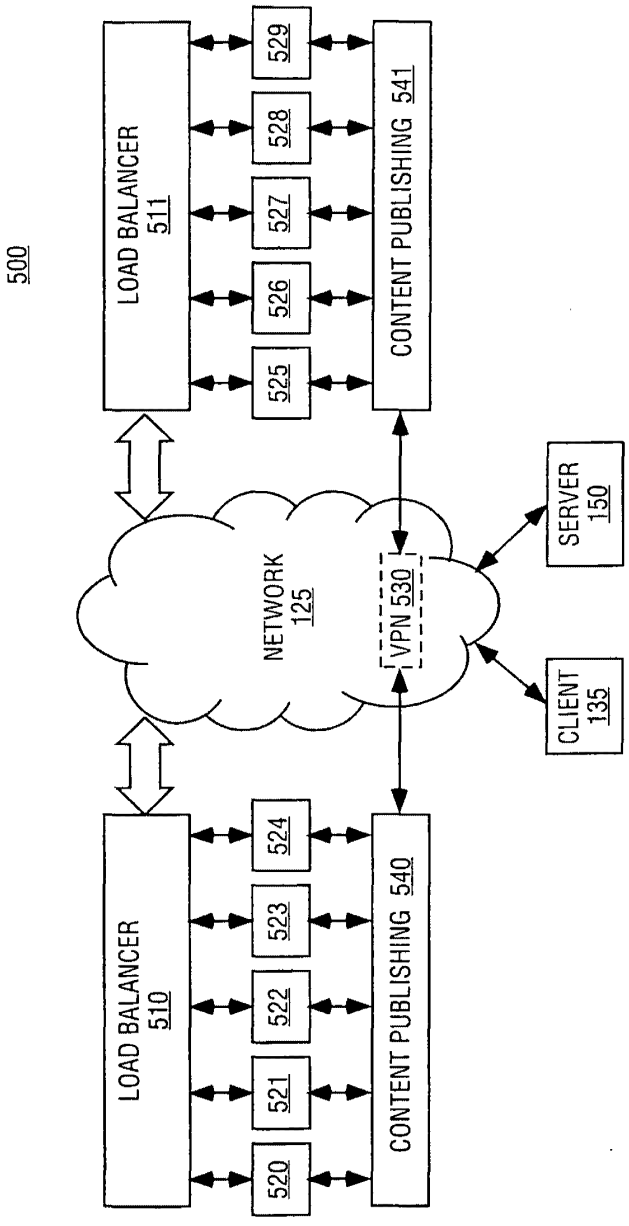

500
LOAD BALANCER 511
529
528
527
526
525
CONTENT PUBLISHING 541
NETWORK 125
VPN 530
SERVER 150
CLIENT 135
LOAD BALANCER 510
524
523
522
521
520
CONTENT PUBLISHING 540

FIG. 5

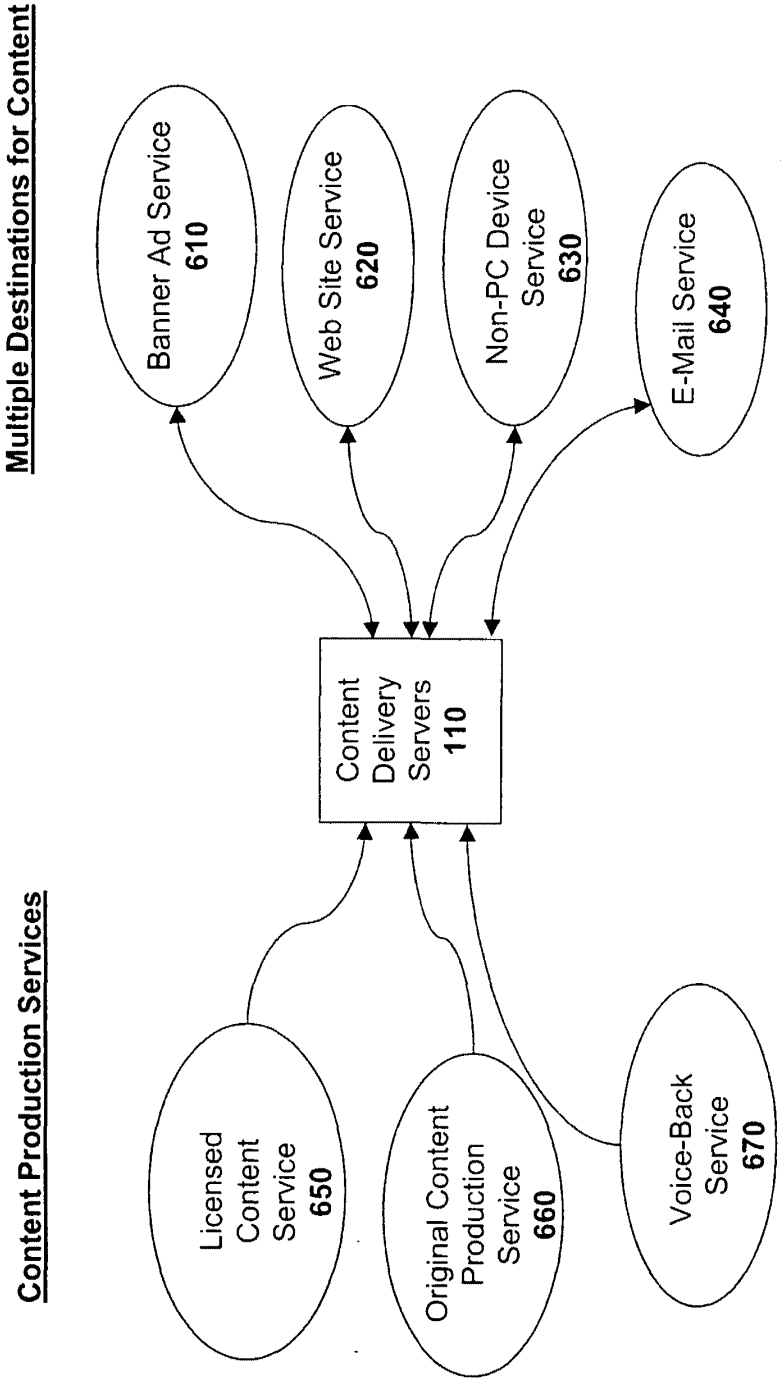

Multiple Destinations for Content
Banner Ad Service 610
Web Site Service 620
Non-PC Device Service 630
E-Mail Service 640
Content Delivery Servers 110
Content Production Services
Licensed Content Service 650
Original Content Production Service 660
Voice-Back Service 670

FIG.6

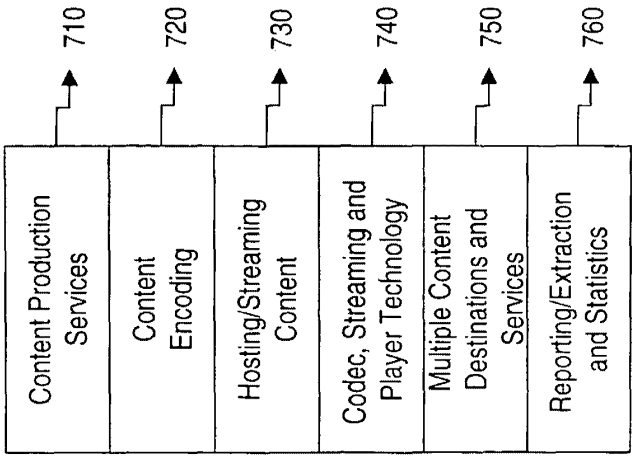

710
720
730
740
750
760
Content Production Services
Content Encoding
Hosting/Streaming Content
Codec, Streaming and Player Technology
Multiple Content Destinations and Services
Reporting/Extraction and Statistics

Fig. 7

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/14015

A. CLASSIFICATION OF SUBJECT MATTER
IPC(7) : G06F 15/00
US CL : 709/231
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 709/231, 227, 229, 230

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
west USPAT

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,797,010 A (BROWN) 18 August 1998 (18.08.1998), abstract	1-23
Y	US 5,754,830 A (BUTTS et al) 19 May 1998 (19.05.1998), abstract	1-23

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
08 August 2000 (08.08.2000)	25 AUG 2000
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230	Authorized officer D. Dinh Telephone No. 305 9600

Form PCT/ISA/210 (second sheet) (July 1998)

OIPE
FEB 19 2009
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PTO/SB/22 (01-09)
Approved for use through 02/28/2009. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARMENT OF COMMERCE
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PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a) **FY 2009** *(Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).)*	Docket Number (Optional) DB001229-000
Application Number 11/484,510	Filed 10 July 2006
For GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE	
Art Unit 2623	Examiner Junior O. Mendoza

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

		Fee	Small Entity Fee	
☐	One month (37 CFR 1.17(a)(1))	$130	$65	$
☐	Two months (37 CFR 1.17(a)(2))	$490	$245	$
☑	Three months (37 CFR 1.17(a)(3))	$1110	$555	$ 555
☐	Four months (37 CFR 1.17(a)(4))	$1730	$865	$
☐	Five months (37 CFR 1.17(a)(5))	$2350	$1175	$

☑ Applicant claims small entity status. See 37 CFR 1.27.

02/19/2009 NNGUYEN1 00000038 200888 11484510
01 FC:2253 555.00 DA

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☑ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 20-0888.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed (Form PTO/SB/96).

☑ attorney or agent of record. Registration Number 34,768

☐ attorney or agent under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34 _____

Paul D Bangor

Signature — 13 February 2009 — Date

Paul D. Bangor, Jr. — Typed or printed name

412-394-7767 — Telephone Number

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☑ Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

I hereby certify that this correspondence is being deposited in the United States Postal Services as First Class Mail in an envelope addressed to:

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450



Attorney for Applicants

Date: 13 February 2009

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2623
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
Customer No.: 24122

TRANSMITTAL LETTER

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the Office action mailed on 13 August 2008 for the above-captioned application, enclosed is the following:

- Response and Amendment;
- Petition for Three Month Extension of Time;
- Information Disclosure Statement;
- Forms PTO/SB/08A and PTO/SB/08B; and
- copies of six (6) cited references.

The Commissioner is hereby authorized to charge any underpayment or credit any overpayment to our Deposit Account No. 20-0888.

{00969529}

A return postcard is also enclosed. Please date stamp and mail the postcard in order to acknowledge receipt of this correspondence.

Respectfully submitted,

Paul D. Bangor, Jr.
Reg. No. 34,768
THORP, REED & ARMSTRONG
One Oxford Centre, 14th Fl.
301 Grant St.
Pittsburgh, Pennsylvania 15219-1425
(412) 394-7767
Attorneys for Applicants

Dated: 13 February 2009

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Attorney for Applicants

Date: 13 February 2009



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2623
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
Customer No.: 24122

TRANSMITTAL LETTER

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the Office action mailed on 13 August 2008 for the above-captioned application, enclosed is the following:

- Response and Amendment;
- Petition for Three Month Extension of Time;
- Information Disclosure Statement;
- Forms PTO/SB/08A and PTO/SB/08B; and
- copies of six (6) cited references.

The Commissioner is hereby authorized to charge any underpayment or credit any overpayment to our Deposit Account No. 20-0888.

{00969529}

A return postcard is also enclosed. Please date stamp and mail the postcard in order to acknowledge receipt of this correspondence.

Respectfully submitted,

Paul D. Bangor, Jr.
Reg. No. 34,768
THORP, REED & ARMSTRONG
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Attorneys for Applicants

Dated: 13 February 2009

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	☐ To be Mailed
11/484,510	07/10/2006	

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)	SMALL ENTITY ☒		OR	OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

		(Column 1)		(Column 2)	(Column 3)	SMALL ENTITY		OR	OTHER THAN SMALL ENTITY	
	02/19/2009	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
AMENDMENT	Total (37 CFR 1.16(i))	* 45	Minus	** 45	= 0	X $26 =	0	OR	X $ =	
	Independent (37 CFR 1.16(h))	* 4	Minus	***4	= 0	X $110 =	0	OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE	0	OR	TOTAL ADD'L FEE	

		(Column 1)		(Column 2)	(Column 3)					
		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
AMENDMENT	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/CORALIA BETANCOURT/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

UNITED STATES PATENT AND TRADEMARK OFFICE

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24122 e 03/23/2009

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Paper No.

Application No.:	**11/484,510**	**Date Mailed:**	**03/23/2009**
First Named Inventor:	Cavicchia, Mark, A.	Examiner:	MENDOZA, JUNIOR O
Attorney Docket No.:	DB001229-000	Art Unit:	2423
Confirmation No.:	9918	Filing Date:	07/10/2006

Please find attached an Office communication concerning this application or proceeding.

Commissioner for Patents

PTO-90c (Rev.08-06)

Notice of Non-Compliant Amendment (37 CFR 1.121)	Application No. 11/484,510	Applicant(s) CAVICCHIA, MARK A.	
		Art Unit 3998	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

The amendment document filed on *19 February, 2009* is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121 or 1.4. In order for the amendment document to be compliant, correction of the following item(s) is required.

THE FOLLOWING MARKED (X) ITEM(S) CAUSE THE AMENDMENT DOCUMENT TO BE NON-COMPLIANT:

- ☐ 1. Amendments to the specification:
  - ☐ A. Amended paragraph(s) do not include markings.
  - ☐ B. New paragraph(s) should not be underlined.
  - ☐ C. Other _____.
- ☐ 2. Abstract:
  - ☐ A. Not presented on a separate sheet. 37 CFR 1.72.
  - ☐ B. Other _____.
- ☐ 3. Amendments to the drawings:
  - ☐ A. The drawings are not properly identified in the top margin as "Replacement Sheet," "New Sheet," or "Annotated Sheet" as required by 37 CFR 1.121(d).
  - ☐ B. The practice of submitting proposed drawing correction has been eliminated. Replacement drawings showing amended figures, without markings, in compliance with 37 CFR 1.84 are required.
  - ☐ C. Other _____.
- ☒ 4. Amendments to the claims:
  - ☐ A. A complete listing of all of the claims is not present.
  - ☐ B. The listing of claims does not include the text of all pending claims (including withdrawn claims)
  - ☒ C. Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim cannot be identified. Note: the status of every claim must be indicated after its claim number by using one of the following status identifiers: (Original), (Currently amended), (Canceled), (Previously presented), (New), (Not entered), (Withdrawn) and (Withdrawn-currently amended).
  - ☐ D. The claims of this amendment paper have not been presented in ascending numerical order.
  - ☒ E. Other: *Claim 27 identifier is missing*.
- ☐ 5. Other (e.g., the amendment is unsigned or not signed in accordance with 37 CFR 1.4): For further explanation of the amendment format required by 37 CFR 1.121, see MPEP § 714.

TIME PERIODS FOR FILING A REPLY TO THIS NOTICE:

1. Applicant is given **no new time period** if the non-compliant amendment is an after-final amendment or an amendment filed after allowance, or a drawing submission (only) If applicant wishes to resubmit the non-compliant after-final amendment with corrections, the **entire corrected amendment** must be resubmitted.

2. Applicant is given **one month**, or thirty (30) days, whichever is longer, from the mail date of this notice to supply the correction, if the non-compliant amendment is one of the following: a preliminary amendment, a non-final amendment (including a submission for a request for continued examination (RCE) under 37 CFR 1.114), a supplemental amendment filed within a suspension period under 37 CFR 1.103(a) or (c), and an amendment filed in response to a Quayle action. If any of above boxes 1 to 4 are checked, the correction required is only the corrected section of the non-compliant amendment in compliance with 37 CFR 1.121.

   Extensions of time are available under 37 CFR 1.136(a) only if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action.
   Failure to timely respond to this notice will result in:
   Abandonment of the application if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action; or
   Non-entry of the amendment if the non-compliant amendment is a preliminary amendment or supplemental amendment.

Legal Instruments Examiner (LIE), if applicable /CORALIA BETANCOURT/ Telephone No: (571)272-0509

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2623
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
Customer No.: 24122

To: Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CORRECTED RESPONSE AND AMENDMENT

Sir:

In response to the Notice of Non-Compliant Amendment of March 23, 2009 and in response to the Office Action of 13 August 2008, please amend the above-identified application as follows:

Amendments to the Specification; none

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 9 of this paper.

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Currently Amended) A ~~portable~~ content manager of audio and/or video content from a plurality of independent content sources, ~~device for receiving and viewing content~~ comprising:

a device capable of establishing and maintaining a connection with a communications link;

an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) listing a plurality of channels, wherein each of the channels is selectable for receiving audio and/or video programming from one of the plurality of independent content sources via the communications link, wherein the application allows for customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

~~an acquisition module that obtains content and data that describes said content from a web server over a communications link; and~~

~~an interface module that presents the data that describes said content to a user and receives input from said user~~.

2. (Currently Amended) The ~~portable~~ content manager ~~device~~ of claim 1, wherein the application allows for customization of the IPG by the user with respect to a description of each of the channels contained in the IPG and/or a first one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received. ~~the interface module comprises an interactive program guide.~~

3. (Currently Amended) The ~~portable~~ content manager ~~device~~ of claim 1, further comprising a digital rights management module that obtains viewing rights from one or more of the plurality of independent content sources ~~a source of content~~.

4. (Currently Amended) The ~~portable~~ content manager ~~device~~ of claim 1, further comprising a GPS receiver and a filtering module that blocks content according to jurisdiction. ~~global positioning satellite communicator for determining geographical location.~~

5. (Currently Amended) The ~~portable~~ content manager ~~device~~ of claim 1, wherein at least one of the plurality of independent content sources comprises a multiple system operator or live television or previously recorded content accessible via the internet ~~further comprising a filtering module that blocks content according to jurisdiction~~.

6. (Currently Amended) The ~~portable~~ content manager ~~device~~ of claim 1, further comprising a voice recognition module that accepts verbal commands and converts them to digital form.

7. (Currently Amended) The ~~portable~~ content manager ~~device~~ of claim 1, further comprising a display device.

8. (Currently Amended) The ~~portable~~ content manager ~~device~~ of claim 1, further comprising a relay module for delivering the IPG~~content~~ and data to a display device.

9. (Currently Amended) The ~~portable~~ content manager ~~device~~ of claim 1, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received~~further comprising a storage module that stores the content and data~~.

10. (Currently Amended) The ~~portable~~ content manager ~~device~~ of claim 1, wherein the communications link is the internet.

11. (Currently Amended) A content acquisition system for reception of audio and/or video content from a plurality of independent content sources, ~~one or more user chosen content sources~~, ~~the system~~ comprising:

a ~~portable~~ device capable of establishing and maintaining a connection with a communications link;

an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) listing a plurality of channels, wherein each of the channels is

selectable for receiving audio and/or video programming from one of the plurality of independent content sources via the communications link, wherein the application allows for customization of the IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received. ~~for management and personalization of programming received from one or more content sources based on user preference; said application further allowing the user to view available content; and remote sources of content that are accessible through the communications link.~~

12. (Original) The content acquisition system of claim 11, wherein the communications link is the internet.

13. (Currently Amended) The content acquisition system of claim 11, further comprising a ~~wherein the~~ data communication pathway to the communications link comprising ~~is~~ a cellular telephone receiving and transmitting device.

14. (Currently Amended) The content acquisition system of claim 11, wherein the ~~portable~~ device further comprises a display screen.

15. (Currently Amended) The content acquisition system of claim 11, wherein the interactive program guide application assists the user in obtaining and/or managing ~~content~~ rights to receive the audio and/or video content from one or more of the plurality of independent content sources.

16. (Currently Amended) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received. ~~obtains redundant content sources in order to assure a constant viewing experience.~~

17. (Currently Amended) The content acquisition system of claim 11, wherein the interactive program guide application further provides for synchronization of changes made to the IPG~~application~~ in order to present a consistent IPG. ~~user experience.~~

18. (Original) The content acquisition system of claim 11, further comprising a transmitter for transmitting incoming data and content to a separate viewing apparatus.

19. (Currently Amended) The content acquisition system of claim 11, further comprising a GPS receiver ~~geograpical positioning device~~ for determining the location of the device and a filter module that selectively blocks content.

20. (Currently Amended) The content acquisition system of claim 11~~19~~, wherein at least one of the plurality of independent content sources comprises a multiple system operator or live television or previously recorded content accessible via the internet. ~~further comprising a filter module that selectively blocks content.~~

21. (Currently Amended) A computer-implemented method for providing an interactive program guide to a user for viewing, selecting and obtaining access to audio and/or video content from a plurality of independent content sources, comprising:

displaying an interactive program guide (IPG) listing a plurality of channels, wherein each of the channels is selectable for receiving audio and/or video programming from one of the plurality of independent content sources via a communications link;

allowing the user to customize the IPG with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received.

~~delivering descriptive program data about available content from a web server over a communications link to a device specified by the user;~~

~~permitting the user to arrange a display of the descriptive program data as desired by said user on said device; and~~

~~providing a selectable option for the user to select the available content to be delivered over the communications link.~~

22. (Currently Amended) The method of claim 21, wherein at least one of the plurality of independent content sources comprises a multiple system operator or live television or previously recorded content accessible via the internet ~~said content sources comprise live television broadcasting, previously recorded content, and content available from a website accessible via the internet~~.

23. (Currently Amended) The method of claim 21, wherein said description ~~descriptive program data~~ comprises information identifying content source ~~identification~~ and/or programming summaries ~~listings for available content~~.

24. (Currently Amended) The method of claim 21, further comprising:

allowing the user to customize the IPG with respect to a second, redundant one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received~~wherein the device comprises a display device~~.

25. (Currently Amended) The method of claim 21, further comprising:

delivering ~~wherein~~ the content ~~is delivered~~ to a ~~second~~ device specified by the user.

26. (Currently Amended) The method of claim 25~~21~~, further comprising automatically authenticating the user to one or more of the content sources prior to delivering the content to the device.

27. (Original) The method of claim 21, further comprising obtaining a redundant source for said content in the event that one of said content sources becomes unavailable while in use.

28. (Currently Amended) The method of claim 25~~21~~, further comprising obtaining viewing rights from one or more of ~~said~~ content sources prior to delivering said content to the device.

29. (Currently Amended) The method of claim 21, further comprising filtering viewing rights from one or more of ~~said~~ content sources in accordance with a geographical location.

30. (Currently Amended) The method of claim 21, further comprising synchronizing changes made by the user to the interactive program guide in order to preserve a consistent IPG ~~user experience~~ across a plurality of ~~all~~ devices.

31. (Original) The method of claim 21, wherein the communications link is the internet.

32. (Currently Amended) An interactive program guide application embodied on a computer readable medium for receiving and managing audio and/or video content from a plurality of independent content sources comprising code segments:

a. for receiving, organizing and storing data that describes said content;

b. for presenting said data in a preferred order identified by a user;

c. for managing viewing rights for said content; and

d. for ensuring user authentication to the interactive program guide application.

33. (Original) The interactive program guide application of claim 32, wherein the data and content are delivered from a web server over a communications link to a device specified by the user.

34. (Original) The interactive program guide application of claim 32, further comprising code segments for receiving a request for content from the user and delivering said content to a device specified by the user.

35. (Original) The interactive program guide application of claim 34, wherein the data that describes the content is displayed on a first device and a request for said content is made on said first device.

36. (Original) The interactive program guide application of claim 35, wherein the content requested using the first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

37. (Original) The interactive program guide application of claim 36, wherein the second device is an internet-enabled television.

38. (Original) The interactive program guide application of claim 32, further comprising code segments for providing automatic updates in order to minimize user involvement in maintaining the application.

39. (Original) The interactive program guide application of claim 32, further comprising code segments for synchronizing changes made by the user across all devices used to access the guide.

40. (Original) The interactive program guide application of claim 32, further comprising code segments for enabling control over the application using a remote control device.

41. (Original) The interactive program guide application of claim 32, further comprising code segments for providing real-time acquisition of content viewing rights.

42. (Original) The interactive program guide application of claim 32, further comprising code segments for filtering content.

43. (Original) The interactive program guide application of claim 42, wherein the content is filtered based on the geographic location of the device at the time of viewing said content.

44. (Original) The interactive program guide application of claim 32, further comprising code segments for obtaining redundant content in order to reduce interruptions in content delivery to the user.

45. (Original) The interactive program guide application of claim 42, wherein the communications link is the internet.

Remarks/Arguments

In response to the Notice of Non-Compliant Amendment of March 23, 2009, Applicant has inserted the missing claim identifier for claim 27. Previously, Applicant filed a Petition for a Three-Month Extension of Time for responding to the Office Action of August 13, 2008 (the "Office Action"), up to and including February 13, 2009.

On Pages 2-9 of the Office Action, the Examiner rejected claims 1-15, 18-26, 28, 29, 31-37, 39-43 and 45 under 35 U.S.C. 102(b) as being anticipated by Tatsuji et al. (Pub No US 2002/0151271). Applicant respectfully traverses these rejections.

Regarding claim 1, Tatsuji fails to teach or suggest a content manager of audio and/or video content from a plurality of independent content sources, comprising:

an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) listing a plurality of channels, wherein each of said channels is selectable for receiving audio and/or video programming from one of the plurality of independent content sources via said communications link, wherein said application allows for customization of said IPG by a user with respect to an order of said listing of said channels in said IPG.

Clearly the Tatsuji EPG provides access only to content made available from the operator of the mobile server 5 of Tatsuji and not from a plurality of independent content sources, as required by all of the pending claims as currently amended. Furthermore, the information provided by the Tatsuji EPG is also set by the operator of the mobile server 5 of Tatsuji and cannot be modified by a user of the portable terminal 7 of Tatsuji. Thus, no customization of the order in which channels are listed in the Tatsuji EPG can be made by a user. For these reasons, Tatsuji does not anticipate claim 1 as currently amended.

Regarding claim 2, Tatsuji also fails to teach or suggest an IPG that is customizable by a user of the IPG with respect to a description of each of said channels contained in the IPG and/or a first one of said independent content sources to be linked to one or more of said channels from which the audio and/or video programming may be received. For these additional reasons, Tatsuji does not anticipate claim 2 as currently amended.

Regarding claim 3, Tatsuji fails to teach or suggest a content manager of audio and/or video content from a plurality of independent content sources, comprising an interactive program guide application an comprising a digital rights management module that obtains viewing rights from one or more of the plurality of independent content sources. For these additional reasons, Tatsuji does not anticipate claim 3 as currently amended.

Regarding claim 9, Tatsuji fails to teach or suggest a content manager of audio and/or video content from a plurality of independent content sources, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received. For these additional reasons, Tatsuji does not anticipate claim 9 as currently amended.

Regarding claims 11-15, 18-20, Tatsuji fails to teach or suggest a content acquisition system for reception of audio and/or video content from a plurality of independent content sources comprising:

an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) listing a plurality of channels, wherein each of the channels is selectable for receiving audio and/or video programming from one of the plurality of independent content sources via the communications link, wherein the application allows for customization of the IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received.

Again, the Tatsuji EPG provides access only to content made available from the operator of the mobile server 5 of Tatsuji and not from a plurality of independent content sources, as required by all of the pending claims as currently amended. Furthermore, the information provided by the Tatsuji EPG is also set by the operator of the mobile server 5 of Tatsuji and cannot be modified by a user of the portable terminal 7 of Tatsuji. Thus, no customization of the order of listing, description or content source of the channels in the Tatsuji EPG can be made by a user. For these reasons, Tatsuji does not anticipate any of claims 11-15 or 18-20 as currently amended.

Regarding claims 21-26, 28, 29and 31, Tatsuji fails to teach or suggest a computer-implemented method for providing an interactive program guide to a user for viewing, selecting and obtaining access to audio and/or video content from a plurality of independent content sources, comprising:

allowing the user to customize the IPG with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received

The Tatsuji EPG provides access only to content made available from the operator of the mobile server 5 of Tatsuji and not from a plurality of independent content sources, as required by all of the pending claims as currently amended. Furthermore, the information provided by the Tatsuji EPG is also

set by the operator of the mobile server 5 of Tatsuji and cannot be modified by a user of the portable terminal 7 of Tatsuji. Thus, no customization of the order of listing, description or content source of the channels in the Tatsuji EPG can be made by a user. For these reasons, Tatsuji does not anticipate any of claims 21-26, 28, 29 or 31 as currently amended.

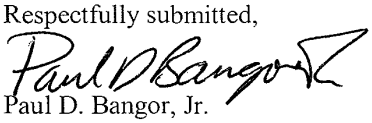
Regarding claims 32-37, 39-43 and 45, Tatsuji fails to teach or suggest an interactive program guide application embodied on a computer readable medium for receiving and managing audio and/or video content from a plurality of independent content sources comprising code segments for presenting said data in a preferred order identified by a user; or for managing viewing rights for said content. The Tatsuji EPG provides access only to content made available from the operator of the mobile server 5 of Tatsuji and not from a plurality of independent content sources, as required by all of the pending claims as currently amended. Furthermore, the information provided by the Tatsuji EPG is also set by the operator of the mobile server 5 of Tatsuji and cannot be modified by a user of the portable terminal 7 of Tatsuji. Thus, no customization of the data found in the Tatsuji EPG can be changed by a user according to his/her preferences. The Tatsuji EPG also does not allow or provide for the managing viewing rights for the content. For these reasons, Tatsuji does not anticipate any of claims 32-37, 39-43 or 45 as currently amended.

On Page 10 of the Office Action, paragraph 4, the Examiner rejected dependent claims 16, 17, 27, 30, 38 and 44 under 35 U.S.C. 103(a) as being unpatentable over Tatsuji in view of Potrebic (Pub No. US 2006/0253867). Applicant respectfully traverses these rejections due to the deficiencies of the teachings of Tatsuji as set forth in detail above with respect to independent claims 11, 21 and 32.

Applicant has made a diligent effort to place the instant application in condition for allowance. Accordingly, a Notice of Allowance for claims 1-45 is respectfully requested. If the Examiner is of the opinion that the instant application is in condition for disposition other than through allowance, the Examiner is requested to contact the undersigned attorney of record at the telephone number listed below.

Respectfully submitted,

Dated: April 23, 2009



Paul D. Bangor, Jr.
Reg. No. 34,768
THORP REED & ARMSTRONG, LLP
One Oxford Centre
301 Grant Street, 14th Floor
Pittsburgh, PA 15219-1425
(412) 394-7767
Attorneys for Applicant

Electronic Acknowledgement Receipt

EFS ID:	5205962
Application Number:	11484510
International Application Number:	
Confirmation Number:	9918
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Customer Number:	24122
Filer:	Paul D. Bangor
Filer Authorized By:	
Attorney Docket Number:	DB001229-000
Receipt Date:	23-APR-2009
Filing Date:	10-JUL-2006
Time Stamp:	14:40:11
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Supplemental Response or Supplemental Amendment	00999744.PDF	558911 4d981104091c75a4b52a9c734586ccf72995d094	no	11
Warnings:					
Information:					

Total Files Size (in bytes):	558911

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New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 11/484,510	Filing Date 07/10/2006	☐ To be Mailed

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)	SMALL ENTITY ☒		OR	OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

		(Column 1)		(Column 2)	(Column 3)	SMALL ENTITY		OR	OTHER THAN SMALL ENTITY	
	04/23/2009	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
AMENDMENT	Total (37 CFR 1.16(i))	* 45	Minus	** 45	= 0	X $26 =	0	OR	X $ =	
	Independent (37 CFR 1.16(h))	* 4	Minus	***4	= 0	X $110 =	0	OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE	0	OR	TOTAL ADD'L FEE	

		(Column 1)		(Column 2)	(Column 3)					
		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
AMENDMENT	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/DORIS M. KING/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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Notice of References Cited	Application/Control No. 11/484,510	Applicant(s)/Patent Under Reexamination CAVICCHIA, MARK A.	
	Examiner JUNIOR O. MENDOZA	Art Unit 2423	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2003/0110490 A1	06-2003	Dew et al.	725/37
*	B	US-2002/0144289	10-2002	Taguchi et al.	725/112
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2423

SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
Updated EAST Text Search	5/28/2009	JM
Class 725 Plus Text Search	5/28/2009	JM
Inventor Search	5/28/2009	JM

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2423

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	08/08/2008	05/28/2009							
	1	✓	✓							
	2	✓	✓							
	3	✓	✓							
	4	✓	✓							
	5	✓	✓							
	6	✓	✓							
	7	✓	✓							
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	34	✓	✓							
	35	✓	✓							
	36	✓	✓							

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2423

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	08/08/2008	05/28/2009							
	37	✓	✓							
	38	✓	✓							
	39	✓	✓							
	40	✓	✓							
	41	✓	✓							
	42	✓	✓							
	43	✓	✓							
	44	✓	✓							
	45	✓	✓							

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	16885	"725"/$.ccls. and @ad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/29 00:07
L2	1101	L1 and (block$4 filter$5) with (location geograph$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/29 00:07
L3	503	L1 and (block$4 filter$5) NEAR4 (location geograph $6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/29 00:08
L4	49	L1 and (location with geograph$6).ab.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/29 00:22
S24	105	725/59.ccls. and @ad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/26 15:05
S25	4894	725/37-61.ccls. and @ad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/26 15:20
S26	36	S25 and (custom$8 organi$6 $3"arrang"$6) same (category) same source	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/26 15:21

S27	21	("20020053084" | "20020078457" | "20020188952" | "20040019907" | "20040034867" | "20040049787" | "20060048184" | "20060123076" | "5635989" | "5694176" | "5914746" | "6005631" | "6175362" | "6182287" | "6285414" | "6317883" | "6631523" | "6707508" | "6757691" | "6798912" | "6865246").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/26 15:29
S28	17	("6182287").URPN.	USPAT	OR	ON	2009/05/26 15:33
S29	4	("4751578" | "5253066" | "5343121" | "5526034").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/26 16:00
S30	47	("4751578" | "5253066" | "5343121" | "5526034").PN. OR ("5694176").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/26 16:00
S35	152	S25 and (custom$8 organi$6 $3"arrang"$6) near4 source	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/26 16:10
S36	40	("6133910").URPN.	USPAT	OR	ON	2009/05/26 16:22
S37	1	09/681172.app.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/26 19:59
S38	13	("4701934" | "5477262" | "5479266" | "5535430" | "5587715" | "5758259" | "5797082" | "5950127" | "6002394" | "6147642" | "6182287" | "6215483" | "6240555").PN. OR ("7231604").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/26 20:03
S39	16884	"725"/$.ccls. and @ad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/26 20:07
S40	16	S39 and (custom$8 organi$6 $3"arrang"$6 sort$4) with (category) with source	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/26 20:07

S41	694	(custom$8 organi$6 $3"arrang"$6 sort$4) with (category) with source	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/26 20:17
S42	1	(custom$8 organi$6 $3"arrang"$6 sort$4) with (category) with source with (channel near1 number) and @ad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/26 20:18
S43	9	(custom$8 organi$6 $3"arrang"$6 sort$4) with (category) with source with (channel) and @ad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/26 20:18
S44	2	("5808694" | "6336218"). PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/26 20:23
S45	41	("5808694").URPN.	USPAT	OR	ON	2009/05/26 20:24
S46	0	("7469413").URPN.	USPAT	OR	ON	2009/05/26 20:55
S47	22	("5517254" | "5550576" | "5686954" | "5751372" | "5801787" | "5808694" | "5828945" | "5883677" | "5900916" | "5982411" | "6002394" | "6023267" | "6133910" | "6144376" | "6172677" | "6239794" | "6321382" | "6348932" | "6507951" | "6526576" | "6529680" | "6600503").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/26 20:55
S48	1	"7178157".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/27 11:54
S49	1	"ep"$4"1217769"$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/28 15:57
S50	2	"ep"$4"1217769"$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/05/28 15:58

S51	16885	"725"/$.ccls. and @ad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/28 20:33
S52	1101	S51 and (block$4 filter$5) with (location geograph$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2009/05/28 20:34

5/29/2009 1:16:37 AM
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 2

Complete if Known	
Application Number	11/484,510
Filing Date	July 10, 2006
First Named Inventor	Mark A. Cavicchia
Art Unit	2623
Examiner Name	Junior O. Mendoza
Attorney Docket Number	DB001229-000

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 7,395,514	03/13/2003	Stern	
		US-			
		US-			
		US-			
		US-			
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]-Number[4]-Kind Code[5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T[6]
	1	WO 0114981 A1	01-01-2001	Audiobase Inc		

Examiner Signature	/Junior Mendoza/	Date Considered	05/29/2009

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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PTO/SB/08b (01-09)
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2 of 2

Complete if Known	
Application Number	11/484,510
Filing Date	10 July 2006
First Named Inventor	Mark A. Cavicchia
Art Unit	2623
Examiner Name	Junior O. Mendoza
Attorney Docket Number	DB001229-000

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	2	PCT "Notification of Transmittal of The International Preliminary Report on Patentability" for International Application No. PCT/US2007/015736, mailed November 3, 2008.	
	3	PCT "International Preliminary Report on Patentability" for International Application No. PCT/US2007/015736, mailed November 3, 2008.	
	4	Form PCT/ISA/220, PCT Noticfication of Transmittal of the International Search Report and the Written Opinion of the International Searching Authority, or the Declaration for International Application No. PCT/US2007/015736, mailed April 2, 2008.	
	5	PCT "International Search Report" for International Application No. PCT/2007/015736, mailed April 2, 2008.	
	6	PCT "Written Opinion of the International Searching Authority" for International Application No. PCT/US2007/015736, mailed April 2, 2008.	

Examiner Signature	/Junior Mendoza/	Date Considered	05/29/2009

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/484,510	07/10/2006	Mark A. Cavicchia	DB001229-000	9918

24122 7590 06/03/2009

THORP REED & ARMSTRONG, LLP
ONE OXFORD CENTRE
301 GRANT STREET, 14TH FLOOR
PITTSBURGH, PA 15219-1425

EXAMINER	
MENDOZA, JUNIOR O	
ART UNIT	PAPER NUMBER
2423	

MAIL DATE	DELIVERY MODE
06/03/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	11/484,510	CAVICCHIA, MARK A.	
	Examiner	Art Unit	
	JUNIOR O. MENDOZA	2423	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 April 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 11, 21 and 32 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 1 – 3, 5 – 16, 18, 20 – 26, 28, 31, 32 – 37, 39 – 41 and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tatsuji et al (Pub No US 2002/0151271) in view of Taguchi et al (Pub No US 2002/0144289). Hereinafter, referenced as Tatsuji and Taguchi, respectively.

Regarding **claim 1**, Tatsuji discloses a content manager of audio and/or video content (Paragraphs [0003] – [0006], fig 1), comprising:

a device capable of establishing and maintaining a connection with a communications link (Paragraphs [0121] [0124] fig 13; mobile comm. network 6);

an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) listing a plurality of channels (Paragraphs [0035] [0096]; electronic program guide EPG,

wherein each of the channels is selectable for receiving audio and/or video programming from one of the plurality of independent content sources via the communications link (Paragraph [0096]; user selects a program from EPG).

However, it is noted that Tatsuji fails to explicitly disclose audio and/or video content from a plurality of independent content sources; wherein the application allows for customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

Nevertheless, in a similar field of endeavor Taguchi discloses audio and/or video content from a plurality of independent content sources (Paragraph [0054] and figure 1; Web station source, web site source, TV station source, radio station source, etc);

wherein the application allows for customization of the IPG by a user with respect to an order of the listing of the channels in the IPG (Paragraphs [0072] [0075] [0077] figure 9; channel field 204).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tatsuji by specifically providing the elements mentioned above, as taught by Taguchi, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 2**, Tatsuji and Taguchi disclose the content manager of claim 1; however, it is noted that Tatsuji fails to explicitly disclose that the application allows for customization of the IPG by the user with respect to a description of each of the channels contained in the IPG and/or a first one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Taguchi discloses that the application allows for customization of the IPG by the user with respect to a description of each of the channels contained in the IPG and/or a first one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received (Paragraphs [0075]0077] figure 12; customization capabilities by categories).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tatsuji by specifically providing the elements mentioned above, as taught by Taguchi, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 3**, Tatsuji and Taguchi disclose the content manager of claim 1; moreover, Tatsuji discloses a digital rights management module that obtains viewing rights from a source (Paragraph [0033] [0148]-[0150] figure 2 and 16; user ID identifies the viewer, where the user ID is linked to a billing unit 5e).

However, it is noted that Tatsuji fails to explicitly disclose that the content is received from one or more of the plurality of independent content sources.

Nevertheless, in a similar field of endeavor Taguchi discloses that the content is received from one or more of the plurality of independent content sources (Paragraph [0054] and figure 1; Web station source, web site source, TV station source, radio station source, etc).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tatsuji by specifically providing the elements mentioned above, as taught by Taguchi, for the purpose of providing different content services in one, allowing a user to have access to different types of content using the same device.

Regarding **claim 5**, Tatsuji and Taguchi disclose the content manager of claim 1; however, it is noted that Tatsuji fails to explicitly disclose that at least one of the plurality of independent content sources comprises a multiple system operator or live television or previously recorded content accessible via the internet.

Nevertheless, in a similar field of endeavor Taguchi discloses that at least one of the plurality of independent content sources comprises a multiple system operator or

live television or previously recorded content accessible via the internet (Paragraph [0054] and figure 1; Web station source, web site source, TV station source, radio station source, etc).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tatsuji by specifically providing the elements mentioned above, as taught by Taguchi, for the purpose of providing different content services in one, allowing a user to have access to different types of content using the same device.

Regarding **claim 6**, Tatsuji and Taguchi disclose the content manager of claim 1; moreover, Tatsuji discloses a voice recognition module that accepts verbal commands and converts them to digital form (Paragraph [0053]).

Regarding **claim 7**, Tatsuji and Taguchi disclose the content manager of claim 1; moreover, Tatsuji discloses a display device (Paragraph [0032], fig 1).

Regarding **claim 8**, Tatsuji and Taguchi disclose the content manager of claim 1; moreover, Tatsuji discloses a relay module for delivering the IPG and data to a display device (Paragraph [0151], fig 1).

Regarding **claim 9**, Tatsuji and Taguchi disclose the content manager of claim 1; however, it is noted that Tatsuji fails to explicitly disclose that the interactive program

guide application allows for customization of the IPG by a user with respect to a second, redundant one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Taguchi discloses that the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received (Paragraph [0075] figure 11; customization capabilities by source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tatsuji by specifically providing the elements mentioned above, as taught by Taguchi, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 10**, Tatsuji and Taguchi disclose the content manager of claim 1; moreover, Tatsuji discloses that the communications link is the internet (Paragraph [0087] [0121]).

Regarding **claim 11**, Tatsuji discloses a content acquisition system for reception of audio and/or video content (Paragraphs [0003] – [0006], fig 1), comprising:

a device capable of establishing and maintaining a connection with a communications link (Paragraphs [0121] [0124] fig 13; mobile comm. network 6);

an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) listing a plurality of channels (Paragraphs [0035] [0096]; electronic program guide EPG),

wherein each of the channels is selectable for receiving audio and/or video programming via the communications link (Paragraph [0096]; user selects a program from EPG).

However, it is noted that Tatsuji fails to explicitly disclose receiving audio and/or video content from a plurality of independent content sources and selecting a channel for receiving audio and/or video programming from one of the plurality of independent content sources; wherein the application allows for customization of the IPG by a user with respect to (i) an order of the listing of the channels in the IPG (ii) a description of each of the channels contained in the IPG and (iii) a first one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Taguchi discloses receiving audio and/or video content from a plurality of independent content sources and selecting a channel for receiving audio and/or video programming from one of the plurality of

independent content sources (Paragraph [0054] and figures 1 and 9; Web station source, web site source, TV station source, radio station source, etc);

wherein the application allows for customization of the IPG by a user with respect to (i) an order of the listing of the channels in the IPG (Paragraph [0072] figure 9; channel field 204),

(ii) a description of each of the channels contained in the IPG (Paragraph [0077] figure 12; customization capabilities by categories)

and (iii) a first one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received (Paragraph [0075] figure 11; customization capabilities by source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tatsuji by specifically providing the elements mentioned above, as taught by Taguchi, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claims 12, 14, 15, 16 and 20,** Tatsuji and Taguchi disclose all the limitations of claims 12, 14, 15, 16 and 20; therefore, claims 12, 14, 15, 16 and 20 are rejected for the same reasons as in claims 10, 7, 3, 9 and 5, respectively.

Regarding **claim 13**, Tatsuji and Taguchi disclose the content acquisition system of claim 11; moreover, Tatsuji discloses that the data communication pathway to the communications link comprising a cellular telephone receiving and transmitting device (Paragraphs [0032] [0167]; fig 1).

Regarding **claim 18**, Tatsuji and Taguchi disclose the content acquisition system of claim 11; moreover, Tatsuji discloses a transmitter for transmitting incoming data and content to a separate viewing apparatus (Paragraphs [0099] – [0103], [0113]; fig 10).

Regarding **claims 21, 22, 24, 25, 28 and 31,** Tatsuji and Taguchi disclose all the limitations of claims 21, 22, 24, 25, 28 and 31; therefore, claims 21, 22, 24, 25, 28 and 31 are rejected for the same reasons as in claims 11, 5, 9, 18, 3 and 10, respectively.

Regarding **claim 23**, Tatsuji and Taguchi disclose the content acquisition system of claim 21; moreover, Tatsuji discloses that said program description (Paragraphs [0107]-[0108] fig 14).

However, it is noted that Tatsuji fails to explicitly disclose that said description comprises information identifying content source and/or programming summaries.

Nevertheless, in a similar field of endeavor Taguchi discloses that said description comprises information identifying content source and/or programming summaries (Paragraph [0072] figure 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tatsuji by specifically providing the elements mentioned above, as taught by Taguchi, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 26**, Tatsuji and Taguchi disclose the content acquisition system of claim 25; moreover, Tatsuji discloses automatically authenticating the user to one or more of the content sources prior to delivering the content to the device (Paragraph [0148] fig 16).

Regarding **claim 32**, Tatsuji discloses an interactive program guide application embodied on a computer readable medium for receiving and managing content comprising code segments (Paragraphs [0003] – [0006] [0035] [0126], fig 1):

a. for receiving, organizing and storing data that describes said content (Paragraphs [0107] – [0114]);

b. for presenting said data in a preferred order identified by a user (Paragraphs [0110] – [0111] fig 12);

c. for managing viewing rights for said content (Paragraphs [0033] [0148]-[0150], also exhibited on figures 2 and 16; user ID identifies the viewer where the user is connected to billing unit 5e);

and d. for ensuring user authentication to the interactive program guide application (Paragraph [0148] fig 16).

However, it is noted that Tatsuji fails to explicitly disclose receiving and managing audio and/or video content from a plurality of independent content sources.

Nevertheless, in a similar field of endeavor Taguchi discloses receiving and managing audio and/or video content from a plurality of independent content sources (Paragraph [0054] and figure 1; Web station source, web site source, TV station source, radio station source, etc).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tatsuji by specifically providing the elements mentioned above, as taught by Taguchi, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 33**, Tatsuji and Taguchi disclose the content acquisition system of claim 32; moreover, Tatsuji discloses that the data and content are delivered from a web server over a communications link to a device specified by the user (Paragraphs [0035] [0099] – [0103] [0113] [0126]; figs 10 and 14).

Regarding **claim 34**, Tatsuji and Taguchi disclose the content acquisition system of claim 32; moreover, Tatsuji discloses code segments for receiving a request for content from the user and delivering said content to a device specified by the user (Paragraphs [0099] – [0103], [0113]; fig 10).

Regarding **claim 35**, Tatsuji and Taguchi disclose the content acquisition system of claim 33; moreover, Tatsuji discloses that the data that describes the content is displayed on a first device and a request for said content is made on said first device (Paragraphs [0099] – [0103], [0113]; fig 10).

Regarding **claim 36**, Tatsuji and Taguchi disclose the content acquisition system of claim 35; moreover, Tatsuji discloses that the content requested using the first device is delivered to a second device having code segments installed for managing the reception and viewing of said content (Paragraphs [0099] – [0103], [0113]; fig 10).

Regarding **claim 37**, Tatsuji and Taguchi disclose the content acquisition system of claim 36; moreover, Tatsuji discloses that the second device is an internet-enabled television (Paragraphs [0099] – [0103], [0113]; figs 10 and 11).

Regarding **claim 39**, Tatsuji and Taguchi disclose the content acquisition system of claim 32; moreover, Tatsuji discloses code segments for synchronizing changes made by the user across all devices used to access the guide (Paragraphs [0126] – [0127]; fig 14).

Regarding **claim 40**, Tatsuji and Taguchi disclose the content acquisition system of claim 32; moreover, Tatsuji discloses code segments for enabling control over the application using a remote control device (Paragraphs [0107] – [0114]; fig 12, portable device controls the program guide).

Regarding **claims 41 and 45,** Tatsuji and Taguchi disclose all the limitations of claims 41 and 45; therefore, claims 41 and 45 are rejected for the same reasons as in claims 3 and 10, respectively.

4. **Claims 4, 19, 29, 42 and 43** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tatsuji in view of Taguchi further in view of Dew et al (Pub No US 2003/0110490). Hereinafter, referenced as Dew.

Regarding **claim 4**, Tatsuji and Taguchi disclose the content manager of claim 1; moreover, Tatsuji discloses a GPS receiver (Paragraph [0092]) and distributing content according to jurisdiction (Paragraph [0166]).

However, it is noted that Tatsuji and Taguchi fail to explicitly disclose a filtering module that blocks content according to jurisdiction.

Nevertheless, in a similar field of endeavor Dew discloses a filtering module that blocks content according to jurisdiction (Paragraphs [0008] [0018] also exhibited on figures 1 and 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tatsuji and Taguchi by specifically providing the elements mentioned above, as taught by Dew, for the purpose of targeting content effectively for users based on geographical area, such as advertisement of local business or targeted programs of interest for a specific community.

Regarding **claim 19,** Tatsuji, Potrebic and Dew disclose all the limitations of claim 19; therefore, claim 19 is rejected for the same reasons as in claim 4.

Regarding **claim 29,** Tatsuji, Potrebic and Dew disclose all the limitations of claim 29; therefore, claim 29 is rejected for the same reasons as in claims 3 and 4.

Regarding **claims 42 and 43,** Tatsuji, Potrebic and Dew disclose all the limitations of claims 42 and 43; therefore, claims 42 and 43 are rejected for the same reasons as in claim 4.

5. **Claims 17, 27, 30, 38 and 44** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tatsuji in view of Taguchi further in view of Potrebic et al. (Pub No US 2006/0253867). Hereinafter, referenced as Potrebic.

Regarding **claim 17**, Tatsuji and Taguchi disclose the content acquisition system of claim 11; however, it is noted that Tatsuji and Taguchi fail to explicitly disclose that the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG.

Nevertheless, in a similar field of endeavor Potrebic discloses that the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG (Paragraphs [0026] [0053] [0055]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tatsuji and Taguchi by specifically providing the

elements mentioned above, as taught by Potrebic, for the purpose providing the most current information to the users.

Regarding **claim 27**, Tatsuji and Taguchi disclose the method of claim 21; however, it is noted that Tatsuji fails to explicitly disclose obtaining a redundant content source for said content in the event that one of said content sources becomes unavailable while in use.

Nevertheless, in a similar field of endeavor Potrebic discloses obtaining a redundant content source for said content in the event that one of said content sources becomes unavailable while in use (Paragraph [0047]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tatsuji and Taguchi by specifically providing the elements mentioned above, as taught by Potrebic, for the purpose of decreasing the chances of a total system failure which provides reliability and stability for the users.

Regarding **claims 30 and 38,** Tatsuji, Taguchi and Potrebic disclose all the limitations of claims 30 and 38; therefore, claims 30 and 38 are rejected for the same reasons as in claim 17.

Regarding **claim 44,** Tatsuji, Taguchi and Potrebic disclose all the limitations of claim 44; therefore, claim 44 is rejected for the same reasons as in claim 27.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUNIOR O. MENDOZA whose telephone number is (571)270-3573. The examiner can normally be reached on Monday - Friday 9am - 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571)272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Junior O Mendoza
Examiner
Art Unit 2423

/J. O. M./
May 28, 2009

/Andrew Y Koenig/
Supervisory Patent Examiner, Art Unit 2423

Doc code: RCEX
Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	11/484,510	Filing Date	2006-07-10	Docket Number (if applicable)	DB001229-000	Art Unit	2423
First Named Inventor	Mark A. Cavicchia			Examiner Name	Junior O. Mendoza		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

- ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ☐ Other _____

☒ Enclosed

- ☒ Amendment/Reply
- ☐ Information Disclosure Statement (IDS)
- ☐ Affidavit(s)/ Declaration(s)
- ☒ Other Two-Month Extension of Time

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____ (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

☒ **The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**
The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 200888

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

☐ Applicant Signature

Doc code: RCEX
Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	Paul D Bangor	Date (YYYY-MM-DD)	2009-11-03
Name	Paul D. Bangor, Jr.	Registration Number	34768

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2623
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
Customer No.: 24122

To: Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE AND AMENDMENT

Sir:

In response to the Office Action of 03 June 2009, please amend the above-identified application as follows:

Amendments to the Specification; none

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 9 of this paper.

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (currently amended) A content manager of audio and/or video content from a plurality of independent content sources, comprising:

a device capable of establishing and maintaining a connection with the Internet via a communications link;

an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) listing a plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of independent content sources via the communications link and the Internet.~~, wherein the application allows for customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.~~

2. (currently amended) The content manager of claim 1, wherein the application allows for customization of the IPG by the user with respect to a description of each of the channels contained in the IPG and/or a first one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

3. (previously presented) The content manager of claim 1, further comprising a digital rights management module that obtains viewing rights from one or more of the plurality of independent content sources.

4. (previously presented) The content manager of claim 1, further comprising a GPS receiver and a filtering module that blocks content according to jurisdiction.

5. (currently amended) The content manager of claim 1, wherein at least one of the plurality of independent content sources comprises a multiple system operator or live television or previously recorded content. ~~accessible via the internet.~~

6. (previously presented) The content manager of claim 1, further comprising a voice recognition module that accepts verbal commands and converts them to digital form.

7. (previously presented) The content manager of claim 1, further comprising a display device.

8. (previously presented) The content manager of claim 1, further comprising a relay module for delivering the IPG and data to a display device.

9. (currently amended) The content manager of claim 1, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

10. (currently amended) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.~~communications link is the internet~~.

11. (currently amended) A content acquisition system for reception of audio and/or video content from a plurality of independent content sources, comprising:

a device capable establishing and maintaining a connection with the Internet via a communications link;

an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) listing a plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of independent content sources via the communications link and the Internet, wherein the application allows for customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a

first one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

12. (currently amended) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received. ~~communications link is the internet.~~

13. (previously presented) The content acquisition system of claim 11, further comprising a data communication pathway to the communications link comprising a cellular telephone receiving and transmitting device.

14. (previously presented) The content acquisition system of claim 11, wherein the device further comprises a display screen.

15. (currently amended) The content acquisition system of claim 11, wherein the interactive program guide application assists the user in obtaining and/or managing rights to receive the streaming audio and/or video programming ~~content~~ from one or more of the plurality of independent content sources.

16. (currently amended) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

17. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG.

18. (original) The content acquisition system of claim 11, further comprising a transmitter for transmitting incoming data and content to a separate viewing apparatus.

19. (previously presented) The content acquisition system of claim 11, further comprising a GPS receiver for determining the location of the device and a filter module that selectively blocks content.

20. (currently amended) The content acquisition system of claim 11, wherein at least one of the plurality of independent content sources comprises a multiple system operator or live television or previously recorded content ~~accessible via the internet~~.

21. (currently amended) A computer-implemented method for providing an interactive program guide to a user for viewing, selecting and obtaining access to audio and/or video content from a plurality of independent content sources, comprising:

displaying an interactive program guide (IPG) listing a plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of independent content sources via the Internet and a communications link~~;~~

~~allowing the user to customize the IPG with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the independent content sources to be linked to one or more of the channels from which the audio and/or video programming may be received~~.

22. (currently amended) The method of claim 21, wherein at least one of the plurality of independent content sources comprises a multiple system operator or live television or previously recorded content. ~~accessible via the internet~~

23. (currently amended) The method of claim 31~~21~~, wherein said description comprises information identifying content source and/or programming summaries.

24. (currently amended) The method of claim 31~~21~~, further comprising:

allowing the user to customize the IPG with respect to a second, redundant one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

25. (previously presented) The method of claim 21, further comprising:

delivering the content to a device specified by the user.

26. (previously presented) The method of claim 25, further comprising automatically authenticating the user to one or more of the content sources prior to delivering the content to the device.

27. (original) The method of claim 21, further comprising obtaining a redundant source for said content in the event that one of said content sources becomes unavailable while in use.

28. (currently amended) The method of claim 25, further comprising obtaining viewing rights from one or more of content sources prior to delivering said content ~~to the device~~.

29. (previously presented) The method of claim 21, further comprising filtering viewing rights from one or more of content sources in accordance with a geographical location.

30. (currently amended) The method of claim 31~~21~~, further comprising synchronizing changes made by the user to the interactive program guide in order to preserve a consistent IPG across a plurality of devices.

31. (currently amended) The method of claim 21, ~~wherein the communications link is the internet~~ further comprising allowing the user to customize the IPG with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

32. (currently amended) An interactive program guide application embodied on a computer readable medium for receiving and managing only or virtually entirely streaming audio and/or video content from a plurality of independent content sources comprising code segments:

a. for receiving, organizing and storing data that describes said content;

b. for presenting said data in a preferred order identified by a user;

c. for managing viewing rights for said content; and

d. for ensuring user authentication to the interactive program guide application.

33. (original) The interactive program guide application of claim 32, wherein the data and content are delivered from a web server over a communications link to a device specified by the user.

34. (original) The interactive program guide application of claim 32, further comprising code segments for receiving a request for content from the user and delivering said content to a device specified by the user.

35. (original) The interactive program guide application of claim 34, wherein the data that describes the content is displayed on a first device and a request for said content is made on said first device.

36. (original) The interactive program guide application of claim 35, wherein the content requested using the first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

37. (currently amended) The interactive program guide application of claim 36, wherein the second device is an ~~internet~~Internet-enabled television.

38. (original) The interactive program guide application of claim 32, further comprising code segments for providing automatic updates in order to minimize user involvement in maintaining the application.

39. (original) The interactive program guide application of claim 32, further comprising code segments for synchronizing changes made by the user across all devices used to access the guide.

40. (original) The interactive program guide application of claim 32, further comprising code segments for enabling control over the application using a remote control device.

41. (original) The interactive program guide application of claim 32, further comprising code segments for providing real-time acquisition of content viewing rights.

42. (original) The interactive program guide application of claim 32, further comprising code segments for filtering content.

43. (original) The interactive program guide application of claim 42, wherein the content is filtered based on the geographic location of the device at the time of viewing said content.

44. (original) The interactive program guide application of claim 32, further comprising code segments for obtaining redundant content in order to reduce interruptions in content delivery to the user.

45. (currently amended) The interactive program guide application of claim 33~~42~~, wherein the communications link is the ~~internet~~Internet.

Remarks/Arguments

Applicant has filed simultaneously herewith a Petition for a Two-Month Extension of Time for responding to the Office Action of June 3, 2009 (the "Office Action"), up to and including November 3, 2009.

Claims 1-45 are currently pending.

On Pages 2-14 of the Office Action, the Examiner rejected claims 1-3, 5-16, 18, 20-26, 28, 31, 32-37, 39-41 and 45 under 35 U.S.C. 103(a) as being unpatentable over Tatsuji et al. (Pub No US 2002/0151271) in view of Taguchi et al (Pub No US 2002/0144289).

On Pages 15-16 of the Office Action, the Examiner rejected claims 4, 19, 29, 42 and 43 under 35 U.S.C. 103(a) as being unpatentable over Tatsuji in view of Taguchi further in view of Dew et al (Pub No US 2003/0110490).

On Pages 16-17 of the Office Action, the Examiner rejected claims 17, 27, 30, 38 and 44 under 35 U.S.C. 103(a) as being unpatentable over Tatsuji in view of Taguchi further in view of Potrebic et al (Pub No US 2006/0253867).

Applicant respectfully traverses these rejections.

As set forth in detail below, the present invention uses a network, primarily the Internet, to extend the TV viewing experience by providing expanded viewing options via an interactive program guide application that allows users to enjoy such expanded viewing options as if they were watching traditional broadcast (ground wave), satellite or cable television in their homes in a traditional "lean back" manner, perhaps while reclining in a lounge chair. None of the systems or methods of the prior art provides the same type of "lean back" experience, particularly with respect to content delivered over a network such as the Internet. For instance, the cited Taguchi reference teaches a system that merely brings "lean forward" hunt and peck Internet browsing, albeit with a remote control, to a user's TV monitor.

None of the cited references, alone or in combination, teach or suggest an interactive program guide (IPG) listing a plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of independent content sources via a communications link and the Internet, as recited in claims 1-31 as currently amended.

Moreover, none of the cited references, alone or in combination, teach or suggest an interactive program guide application embodied on a computer readable medium for receiving and managing only or

virtually entirely streaming audio and/or video content from a plurality of independent content sources as required by claims 32-45 as currently amended.

As noted in Applicant's response to the previous office action, the Tatsuji teaches an EPG that cannot be customized by a user and that provides access only to content made available from the operator of the mobile server 5 of Tatsuji and not from a plurality of independent content sources.

While Taguchi teaches a channel table 200 that can be customized by a user, Taguchi teaches an aggregator of disparate media inputs through a web tuner 10 that provides a media type independent interface and control for receiving information, "so that the user is able to operate a single interface to receive multiple types of media" via media a control device 126 (remote control) and a channel output device 128 that can display the channel table 200. See Taguchi, paragraphs [0012], [0066] and [0072]. The main teaching of Taguchi is of hardware/software to aggregate media input from a wide variety of devices that may be found in a home or office, such as broadcast (ground wave), satellite and cable television, broadcast (ground wave) radio and the Internet. Taguchi teaches that the user can customize the input for each channel of the channel table 200 according to preference, so that the user might access a favorite radio station, broadcast (ground wave) television station or a website on the Internet depending upon the channel selected. Taguchi in no way teaches:

an interactive program guide (IPG) listing a plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of independent content sources via a communications link and the Internet as recited in claims, as recited in claim 1 as amended;

an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) listing a plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of independent content sources via the communications link and the Internet, as recited in claim 11 as amended;

the step of displaying an interactive program guide (IPG) listing a plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of independent content sources via the Internet and a communications link, as recited in claim 21 as amended; or

an interactive program guide application embodied on a computer readable medium for receiving and managing only or virtually entirely streaming audio and/or video content from a plurality of independent content sources, as recited in claim 32 as amended.

In every instance where Taguchi teaches that channel in the channel table 200 may be customized to a website, such website is always a hypertext document controlled by Hyperext Transfer Protocol (HTTP) which is an application-level protocol for distributed, collaborative, hypermedia information systems. See Taguchi, paragraphs [0007], [0008], [0013], [0025], [0063], [0070], [0074], [0075], [0093], [0094] and [0104]. Thus, Taguchi teaches a "lean forward" application with respect to media provided via the Internet since, once a user selects a channel customized to a website via channel table 200, they land a hypertext page requiring further navigation to find desired content via that webpage.

The present invention is directed to a system and method for an interactive program guide (IPG) application listing a plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of independent content sources via the public Internet so that users can enjoy an expanded TV experience as if they were watching traditional broadcast (ground wave), satellite or cable television in their homes in a traditional "lean back" manner. Thus, the present invention brings "Internet Television" or the open delivery of television content over a network such as the public Internet to users in a "lean back" manner. Neither Tatsuji nor Taguchi, alone or in combination with each other or any of the other cited references teach the systems or methods for providing customizable "lean back" Internet Television viewing experience as recited in claims 1-45 of the present application. For all of the above reasons, Applicant respectfully requests withdrawal of the rejections of claims 1-45.

Applicant has made a diligent effort to place the instant application in condition for allowance. Accordingly, a Notice of Allowance for claims 1-45 is respectfully requested. If the Examiner is of the opinion that the instant application is in condition for disposition other than through allowance, the Examiner is requested to contact the undersigned attorney of record at the telephone number listed below.

Dated: November 3, 2009

Respectfully submitted,

Paul D. Bangor, Jr.
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Electronic Patent Application Fee Transmittal

Application Number:	11484510
Filing Date:	10-Jul-2006
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Filer:	Paul D. Bangor
Attorney Docket Number:	DB001229-000

Filed as Small Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Extension - 2 months with $0 paid	2252	1	245	245

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
Request for continued examination	2801	1	405	405
		Total in USD ($)		**650**

Electronic Acknowledgement Receipt

EFS ID:	6385507
Application Number:	11484510
International Application Number:	
Confirmation Number:	9918
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Customer Number:	24122
Filer:	Paul D. Bangor
Filer Authorized By:	
Attorney Docket Number:	DB001229-000
Receipt Date:	03-NOV-2009
Filing Date:	10-JUL-2006
Time Stamp:	17:57:20
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$650
RAM confirmation Number	3897
Deposit Account	200888
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees) Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)	

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)					
File Listing:					
Document Number	**Document Description**	**File Name**	**File Size(Bytes)/ Message Digest**	**Multi Part /.zip**	**Pages (if appl.)**
1	Extension of Time	01058046.PDF	65962 bbbab6bef3dbda4308ac49afabd39f6e9b1f5223	no	1
Warnings:					
Information:					
2	Request for Continued Examination (RCE)	01058045.PDF	79258 9bd0ac0d0ac7063dd7d828f48f3f29d7bae6bf19	no	2
Warnings:					
This is not a USPTO supplied RCE SB30 form.					
Information:					
3	Amendment Submitted/Entered with Filing of CPA/RCE	01058051.PDF	504732 7740acd0c6207b1704d1b3b6d5cef9597627eaeb	no	11
Warnings:					
Information:					
4	Fee Worksheet (PTO-875)	fee-info.pdf	32130 6192019d4cc8da5d4b8202c7ed03c4d339bc4013	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	682082		

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/22 (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARMENT OF COMMERCE
Under the paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a) **FY 2009** *(Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).)*	Docket Number (Optional) DB001229-000
Application Number 11/484,510	Filed July 10, 2006
For GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE	
Art Unit 2423	Examiner Junior O. Mendoza

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

		Fee	Small Entity Fee	
☐	One month (37 CFR 1.17(a)(1))	$130	$65	$
☑	Two months (37 CFR 1.17(a)(2))	$490	$245	$ 245
☐	Three months (37 CFR 1.17(a)(3))	$1110	$555	$
☐	Four months (37 CFR 1.17(a)(4))	$1730	$865	$
☐	Five months (37 CFR 1.17(a)(5))	$2350	$1175	$

☑ Applicant claims small entity status. See 37 CFR 1.27.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☑ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 20-0888.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed (Form PTO/SB/96).

☑ attorney or agent of record. Registration Number 34,768

☐ attorney or agent under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34 _____

Paul D Bangor

Signature — 3 November 2009 — Date

Paul D. Bangor, Jr. — Typed or printed name — 412-394-7767 — Telephone Number

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☑ Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 11/484,510	Filing Date 07/10/2006	☐ To be Mailed

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)	SMALL ENTITY ☒		OR	OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

		(Column 1)		(Column 2)	(Column 3)	SMALL ENTITY		OR	OTHER THAN SMALL ENTITY	
	11/03/2009	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
AMENDMENT	Total (37 CFR 1.16(i))	* 44	Minus	** 45	= 0	X $26 =	0	OR	X $ =	
	Independent (37 CFR 1.16(h))	* 4	Minus	***4	= 0	X $110 =	0	OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE	0	OR	TOTAL ADD'L FEE	

		(Column 1)		(Column 2)	(Column 3)					
		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
AMENDMENT	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/JAMES MASON/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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Doc Code: M865 or FAI.REQ.INTV

PTOL-413A (10-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Applicant Initiated Interview Request Form

Application No.: 11/484,510 First Named Applicant: Mark A. Cavicchia
Examiner: Junior O. Mendoza Art Unit: 2423 Status of Application: RCE Filed 11/3/09

Tentative Participants:
(1) Mark A. Cavicchia (2) Paul D. Bangor, Jr.
(3) Examiner Junior O. Mendoza (4) _____

Proposed Date of Interview: November 19, 2009 **Proposed Time:** 11 AM **(AM/PM)**

Type of Interview Requested:
(1) [ ] Telephonic (2) [X] Personal (3) [ ] Video Conference

Exhibit To Be Shown or Demonstrated: [X] YES [ ] NO
If yes, provide brief description: Electronic demonstration of Applicant's Invention via Internet

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) Rej.	1-45	Tatsuji & Taguchi	[ ]	[ ]	[ ]
(2)			[ ]	[ ]	[ ]
(3)			[ ]	[ ]	[ ]
(4)			[ ]	[ ]	[ ]

[ ] Continuation Sheet Attached
[ ] Proposed Amendment or Arguments Attached
Brief Description of Arguments to be Presented:

Amendments and Arguments contained in Response and Amendment Filed on November 3, 2009

An interview was conducted on the above-identified application on _____.
NOTE: This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).
This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

Paul D Bangor Jr
Applicant/Applicant's Representative Signature

Examiner/SPE Signature

Paul D. Bangor, Jr.
Typed/Printed Name of Applicant or Representative

34,768
Registration Number, if applicable

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Acknowledgement Receipt

EFS ID:	6432428
Application Number:	11484510
International Application Number:	
Confirmation Number:	9918
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Customer Number:	24122
Filer:	Paul D. Bangor
Filer Authorized By:	
Attorney Docket Number:	DB001229-000
Receipt Date:	11-NOV-2009
Filing Date:	10-JUL-2006
Time Stamp:	12:34:44
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Letter Requesting Interview with Examiner	01060073.PDF	62181 57c8e08f15755c414448d70e68c63432a9b234fe	no	1

Warnings:

Information:

Total Files Size (in bytes):	62181

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New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/484,510	07/10/2006	Mark A. Cavicchia	DB001229-000	9918

24122 7590 11/23/2009

THORP REED & ARMSTRONG, LLP
ONE OXFORD CENTRE
301 GRANT STREET, 14TH FLOOR
PITTSBURGH, PA 15219-1425

EXAMINER	
MENDOZA, JUNIOR O	
ART UNIT	**PAPER NUMBER**
2423	

MAIL DATE	DELIVERY MODE
11/23/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Interview Summary	Application No.	Applicant(s)	
	11/484,510	CAVICCHIA, MARK A.	
	Examiner	Art Unit	
	Junior Mendoza	2423	

All participants (applicant, applicant's representative, PTO personnel):

(1) *Junior Mendoza*.

(2) *Andrew Koenig*.

(3)*Paul Bangor*.

(4)*Mark Cavicchia*.

Date of Interview: *19 November 2009*.

Type: a)☐ Telephonic b)☐ Video Conference
c)☒ Personal [copy given to: 1)☐ applicant 2)☒ applicant's representative]

Exhibit shown or demonstration conducted: d)☒ Yes e)☐ No.
If Yes, brief description: _____.

Claim(s) discussed: *Amendment filed 11/3/09*.

Identification of prior art discussed: *Tatsuji and Taguchi of record*.

Agreement with respect to the claims f)☐ was reached. g)☒ was not reached. h)☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: *The applicant demonstrated and discussed the invention with respect to receiving program listing information from a source, wherein the listing information enables a streaming connection, where the streamed content is provided from an independent/unrelated source. The examiners suggested potential claim language to help advance prosecution* .

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

/Andrew Y Koenig/
Supervisory Patent Examiner, Art Unit 2423

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

———

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2623
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
Customer No.: 24122

To: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

STATEMENT OF SUBSTANCE OF INTERVIEW

Sir:

On November 19, 2009, the applicant, Mark Cavicchia, the undersigned and Examiners Junior Mendoza and Andrew Koenig conducted a personal interview regarding the above-referenced application. The applicant, Mark Cavicchia, made a demonstration of the invention showing the receiving of interactive program guide (IPG) information from a source that enables a streaming connection where the streamed content is provided from an independent/unrelated source. The examiners suggested potential claim language to help advance prosecution. The amendments from the previously filed RCE were also discussed. No agreement was reached.

Dated: December 23, 2009

Respectfully submitted,



Paul D. Bangor, Jr.
Reg. No. 34,768
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One Oxford Centre
301 Grant Street, 14th Floor
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(412) 394-7767
Attorneys for Applicant

Electronic Acknowledgement Receipt

EFS ID:	6710774
Application Number:	11484510
International Application Number:	
Confirmation Number:	9918
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Customer Number:	24122
Filer:	Darren Wolf/Suzanne Horcick
Filer Authorized By:	Darren Wolf
Attorney Docket Number:	DB001229-000
Receipt Date:	28-DEC-2009
Filing Date:	10-JUL-2006
Time Stamp:	12:06:58
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Applicant summary of interview with examiner	01073737.PDF	35860 4d331b11f1531daaa2f0d3443b07caeb41874735	no	1
Warnings:					
Information:					

Total Files Size (in bytes):	35860

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New Applications Under 35 U.S.C. 111
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National Stage of an International Application under 35 U.S.C. 371
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New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/484,510	07/10/2006	Mark A. Cavicchia	DB001229-000	9918

24122 7590 01/22/2010

THORP REED & ARMSTRONG, LLP
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301 GRANT STREET, 14TH FLOOR
PITTSBURGH, PA 15219-1425

EXAMINER	
MENDOZA, JUNIOR O	
ART UNIT	PAPER NUMBER
2423	

MAIL DATE	DELIVERY MODE
01/22/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	11/484,510	CAVICCHIA, MARK A.	
	Examiner	Art Unit	
	JUNIOR O. MENDOZA	2423	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 November 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 July 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/03/2009 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 11, 21 and 32 have been considered but are moot in view of the new ground(s) of rejection.

Even though, the examiner disagrees with the arguments made by the applicant with respect to rejection made under Tatsuji in view of Taguchi; the examiner introduces new art and new grounds of rejection in order to advance prosecution.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. **Claims 1, 3, 5, 7 and 8** are rejected under 35 U.S.C. 102(a) as being anticipated by Herman, Tom COO of JumpTV (http://www.publicdatasystems.com/JumpTV/JumpTV.html) July 01, 2006. Hereinafter referenced as Herman.

Regarding **claim 1**, Herman discloses a content manager of audio and/or video content from a plurality of independent content sources (JumpTV), comprising:

a device capable of establishing and maintaining a connection with the Internet via a communications link (Page 1 first paragraph; computers, laptops, internet-enabled television and mobile phone connect to JumpTV network via an internet connection);

an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) listing a plurality of channels (Pages 3-16; channel listing),

wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of independent content sources (Page 1 second paragraph; TV stations from different countries) via the communications link and the Internet (Page 1 first paragraph and page 26; add channels to view in JumpTV).

Regarding **claim 3**, Herman discloses the content acquisition system of claim 11; moreover, Herman discloses a digital rights management module that obtains viewing rights from one or more of the plurality of independent content sources (Page 19, page 22; user login and registration to a specific content source for a specific user account).

Regarding **claim 5**, Herman discloses the content acquisition system of claim 1; moreover, Herman discloses that at least one of the plurality of independent content sources comprises a multiple system operator or live television or previously recorded content (Page 1 first paragraph, page 3; channels from different countries).

Regarding **claim 7**, Herman discloses the content acquisition system of claim 1; moreover, Herman discloses a display device (Page 1 first paragraph; computers, laptops, internet-enabled television and mobile phone connect to JumpTV).

Regarding **claim 8**, Herman discloses the content acquisition system of claim 1; moreover, Herman discloses a relay module for delivering the IPG and data to a display device (Pages 3-16; channel listing).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. **Claims 2, 9, 10 – 16, 18, 20 – 26, 28, 29, 31 – 35, 39 – 43 and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Mizutome et al. (Patent No US 7,469,413). Hereinafter, referenced as Mizutome.

Regarding **claim 2**, Herman discloses the content manager of claim 1; moreover, Herman discloses the interactive program guide application (see claim 1).

However, it is noted that Herman fails to explicitly disclose an application which allows for customization of the IPG by the user with respect to a description of each of the channels contained in the IPG and/or a first one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses tan application which allows for customization of the IPG by the user with respect to a description of each of the channels contained in the IPG and/or a first one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 8 lines 20-32 and lines 62-67 figure 6; customized program guide).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 9**, Herman discloses the content manager of claim 1; moreover, Herman discloses the interactive program guide application (see claim 1).

However, it is noted that Herman fails to explicitly disclose that the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses that the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 6 lines19-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 10**, Herman discloses the content manager of claim 1; moreover, Herman discloses the interactive program guide application (see claim 1).

However, it is noted that Herman fails to explicitly disclose customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

Nevertheless, in a similar field of endeavor Mizutome discloses customization of the IPG by a user with respect to an order of the listing of the channels in the IPG (Col. 8 lines 20-32 figures 5 and 20; customized guide starting at a user defined channel).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 11**, Herman discloses a content acquisition system for reception of audio and/or video content from a plurality of independent content sources (JumpTV), comprising:

a device capable establishing and maintaining a connection with the Internet via a communications link (Page 1 first paragraph; computers, laptops, internet-enabled television and mobile phone connect to JumpTV network via an internet connection);

an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) listing a plurality of channels (Pages 3-16; channel listing),

wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of independent content sources (Page 1 second paragraph; TV stations from different countries) via the communications link and the Internet (Page 1 first paragraph and page 26; add channels to view in JumpTV).

However, it is noted that Herman fails to explicitly disclose customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG (Col. 8 lines 20-32 figures 5 and 20; customized guide starting at a user defined channel),

(ii) a description of each of the channels contained in the IPG (Figures 10A and 10B;customize program guide by content genre)

and (iii) a first one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide according to source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements

mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 12**, Herman and Mizutome disclose the content acquisition system of claim 11; moreover, Herman discloses the interactive program guide application (see claim 1).

However, it is noted that Herman fails to explicitly disclose allowing for customization of an IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses allowing for customization of an IPG by a user with respect to (i) an order of the listing of the channels in the IPG (Col. 8 lines 20-32 figures 5 and 20; customized guide starting at a user defined channel),

(ii) a description of each of the channels contained in the IPG (Figures 10A and 10B;customize program guide by content genre)

and (iii) a first one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may

be received (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide according to source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 13**, Herman and Mizutome disclose the content acquisition system of claim 11; moreover, Herman discloses the data communication pathway to the communications link comprising a cellular telephone receiving and transmitting device (Page 1 first paragraph; mobile phone connect to JumpTV network via an internet connection).

Regarding **claims 14, 15, 16 and 20**, Herman and Mizutome disclose all the limitations of claims 14, 15, 16 and 20; therefore, claims 14, 15, 16 and 20 are rejected for the same reasons as in claims 7, 3, 9 and 5, respectively.

Regarding **claim 18**, Herman and Mizutome disclose the content acquisition system of claim 11; moreover, Herman discloses a transmitter (JumpTV internet network) for transmitting incoming data and content to a separate viewing apparatus

(Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claims 21, 22, 24, 25, 28 and 31**, Herman and Mizutome disclose all the limitations of claims 21, 22, 24, 25, 28 and 31; therefore, claims 21, 22, 24, 25, 28 and 31 are rejected for the same reasons as in claims 1, 5, 9, 18, 3 and 12, respectively.

Regarding **claim 23**, Herman and Mizutome disclose the method of claim 31; moreover, Herman discloses the interactive program guide application (see claim 1).

However, it is noted that Herman fails to explicitly disclose that a description comprises information identifying content source and/or programming summaries.

Nevertheless, in a similar field of endeavor Taguchi discloses that a description comprises information identifying content source and/or programming summaries (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide according to source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 26**, Herman and Mizutome disclose the method of claim 25; moreover, Herman discloses automatically authenticating the user to one or more of the content sources prior to delivering the content to the device (Page 19, page 22; user login and registration to a specific content source for a specific user account).

Regarding **claim 29**, Herman and Mizutome disclose the method of claim 21; moreover, Herman discloses filtering viewing rights from one or more of content sources in accordance with a geographical location (Page 17; see geo-custom and geoblock for a region).

Regarding **claim 32**, Herman discloses an interactive program guide application embodied on a computer readable medium for receiving and managing only or virtually streaming content comprising code segments (JumpTV):

a. for receiving, organizing and storing data that describes said content (Pages 3-16; channel listing description);

c. for managing viewing rights for said content (Page 1 first paragraph and page 26; channel and package registration).

and d. for ensuring user authentication to the interactive program guide application (Page 19, page 22; user registration and login to a user account).

However, it is noted that Herman fails to explicitly disclose b. presenting data in a preferred order identified by a user.

Nevertheless, in a similar field of endeavor Mizutome discloses b. presenting data in a preferred order identified by a user (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 33**, Herman and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses that the data and content are delivered from a web server over a communications link to a device specified by the user (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 34**, Herman and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses code segments for receiving a request for content from the user and delivering said content to a device specified by the user (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 35**, Herman and Mizutome disclose the interactive program guide application of claim 34; moreover, Herman discloses that the data that describes the content is displayed on a first device and a request for said content is made on said first device (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 39**, Herman and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses code segments for synchronizing changes made by the user across all devices used to access the guide (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access; therefore, changed made from any accessing device will be reflected on any other device used to access JumpTV in the future).

Regarding **claim 40**, Herman and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses code segments for enabling control over the application using a receiver (Page 1 first paragraph, page 38; using JumpTV from any location implementing a television).

However, it is noted that Herman fails to explicitly disclose that the receiver includes a remote control device.

Nevertheless, in a similar field of endeavor Mizutome discloses that the receiver includes a remote control device (Figure 1; remote control 116).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing the user to control the program guide from the comfort of their seat.

Regarding **claims 41 and 45**, Herman and Mizutome disclose all the limitations of claims 41 and 45; therefore, claims 41 and 45 are rejected for the same reasons as in claims 15 and 1, respectively.

Regarding **claims 42 and 43**, Herman and Mizutome disclose all the limitations of claims 42 and 43; therefore, claims 42 and 43 are rejected for the same reasons as in claim 29.

7. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Dew et al. (Pub No US 2003/0110490). Hereinafter, referenced as Dew.

Regarding **claim 4**, Herman discloses the content manager of claim 1; moreover, Herman discloses a filtering module that blocks content according to jurisdiction (Page 17; see geo-custom and geoblock for a region).

However, it is noted that Herman fails to explicitly disclose a GPS receiver.

Nevertheless, in a similar field of endeavor Dew discloses a GPS receiver (Paragraphs [0008] [0018] [0024] also exhibited on figures 1 and 2; present content exclusively according to location).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Dew, for the purpose of targeting content effectively for users based on geographical area, such as advertisement of local business or targeted programs of interest for a specific community.

8. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Contolini et al. (Patent No US 6,643,620). Hereinafter, referenced as Contolini.

Regarding **claim 6**, Herman discloses the content manager of claim 1; however, it is noted that Herman fails a voice recognition module that accepts verbal commands and converts them to digital form.

Nevertheless, in a similar field of endeavor Contolini discloses a voice recognition module that accepts verbal commands and converts them to digital form (Col. 7 lines 1-12, figure 1; voice recognition system which digitized inputted user commands).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Contolini, for the purpose of allowing a user to easily and efficiently input commands without the need of manual inputs for user satisfaction.

9. **Claims 17, 27, 30, 38 and 44** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Mizutome further in view of Potrebic et al. (Pub No US 2006/0253867). Hereinafter, referenced as Potrebic.

Regarding **claim 17**, Herman and Mizutome disclose the content acquisition system of claim 11; however, it is noted that Herman and Mizutome fail to explicitly disclose that the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG.

Nevertheless, in a similar field of endeavor Potrebic discloses that the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG (Paragraphs [0026] [0053] [0055]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Mizutome by specifically providing the elements mentioned above, as taught by Potrebic, for the purpose providing the most current information related to content line up to the users, which would prevent a discrepancy between the program guide and the actual content being presented.

Regarding **claim 27**, Herman and Mizutome disclose the method of claim 21; however, it is noted that Herman and Mizutome fail to explicitly disclose obtaining a redundant content source for said content in the event that one of said content sources becomes unavailable while in use.

Nevertheless, in a similar field of endeavor Potrebic discloses obtaining a redundant content source for said content in the event that one of said content sources becomes unavailable while in use (Paragraph [0047]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Mizutome by specifically providing the elements mentioned above, as taught by Potrebic, for the purpose of decreasing the chances of a total system failure which provides reliability and stability for the users.

Regarding **claims 30 and 38**, Herman, Mizutome and Potrebic disclose all the limitations of claims 30 and 38; therefore, claims 30 and 38 are rejected for the same reasons as in claim 17.

Regarding **claim 44**, Herman, Mizutome and Potrebic disclose all the limitations of claim 44; therefore, claim 44 is rejected for the same reasons as in claim 27.

10. **Claim 19** is rejected under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Mizutome further in view of Dew.

Regarding **claim 19**, Herman, Mizutome and Dew disclose all the limitations of claim 19; therefore, claim 19 is rejected for the same reasons as in claim 4.

11. **Claims 36 and 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Mizutome further in view of Tatsuji et al. (Pub No US 2002/0151271). Hereinafter, referenced as Tatsuji.

Regarding **claim 36**, Herman and Mizutome disclose the interactive program guide application of claim 35; moreover, Herman discloses content requested using the first device (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

However, it is noted that Herman and Mizutome fail to explicitly disclose content requested using a first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

Nevertheless, in a similar field of endeavor Tatsuji discloses content requested using a first device is delivered to a second device having code segments installed for

managing the reception and viewing of said content (Paragraphs [0099] – [0103], [0113], figure 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Mizutome by specifically providing the elements mentioned above, as taught by Tatsuji, for the purpose providing the most current information related to content line up to the users, which would prevent a discrepancy between the program guide and the actual content being presented.

Regarding **claim 37**, Herman and Mizutome disclose the interactive program guide application of claim 36; however, it is noted that Herman and Mizutome fail to explicitly disclose that the second device is an internet-enabled television.

Nevertheless, in a similar field of endeavor Tatsuji discloses that the second device is an internet-enabled television (Paragraphs [0099] – [0103], [0113], also exhibited on figures 10 and 11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Mizutome by specifically providing the elements mentioned above, as taught by Tatsuji, for the purpose providing the most current information related to content line up to the users, which would prevent a discrepancy between the program guide and the actual content being presented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUNIOR O. MENDOZA whose telephone number is (571)270-3573. The examiner can normally be reached on Monday - Friday 9am - 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571)272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Junior O Mendoza
Examiner
Art Unit 2423

/J. O. M./
January 7, 2010

/Andrew Y Koenig/
Supervisory Patent Examiner, Art Unit 2423

Notice of References Cited	Application/Control No. 11/484,510	Applicant(s)/Patent Under Reexamination CAVICCHIA, MARK A.	
	Examiner JUNIOR O. MENDOZA	Art Unit 2423	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2002/0144289 A1	10-2002	Taguchi et al.	725/112
*	B	US-6,643,620 B1	11-2003	Contolini et al.	704/270
*	C	US-7,469,413 B1	12-2008	Mizutome et al.	725/48
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Herman, Tom COO of JumpTV (http://www.publicdatasystems.com/JumpTV/ JumpTV.html) July 01, 2006.
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2423

SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
Updated EAST Text Search	1/7/2010	JM
Class 725 Plus Text Search	1/7/2010	JM
Inventor Search	1/7/2010	JM
www.google.com Search for: JumpTV Documentation	1/7/2010	JM

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2423

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	08/08/2008	05/28/2009	01/07/2010						
	1	✓	✓	✓						
	2	✓	✓	✓						
	3	✓	✓	✓						
	4	✓	✓	✓						
	5	✓	✓	✓						
	6	✓	✓	✓						
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	34	✓	✓	✓						
	35	✓	✓	✓						
	36	✓	✓	✓						

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2423

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
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	38	✓	✓	✓						
	39	✓	✓	✓						
	40	✓	✓	✓						
	41	✓	✓	✓						
	42	✓	✓	✓						
	43	✓	✓	✓						
	44	✓	✓	✓						
	45	✓	✓	✓						

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S85	13	S83 and ((voice speech) near3 recogni$6).ab. and (portable phone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2010/01/07 00:15
S84	176	S83 and (voice speech) near3 recogni$6 and (digitiz $4 (digital near2 convert $4)) and (portable phone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2010/01/07 00:11
S83	15884	"725"/$.ccls. and @ad<="20050909"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2010/01/07 00:09
S82	11	("6643620").URPN.	USPAT	OR	ON	2010/01/07 00:07
S81	17	("20010056350" | "20020052746" | "20020052746" | "20020133819" | "20020120925" | "20030028382" | "20030061039" | "20030095212" | "20030095212" | "20030167171" | "20040117852" | "20050144009" | "20050172319" | "20050204401" | "20050204401" | "20050005308" | "20080016526" | "5600775" | "6643620" | "6216267"). PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2010/01/06 23:58
S80	1	11/118093	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2010/01/06 23:52
S79	17	S78 and global near2 (ipg epg guide)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2010/01/06 12:39

S78	17489	"725"/$.ccls. and @ad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2010/01/06 12:39
S77	0	neulion$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2010/01/06 10:51
S75	0	neulion.as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2010/01/06 10:51
S71	1	"20050071323"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2010/01/06 10:16
S70	4	channer.as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2010/01/06 10:13
S69	1	jumptv	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2010/01/06 10:12
S67	2	09/388,634	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/01/05 19:23
S66	0	09/388,634.app.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/01/05 19:23
S65	0	09/377883.app.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/01/05 19:23

S64	2	09/377883	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/01/05 19:22
S63	1	WO-0114981-$.DID.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/01/05 18:06
S62	0	WO-0114981-$.DID.	US-PGPUB; USPAT; USOCR	OR	ON	2010/01/05 18:05
S61	0	PCT/US00/14015	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/01/05 18:05
S60	4	"EP"$4"367734"$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/01/05 18:03
S59	4	"EP"$4"217769"$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/01/05 18:02
S58	1	US-20060080709-$.DID.	US-PGPUB; USPAT; USOCR	OR	ON	2010/01/05 18:01

1/7/2010 3:33:53 PM
C:\Documents and Settings\jmendoza\My Documents\EAST\Workspaces\11484510 Global IPG for Cell Phone and Sending Content from Cell Phone to TV.wsp

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2423
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
Customer No.: 24122

To: Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE AND AMENDMENT

Sir:

In response to the Office Action of 22 January 2010, please amend the above-identified application as follows:

Amendments to the Specification; none

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 10 of this paper.

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (currently amended) A content manager of audio and/or video content ~~from a plurality of independent content sources~~, comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from both aggregated content sources and non-aggregated content sources;

a device capable of establishing and maintaining a connection with the network ~~Internet~~ via a communications link; and

an interactive program guide application installed on the device ~~on a machine-readable medium~~ that provides and/or displays an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from both aggregated content sources and non-aggregated content sources and descriptive program data from the server for the audio and/or video content available on each of the plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the aggregated content sources and non-aggregated ~~plurality of independent~~ content sources via the communications link and the network; and

wherein the server is distinct from each of the aggregated content sources and non-aggregated content sources. ~~Internet.~~

2. (currently amended) The content manager of claim 1, wherein the application allows for customization of the IPG by the user with respect to a description of each of the channels contained in the IPG and/or a first one of the aggregated content sources and non-aggregated ~~independent~~ content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

3. (currently amended) The content manager of claim 1, further comprising a digital rights management module that obtains viewing rights from one or more of the aggregated content sources and non-aggregated ~~plurality of independent~~ content sources.

4. (previously presented) The content manager of claim 1, further comprising a GPS receiver and a filtering module that blocks content according to jurisdiction.

5. (currently amended) The content manager of claim 1, wherein at least one of the aggregated content sources and non-aggregated ~~plurality of independent~~ content sources comprises a multiple system operator or live television or previously recorded content.

6. (previously presented) The content manager of claim 1, further comprising a voice recognition module that accepts verbal commands and converts them to digital form.

7. (previously presented) The content manager of claim 1, further comprising a display device.

8. (previously presented) The content manager of claim 1, further comprising a relay module for delivering the IPG and data to a display device.

9. (currently amended) The content manager of claim 1, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the aggregated content sources and non-aggregated ~~independent~~ content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

10. (previously presented) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

11. (currently amended) A content acquisition system for reception of audio and/or video content ~~from a plurality of independent content sources~~, comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from both aggregated content sources and non-aggregated content sources;

a device capable establishing and maintaining a connection with a network~~the Internet~~ via a communications link; and

an interactive program guide application installed on the device ~~on a machine-readable medium~~ that provides and/or displays an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from both aggregated content sources and non-aggregated and descriptive program data from the server for the audio and/or video content available on each of the plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the aggregated content sources and non-aggregated ~~plurality of independent~~ content sources via the communications link and the network; ~~Internet,~~

wherein the server is distinct from each of the aggregated content sources and non-aggregated content sources; and

wherein the application allows for customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the aggregated content sources and non-aggregated ~~independent~~ content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

12. (currently amended) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the aggregated content sources or non-aggregated ~~independent~~ content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

13. (previously presented) The content acquisition system of claim 11, further comprising a data communication pathway to the communications link comprising a cellular telephone receiving and transmitting device.

14. (previously presented) The content acquisition system of claim 11, wherein the device further comprises a display screen.

15. (currently amended) The content acquisition system of claim 11, wherein the interactive program guide application assists the user in obtaining and/or managing rights to receive the streaming audio and/or video programming from one or more of the aggregated content sources and non-aggregated ~~plurality of independent~~ content sources.

16. (currently amended) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the aggregated content sources and non-aggregated ~~independent~~ content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

17. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG.

18. (original) The content acquisition system of claim 11, further comprising a transmitter for transmitting incoming data and content to a separate viewing apparatus.

19. (previously presented) The content acquisition system of claim 11, further comprising a GPS receiver for determining the location of the device and a filter module that selectively blocks content.

20. (currently amended) The content acquisition system of claim 11, wherein at least one of the aggregated content sources and non-aggregated ~~plurality of independent~~ content sources comprises a multiple system operator or live television or previously recorded content.

21. (currently amended) A computer-implemented method for providing an interactive program guide to a user for viewing, selecting and obtaining access to audio and/or video content from both aggregated content sources and non-aggregated ~~a plurality of independent~~ content sources, comprising:

displaying an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from both aggregated content sources and non-aggregated content sources, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video

programming from one of the aggregated content sources and non-aggregated ~~plurality of independent~~ content sources via a network ~~the Internet~~ and a communications link~~;~~

providing descriptive program data for the audio and/or video content available on each of the plurality of channels from a server to the IPG via the network, wherein the server is distinct from each of the aggregated content sources and non-aggregated content sources; and

allowing the user to customize the IPG with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the aggregated content sources and non-aggregated content sources to be linked to one or more of the channels from which the audio and/or video programming may be received.

22. (currently amended) The method of claim 21, wherein at least one of the aggregated content sources and non-aggregated ~~plurality of independent~~ content sources comprises a multiple system operator or live television or previously recorded content.

23. (currently amended) The method of claim ~~31~~21, wherein said description comprises information identifying content source and/or programming summaries.

24. (currently amended) The method of claim ~~31~~21, further comprising:

allowing the user to customize the IPG with respect to a second, redundant one of the aggregated content sources and non-aggregated ~~independent~~ content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

25. (previously presented) The method of claim 21, further comprising:

delivering the content to a device specified by the user.

26. (previously presented) The method of claim 25, further comprising automatically authenticating the user to one or more of the content sources prior to delivering the content to the device.

27. (original) The method of claim 21, further comprising obtaining a redundant source for said content in the event that one of said content sources becomes unavailable while in use.

28. (previously presented) The method of claim 25, further comprising obtaining viewing rights from one or more of content sources prior to delivering said content.

29. (previously presented) The method of claim 21, further comprising filtering viewing rights from one or more of content sources in accordance with a geographical location.

30. (currently amended) The method of claim ~~31~~21, further comprising synchronizing changes made by the user to the interactive program guide in order to preserve a consistent IPG across a plurality of devices.

31. (currently amended) The method of claim 21, wherein the network is the Internet. ~~further comprising allowing the user to customize the IPG with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.~~

32. (currently amended) An interactive program guide application embodied on a computer readable medium for receiving and managing only or virtually entirely streaming audio and/or video content from a plurality of aggregated content sources and non-aggregated ~~independent~~ content sources comprising code segments:

a. for receiving~~, organizing and storing~~ data that describes said content from a server on a network;

b. for presenting said data in a preferred order identified by a user;

c. for managing viewing rights for said content; ~~and~~

d. for ensuring user authentication to the interactive program guide application; and

e. for receiving said content from both aggregated content sources and non-aggregated content sources, wherein the server is distinct from each of the aggregated content sources and non-aggregated content sources.

33. (currently amended) The interactive program guide application of claim 32, wherein the data and content are delivered ~~from a web server~~ over a communications link to a device specified by the user.

34. (original) The interactive program guide application of claim 32, further comprising code segments for receiving a request for content from the user and delivering said content to a device specified by the user.

35. (original) The interactive program guide application of claim 34, wherein the data that describes the content is displayed on a first device and a request for said content is made on said first device.

36. (original) The interactive program guide application of claim 35, wherein the content requested using the first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

37. (previously presented) The interactive program guide application of claim 36, wherein the second device is an Internet-enabled television.

38. (original) The interactive program guide application of claim 32, further comprising code segments for providing automatic updates in order to minimize user involvement in maintaining the application.

39. (original) The interactive program guide application of claim 32, further comprising code segments for synchronizing changes made by the user across all devices used to access the guide.

40. (original) The interactive program guide application of claim 32, further comprising code segments for enabling control over the application using a remote control device.

41. (original) The interactive program guide application of claim 32, further comprising code segments for providing real-time acquisition of content viewing rights.

42. (original) The interactive program guide application of claim 32, further comprising code segments for filtering content.

43. (original) The interactive program guide application of claim 42, wherein the content is filtered based on the geographic location of the device at the time of viewing said content.

44. (original) The interactive program guide application of claim 32, further comprising code segments for obtaining redundant content in order to reduce interruptions in content delivery to the user.

45. (currently amended) The interactive program guide application of claim 32~~-33~~, wherein the network ~~communications link~~ is the Internet.

Remarks/Arguments

Claims 1-45 are currently pending.

On Pages 3-4 of the Office Action, the Examiner rejected claims 1, 3, 5, 7 and 8 under 35 U.S.C. 102(a) as being anticipated by Herman, Tom COO of JumpTV (http://www.publidatasystems.com/JumpTV/JumpTV.html) July 01, 2006 ("Herman"). Applicant respectfully traverses these rejections. JumpTV is the same as a traditional cable multi-service operator (MSO) using a different pipe – Internet vs. coaxial cable. JumpTV's system has complete control over what content customers can or cannot access. A JumpTV customer cannot add private or non-aggregated channels to the IPG to be viewed using the content manager. A JumpTV customer cannot access channels that do not pass through JumpTV's headend. Therefore, Herman merely teaches a typical closed, aggregated content source or MSO which does not allow users to customize the IPG with respect to obtaining content from aggregated content sources (like Cablevision, TimeWarner Cable, Comcast, etc.) and non-aggregated content sources (like TRT-1 Turkey: mms://95.0.159.131/TV1, Fox 11 Los Angeles: http://mfile.akamai.com/23073/live/reflector:34194.asx, RAI News 24: http://mediapolis.rai.it/relinker/relinkerServlet.htm?cont=1, etc.) alike. Moreover, Herman does not teach the content manager of claim 1 wherein the descriptive program data is obtained from a source distinct from the aggregated content sources and non-aggregated content sources. For these reasons, claims 1, 3, 5, 7 and 8 clearly are not anticipated by Herman under 35 U.S.C. 102(a).

On Pages 4-15 of the Office Action, the Examiner rejected claims 2, 9, 10-16, 18, 20-26, 28, 29, 31-35, 39-43 and 45 under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Mizutome et al. (Patent No. US 7,469,413). Applicant respectfully traverses these rejections. As set forth above, Herman merely teaches a typical closed, aggregated content source or MSO which does not allow users to customize the IPG with respect to obtaining content from aggregated content sources and non-aggregated content sources as recited in the content manager of each of the independent claims 1, 11, 21 and 32. Moreover, Herman does not teach the content manager of independent claims 1, 11, 21 and 32 wherein the descriptive program data is obtained from a source distinct from the aggregated content sources and non-aggregated content sources. Based upon these deficiencies in the teachings of Herman, the combination of Herman in view of Mizutome et al., clearly fails to render claims 2, 9, 10-16, 18, 20-26, 28, 29, 31-35, 39-43 and 45 unpatentable under 35 U.S.C. 103(a).

On Page 15 of the Office Action, the Examiner rejects claim 4 under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Dew et al. (Pub No US 2003/0110490). Applicant respectfully traverses this rejection. As set forth above, Herman merely teaches a typical closed, aggregated content

source or MSO which does not allow users to customize the IPG with respect to obtaining content from aggregated content sources and non-aggregated content sources as recited in the content manager of independent claim 1. Moreover, Herman does not teach the content manager of claim 1 wherein the descriptive program data is obtained from a source distinct from the aggregated content sources and non-aggregated content sources. Based upon these deficiencies in the teachings of Herman, the combination of Herman in view of Dew et al., clearly fails to render claim 4 unpatentable under 35 U.S.C. 103(a).

On Pages 16-19 of the Office Action, the Examiner rejects claim 6 under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Contolini et al. (Patent No US 6,643,620). Applicant respectfully traverses this rejection. As set forth above, Herman merely teaches a typical closed, aggregated content source or multiple system operator which does not allow users to customize the IPG with respect to obtaining content from aggregated content sources and non-aggregated content sources as recited in the content manager of independent claim 1. Moreover, Herman does not teach the content manager of claim 1 wherein the descriptive program data is obtained from a source distinct from the aggregated content sources and non-aggregated content sources. Based upon these deficiencies in the teachings of Herman, the combination of Herman in view of Contolini et al., clearly fails to render claim 6 unpatentable under 35 U.S.C. 103(a).

On Pages 17-19 of the Office Action, the Examiner rejects claims 17, 27, 30, 38 and 44 under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Mizutome further in view of Potrebic et al. (Pub No US 2006/0253867). Applicant respectfully traverses this rejection. As set forth above, Herman merely teaches a typical closed, aggregated content source or multiple system operator which does not allow users to customize the IPG with respect to obtaining content from aggregated content sources and non-aggregated content sources as recited in the content manager of each of independent claims 11, 21 and 32. Moreover, Herman does not teach the content manager of claims 11, 21 and 32 wherein the descriptive program data is obtained from a source distinct from the aggregated content sources and non-aggregated content sources. Based upon these deficiencies in the teachings of Herman, the combination of Herman in view of Mizutome further in view of Potrebic et al., clearly fails to render claims 17, 27, 30, 38 and 44 unpatentable under 35 U.S.C. 103(a).

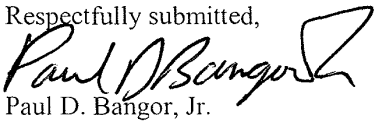
On Pages 19-20 of the Office Action, the Examiner rejects claims 36 and 37 under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Mizutome further in view of Tatsuji et al. (Pub No US 2002/0151271). Applicant respectfully traverses this rejection. As set forth above, Herman merely teaches a typical closed, aggregated content source or multiple system operator which does not allow users to customize the IPG with respect to obtaining content from aggregated content sources and non-aggregated content sources as recited in the content manager of independent claim32. Moreover, Herman

does not teach the content manager of claim 32 wherein the descriptive program data is obtained from a source distinct from the aggregated content sources and non-aggregated content sources. Based upon these deficiencies in the teachings of Herman, the combination of Herman in view of Mizutome further in view of Tatsuji et al., clearly fails to render claims 36 and 37 unpatentable under 35 U.S.C. 103(a).

Applicant has made a diligent effort to place the instant application in condition for allowance. Accordingly, a Notice of Allowance for claims 1-45 is respectfully requested. If the Examiner is of the opinion that the instant application is in condition for disposition other than through allowance, the Examiner is requested to contact the undersigned attorney of record at the telephone number listed below.

Dated: April 22, 2010

Respectfully submitted,



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Electronic Acknowledgement Receipt

EFS ID:	7471154
Application Number:	11484510
International Application Number:	
Confirmation Number:	9918
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Customer Number:	24122
Filer:	Paul D. Bangor
Filer Authorized By:	
Attorney Docket Number:	DB001229-000
Receipt Date:	22-APR-2010
Filing Date:	10-JUL-2006
Time Stamp:	18:16:47
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Amendment/Req. Reconsideration-After Non-Final Reject	01110139.PDF	541535 22fe7840f37ff76701c2948baf9b636183b20f17	no	12

Warnings:	
Information:	

Total Files Size (in bytes):	541535

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	☒ To be Mailed
11/484,510	07/10/2006	

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)	SMALL ENTITY ☒		OR	OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	04/22/2010	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 45	Minus	** 45	= 0	X $26 =	0	OR	X $ =	
	Independent (37 CFR 1.16(h))	* 4	Minus	***4	= 0	X $110 =	0	OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE	0	OR	TOTAL ADD'L FEE	

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)	OR	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/NICHELE PETERSON/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/484,510	07/10/2006	Mark A. Cavicchia	DB001229-000	9918

24122 7590 07/06/2010

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EXAMINER	
MENDOZA, JUNIOR O	
ART UNIT	PAPER NUMBER
2423	

MAIL DATE	DELIVERY MODE
07/06/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	11/484,510	CAVICCHIA, MARK A.	
	Examiner	Art Unit	
	JUNIOR O. MENDOZA	2423	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 April 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 04/22/2010 have been fully considered but they are not persuasive.

Regarding **claims 1, 11, 21 and 32**, applicant argues that Herman does not teach "aggregated content sources and non-aggregated content sources".

However, the examiner respectfully disagrees with the applicant. Herman clearly discloses a JumpTV online system where the interface includes a JumpTV channel listing, as shown on pages 1-3. Furthermore, the JumpTV channels listing consists of content packages, e.g. Arabic package (aggregated content) and individual channels sources, e.g. Al Jazeera (non-aggregated content), which allows the user to select desired content, see page 3. Therefore, Herman clearly discloses "aggregated content sources and non-aggregated content sources".

Claim Objections

2. **Claim 11** is objected to because of the following informalities: the examiner suggest changing "…from both aggregated content sources and non aggregated and descriptive program data from the server…" to "…from both aggregated content sources and non aggregated content sources and descriptive program data from the server…" in page 4 lines 3-4 in order to avoid any confusion.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. **Claims 1, 3, 5, 7 and 8** are rejected under 35 U.S.C. 102(a) as being anticipated by Herman, Tom COO of JumpTV (http://www.publicdatasystems.com/JumpTV/JumpTV.html) July 01, 2006. Hereinafter referenced as Herman.

Regarding **claim 1**, Herman discloses a content manager of audio and/or video content (JumpTV), comprising:

a server resident on a network (JumpTV online network) containing descriptive program data (channel title and information) about the audio and/or video content available (JumpTV channel Listing) from both aggregated content sources (content packages, e.g. Arabic package) and non-aggregated content (individual channels, e.g. Al Jazeera) sources (Pages 1, 3 and 18; JumpTV offers aggregated content or package of channels, and non-aggregated content or individual channels);

a device capable of establishing and maintaining a connection with the network via a communications link (Page 1 first paragraph; computers, laptops, internet-enabled television and mobile phone connect to JumpTV network via an internet connection);

and an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) (JumpTV channel Listing) listing a plurality of channels of audio and/or video content available from both aggregated content sources (content packages, e.g. Arabic package) and non-aggregated content sources (individual channels, e.g. Al Jazeera) and descriptive program data (channel title and information) from the server (JumpTV online network) for the audio and/or video content available on each of the plurality of channels (Pages 3-16; channel listing),

wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the aggregated content sources and non-aggregated content sources (Page 1 second paragraph; TV stations from different countries) via the communications link and the network (Page 1 first paragraph and page 26; add channels to view in JumpTV);

and wherein the server is distinct from each of the aggregated content sources and non-aggregated content sources (Pages 1 and 18; JumpTV online network containing streaming and relaying servers).

Regarding **claim 3**, Herman discloses the content acquisition system of claim 11; moreover, Herman discloses a digital rights management module that obtains viewing rights from one or more of the aggregated content sources and non-aggregated content

sources (Page 19, page 22; user login and registration to a specific content source for a specific user account).

Regarding **claim 5**, Herman discloses the content acquisition system of claim 1; moreover, Herman discloses that at least one of the aggregated content sources and non-aggregated content sources comprises a multiple system operator or live television or previously recorded content (Page 1 first paragraph, page 3; channels from different countries).

Regarding **claim 7**, Herman discloses the content acquisition system of claim 1; moreover, Herman discloses a display device (Page 1 first paragraph; computers, laptops, internet-enabled television and mobile phone connect to JumpTV).

Regarding **claim 8**, Herman discloses the content acquisition system of claim 1; moreover, Herman discloses a relay module for delivering the IPG and data to a display device (Pages 3-16; channel listing).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. **Claims 2, 9, 10 – 16, 18, 20 – 26, 28, 29, 31 – 35, 39 – 43 and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Mizutome et al. (Patent No US 7,469,413). Hereinafter, referenced as Mizutome.

Regarding **claim 2**, Herman discloses the content manager of claim 1; moreover, Herman discloses description of each of the channels contained in the IPG (JumpTV channel Listing) and/or a aggregated content sources (content packages, e.g. Arabic package) and non-aggregated content sources (individual channels, e.g. Al Jazeera) to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Page 1). Furthermore, Herman discloses customizing of the interface (Page 17; geo-custom).

However, it is noted that Herman is silent to explicitly disclose an application which allows for customization of the IPG by the user with respect to a description of each of the channels contained in the IPG and/or a first one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses tan application which allows for customization of the IPG by the user with respect to a description of each of the channels contained in the IPG and/or a first one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 8 lines 20-32 and lines 62-67 figure 6; customized program guide).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 9**, Herman discloses the content manager of claim 1; moreover, Herman discloses description of each of the channels contained in the IPG (JumpTV channel Listing) and/or a aggregated content sources (content packages, e.g. Arabic package) and non-aggregated content sources (individual channels, e.g. Al Jazeera) to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Page 1). Furthermore, Herman discloses customizing of the interface (Page 17; geo-custom).

However, it is noted that Herman fails to explicitly disclose that the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses that the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the independent content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 6 lines19-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 10**, Herman discloses the content manager of claim 1; moreover, Herman discloses the interactive program guide application (see claim 1).

However, it is noted that Herman fails to explicitly disclose customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

Nevertheless, in a similar field of endeavor Mizutome discloses customization of the IPG by a user with respect to an order of the listing of the channels in the IPG (Col. 8 lines 20-32 figures 5 and 20; customized guide starting at a user defined channel).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 11**, Herman discloses a content acquisition system for reception of audio and/or video content (JumpTV), comprising:

a server resident on a network (JumpTV online network) containing descriptive program data (channel title and information) about the audio and/or video content available (JumpTV channel Listing) from both aggregated content sources (content packages, e.g. Arabic package) and non-aggregated content (individual channels, e.g. Al Jazeera) sources (Pages 1, 3 and 18; JumpTV offers aggregated content or package of channels, and non-aggregated content or individual channels);

a device capable of establishing and maintaining a connection with the network via a communications link (Page 1 first paragraph; computers, laptops, internet-enabled television and mobile phone connect to JumpTV network via an internet connection);

and an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) (JumpTV channel Listing) listing a plurality of channels of audio and/or video content available from both aggregated content sources (content packages, e.g. Arabic package) and non-aggregated content sources (individual channels, e.g. Al Jazeera) and descriptive program data (channel title and information) from the server (JumpTV online network) for the audio and/or video content available on each of the plurality of channels (Pages 3-16; channel listing),

wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the aggregated content sources and non-aggregated content sources (Page 1 second paragraph; TV stations from different countries) via the communications link and the network (Page 1 first paragraph and page 26; add channels to view in JumpTV);

and wherein the server is distinct from each of the aggregated content sources and non-aggregated content sources (Pages 1 and 18; JumpTV online network containing streaming and relaying servers).

However, it is noted that Herman fails to explicitly disclose customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG (Col. 8 lines 20-32 figures 5 and 20; customized guide starting at a user defined channel),

(ii) a description of each of the channels contained in the IPG (Figures 10A and 10B;customize program guide by content genre)

and (iii) a first one of content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide according to source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 12**, Herman and Mizutome disclose the content acquisition system of claim 11; moreover, Herman discloses description of each of the channels contained in the IPG (JumpTV channel Listing) and/or a aggregated content sources (content packages, e.g. Arabic package) and non-aggregated content sources (individual channels, e.g. Al Jazeera) to be linked to one or more of the channels from

which the streaming audio and/or video programming may be received (Page 1). Furthermore, Herman discloses customizing of the interface (Page 17; geo-custom).

However, it is noted that Herman fails to explicitly disclose allowing for customization of an IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses allowing for customization of an IPG by a user with respect to (i) an order of the listing of the channels in the IPG (Col. 8 lines 20-32 figures 5 and 20; customized guide starting at a user defined channel),

(ii) a description of each of the channels contained in the IPG (Figures 10A and 10B;customize program guide by content genre)

and (iii) a first one of the content sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide according to source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 13**, Herman and Mizutome disclose the content acquisition system of claim 11; moreover, Herman discloses the data communication pathway to the communications link comprising a cellular telephone receiving and transmitting device (Page 1 first paragraph; mobile phone connect to JumpTV network via an internet connection).

Regarding **claims 14, 15, 16 and 20**, Herman and Mizutome disclose all the limitations of claims 14, 15, 16 and 20; therefore, claims 14, 15, 16 and 20 are rejected for the same reasons as in claims 7, 3, 9 and 5, respectively.

Regarding **claim 18**, Herman and Mizutome disclose the content acquisition system of claim 11; moreover, Herman discloses a transmitter (JumpTV internet network) for transmitting incoming data and content to a separate viewing apparatus (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 21**, Herman and Mizutome disclose all the limitations of claim 21; therefore, claim 21 is rejected for the same reasons as in claims 11 and 12.

Regarding **claims 22, 24, 25 and 28**, Herman and Mizutome disclose all the limitations of claims 22, 24, 25 and 28; therefore, claims 22, 24, 25 and 28 are rejected for the same reasons as in claims 5, 9, 18 and 3, respectively.

Regarding **claim 31**, Herman and Mizutome disclose the method of claim 21; moreover, Herman discloses that the network is the Internet (Page 1 first paragraph; computers, laptops, internet-anabled television and mobile phone connect to JumpTV network via an internet connection).

Regarding **claim 23**, Herman and Mizutome disclose the method of claim 21; moreover, Herman discloses the interactive program guide application (see claim 1) and a more information link about a content source (see page 3).

However, it is noted that Herman is silent to explicitly disclose that a description comprises information identifying content source and/or programming summaries.

Nevertheless, in a similar field of endeavor Taguchi discloses that a description comprises information identifying content source and/or programming summaries (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide according to source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a

more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 26**, Herman and Mizutome disclose the method of claim 25; moreover, Herman discloses automatically authenticating the user to one or more of the content sources prior to delivering the content to the device (Page 19, page 22; user login and registration to a specific content source for a specific user account).

Regarding **claim 29**, Herman and Mizutome disclose the method of claim 21; moreover, Herman discloses filtering viewing rights from one or more of content sources in accordance with a geographical location (Page 17; see geo-custom and geoblock for a region).

Regarding **claim 32**, Herman discloses an interactive program guide application embodied on a computer readable medium for receiving and managing only or virtually streaming content from a plurality of aggregated content sources (content packages, e.g. Arabic package) and non-aggregated content sources (individual channels, e.g. Al Jazeera) comprising code segments (JumpTV):

a. for receiving, organizing and storing data that describes said content (Pages 3-16; channel listing description);

c. for managing viewing rights for said content (Page 1 first paragraph and page 26; channel and package registration).

d. for ensuring user authentication to the interactive program guide application (Page 19, page 22; user registration and login to a user account).

e. for receiving said content from both aggregated content sources (content packages, e.g. Arabic package) and non-aggregated content sources (individual channels, e.g. Al Jazeera), wherein the server is distinct from each of the aggregated content sources and non-aggregated content sources (Pages 1 and 18; JumpTV online network containing streaming and relaying servers).

However, it is noted that Herman fails to explicitly disclose b. presenting data in a preferred order identified by a user.

Nevertheless, in a similar field of endeavor Mizutome discloses b. presenting data in a preferred order identified by a user (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 33**, Herman and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses that the data and content are delivered over a communications link to a device specified by the user (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 34**, Herman and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses code segments for receiving a request for content from the user and delivering said content to a device specified by the user (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 35**, Herman and Mizutome disclose the interactive program guide application of claim 34; moreover, Herman discloses that the data that describes the content is displayed on a first device and a request for said content is made on said first device (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 39**, Herman and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses code segments for

synchronizing changes made by the user across all devices used to access the guide (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access; therefore, changed made from any accessing device will be reflected on any other device used to access JumpTV in the future).

Regarding **claim 40**, Herman and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses code segments for enabling control over the application using a receiver (Page 1 first paragraph, page 38; using JumpTV from any location implementing a television).

However, it is noted that Herman fails to explicitly disclose that the receiver includes a remote control device.

Nevertheless, in a similar field of endeavor Mizutome discloses that the receiver includes a remote control device (Figure 1; remote control 116).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing the user to control the program guide from the comfort of their seat.

Regarding **claims 41 and 45**, Herman and Mizutome disclose all the limitations of claims 41 and 45; therefore, claims 41 and 45 are rejected for the same reasons as in claims 15 and 31, respectively.

Regarding **claims 42 and 43**, Herman and Mizutome disclose all the limitations of claims 42 and 43; therefore, claims 42 and 43 are rejected for the same reasons as in claim 29.

7. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Dew et al. (Pub No US 2003/0110490). Hereinafter, referenced as Dew.

Regarding **claim 4**, Herman discloses the content manager of claim 1; moreover, Herman discloses a filtering module that blocks content according to jurisdiction (Page 17; see geo-custom and geoblock for a region).

However, it is noted that Herman fails to explicitly disclose a GPS receiver.

Nevertheless, in a similar field of endeavor Dew discloses a GPS receiver (Paragraphs [0008] [0018] [0024] also exhibited on figures 1 and 2; present content exclusively according to location).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Dew, for the purpose of targeting content effectively for users based on geographical area, such as advertisement of local business or targeted programs of interest for a specific community.

8. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Contolini et al. (Patent No US 6,643,620). Hereinafter, referenced as Contolini.

Regarding **claim 6**, Herman discloses the content manager of claim 1; however, it is noted that Herman fails a voice recognition module that accepts verbal commands and converts them to digital form.

Nevertheless, in a similar field of endeavor Contolini discloses a voice recognition module that accepts verbal commands and converts them to digital form (Col. 7 lines 1-12, figure 1; voice recognition system which digitized inputted user commands).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Contolini, for the purpose of allowing a user to easily and efficiently input commands without the need of manual inputs for user satisfaction.

9. **Claims 17, 27, 30, 38 and 44** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Mizutome further in view of Potrebic et al. (Pub No US 2006/0253867). Hereinafter, referenced as Potrebic.

Regarding **claim 17**, Herman and Mizutome disclose the content acquisition system of claim 11; however, it is noted that Herman and Mizutome fail to explicitly disclose that the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG.

Nevertheless, in a similar field of endeavor Potrebic discloses that the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG (Paragraphs [0026] [0053] [0055]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Mizutome by specifically providing the elements mentioned above, as taught by Potrebic, for the purpose providing the most current information related to content line up to the users, which would prevent a discrepancy between the program guide and the actual content being presented.

Regarding **claim 27**, Herman and Mizutome disclose the method of claim 21; however, it is noted that Herman and Mizutome fail to explicitly disclose obtaining a redundant content source for said content in the event that one of said content sources becomes unavailable while in use.

Nevertheless, in a similar field of endeavor Potrebic discloses obtaining a redundant content source for said content in the event that one of said content sources becomes unavailable while in use (Paragraph [0047]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Mizutome by specifically providing

the elements mentioned above, as taught by Potrebic, for the purpose of decreasing the chances of a total system failure which provides reliability and stability for the users.

Regarding **claims 30 and 38**, Herman, Mizutome and Potrebic disclose all the limitations of claims 30 and 38; therefore, claims 30 and 38 are rejected for the same reasons as in claim 17.

Regarding **claim 44**, Herman, Mizutome and Potrebic disclose all the limitations of claim 44; therefore, claim 44 is rejected for the same reasons as in claim 27.

10. **Claim 19** is rejected under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Mizutome further in view of Dew.

Regarding **claim 19**, Herman, Mizutome and Dew disclose all the limitations of claim 19; therefore, claim 19 is rejected for the same reasons as in claim 4.

11. **Claims 36 and 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Mizutome further in view of Tatsuji et al. (Pub No US 2002/0151271). Hereinafter, referenced as Tatsuji.

Regarding **claim 36**, Herman and Mizutome disclose the interactive program guide application of claim 35; moreover, Herman discloses content requested using the first device (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

However, it is noted that Herman and Mizutome fail to explicitly disclose content requested using a first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

Nevertheless, in a similar field of endeavor Tatsuji discloses content requested using a first device is delivered to a second device having code segments installed for managing the reception and viewing of said content (Paragraphs [0099] – [0103], [0113], figure 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Mizutome by specifically providing the elements mentioned above, as taught by Tatsuji, for the purpose providing the most current information related to content line up to the users, which would prevent a discrepancy between the program guide and the actual content being presented.

Regarding **claim 37**, Herman and Mizutome disclose the interactive program guide application of claim 36; however, it is noted that Herman and Mizutome fail to explicitly disclose that the second device is an internet-enabled television.

Nevertheless, in a similar field of endeavor Tatsuji discloses that the second device is an internet-enabled television (Paragraphs [0099] – [0103], [0113], also exhibited on figures 10 and 11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Mizutome by specifically providing the elements mentioned above, as taught by Tatsuji, for the purpose providing the most current information related to content line up to the users, which would prevent a discrepancy between the program guide and the actual content being presented.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUNIOR O. MENDOZA whose telephone number is (571)270-3573. The examiner can normally be reached on Monday - Friday 9am - 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571)272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Junior O Mendoza
Examiner
Art Unit 2423

/J. O. M./
June 30, 2010

/Andrew Y Koenig/
Supervisory Patent Examiner, Art Unit 2423

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2423

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	08/08/2008	05/28/2009	01/07/2010	06/29/2010					
	1	✓	✓	✓	✓					
	2	✓	✓	✓	✓					
	3	✓	✓	✓	✓					
	4	✓	✓	✓	✓					
	5	✓	✓	✓	✓					
	6	✓	✓	✓	✓					
	7	✓	✓	✓	✓					
	8	✓	✓	✓	✓					
	9	✓	✓	✓	✓					
	10	✓	✓	✓	✓					
	11	✓	✓	✓	✓					
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	30	✓	✓	✓	✓					
	31	✓	✓	✓	✓					
	32	✓	✓	✓	✓					
	33	✓	✓	✓	✓					
	34	✓	✓	✓	✓					
	35	✓	✓	✓	✓					
	36	✓	✓	✓	✓					

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✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	08/08/2008	05/28/2009	01/07/2010	06/29/2010					
	37	✓	✓	✓	✓					
	38	✓	✓	✓	✓					
	39	✓	✓	✓	✓					
	40	✓	✓	✓	✓					
	41	✓	✓	✓	✓					
	42	✓	✓	✓	✓					
	43	✓	✓	✓	✓					
	44	✓	✓	✓	✓					
	45	✓	✓	✓	✓					

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2423

SEARCHED			
Class	Subclass	Date	Examiner
725	59	6/29/2010	JM

SEARCH NOTES		
Search Notes	Date	Examiner
Updated EAST Text Search	6/29/2010	JM
Class 725 Plus Text Search	6/29/2010	JM
Inventor Search	6/29/2010	JM
www.google.com Search for: JumpTV Documentation	1/7/2010	JM

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L3	6	CAVICCHIA.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2010/06/29 21:57
L2	1	11/484510	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2010/06/29 21:57
S91	122	"725"/59.ccls. and @ad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2010/06/29 19:54
S90	26	S87 and S89	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2010/06/29 19:49
S89	18014	"725"/$.ccls. and @ad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2010/06/29 19:49
S87	1181	aggregat$5 near3 (source server channel) same (customiz$4 sort$4 filter$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2010/06/29 19:48
S86	1	12/652178	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2010/06/29 19:41

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IPG for Cell Phone and Sending Content from Cell Phone to TV.wsp

Doc code: RCEX
Doc description: Request for Continued Examination (RCE)

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REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	11/484,510	Filing Date	2006-07-10	Docket Number (if applicable)	DB001229-000	Art Unit	2423
First Named Inventor	Mark A. Cavicchia			Examiner Name	Junior O. Mendoza		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____

☐ Other _____

☒ Enclosed

☒ Amendment/Reply

☐ Information Disclosure Statement (IDS)

☐ Affidavit(s)/ Declaration(s)

☒ Other 3 Month Extension of Time

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____ (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

☒ **The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**
The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 200888

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

☐ Applicant Signature

Doc code: RCEX
Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)
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Signature of Registered U.S. Patent Practitioner			
Signature	Paul D Bangor	Date (YYYY-MM-DD)	2011-01-06
Name	Paul D. Bangor, Jr.	Registration Number	34768

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2423
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
Customer No.: 24122

To: Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE AND AMENDMENT

Sir:

In response to the Final Office Action of July 6, 2010, please amend the above-identified application as follows:

Amendments to the Specification; none

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 12 of this paper.

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (currently amended) A content manager of audio and/or video content comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from a plurality of sources, wherein the plurality of sources includes sources selected from the group consisting of multiple system operators (MSOs) and non-MSOs~~both aggregated content sources and non-aggregated content sources~~;

a device capable of establishing and maintaining a connection with the network via a communications link; and

an interactive program guide application installed on the device that provides and/or displays an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources ~~both aggregated content sources and non-aggregated content sources~~ and descriptive program data from the server for the audio and/or video content available on each of the plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources ~~aggregated content sources and non-aggregated content sources~~ via the

communications link and the network; and wherein the server is distinct from at least one ~~each~~ of the plurality of sources ~~aggregated content sources and non-aggregated content sources~~.

2. (currently amended) The content manager of claim 1, wherein the application allows for customization of the IPG by a ~~the~~ user with respect to a description of each of the channels contained in the IPG and/or a first one of the plurality of sources ~~aggregated content sources and non-aggregated content sources~~ to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

3. (currently amended) The content manager of claim 1, further comprising a digital rights management module that obtains viewing rights from one or more of the plurality of sources ~~aggregated content sources and non-aggregated content sources~~.

4. (previously presented) The content manager of claim 1, further comprising a GPS receiver and a filtering module that blocks content according to jurisdiction.

5. (currently amended) The content manager of claim 1, wherein at least one of the plurality of sources ~~aggregated content sources and non-aggregated content sources~~ comprises ~~a multiple system operator or~~ live television or previously recorded content.

6. (previously presented) The content manager of claim 1, further comprising a voice recognition module that accepts verbal commands and converts them to digital form.

7. (previously presented) The content manager of claim 1, further comprising a display device.

8. (previously presented) The content manager of claim 1, further comprising a relay module for delivering the IPG and data to a display device.

9. (currently amended) The content manager of claim 1, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the plurality of sources ~~aggregated content sources and non-aggregated content sources~~ to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

10. (previously presented) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

11. (currently amended) A content acquisition system for reception of audio and/or video content, comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from a plurality of sources, wherein the plurality of sources includes sources selected from the group consisting of multiple system operators (MSOs) and non-MSOs~~both aggregated content sources and non-aggregated content sources~~;

a device capable establishing and maintaining a connection with a network via a communications link; and

an interactive program guide application installed on the device that provides and/or displays an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources ~~both aggregated content sources and non-aggregated content~~ and descriptive program data from the server for the audio and/or video content available on each of the plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources ~~the aggregated content sources and non-aggregated content sources~~ via the communications link and the network; wherein the server is distinct from at least one ~~each~~ of the plurality of sources ~~the aggregated content sources and non-aggregated content sources~~; and

wherein the application allows for customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources ~~the aggregated content sources and non-aggregated content sources~~ to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

12. (currently amended) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources ~~the aggregated content sources and non-aggregated content sources~~ to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

13. (previously presented) The content acquisition system of claim 11, further comprising a data communication pathway to the communications link comprising a cellular telephone receiving and transmitting device.

14. (previously presented) The content acquisition system of claim 11, wherein the device further comprises a display screen.

15. (currently amended) The content acquisition system of claim 11, wherein the interactive program guide application assists the user in obtaining and/or managing rights to receive the streaming audio and/or video programming from one or more of the plurality of sources ~~the aggregated content sources and non-aggregated content sources~~.

16. (currently amended) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the plurality of sources ~~the aggregated content sources and non-aggregated content sources~~ to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

17. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG.

18. (original) The content acquisition system of claim 11, further comprising a transmitter for transmitting incoming data and content to a separate viewing apparatus.

19. (previously presented) The content acquisition system of claim 11, further comprising a GPS receiver for determining the location of the device and a filter module that selectively blocks content.

20. (currently amended) The content acquisition system of claim 11, wherein at least one of the plurality of sources ~~the aggregated content sources and non-aggregated content sources~~ comprises ~~a multiple system operator or~~ live television or previously recorded content.

21. (currently amended) A computer-implemented method for providing an interactive program guide to a user for viewing, selecting and obtaining access to audio and/or video content from a plurality of sources, wherein the plurality of sources includes sources selected from the group consisting of multiple system operators (MSOs) and non-MSOs, ~~both aggregated content sources and non-aggregated content sources,~~ comprising:

displaying an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources ~~both aggregated content sources and non-aggregated content sources~~, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources ~~the aggregated content sources and non-aggregated content sources~~ via a network and a communications link;

providing descriptive program data for the audio and/or video content available on each of the plurality of channels from a server to the IPG via the network, wherein the server is distinct from at least one ~~each~~ of the plurality of sources ~~the aggregated content sources and non-aggregated content sources~~; and

allowing the user to customize the IPG with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources ~~the aggregated content sources and non-~~

~~aggregated content sources~~ to be linked to one or more of the channels from which the audio and/or video programming may be received.

22. (currently amended) The method of claim 21, wherein at least one of the plurality of sources ~~the aggregated content sources and non-aggregated content sources~~ comprises ~~a multiple system operator or~~ live television or previously recorded content.

23. (previously presented) The method of claim 21, wherein said description comprises information identifying content source and/or programming summaries.

24. (currently amended) The method of claim 21, further comprising:

allowing the user to customize the IPG with respect to a second, redundant one of the plurality of sources ~~the aggregated content sources and non-aggregated content sources~~ to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

25. (previously presented) The method of claim 21, further comprising:

delivering the content to a device specified by the user.

26. (previously presented) The method of claim 25, further comprising automatically authenticating the user to one or more of the content sources prior to delivering the content to the device.

27. (original) The method of claim 21, further comprising obtaining a redundant source for said content in the event that one of said content sources becomes unavailable while in use.

28. (previously presented) The method of claim 25, further comprising obtaining viewing rights from one or more of content sources prior to delivering said content.

29. (previously presented) The method of claim 21, further comprising filtering viewing rights from one or more of content sources in accordance with a geographical location.

30. (previously presented) The method of claim 21, further comprising synchronizing changes made by the user to the interactive program guide in order to preserve a consistent IPG across a plurality of devices.

31. (previously presented) The method of claim 21, wherein the network is the Internet.

32. (currently amended) An interactive program guide application embodied on a computer readable medium for receiving and managing only or virtually entirely streaming audio and/or video content from a plurality of sources, wherein the plurality of sources includes sources selected from the group consisting of multiple system operators (MSOs) and non-MSOs, ~~aggregated content sources and non-aggregated content sources~~ comprising code segments:

a. for receiving data that describes said content from a server on a network;

b. for presenting said data in a preferred order identified by a user;

c. for managing viewing rights for said content;

d. for ensuring user authentication to the interactive program guide application; and

e. for receiving said content from the plurality of sources ~~both aggregated content sources and non-aggregated content sources~~, wherein the server is distinct from at least one ~~each~~ of the plurality of sources ~~the aggregated content sources and non-aggregated content sources~~.

33. (previously presented) The interactive program guide application of claim 32, wherein the data and content are delivered over a communications link to a device specified by the user.

34. (original) The interactive program guide application of claim 32, further comprising code segments for receiving a request for content from the user and delivering said content to a device specified by the user.

35. (original) The interactive program guide application of claim 34, wherein the data that describes the content is displayed on a first device and a request for said content is made on said first device.

36. (original) The interactive program guide application of claim 35, wherein the content requested using the first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

37. (previously presented) The interactive program guide application of claim 36, wherein the second device is an Internet-enabled television.

38. (original) The interactive program guide application of claim 32, further comprising code segments for providing automatic updates in order to minimize user involvement in maintaining the application.

39. (original) The interactive program guide application of claim 32, further comprising code segments for synchronizing changes made by the user across all devices used to access the guide.

40. (original) The interactive program guide application of claim 32, further comprising code segments for enabling control over the application using a remote control device.

41. (original) The interactive program guide application of claim 32, further comprising code segments for providing real-time acquisition of content viewing rights.

42. (original) The interactive program guide application of claim 32, further comprising code segments for filtering content.

43. (original) The interactive program guide application of claim 42, wherein the content is filtered based on the geographic location of the device at the time of viewing said content.

44. (original) The interactive program guide application of claim 32, further comprising code segments for obtaining redundant content in order to reduce interruptions in content delivery to the user.

45. (previously presented) The interactive program guide application of claim 32, wherein the network is the Internet.

Remarks/Arguments

Claims 1-45 are currently pending.

Amendments to the Claims:

Claims 1, 2, 3, 5, 9, 11, 12, 15, 16, 20-22, 24, and 32 have been amended to refer to "a plurality of sources, wherein the plurality of sources includes sources selected from the group consisting of multiple system operators (MSOs) and non-MSOs." This replaces the previous element of "both aggregated content sources and non-aggregated content sources."

Claim Objections:

The claim objection is moot based upon the amendment to claim 11.

Rejection based on U.S.C. 102(a):

On Pages 3-5 of the Office Action, the Examiner rejected claims 1, 3, 5, 7 and 8 under 35 U.S.C. 102(a) as being anticipated by Herman, Tom COO of JumpTV (http://www.publidatasystems.com/JumpTV/JumpTV.html) July 01, 2006 ("Herman").

An applicant is entitled to be his or her own lexicographer. *In re Paulsen*, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994) MPEP § 2173.05(a).

In the specification, the characteristics of a Multiple System Operators (MSO) are described. An MSO is the equivalent of a cable system that receives and broadcasts channels. An MSO controls content availability, thus if an MSO chooses not to purchase rights to broadcast a specific content provider's channel the user cannot access that specific content provider's channel even if a separate content access relationship has been established. [0005, 0010, 0019, 0028 and 0029]

JumpTV meets the above characteristics of an MSO. JumpTV is the same as a traditional cable multi-service operator (MSO) using a different pipe – Internet vs. coaxial cable. JumpTV's system has complete control over what content customers can or cannot access. A JumpTV customer cannot add channels for non-MSO and/or other MSO sources that are not part of the JumpTV provider's channel selections to the IPG to be viewed using the content manager. A JumpTV customer cannot access channels that do not pass through JumpTV's headend. Therefore, Herman merely teaches a typical closed, aggregated content source or MSO which does not allow users to customize the IPG with respect to obtaining content from other MSO content sources (like Cablevision, TimeWarner Cable, Comcast, etc.) and/or non-MSO content

sources separate from an MSO (like TRT-1 Turkey: mms://95.0.159.131/TV1, Fox 11 Los Angeles: http://mfile.akamai.com/23073/live/reflector:34194.asx, RAI News 24: http://mediapolis.rai.it/relinker/relinkerServlet.htm?cont=1, etc.) alike.

Thus, Herman teaches that JumpTV is one MSO.

"Content packages" as defined by Herman are not the equivalent of an MSO as defined by the Applicants. Content packages, e.g. "Arabic Package," are not MSO's. Herman on page 18 provides the following definitions:

Channel: A TV station that partners w/ JumpTV to put it's [sic] signal on the internet.

Package: A collection of more thatn [sic] one TV Station sold as a group or "Package" of stations for one price.

Thus, Herman does not teach a content manager containing descriptive program data from a plurality of sources, wherein the plurality of sources includes sources selected from the group consisting of multiple system operators (MSOs) and non-MSOs. Instead, Herman only teaches a "closed" content manager for only a single MSO.

Moreover, Herman does not teach the content manager of claim 1 wherein the descriptive program data is obtained from a source distinct from at least one of the plurality of sources, wherein the plurality of sources includes sources selected from the group consisting of multiple system operators (MSOs) and non-MSOs. For these reasons, claims 1, 3, 5, 7 and 8 clearly are not anticipated by Herman under 35 U.S.C. 102(a).

Rejections under 35 U.S.C. 103(a):

On Pages 6-19 of the Office Action, the Examiner rejected claims 2, 9, 10-16, 18, 20-26, 28, 29, 31-35, 39-43 and 45 under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Mizutome et al. (Patent No. US 7,469,413). Applicant respectfully traverses these rejections.

As set forth above, Herman merely teaches a typical closed MSO which does not allow users to customize the IPG with respect to obtaining content from a plurality of sources, wherein the plurality of sources includes sources selected from the group consisting of multiple system operators (MSOs) and non-MSOs as recited in the content manager of each of independent claims 1, 11, 21 and 32. Moreover, Herman does not teach the content manager of claims 1, 11, 21 and 32 wherein the descriptive program data is obtained from a source distinct from at least one of such sources. Based upon these deficiencies in the teachings of Herman, the combination

of Herman in view of Mizutome clearly fails to render claims unpatentable under 35 U.S.C. 103(a).

On Page 19 of the Office Action, the Examiner rejects claim 4 under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Dew et al. (Pub No US 2003/0110490). Applicant respectfully traverses this rejection. As set forth above, Herman merely teaches a typical closed MSO which does not allow users to customize the IPG with respect to obtaining content from a plurality of sources, wherein the plurality of sources includes sources selected from the group consisting of multiple system operators (MSOs) and non-MSOs as recited in the content manager of independent claim 1. Moreover, Herman does not teach the content manager of claim 1 wherein the descriptive program data is obtained from a source distinct from at least one of such sources. Based upon these deficiencies in the teachings of Herman, the combination of Herman in view of Dew et al., clearly fails to render claim 4 unpatentable under 35 U.S.C. 103(a).

On Page 20 of the Office Action, the Examiner rejects claim 6 under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Contolini et al. (Patent No US 6,643,620). Applicant respectfully traverses this rejection. As set forth above, Herman merely teaches a typical closed MSO which does not allow users to customize the IPG with respect to obtaining content from a plurality of sources, wherein the plurality of sources includes sources selected from the group consisting of multiple system operators (MSOs) and non-MSOs as recited in the content manager of independent claim 1. Moreover, Herman does not teach the content manager of claim 1 wherein the descriptive program data is obtained from a source distinct from at least one of such sources. Based upon these deficiencies in the teachings of Herman, the combination of Herman in view of Contolini et al., clearly fails to render claim 6 unpatentable under 35 U.S.C. 103(a).

On Page 20-22 of the Office Action, the Examiner rejects claims 17, 27, 30, 38 and 44 under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Mizutome further in view of Potrebic et al. (Pub No US 2006/0253867). Applicant respectfully traverses this rejection. As set forth above, Herman merely teaches a typical closed MSO which does not allow users to customize the IPG with respect to obtaining content from a plurality of sources, wherein the plurality of sources includes sources selected from the group consisting of multiple system operators (MSOs) and non-MSOs as recited in the content manager of each of independent claims 11, 21 and 32. Moreover, Herman does not teach the content manager of claims 11, 21 and 32 wherein the descriptive program data is obtained from a source distinct from at least one

of such sources. Based upon these deficiencies in the teachings of Herman, the combination of Herman in view of Mizutome further in view of Potrebic et al., clearly fails to render claims 17, 27, 30, 38 and 44 unpatentable under 35 U.S.C. 103(a).

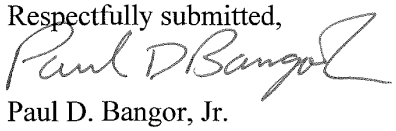
On Page 23 of the Office Action, the Examiner rejects claim 19 under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Dew et al. (Pub No US 2003/0110490). Applicant respectfully traverses this rejection. As set forth above, Herman merely teaches a typical closed MSO which does not allow users to customize the IPG with respect to obtaining content from a plurality of sources, wherein the plurality of sources includes sources selected from the group consisting of multiple system operators (MSOs) and non-MSOs as recited in the content manager of independent claim 1. Moreover, Herman does not teach the content manager of claim 1 wherein the descriptive program data is obtained from a source distinct from at least one of such sources. Based upon these deficiencies in the teachings of Herman, the combination of Herman in view of Dew et al., clearly fails to render claim 19 unpatentable under 35 U.S.C. 103(a).

On Pages 23-24 of the Office Action, the Examiner rejects claims 36 and 37 under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Mizutome further in view of Tatsuji et al. (Pub No US 2002/0151271). Applicant respectfully traverses this rejection. As set forth above, Herman merely teaches a typical closed MSO which does not allow users to customize the IPG with respect to obtaining content from a plurality of sources, wherein the plurality of sources includes sources selected from the group consisting of multiple system operators (MSOs) and non-MSOs as recited in the content manager of independent claim 32. Moreover, Herman does not teach the content manager of claim 32 wherein the descriptive program data is obtained from a source distinct from at least one of such sources. Based upon these deficiencies in the teachings of Herman, the combination of Herman in view of Mizutome further in view of Tatsuji et al., clearly fails to render claims 36 and 37 unpatentable under 35 U.S.C. 103(a).

Applicant has made a diligent effort to place the instant application in condition for allowance. Accordingly, a Notice of Allowance for claims 1-45 is respectfully requested. If the Examiner is of the opinion that the instant application is in condition for disposition other than through allowance, the Examiner is requested to contact the undersigned attorney of record at the telephone number listed below.

Dated: January 6, 2011

Respectfully submitted,



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Attorneys for Applicant

PTO/SB/22 (07-09)
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PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a) **FY 2009** ***(Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).)***	Docket Number (Optional) DB001229-000
Application Number 11/484,510	Filed July 10, 2006
For GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE	
Art Unit 2423	Examiner Junior O. Mendoza

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

		Fee	Small Entity Fee	
☐	One month (37 CFR 1.17(a)(1))	$130	$65	$
☐	Two months (37 CFR 1.17(a)(2))	$490	$245	$
☑	Three months (37 CFR 1.17(a)(3))	$1110	$555	$ 555
☐	Four months (37 CFR 1.17(a)(4))	$1730	$865	$
☐	Five months (37 CFR 1.17(a)(5))	$2350	$1175	$

☑ Applicant claims small entity status. See 37 CFR 1.27.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☑ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 20-0888.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed (Form PTO/SB/96).

☑ attorney or agent of record. Registration Number 34,768

☐ attorney or agent under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34 _____

Paul D Bangor

Signature — 6 January 2011 — Date

Paul D. Bangor, Jr. — Typed or printed name

412-394-7767 — Telephone Number

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☑ Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Patent Application Fee Transmittal

Application Number:	11484510
Filing Date:	10-Jul-2006
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Filer:	Paul D. Bangor
Attorney Docket Number:	DB001229-000

Filed as Small Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Extension - 3 months with $0 paid	2253	1	555	555

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
Request for continued examination	2801	1	405	405
		Total in USD ($)		**960**

Electronic Acknowledgement Receipt

EFS ID:	9183370
Application Number:	11484510
International Application Number:	
Confirmation Number:	9918
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Customer Number:	24122
Filer:	Paul D. Bangor
Filer Authorized By:	
Attorney Docket Number:	DB001229-000
Receipt Date:	06-JAN-2011
Filing Date:	10-JUL-2006
Time Stamp:	20:16:44
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$960
RAM confirmation Number	5753
Deposit Account	200888
Authorized User	

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1	Request for Continued Examination (RCE)	01197832.PDF	80783 ebf7a76fb6f81b6434cc7ec67abb4910b12077d8	no	2
Warnings:					
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2	Amendment Submitted/Entered with Filing of CPA/RCE	01197874.PDF	670856 c3110c2c602c5c4b523c23890b7b8589fb695d63	no	16
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3	Extension of Time	01197833.PDF	64777 00a7ab01c2902deb3bca0ac940923651293b7ad7	no	1
Warnings:					
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If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

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If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

<u>New International Application Filed with the USPTO as a Receiving Office</u>
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	☐ To be Mailed
11/484,510	07/10/2006	

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)	SMALL ENTITY ☒		OR	OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

		(Column 1)		(Column 2)	(Column 3)	SMALL ENTITY		OR	OTHER THAN SMALL ENTITY	
	01/06/2011	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
AMENDMENT	Total (37 CFR 1.16(i))	* 45	Minus	** 45	= 0	X $26 =	0	OR	X $ =	
	Independent (37 CFR 1.16(h))	* 4	Minus	***4	= 0	X $110 =	0	OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE	0	OR	TOTAL ADD'L FEE	

		(Column 1)		(Column 2)	(Column 3)					
		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
AMENDMENT	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/VIOLA ROGERS/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/484,510	07/10/2006	Mark A. Cavicchia	DB001229-000	9918

24122 7590 06/10/2011

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PITTSBURGH, PA 15219-1425

EXAMINER	
MENDOZA, JUNIOR O	
ART UNIT	PAPER NUMBER
2423	

NOTIFICATION DATE	DELIVERY MODE
06/10/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

TRAIP@thorpreed.com
nswarmer@thorpreed.com
cmeshanko@thorpreed.com

Office Action Summary	Application No.	Applicant(s)	
	11/484,510	CAVICCHIA, MARK A.	
	Examiner	Art Unit	
	JUNIOR MENDOZA	2423	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 January 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 11, 21 and 32 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. **Claims 32 – 44** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim recites, *inter alia*, **"**an interactive program guide application embodied on a computer readable medium **...**". After close inspection, the examiner respectfully notes that the disclosure, as a whole, does not specifically identify what may be included as a computer readable storage medium and what is not to be included as a computer readable storage medium.

An Examiner is obliged to give claims their broadest reasonable interpretation consistent with the specification during examination. The broadest reasonable interpretation of a claim drawn to a computer readable medium (also called machine readable medium and other such variations) typically covers forms of non-transitory

tangible media and transitory propagating signals *per se* in view of the ordinary and customary meaning of computer readable media, particularly when the specification is silent. See MPEP 2111.01. When the broadest reasonable interpretation of a claim covers a signal, *per se*, the claim must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter.

Therefore, given the silence of the disclosure and the broadest reasonable interpretation, the computer readable storage medium of the claim may include transitory propagating signals. As a result, the claim pertains to non-statutory subject matter. However, the Examiner respectfully submits that a claim drawn to such a computer readable medium that covers both transitory and non-transitory embodiments may be amended to narrow the claim to cover only statutory embodiments to avoid a rejection under 35 U.S.C. § 101 by adding the limitation “non-transitory” to the claim. Such an amendment would typically not raise the issue of new matter, even when the specification is silent because the broadest reasonable interpretation relies on the ordinary and customary meaning that includes signals *per se*.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claims 1, 3, 5, 7 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman, Tom COO of JumpTV (http://www.publicdatasystems.com/JumpTV/JumpTV.html July 01, 2006 in view of Karaoguz et al. (Pub No US 2009/0007212). Hereinafter referenced as Herman and Karaoguz, respectively.

Regarding **claim 1**, Herman discloses a content manager of audio and/or video content (JumpTV), comprising:

a server resident on a network (JumpTV online network) containing descriptive program data (channel title and information) about the audio and/or video content available (JumpTV channel Listing) from a plurality of sources, wherein the plurality of sources includes sources selected from the group consisting of multiple system operators (MSOs) (Pages 1, 3 and 18; JumpTV offers package of channels and individual channels from different MSO distributors around the world);

a device capable of establishing and maintaining a connection with the network via a communications link (Page 1 first paragraph; computers, laptops, internet-enabled television and mobile phone connect to JumpTV network via an internet connection);

and an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) (JumpTV channel Listing) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data (channel title and information) from the server (JumpTV online network) for the audio and/or video content available on each of the plurality of channels (Pages 3-16; channel listing),

wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources (Page 1 second paragraph; TV stations from different countries) via the communications link and the network (Page 1 first paragraph and page 26; add channels to view in JumpTV);

and wherein the server is distinct from at least one of the plurality of sources (Pages 1 and 18; JumpTV online network containing streaming and relaying servers around the world).

However, it is noted that Herman is silent to explicitly disclose that a plurality of sources also include sources selected from the group consisting of non-MSO.

Nevertheless, in a similar field of endeavor Karaoguz discloses that a plurality of sources may include sources selected from the group consisting of multiple system operators (MSOs) (Paragraphs [0027] [0043] figures 1A -1C and 4; broadcast media channels 164 from MSO provider 109)

and non-MSO (Paragraphs [0027] [0043] figures 1A -1C and 4; personal media channels 162 and friend’s and family's media channels 163).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Karaoguz, for the predictable result of allowing the viewer to be able to access different type of distributed data from a broadcast and broadband sources in a single program guide, for easy access for user selection of content.

Regarding **claim 3**, Herman and Karaoguz disclose the content acquisition system of claim 11; moreover, Herman discloses a digital rights management module that obtains viewing rights from one or more of the plurality of sources (Page 19, page 22; user login and registration to a specific content source for a specific user account).

Regarding **claim 5**, Herman and Karaoguz disclose the content acquisition system of claim 1; moreover, Herman discloses that at least one of the plurality of sources comprises live television or previously recorded content (Page 1 first paragraph, page 3; live channels from different countries).

Regarding **claim 7**, Herman and Karaoguz disclose the content acquisition system of claim 1; moreover, Herman discloses a display device (Page 1 first paragraph; computers, laptops, internet-enabled television and mobile phone connect to JumpTV).

Regarding **claim 8**, Herman and Karaoguz disclose the content acquisition system of claim 1; moreover, Herman discloses a relay module for delivering the IPG and data to a display device (Pages 3-16; channel listing).

6. **Claims 2, 9, 10 – 16, 18, 20 – 26, 28, 29, 31 – 37, 39 – 43 and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman and Karaoguz in view of Mizutome et al. (Patent No US 7,469,413). Hereinafter, referenced as Mizutome.

Regarding **claim 2**, Herman and Karaoguz disclose the content manager of claim 1; moreover, Herman discloses description of each of the channels contained in the IPG (JumpTV channel Listing) and/or the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Page 1, Page 17; geo-custom).

Furthermore, Karaoguz discloses that the view of tje program guide interface may be personalized (Paragraph [0030]).

However, it is noted that Herman and Karaoguz are silent to explicitly disclose an application which allows for customization of the IPG by a user with respect to a description of each of the channels contained in the IPG and/or a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses tan application which allows for customization of the IPG by the user with respect to a description of each of the channels contained in the IPG and/or a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 8 lines 20-32 and lines 62-67 figure 6; customized program guide).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Karaoguz by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 9**, Herman and Karaoguz disclose the content manager of claim 1; moreover, Herman discloses description of each of the channels contained in the IPG (JumpTV channel Listing) and/or a aggregated content sources (content packages, e.g. Arabic package) and non-aggregated content sources (individual channels, e.g. Al Jazeera) to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Page 1). Furthermore, Herman discloses customizing of the interface (Page 17; geo-custom).

Furthermore, Karaoguz discloses that the view of the program guide interface may be personalized (Paragraph [0030]).

However, it is noted that Herman and Karaoguz are silent to explicitly disclose that the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses that the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 6 lines19-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Karaoguz by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 10**, Herman and Karaoguz disclose the content manager of claim 1; moreover, Herman discloses the interactive program guide application (see claim 1).

Furthermore, Karaoguz discloses that the view of the program guide interface may be personalized (Paragraph [0030]).

However, it is noted that Herman and Karaoguz are silent to explicitly disclose customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

Nevertheless, in a similar field of endeavor Mizutome discloses customization of the IPG by a user with respect to an order of the listing of the channels in the IPG (Col. 8 lines 20-32 figures 5 and 20; customized guide starting at a user defined channel).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 11**, Herman discloses a content acquisition system for reception of audio and/or video content (JumpTV), comprising:

a server resident on a network (JumpTV online network) containing descriptive program data (channel title and information) about the audio and/or video content available (JumpTV channel Listing) from a plurality of sources, wherein the plurality of sources includes sources selected from the group consisting of multiple system operators (MSOs) (Pages 1, 3 and 18; JumpTV offers package of channels and individual channels from different MSO distributors around the world);

a device capable of establishing and maintaining a connection with the network via a communications link (Page 1 first paragraph; computers, laptops, internet-enabled television and mobile phone connect to JumpTV network via an internet connection);

and an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) (JumpTV channel Listing) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data (channel title and information) from the server (JumpTV online network) for the audio and/or video content available on each of the plurality of channels (Pages 3-16; channel listing),

wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network (Page 1 first paragraph and page 26; add channels to view in JumpTV);

and wherein the server is distinct from at least one of the plurality of sources (Pages 1 and 18; JumpTV online network containing streaming and relaying servers).

However, it is noted that Herman is silent to explicitly disclose that a plurality of sources also include sources selected from the group consisting of non-MSO.

Nevertheless, in a similar field of endeavor Karaoguz discloses that a plurality of sources may include sources selected from the group consisting of multiple system operators (MSOs) (Paragraphs [0027] [0043] figures 1A -1C and 4; broadcast media channels 164 from MSO provider 109)

and non-MSO (Paragraphs [0027] [0043] figures 1A -1C and 4; personal media channels 162 and friend's and family's media channels 163);

Furthermore, Karaoguz discloses that the view of the program guide interface may be personalized (Paragraph [0030]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Karaoguz, for the predictable result of allowing the viewer to be able to access different type of distributed data from a broadcast and broadband sources in a single program guide, for easy access for user selection of content.

However, it is noted that Herman and Karaoguz are silent to explicitly disclose customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in

the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG (Col. 8 lines 20-32 figures 5 and 20; customized guide starting at a user defined channel),

(ii) a description of each of the channels contained in the IPG (Figures 10A and 10B;customize program guide by content genre)

and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide according to source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 12**, Herman, Karaoguz and Mizutome disclose the content acquisition system of claim 11; moreover, Herman discloses description of each of the channels contained in the IPG (JumpTV channel Listing) and/or a aggregated content

sources (content packages, e.g. Arabic package) and non-aggregated content sources (individual channels, e.g. Al Jazeera) to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Page 1, Page 17; geo-custom).

Furthermore, Karaoguz discloses that the view of the program guide interface may be personalized (Paragraph [0030]).

However, it is noted that Herman and Karaoguz are silent to explicitly disclose allowing for customization of an IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses allowing for customization of an IPG by a user with respect to (i) an order of the listing of the channels in the IPG (Col. 8 lines 20-32 figures 5 and 20; customized guide starting at a user defined channel),

(ii) a description of each of the channels contained in the IPG (Figures 10A and 10B;customize program guide by content genre)

and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide according to source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Karaoguz by specifically providing

the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 13**, Herman, Karaoguz and Mizutome disclose the content acquisition system of claim 11; moreover, Herman discloses the data communication pathway to the communications link comprising a cellular telephone receiving and transmitting device (Page 1 first paragraph; mobile phone connect to JumpTV network via an internet connection).

Regarding **claims 14, 15, 16 and 20**, Herman, Karaoguz and Mizutome disclose all the limitations of claims 14, 15, 16 and 20; therefore, claims 14, 15, 16 and 20 are rejected for the same reasons as in claims 7, 3, 9 and 5, respectively.

Regarding **claim 18**, Herman, Karaoguz and Mizutome disclose the content acquisition system of claim 11; moreover, Herman discloses a transmitter (JumpTV internet network) for transmitting incoming data and content to a separate viewing apparatus (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 21**, Herman, Karaoguz and Mizutome disclose all the limitations of claim 21; therefore, claim 21 is rejected for the same reasons as in claims 11 and 12.

Regarding **claims 22, 24, 25 and 28**, Herman, Karaoguz and Mizutome disclose all the limitations of claims 22, 24, 25 and 28; therefore, claims 22, 24, 25 and 28 are rejected for the same reasons as in claims 5, 9, 18 and 3, respectively.

Regarding **claim 23**, Herman, Karaoguz and Mizutome disclose the method of claim 21; moreover, Herman discloses the interactive program guide application (see claim 1) and a more information link about a content source (see page 3).

However, it is noted that Herman and Karaoguz are silent to explicitly disclose that a description comprises information identifying content source and/or programming summaries.

Nevertheless, in a similar field of endeavor Mizutome discloses that a description comprises information identifying content source and/or programming summaries (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide according to source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Karaoguz by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different

sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 26**, Herman, Karaoguz and Mizutome disclose the method of claim 25; moreover, Herman discloses automatically authenticating the user to one or more of the content sources prior to delivering the content to the device (Page 19, page 22; user login and registration to a specific content source for a specific user account).

Regarding **claim 29**, Herman, Karaoguz and Mizutome disclose the method of claim 21; moreover, Herman discloses filtering viewing rights from one or more of content sources in accordance with a geographical location (Page 17; see geo-custom and geoblock for a region).

Regarding **claim 31**, Herman, Karaoguz and Mizutome disclose the method of claim 21; moreover, Herman discloses that the network is the Internet (Page 1 first paragraph; computers, laptops, internet-anabled television and mobile phone connect to JumpTV network via an internet connection).

Regarding **claim 32**, Herman discloses an interactive program guide application embodied on a computer readable medium for receiving and managing only or virtually streaming content from a plurality of sources, the plurality of sources includes sources selected from the group consisting of multiple system operators (MSOs) (Pages 1, 3 and 18; JumpTV offers package of channels and individual channels from different MSO distributors around the world); comprising code segments (JumpTV):

a. for receiving, organizing and storing data that describes said content (Pages 3-16; channel listing description);

c. for managing viewing rights for said content (Page 1 first paragraph and page 26; channel and package registration).

d. for ensuring user authentication to the interactive program guide application (Page 19, page 22; user registration and login to a user account).

e. for receiving said content from the plurality of sources, wherein the server is distinct from at least one of the plurality of sources (Pages 1 and 18; JumpTV online network containing streaming and relaying servers).

However, it is noted that Herman is silent to explicitly disclose that a plurality of sources also include sources selected from the group consisting of non-MSO.

Nevertheless, in a similar field of endeavor Karaoguz discloses that a plurality of sources may include sources selected from the group consisting of multiple system operators (MSOs) (Paragraphs [0027] [0043] figures 1A -1C and 4; broadcast media channels 164 from MSO provider 109)

and non-MSO (Paragraphs [0027] [0043] figures 1A -1C and 4; personal media channels 162 and friend's and family's media channels 163);

Furthermore, Karaoguz discloses that the view of the program guide interface may be personalized (Paragraph [0030]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Karaoguz, for the predictable result of allowing the viewer to be able to access different type of distributed data from a broadcast and broadband sources in a single program guide, for easy access for user selection of content.

However, it is noted that Herman and Karaoguz are silent to explicitly disclose b. presenting data in a preferred order identified by a user.

Nevertheless, in a similar field of endeavor Mizutome discloses b. presenting data in a preferred order identified by a user (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Karaoguz by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 33**, Herman, Karaoguz and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses that the data and content are delivered over a communications link to a device specified by the user (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 34**, Herman, Karaoguz and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses code segments for receiving a request for content from the user and delivering said content to a device specified by the user (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 35**, Herman, Karaoguz and Mizutome disclose the interactive program guide application of claim 34; moreover, Herman discloses that the data that describes the content is displayed on a first device and a request for said content is made on said first device (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 36**, Herman, Karaoguz and Mizutome disclose the interactive program guide application of claim 35; moreover, Herman discloses content requested using the first device (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

However, it is noted that Herman fails to explicitly disclose content requested using a first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

Nevertheless, in a similar field of endeavor Karaoguz discloses content requested using a first device is delivered to a second device having code segments installed for managing the reception and viewing of said content (Paragraphs [0041] [0042], figure 1A, 1B).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Karaoguz, for the purpose providing the most current information related to content line up to the users, which would prevent a discrepancy between the program guide and the actual content being presented.

Regarding **claim 37**, Herman, Karaoguz and Mizutome disclose the interactive program guide application of claim 36; however, it is noted that Herman fails to explicitly disclose that the second device is an internet-enabled television.

Nevertheless, in a similar field of endeavor Karaoguz discloses that the second device is an internet-enabled television (Paragraph [0032], figure 1A, 1B; where each of the entities within the media exchange network 100 may be identified using a network or protocol address such as, for example, an Internet protocol IP address).
Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Karaoguz, for the purpose providing the most current information related to content line up to the users, which would prevent a discrepancy between the program guide and the actual content being presented.

Regarding **claim 39**, Herman, Karaoguz and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses code segments for synchronizing changes made by the user across all devices used to access the guide (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access; therefore, changed made from any accessing device will be reflected on any other device used to access JumpTV in the future).

Regarding **claim 40**, Herman, Karaoguz and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses code segments for

enabling control over the application using a receiver (Page 1 first paragraph, page 38; using JumpTV from any location implementing a television).

However, it is noted that Herman fails to explicitly disclose that the receiver includes a remote control device.

Nevertheless, in a similar field of endeavor Karaoguz discloses that the receiver includes a remote control device (Paragraph [0027] figure 1A; remote control 104).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Karaoguz, for the purpose of allowing the user to control the program guide from the comfort of their seat.

Regarding **claims 41 and 45**, Herman, Karaoguz and Mizutome disclose all the limitations of claims 41 and 45; therefore, claims 41 and 45 are rejected for the same reasons as in claims 15 and 31, respectively.

Regarding **claims 42 and 43**, Herman, Karaoguz and Mizutome disclose all the limitations of claims 42 and 43; therefore, claims 42 and 43 are rejected for the same reasons as in claim 29.

7. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Herman and Karaoguz in view of Dew et al. (Pub No US 2003/0110490). Hereinafter, referenced as Dew.

Regarding **claim 4**, Herman and Karaoguz disclose the content manager of claim 1; moreover, Herman discloses a filtering module that blocks content according to jurisdiction (Page 17; see geo-custom and geoblock for a region).

However, it is noted that Herman and Karaoguz are silent to explicitly disclose a GPS receiver.

Nevertheless, in a similar field of endeavor Dew discloses a GPS receiver (Paragraphs [0008] [0018] [0024] also exhibited on figures 1 and 2; present content exclusively according to location).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Karaoguz by specifically providing the elements mentioned above, as taught by Dew, for the purpose of targeting content effectively for users based on geographical area, such as advertisement of local business or targeted programs of interest for a specific community.

8. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Herman and Karaoguz in view of Contolini et al. (Patent No US 6,643,620). Hereinafter, referenced as Contolini.

Regarding **claim 6**, Herman and Karaoguz disclose the content manager of claim 1; moreover, Karaoguz discloses that a remote control may understand voice commands 906 (Paragraph [0076] figure 9A).

Hwever, it is noted that Herman and Karaoguz are silent to explicitly discloses a voice recognition module that accepts verbal commands and converts them to digital form.

Nevertheless, in a similar field of endeavor Contolini discloses a voice recognition module that accepts verbal commands and converts them to digital form (Col. 7 lines 1-12, figure 1; voice recognition system which digitized inputted user commands).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Karaoguz by specifically providing the elements mentioned above, as taught by Contolini, for the purpose of allowing a user to easily and efficiently input commands without the need of manual inputs for user satisfaction.

9. **Claims 17, 27, 30, 38 and 44** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman, Karaoguz and Mizutome further in view of Potrebic et al. (Pub No US 2006/0253867). Hereinafter, referenced as Potrebic.

Regarding **claim 17**, Herman, Karaoguz and Mizutome disclose the content acquisition system of claim 11; however, it is noted that Herman, Karaoguz and Mizutome fail to explicitly disclose that the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG.

Nevertheless, in a similar field of endeavor Potrebic discloses that the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG (Paragraphs [0026] [0053] [0055]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman, Karaoguz and Mizutome by specifically providing the elements mentioned above, as taught by Potrebic, for the purpose providing the most current information related to content line up to the users, which would prevent a discrepancy between the program guide and the actual content being presented.

Regarding **claim 27**, Herman, Karaoguz and Mizutome disclose the method of claim 21; however, it is noted that Herman, Karaoguz and Mizutome fail to explicitly

disclose obtaining a redundant content source for said content in the event that one of said content sources becomes unavailable while in use.

Nevertheless, in a similar field of endeavor Potrebic discloses obtaining a redundant content source for said content in the event that one of said content sources becomes unavailable while in use (Paragraph [0047]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman, Karaoguz and Mizutome by specifically providing the elements mentioned above, as taught by Potrebic, for the purpose of decreasing the chances of a total system failure which provides reliability and stability for the users.

Regarding **claims 30 and 38**, Herman, Karaoguz, Mizutome and Potrebic disclose all the limitations of claims 30 and 38; therefore, claims 30 and 38 are rejected for the same reasons as in claim 17.

Regarding **claim 44**, Herman, Karaoguz, Mizutome and Potrebic disclose all the limitations of claim 44; therefore, claim 44 is rejected for the same reasons as in claim 27.

10. **Claim 19** is rejected under 35 U.S.C. 103(a) as being unpatentable over Herman, Karaoguz and Mizutome further in view of Dew.

Regarding **claim 19**, Herman, Mizutome and Dew disclose all the limitations of claim 19; therefore, claim 19 is rejected for the same reasons as in claim 4.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUNIOR MENDOZA whose telephone number is (571)270-3573. The examiner can normally be reached on Monday - Friday 9am - 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571)272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Junior O Mendoza
Examiner
Art Unit 2423

/J. M./
June 1, 2011

/Andrew Y Koenig/
Supervisory Patent Examiner, Art Unit 2423

Notice of References Cited	Application/Control No. 11/484,510	Applicant(s)/Patent Under Reexamination CAVICCHIA, MARK A.	
	Examiner JUNIOR MENDOZA	Art Unit 2423	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2009/0007212 A1	01-2009	Karaoguz et al.	725/131
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S112	2	(Media Exchange Network With Media Guide Interface).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	AND	ON	2011/06/01 19:21
S111	15	60/448,705 and personalized	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2011/06/01 19:18
S110	1	10/675904	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2011/06/01 19:18
S109	2	"10/675413"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2011/06/01 19:17
S108	4	"10675413"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2011/06/01 19:17
S107	1	10/675090	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2011/06/01 19:15
S106	21	60/448,705	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2011/06/01 19:12
S105	7	60/470,263	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2011/06/01 18:49
S104	39	karaoguz.in. and custom$7 with (menu guide epg ipg interface)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2011/06/01 18:48

S103	210	karaoguz.in. and custom$7	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2011/06/01 18:47
S102	16	(multiple plurality group) with mso with (menu guide ipg epg schedul$4) and @rlad<="20060710" not S101	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2011/06/01 18:20
S101	58	(multiple plurality group) with mso with (menu guide ipg epg schedul$4) and "725".clas. and @rlad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2011/06/01 18:14
S100	282	(multiple plurality group) with mso and "725".clas. and @rlad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2011/06/01 18:13
S99	620	(multiple plurality group) with mso and "725".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2011/06/01 18:13
S98	874	mso and "725".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2011/06/01 18:13
S97	55	karaoguz.in. and personal with channel and "725".clas. and @rlad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2011/05/31 20:51
S96	66	karaoguz.in. and personal with channel and "725".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2011/05/31 20:50
S95	135	karaoguz.in. and personal with channel	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2011/05/31 20:50
S94	785	karaoguz.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2011/05/31 20:50

6/1/2011 9:07:48 PM
C:\Documents and Settings\jmendoza\My Documents\EAST\Workspaces\11484510 Global IPG

for Cell Phone and Sending Content from Cell Phone to TV.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2423

SEARCHED			
Class	Subclass	Date	Examiner
725	59	6/29/2010	JM

SEARCH NOTES		
Search Notes	Date	Examiner
Updated EAST Text Search	6/1/2011	JM
Class 725 Plus Text Search	6/1/2011	JM
Inventor Search	6/29/2010	JM
www.google.com Search for: JumpTV Documentation	1/7/2010	JM
Consulted with Hunter Lonsberry	6/1/2011	JM

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2423

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	08/08/2008	05/28/2009	01/07/2010	06/29/2010	06/01/2011				
	1	✓	✓	✓	✓	✓				
	2	✓	✓	✓	✓	✓				
	3	✓	✓	✓	✓	✓				
	4	✓	✓	✓	✓	✓				
	5	✓	✓	✓	✓	✓				
	6	✓	✓	✓	✓	✓				
	7	✓	✓	✓	✓	✓				
	8	✓	✓	✓	✓	✓				
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	36	✓	✓	✓	✓	✓				

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2423

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	08/08/2008	05/28/2009	01/07/2010	06/29/2010	06/01/2011				
	37	✓	✓	✓	✓	✓				
	38	✓	✓	✓	✓	✓				
	39	✓	✓	✓	✓	✓				
	40	✓	✓	✓	✓	✓				
	41	✓	✓	✓	✓	✓				
	42	✓	✓	✓	✓	✓				
	43	✓	✓	✓	✓	✓				
	44	✓	✓	✓	✓	✓				
	45	✓	✓	✓	✓	✓				

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2423
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
Customer No.: 24122

To: Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE AND AMENDMENT

Sir:

In response to the Office Action of June 10, 2011, please amend the above-identified application as follows:

Amendments to the Specification; none

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 11 of this paper.

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (currently amended) A content manager of audio and/or video content comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from a plurality of sources, wherein the plurality of sources includes ~~sources selected from the group consisting of~~ one or more multiple system operators (MSOs) and one or more non-MSOs;

a device capable of establishing and maintaining a connection with the network via a communications link; and

an interactive program guide application installed on the device that provides and/or displays an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data from the server for the audio and/or video content available on each of the plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network; and wherein the server is distinct from at least one of the plurality of sources.

2. (previously presented) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to a description of each of the channels contained in the IPG and/or a first one of the

plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

3. (previously presented) The content manager of claim 1, further comprising a digital rights management module that obtains viewing rights from one or more of the plurality of sources.

4. (previously presented) The content manager of claim 1, further comprising a GPS receiver and a filtering module that blocks content according to jurisdiction.

5. (previously presented) The content manager of claim 1, wherein at least one of the plurality of sources comprises live television or previously recorded content.

6. (previously presented) The content manager of claim 1, further comprising a voice recognition module that accepts verbal commands and converts them to digital form.

7. (previously presented) The content manager of claim 1, further comprising a display device.

8. (previously presented) The content manager of claim 1, further comprising a relay module for delivering the IPG and data to a display device.

9. (previously presented) The content manager of claim 1, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the plurality of sources to be linked to

one or more of the channels from which the streaming audio and/or video programming may be received.

10. (previously presented) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

11. (currently amended) A content acquisition system for reception of audio and/or video content, comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from a plurality of sources, wherein the plurality of sources includes ~~sources selected from the group consisting of~~ one or more multiple system operators (MSOs) and one or more non-MSOs;

a device capable establishing and maintaining a connection with a network via a communications link; and

an interactive program guide application installed on the device that provides and/or displays an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data from the server for the audio and/or video content available on each of the plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network;

wherein the server is distinct from at least one of the plurality of sources; and

wherein the application allows for customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

12. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

13. (previously presented) The content acquisition system of claim 11, further comprising a data communication pathway to the communications link comprising a cellular telephone receiving and transmitting device.

14. (previously presented) The content acquisition system of claim 11, wherein the device further comprises a display screen.

15. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application assists the user in obtaining and/or managing rights to receive the streaming audio and/or video programming from one or more of the plurality of sources.

16. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user

with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

17. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG.

18. (original) The content acquisition system of claim 11, further comprising a transmitter for transmitting incoming data and content to a separate viewing apparatus.

19. (previously presented) The content acquisition system of claim 11, further comprising a GPS receiver for determining the location of the device and a filter module that selectively blocks content.

20. (previously presented) The content acquisition system of claim 11, wherein at least one of the plurality of sources comprises live television or previously recorded content.

21. (currently amended) A computer-implemented method for providing an interactive program guide to a user for viewing, selecting and obtaining access to audio and/or video content from a plurality of sources, wherein the plurality of sources includes ~~sources selected from the group consisting of~~ one or more multiple system operators (MSOs) and one or more non-MSOs, comprising:

displaying an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video

programming from one of the plurality of sources via a network and a communications link;

providing descriptive program data for the audio and/or video content available on each of the plurality of channels from a server to the IPG via the network, wherein the server is distinct from at least one of the plurality of sources; and

allowing the user to customize the IPG with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the audio and/or video programming may be received.

22. (previously presented) The method of claim 21, wherein at least one of the plurality of sources comprises live television or previously recorded content.

23. (previously presented) The method of claim 21, wherein said description comprises information identifying content source and/or programming summaries.

24. (previously presented) The method of claim 21, further comprising:
allowing the user to customize the IPG with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

25. (previously presented) The method of claim 21, further comprising:
delivering the content to a device specified by the user.

26. (previously presented) The method of claim 25, further comprising automatically authenticating the user to one or more of the content sources prior to delivering the content to the device.

27. (original) The method of claim 21, further comprising obtaining a redundant source for said content in the event that one of said content sources becomes unavailable while in use.

28. (previously presented) The method of claim 25, further comprising obtaining viewing rights from one or more of content sources prior to delivering said content.

29. (previously presented) The method of claim 21, further comprising filtering viewing rights from one or more of content sources in accordance with a geographical location.

30. (previously presented) The method of claim 21, further comprising synchronizing changes made by the user to the interactive program guide in order to preserve a consistent IPG across a plurality of devices.

31. (previously presented) The method of claim 21, wherein the network is the Internet.

32. (currently amended) An interactive program guide application embodied on a non-transitory computer readable medium for receiving and managing only or virtually entirely streaming audio and/or video content from a plurality of sources, wherein the plurality of sources includes ~~sources selected from the group consisting of~~ one or more multiple system operators (MSOs) and one or more non-MSOs, comprising code segments:

a. for receiving data that describes said content from a server on a network;

b. for presenting said data in a preferred order identified by a user;

c. for managing viewing rights for said content;

d. for ensuring user authentication to the interactive program guide application; and

e. for receiving said content from the plurality of sources, wherein the server is distinct from at least one of the plurality of sources.

33. (previously presented) The interactive program guide application of claim 32, wherein the data and content are delivered over a communications link to a device specified by the user.

34. (original) The interactive program guide application of claim 32, further comprising code segments for receiving a request for content from the user and delivering said content to a device specified by the user.

35. (original) The interactive program guide application of claim 34, wherein the data that describes the content is displayed on a first device and a request for said content is made on said first device.

36. (original) The interactive program guide application of claim 35, wherein the content requested using the first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

37. (previously presented) The interactive program guide application of claim 36, wherein the second device is an Internet-enabled television.

38. (original) The interactive program guide application of claim 32, further comprising code segments for providing automatic updates in order to minimize user involvement in maintaining the application.

39. (original) The interactive program guide application of claim 32, further comprising code segments for synchronizing changes made by the user across all devices used to access the guide.

40. (original) The interactive program guide application of claim 32, further comprising code segments for enabling control over the application using a remote control device.

41. (original) The interactive program guide application of claim 32, further comprising code segments for providing real-time acquisition of content viewing rights.

42. (original) The interactive program guide application of claim 32, further comprising code segments for filtering content.

43. (original) The interactive program guide application of claim 42, wherein the content is filtered based on the geographic location of the device at the time of viewing said content.

44. (original) The interactive program guide application of claim 32, further comprising code segments for obtaining redundant content in order to reduce interruptions in content delivery to the user.

45. (previously presented) The interactive program guide application of claim 32, wherein the network is the Internet.

Remarks/Arguments

Claims 1-45 are currently pending.

Amendments to the Claims:

Each independent claim 1, 11, 21 and 32 have been amended to refer to "a plurality of sources, wherein the plurality of sources includes ~~sources selected from the group consisting of~~ one or more multiple system operators (MSOs) and one or more non-MSOs."

Rejection based on 35 U.S.C. 101:

On Pages 2-3 of the Office Action, the Examiner rejected claims 32-44 under 35 U.S.C. 101 as being directed to non-statutory subject matter. Independent claim 32, upon which dependent claims 33-44 depend, directly or indirectly, has been amended to recite "a non-transitory computer readable medium" to overcome this rejection.

Rejections under 35 U.S.C. 103(a):

On Pages 4-7 of the Office Action, the Examiner rejected claims 1, 3, 5, 7 and 8 under 35 U.S.C. 103(a) as being unpatentable over Herman, Tom COO of JumpTV (http://www.publidatasystems.com/JumpTV/JumpTV.html) July 01, 2006 ("Herman") in view of Karaoguz (Pub No US 2009/007212) ("Karaoguz"). Applicant respectfully traverses these rejections.

In the specification, the characteristics of a Multiple System Operators (MSO) are described. An MSO is the equivalent of a cable system that receives and broadcasts channels. An MSO controls content availability, thus if an MSO chooses not to purchase rights to broadcast a specific content provider's channel the user cannot access that specific content provider's channel even if a separate content access relationship has been established. [0005, 0010, 0019, 0028 and 0029]. Each cable TV installation serving a community is known as a "cable system", and the operator of the system is called the "system operator". Most system operators run cable systems in more than one community. Therefore, the vast majority of them are Multiple System Operators.

A cable company acquires rights to broadcast individual channels from the owners of those channels – i.e. Viacom, NBC Universal, News Corporation, etc. None of these companies

are considered MSOs. MSOs are companies like JumpTV, Dish Network, Comcast, Time Warner Cable, etc. MSOs downlink content and then rebroadcast it from their head-end(s).

JumpTV does not aggregate content from various MSOs, it aggregates content from various channels owners (not distributors or MSOs) and the REBROADCASTS that content from its own head-end.

JumpTV meets the above characteristics of a **SINGLE** MSO. JumpTV is the same as a traditional cable MSO using a different pipe – Internet vs. coaxial cable. JumpTV's system has complete control over what content customers can or cannot access. A JumpTV customer cannot add channels for non-MSO and/or other MSO sources that are not part of JumpTV's channel selections to the IPG to be viewed using the content manager. A JumpTV customer cannot access channels that do not pass through JumpTV's headend. JumpTV customers CAN ONLY WATCH content passing through JumpTV's headend. If JumpTV does not rebroadcast the channel from its headend, JumpTV customers cannot watch the channel.

Therefore, Herman merely teaches a typical closed, aggregated content source or MSO which does not allow users to customize the IPG with respect to obtaining content from other MSO content sources (like Cablevision, TimeWarner Cable, Comcast, etc.) and/or non-MSO content sources separate from an MSO (like TRT-1 Turkey: mms://95.0.159.131/TV1, Fox 11 Los Angeles: http://mfile.akamai.com/23073/live/reflector:34194.asx, RAI News 24: http://mediapolis.rai.it/relinker/relinkerServlet.htm?cont=1, etc.) alike.

Thus, Herman teaches that JumpTV is **ONE** MSO.

"Content packages" as defined by Herman are not the equivalent of an MSO as defined by the Applicants. Content packages, e.g. "Arabic Package," are not MSO's. Herman on page 18 provides the following definitions:

Channel: A TV station that partners w/ JumpTV to put it's [sic] signal on the internet.

Package: A collection of more thatn [sic] one TV Station sold as a group or "Package" of stations for one price.

Thus, Herman does not teach a content manager containing descriptive program data from a plurality of sources, wherein the plurality of sources includes one or more MSOs and one or more non-MSOs. Instead, Herman only teaches a "closed" content manager for only a single MSO.

Moreover, Herman does not teach the content manager of claim 1, as amended, wherein the descriptive program data is obtained from a source distinct from at least one of the plurality of sources. In Herman, the descriptive program data comes from the JumpTV server which is not distinct from the JumpTV MSO.

These deficiencies of Herman with respect to claim 1 are also not taught or suggested by Karaoguz. Karaoguz teaches a peer-to-peer system for sharing "personal" audio/video content over the "media exchange network 100," using a media processing system (MPS) 102 such as an enhanced set top box provided by an MSO or a PC 117 and using a media guide interface 160 on each such MPS. Clearly, Karaoguz does not teach or suggest the following limitations of claim 1 as amended:

> "a server resident on a network containing descriptive program data about the audio and/or video content available from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs;
>
> * * *
>
> and wherein the server is distinct from at least one of the plurality of sources."

All that Karaoguz teaches is that a user may make private content or files available for viewing only by those to whom such content is pushed via a network, via a media guide interface 160 that is resident in a fixed location. Neither Karaoguz nor the combination of Herman/Karaoguz teaches the content manager of claim 1 having an IPG available for access by a user anywhere such user can connect to the network (such as the Internet) to provide a consistent viewing experience to the user at any such location of content provided by one or more multiple system operators (MSOs) and one or more non-MSOs.

Based upon these deficiencies in the teachings of both Herman and Karaoguz, the combination of Herman in view of Karaoguz clearly fails to render claims 1, 3, 5, 7 or 8 unpatentable under 35 U.S.C. 103(a).

On Pages 7-23 of the Office Action, the Examiner rejected claims 2, 9, 10-16, 18, 20-26, 28, 29, 31-37, 39-43 and 45 under 35 U.S.C. 103(a) as being unpatentable over Herman and Karaoguz in view of Mizutome et al. (Patent No US 7,469,413) ("Mizutome"). Applicant

respectfully traverses these rejections. Based upon the deficiencies in the teachings of both Herman and Karaoguz as set forth above, the combination of Herman and Karaoguz in view of Mizutome clearly fails to render claims 2, 9, 10-16, 18, 20-26, 28, 29, 31-37, 39-43 or 45 unpatentable under 35 U.S.C. 103(a).

On Page 24 of the Office Action, the Examiner rejected claim 4 under 35 U.S.C. 103(a) as being unpatentable over Herman and Karaoguz in view of Dew (Pub No US 2003/0110490) ("Dew"). Applicant respectfully traverses this rejection. Based upon the deficiencies in the teachings of both Herman and Karaoguz as set forth above, the combination of Herman and Karaoguz in view of Dew clearly fails to render claim 4 unpatentable under 35 U.S.C. 103(a).

On Page 25 of the Office Action, the Examiner rejected claim 6 under 35 U.S.C. 103(a) as being unpatentable over Herman and Karaoguz in view of Contolini et al. (Patent No US 6,643,620) ("Contolini"). Applicant respectfully traverses this rejection. Based upon the deficiencies in the teachings of both Herman and Karaoguz as set forth above, the combination of Herman and Karaoguz in view of Contolini clearly fails to render claim 6 unpatentable under 35 U.S.C. 103(a).

On Pages 26-27 of the Office Action, the Examiner rejected claims 17, 27, 30, 38 and 44 under 35 U.S.C. 103(a) as being unpatentable over Herman, Karaoguz and Mizutome further in view of Potrebic et al. (Pub No US 2006/0253867) ("Potrebic"). Applicant respectfully traverses these rejections. Based upon the deficiencies in the teachings of both Herman and Karaoguz as set forth above, the combination of Herman, Karaoguz and Mizutome further in view of Potrebic clearly fails to render claims 17, 27, 30, 38 and 44 unpatentable under 35 U.S.C. 103(a).

On Page 28 of the Office Action, the Examiner rejected claim 19 under 35 U.S.C. 103(a) as being unpatentable over Herman, Karaoguz and Mizutome further in view of Dew. Applicant respectfully traverses this rejection. Based upon the deficiencies in the teachings of both Herman and Karaoguz as set forth above, the combination of Herman, Karaoguz and Mizutome further in view of Dew clearly fails to render claim 19 unpatentable under 35 U.S.C. 103(a).

Applicant has made a diligent effort to place the instant application in condition for allowance. Accordingly, a Notice of Allowance for claims 1-45 is respectfully requested. If the Examiner is of the opinion that the instant application is in condition for disposition other than

through allowance, the Examiner is requested to contact the undersigned attorney of record at the telephone number listed below.

Respectfully submitted,

Dated: October 11, 2011

Paul D. Bangor, Jr.
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Electronic Patent Application Fee Transmittal

Application Number:	11484510
Filing Date:	10-Jul-2006
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Filer:	Paul D. Bangor
Attorney Docket Number:	DB001229-000

Filed as Small Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Extension - 1 month with $0 paid	2251	1	75	75

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
		Total in USD ($)		**75**

Electronic Acknowledgement Receipt

EFS ID:	11166006
Application Number:	11484510
International Application Number:	
Confirmation Number:	9918
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Customer Number:	24122
Filer:	Paul D. Bangor
Filer Authorized By:	
Attorney Docket Number:	DB001229-000
Receipt Date:	11-OCT-2011
Filing Date:	10-JUL-2006
Time Stamp:	22:45:27
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$75
RAM confirmation Number	7072
Deposit Account	200888
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)

1	Extension of Time	01292682.PDF	63545 83a4934bfe3a2c4a1e2d7aa3fdcd5be969a7d69a	no	1
Warnings:					
Information:					
2	Amendment/Req. Reconsideration-After Non-Final Reject	01292681.PDF	627896 d9ebb843a5ddc1d2a6192c9523e7286520dde7c7	no	15
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30161 a7b20597e578b63292f050e0ff9e87a8d3cdebd7	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	721602		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

<u>New Applications Under 35 U.S.C. 111</u>
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

<u>National Stage of an International Application under 35 U.S.C. 371</u>
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

<u>New International Application Filed with the USPTO as a Receiving Office</u>
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/22 (09-11)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARMENT OF COMMERCE
Under the paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)	Docket Number (Optional) DB001229-000
Application Number 11/484,510	Filed 07/10/2006
For GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE	
Art Unit 2423	Examiner Junior O. Mendoza

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

	Fee	Small Entity Fee	
☑ One month (37 CFR 1.17(a)(1))	$150	$75	$ 75
☐ Two months (37 CFR 1.17(a)(2))	$560	$280	$
☐ Three months (37 CFR 1.17(a)(3))	$1270	$635	$
☐ Four months (37 CFR 1.17(a)(4))	$1980	$990	$
☐ Five months (37 CFR 1.17(a)(5))	$2690	$1345	$

☑ Applicant claims small entity status. See 37 CFR 1.27.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☑ The Director has already been authorized to charge fees in this application to a Deposit Account.

☐ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 20-0888.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed (Form PTO/SB/96).

☑ attorney or agent of record. Registration Number 34,768

☐ attorney or agent under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34 _____

Paul D Bangor

Signature — October 11, 2011 — Date

Paul D. Bangor, Jr. — Typed or printed name

412-394-7767 — Telephone Number

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☑ Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	☐ To be Mailed
11/484,510	07/10/2006	

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)	SMALL ENTITY ☒		OR	OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)		RATE ($)	FEE ($)
☒ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	150		N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	150		TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT 10/11/2011

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 45	Minus	** 45	= 0	X $30 =	0	OR	X $ =	
Independent (37 CFR 1.16(h))	* 4	Minus	***4	= 0	X $125 =	0	OR	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE	0	OR	TOTAL ADD'L FEE	

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)	OR	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/GWENDOLYN MYERS/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/484,510	07/10/2006	Mark A. Cavicchia	DB001229-000	9918

24122 7590 02/02/2012

THORP REED & ARMSTRONG, LLP
ONE OXFORD CENTRE
301 GRANT STREET, 14TH FLOOR
PITTSBURGH, PA 15219-1425

EXAMINER	
MENDOZA, JUNIOR O	
ART UNIT	**PAPER NUMBER**
2423	

NOTIFICATION DATE	DELIVERY MODE
02/02/2012	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

TRAIP@thorpreed.com
nswarmer@thorpreed.com
cmeshanko@thorpreed.com

Office Action Summary	Application No.	Applicant(s)	
	11/484,510	CAVICCHIA, MARK A.	
	Examiner	Art Unit	
	JUNIOR MENDOZA	2423	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 October 2011*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1-45* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-45* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/11/2011 have been fully considered but they are not persuasive.

Regarding **claims 1, 11, 21 and 32**, applicant argues that Herman only teaches a “closed” content manager for a only a single MSO (Multiple System Operators), see remarks page 12.

However, the examiner respectfully disagrees with the applicant. The examiner points out that the claim language merely requires a single MSO (multiple system operator) and a single non-MSO, since all the independent claims state that the plurality of sources includes one or more MSO and one or more non-MSO. Therefore, a plurality of MSOs is not captured in the current claim language as argued by the applicant.

Moreover, Herman clearly discloses a JumpTV online system where the interface includes a JumpTV channel listing, as shown on pages 1-3. Furthermore, the JumpTV channels listing consists of content packages, e.g. Arabic package, and individual channels sources, e.g. Al Jazeera, which allows the user to select desired content, see page 3. JumpTV provides content from a plurality of content provider companies from different geographical regions of the world and makes it readily available for the user, paragraph 17 lines 2-4; in a broadest reasonable

interpretation any cable company that serves multiple communities, e.g. cities in a country, is thus an MSO.

Additionally, the applicant argues that Herman does not discloses that the descriptive program data is obtained from a source distinct from at least one of the plurality of sources, since in Herman the descriptive program data comes from the JumpTV server, remarks page 13 lines 1-4. However, as previously described the JumpTV server merely relays content provided from a plurality of different geographical location, e.g. country's MSO, hence the JumpTV server is indeed distinct from the plurality of sources. Therefore, Herman clearly discloses the claimed features of the current application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 1, 3, 5, 7 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman, Tom COO of JumpTV (http://www.publicdatasystems.com/JumpTV/JumpTV.html July 01, 2006 in view of Karaoguz et al. (Pub No US 2009/0007212). Hereinafter referenced as Herman and Karaoguz, respectively.

Regarding **claim 1**, Herman discloses a content manager of audio and/or video content (JumpTV), comprising:

a server resident on a network (JumpTV online network) containing descriptive program data (channel title and information) about the audio and/or video content available (JumpTV channel Listing) from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) (Pages 1, 3 and 18; JumpTV offers package of channels and individual channels from different MSO distributors around the world);

a device capable of establishing and maintaining a connection with the network via a communications link (Page 1 first paragraph; computers, laptops, internet-enabled television and mobile phone connect to JumpTV network via an internet connection);

and an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) (JumpTV channel Listing) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data (channel title and information) from the server (JumpTV online network) for the audio and/or video content available on each of the plurality of channels (Pages 3-16; channel listing),

wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources (Page 1 second paragraph; TV stations from different countries) via the communications link and the network (Page 1 first paragraph and page 26; add channels to view in JumpTV);

and wherein the server is distinct from at least one of the plurality of sources (Pages 1 and 18; JumpTV online network containing streaming and relaying servers around the world).

However, it is noted that Herman is silent to explicitly disclose that a plurality of sources includes one ore more non-MSOs.

Nevertheless, in a similar field of endeavor Karaoguz discloses that a plurality of sources may include one or more multiple system operators (MSOs) (Paragraphs [0027] [0043] figures 1A -1C and 4; broadcast media channels 164 from MSO provider 109)

and one or more non-MSOs (Paragraphs [0027] [0043] figures 1A -1C and 4; personal media channels 162 and friend's and family's media channels 163).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Karaoguz, for the predictable result of allowing the viewer to be able to access different type of distributed data from a broadcast and broadband sources in a single program guide, for easy access for user selection of content.

Regarding **claim 3**, Herman and Karaoguz disclose the content acquisition system of claim 11; moreover, Herman discloses a digital rights management module

that obtains viewing rights from one or more of the plurality of sources (Page 19, page 22; user login and registration to a specific content source for a specific user account).

Regarding **claim 5**, Herman and Karaoguz disclose the content acquisition system of claim 1; moreover, Herman discloses that at least one of the plurality of sources comprises live television or previously recorded content (Page 1 first paragraph, page 3; live channels from different countries).

Regarding **claim 7**, Herman and Karaoguz disclose the content acquisition system of claim 1; moreover, Herman discloses a display device (Page 1 first paragraph; computers, laptops, internet-enabled television and mobile phone connect to JumpTV).

Regarding **claim 8**, Herman and Karaoguz disclose the content acquisition system of claim 1; moreover, Herman discloses a relay module for delivering the IPG and data to a display device (Pages 3-16; channel listing).

4. **Claims 2, 9, 10 – 16, 18, 20 – 26, 28, 29, 31 – 37, 39 – 43 and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman and Karaoguz in view of Mizutome et al. (Patent No US 7,469,413). Hereinafter, referenced as Mizutome.

Regarding **claim 2**, Herman and Karaoguz disclose the content manager of claim 1; moreover, Herman discloses description of each of the channels contained in the IPG (JumpTV channel Listing) and/or the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Page 1, Page 17; geo-custom).

Furthermore, Karaoguz discloses that the view of tje program guide interface may be personalized (Paragraph [0030]).

However, it is noted that Herman and Karaoguz are silent to explicitly disclose an application which allows for customization of the IPG by a user with respect to a description of each of the channels contained in the IPG and/or a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses tan application which allows for customization of the IPG by the user with respect to a description of each of the channels contained in the IPG and/or a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 8 lines 20-32 and lines 62-67 figure 6; customized program guide).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Karaoguz by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 9**, Herman and Karaoguz disclose the content manager of claim 1; moreover, Herman discloses description of each of the channels contained in the IPG (JumpTV channel Listing) and/or a aggregated content sources (content packages, e.g. Arabic package) and non-aggregated content sources (individual channels, e.g. Al Jazeera) to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Page 1). Furthermore, Herman discloses customizing of the interface (Page 17; geo-custom).

Furthermore, Karaoguz discloses that the view of the program guide interface may be personalized (Paragraph [0030]).

However, it is noted that Herman and Karaoguz are silent to explicitly disclose that the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses that the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 6 lines19-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Karaoguz by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 10**, Herman and Karaoguz disclose the content manager of claim 1; moreover, Herman discloses the interactive program guide application (see claim 1).

Furthermore, Karaoguz discloses that the view of the program guide interface may be personalized (Paragraph [0030]).

However, it is noted that Herman and Karaoguz are silent to explicitly disclose customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

Nevertheless, in a similar field of endeavor Mizutome discloses customization of the IPG by a user with respect to an order of the listing of the channels in the IPG (Col. 8 lines 20-32 figures 5 and 20; customized guide starting at a user defined channel).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 11**, Herman discloses a content acquisition system for reception of audio and/or video content (JumpTV), comprising:

a server resident on a network (JumpTV online network) containing descriptive program data (channel title and information) about the audio and/or video content available (JumpTV channel Listing) from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) (Pages 1, 3 and 18; JumpTV offers package of channels and individual channels from different MSO distributors around the world);

a device capable of establishing and maintaining a connection with the network via a communications link (Page 1 first paragraph; computers, laptops, internet-enabled television and mobile phone connect to JumpTV network via an internet connection);

and an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) (JumpTV channel Listing) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data (channel title and information) from the server (JumpTV online network) for the audio and/or video content available on each of the plurality of channels (Pages 3-16; channel listing),

wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network (Page 1 first paragraph and page 26; add channels to view in JumpTV);

and wherein the server is distinct from at least one of the plurality of sources (Pages 1 and 18; JumpTV online network containing streaming and relaying servers).

However, it is noted that Herman is silent to explicitly disclose that a plurality of sources also include one or more non-MSOs.

Nevertheless, in a similar field of endeavor Karaoguz discloses that a plurality of sources may include one or more multiple system operators (MSOs) (Paragraphs [0027] [0043] figures 1A -1C and 4; broadcast media channels 164 from MSO provider 109)

and one or more non-MSOs (Paragraphs [0027] [0043] figures 1A -1C and 4; personal media channels 162 and friend’s and family's media channels 163);

Furthermore, Karaoguz discloses that the view of the program guide interface may be personalized (Paragraph [0030]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Karaoguz, for the predictable result of allowing the viewer to be able to access different type of distributed data from a broadcast and broadband sources in a single program guide, for easy access for user selection of content.

However, it is noted that Herman and Karaoguz are silent to explicitly disclose customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG (Col. 8 lines 20-32 figures 5 and 20; customized guide starting at a user defined channel),

(ii) a description of each of the channels contained in the IPG (Figures 10A and 10B;customize program guide by content genre)

and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide according to source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements

mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 12**, Herman, Karaoguz and Mizutome disclose the content acquisition system of claim 11; moreover, Herman discloses description of each of the channels contained in the IPG (JumpTV channel Listing) and/or a aggregated content sources (content packages, e.g. Arabic package) and non-aggregated content sources (individual channels, e.g. Al Jazeera) to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Page 1, Page 17; geo-custom).

Furthermore, Karaoguz discloses that the view of the program guide interface may be personalized (Paragraph [0030]).

However, it is noted that Herman and Karaoguz are silent to explicitly disclose allowing for customization of an IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses allowing for customization of an IPG by a user with respect to (i) an order of the listing of the

channels in the IPG (Col. 8 lines 20-32 figures 5 and 20; customized guide starting at a user defined channel),

(ii) a description of each of the channels contained in the IPG (Figures 10A and 10B;customize program guide by content genre)

and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide according to source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Karaoguz by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 13**, Herman, Karaoguz and Mizutome disclose the content acquisition system of claim 11; moreover, Herman discloses the data communication pathway to the communications link comprising a cellular telephone receiving and transmitting device (Page 1 first paragraph; mobile phone connect to JumpTV network via an internet connection).

Regarding **claims 14, 15, 16 and 20**, Herman, Karaoguz and Mizutome disclose all the limitations of claims 14, 15, 16 and 20; therefore, claims 14, 15, 16 and 20 are rejected for the same reasons as in claims 7, 3, 9 and 5, respectively.

Regarding **claim 18**, Herman, Karaoguz and Mizutome disclose the content acquisition system of claim 11; moreover, Herman discloses a transmitter (JumpTV internet network) for transmitting incoming data and content to a separate viewing apparatus (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 21**, Herman, Karaoguz and Mizutome disclose all the limitations of claim 21; therefore, claim 21 is rejected for the same reasons as in claims 11 and 12.

Regarding **claims 22, 24, 25 and 28**, Herman, Karaoguz and Mizutome disclose all the limitations of claims 22, 24, 25 and 28; therefore, claims 22, 24, 25 and 28 are rejected for the same reasons as in claims 5, 9, 18 and 3, respectively.

Regarding **claim 23**, Herman, Karaoguz and Mizutome disclose the method of claim 21; moreover, Herman discloses the interactive program guide application (see claim 1) and a more information link about a content source (see page 3).

However, it is noted that Herman and Karaoguz are silent to explicitly disclose that a description comprises information identifying content source and/or programming summaries.

Nevertheless, in a similar field of endeavor Mizutome discloses that a description comprises information identifying content source and/or programming summaries (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide according to source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Karaoguz by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 26**, Herman, Karaoguz and Mizutome disclose the method of claim 25; moreover, Herman discloses automatically authenticating the user to one or more of the content sources prior to delivering the content to the device (Page 19, page 22; user login and registration to a specific content source for a specific user account).

Regarding **claim 29**, Herman, Karaoguz and Mizutome disclose the method of claim 21; moreover, Herman discloses filtering viewing rights from one or more of

content sources in accordance with a geographical location (Page 17; see geo-custom and geoblock for a region).

Regarding **claim 31**, Herman, Karaoguz and Mizutome disclose the method of claim 21; moreover, Herman discloses that the network is the Internet (Page 1 first paragraph; computers, laptops, internet-anabled television and mobile phone connect to JumpTV network via an internet connection).

Regarding **claim 32**, Herman discloses an interactive program guide application embodied on a non-transitory computer readable medium for receiving and managing only or virtually streaming content from a plurality of sources, the plurality of sources includes one or more multiple system operators (MSOs) (Pages 1, 3 and 18; JumpTV offers package of channels and individual channels from different MSO distributors around the world); comprising code segments (JumpTV):

a. for receiving, organizing and storing data that describes said content (Pages 3-16; channel listing description);

c. for managing viewing rights for said content (Page 1 first paragraph and page 26; channel and package registration).

d. for ensuring user authentication to the interactive program guide application (Page 19, page 22; user registration and login to a user account).

e. for receiving said content from the plurality of sources, wherein the server is distinct from at least one of the plurality of sources (Pages 1 and 18; JumpTV online network containing streaming and relaying servers).

However, it is noted that Herman is silent to explicitly disclose that a plurality of sources also include one or more non-MSOs.

Nevertheless, in a similar field of endeavor Karaoguz discloses that a plurality of sources may include one or more multiple system operators (MSOs) (Paragraphs [0027] [0043] figures 1A -1C and 4; broadcast media channels 164 from MSO provider 109)

and one or more non-MSOs (Paragraphs [0027] [0043] figures 1A -1C and 4; personal media channels 162 and friend's and family's media channels 163);

Furthermore, Karaoguz discloses that the view of the program guide interface may be personalized (Paragraph [0030]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Karaoguz, for the predictable result of allowing the viewer to be able to access different type of distributed data from a broadcast and broadband sources in a single program guide, for easy access for user selection of content.

However, it is noted that Herman and Karaoguz are silent to explicitly disclose b. presenting data in a preferred order identified by a user.

Nevertheless, in a similar field of endeavor Mizutome discloses b. presenting data in a preferred order identified by a user (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Karaoguz by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 33**, Herman, Karaoguz and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses that the data and content are delivered over a communications link to a device specified by the user (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 34**, Herman, Karaoguz and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses code segments for receiving a request for content from the user and delivering said content to a device specified by the user (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 35**, Herman, Karaoguz and Mizutome disclose the interactive program guide application of claim 34; moreover, Herman discloses that the data that describes the content is displayed on a first device and a request for said content is made on said first device (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 36**, Herman, Karaoguz and Mizutome disclose the interactive program guide application of claim 35; moreover, Herman discloses content requested using the first device (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

However, it is noted that Herman fails to explicitly disclose content requested using a first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

Nevertheless, in a similar field of endeavor Karaoguz discloses content requested using a first device is delivered to a second device having code segments installed for managing the reception and viewing of said content (Paragraphs [0041] [0042], figure 1A, 1B).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Karaoguz, for the purpose providing the most current information related to content line up to the users, which would prevent a discrepancy between the program guide and the actual content being presented.

Regarding **claim 37**, Herman, Karaoguz and Mizutome disclose the interactive program guide application of claim 36; however, it is noted that Herman fails to explicitly disclose that the second device is an internet-enabled television.

Nevertheless, in a similar field of endeavor Karaoguz discloses that the second device is an internet-enabled television (Paragraph [0032], figure 1A, 1B; where each of the entities within the media exchange network 100 may be identified using a network or protocol address such as, for example, an Internet protocol IP address).
Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Karaoguz, for the purpose providing the most current information related to content line up to the users, which would prevent a discrepancy between the program guide and the actual content being presented.

Regarding **claim 39**, Herman, Karaoguz and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses code segments for synchronizing changes made by the user across all devices used to access the guide (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access; therefore, changed made from any accessing device will be reflected on any other device used to access JumpTV in the future).

Regarding **claim 40**, Herman, Karaoguz and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses code segments for enabling control over the application using a receiver (Page 1 first paragraph, page 38; using JumpTV from any location implementing a television).

However, it is noted that Herman fails to explicitly disclose that the receiver includes a remote control device.

Nevertheless, in a similar field of endeavor Karaoguz discloses that the receiver includes a remote control device (Paragraph [0027] figure 1A; remote control 104).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Karaoguz, for the purpose of allowing the user to control the program guide from the comfort of their seat.

Regarding **claims 41 and 45**, Herman, Karaoguz and Mizutome disclose all the limitations of claims 41 and 45; therefore, claims 41 and 45 are rejected for the same reasons as in claims 15 and 31, respectively.

Regarding **claims 42 and 43**, Herman, Karaoguz and Mizutome disclose all the limitations of claims 42 and 43; therefore, claims 42 and 43 are rejected for the same reasons as in claim 29.

5. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Herman and Karaoguz in view of Dew et al. (Pub No US 2003/0110490). Hereinafter, referenced as Dew.

Regarding **claim 4**, Herman and Karaoguz disclose the content manager of claim 1; moreover, Herman discloses a filtering module that blocks content according to jurisdiction (Page 17; see geo-custom and geoblock for a region).

However, it is noted that Herman and Karaoguz are silent to explicitly disclose a GPS receiver.

Nevertheless, in a similar field of endeavor Dew discloses a GPS receiver (Paragraphs [0008] [0018] [0024] also exhibited on figures 1 and 2; present content exclusively according to location).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Karaoguz by specifically providing the elements mentioned above, as taught by Dew, for the purpose of targeting content effectively for users based on geographical area, such as advertisement of local business or targeted programs of interest for a specific community.

6. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Herman and Karaoguz in view of Contolini et al. (Patent No US 6,643,620). Hereinafter, referenced as Contolini.

Regarding **claim 6**, Herman and Karaoguz disclose the content manager of claim 1; moreover, Karaoguz discloses that a remote control may understand voice commands 906 (Paragraph [0076] figure 9A).

Hwever, it is noted that Herman and Karaoguz are silent to explicitly discloses a voice recognition module that accepts verbal commands and converts them to digital form.

Nevertheless, in a similar field of endeavor Contolini discloses a voice recognition module that accepts verbal commands and converts them to digital form

(Col. 7 lines 1-12, figure 1; voice recognition system which digitized inputted user commands).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Karaoguz by specifically providing the elements mentioned above, as taught by Contolini, for the purpose of allowing a user to easily and efficiently input commands without the need of manual inputs for user satisfaction.

7. **Claims 17, 27, 30, 38 and 44** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman, Karaoguz and Mizutome further in view of Potrebic et al. (Pub No US 2006/0253867). Hereinafter, referenced as Potrebic.

Regarding **claim 17**, Herman, Karaoguz and Mizutome disclose the content acquisition system of claim 11; however, it is noted that Herman, Karaoguz and Mizutome fail to explicitly disclose that the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG.

Nevertheless, in a similar field of endeavor Potrebic discloses that the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG (Paragraphs [0026] [0053] [0055]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman, Karaoguz and Mizutome by specifically providing the elements mentioned above, as taught by Potrebic, for the purpose providing the most current information related to content line up to the users, which would prevent a discrepancy between the program guide and the actual content being presented.

Regarding **claim 27**, Herman, Karaoguz and Mizutome disclose the method of claim 21; however, it is noted that Herman, Karaoguz and Mizutome fail to explicitly disclose obtaining a redundant content source for said content in the event that one of said content sources becomes unavailable while in use.

Nevertheless, in a similar field of endeavor Potrebic discloses obtaining a redundant content source for said content in the event that one of said content sources becomes unavailable while in use (Paragraph [0047]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman, Karaoguz and Mizutome by specifically providing the elements mentioned above, as taught by Potrebic, for the purpose of decreasing the chances of a total system failure which provides reliability and stability for the users.

Regarding **claims 30 and 38**, Herman, Karaoguz, Mizutome and Potrebic disclose all the limitations of claims 30 and 38; therefore, claims 30 and 38 are rejected for the same reasons as in claim 17.

Regarding **claim 44**, Herman, Karaoguz, Mizutome and Potrebic disclose all the limitations of claim 44; hence, claim 44 is rejected for the same reasons as in claim 27.

8. **Claim 19** is rejected under 35 U.S.C. 103(a) as being unpatentable over Herman, Karaoguz and Mizutome further in view of Dew.

Regarding **claim 19**, Herman, Mizutome and Dew disclose all the limitations of claim 19; therefore, claim 19 is rejected for the same reasons as in claim 4.

Citation of Pertinent Prior Art

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Wilder et al. (Pub No US 2003/0051246) – combining at a central broadcasting station 100 several EPG sources (such as different cable companies, satellite systems) into a single EPG, paragraphs [0030] [0047] figure 2.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUNIOR MENDOZA whose telephone number is (571)270-3573. The examiner can normally be reached on Monday - Friday 9am - 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571)272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Junior O Mendoza
Examiner
Art Unit 2423

/J. M./
January 20, 2012

/HAI V. TRAN/
Primary Examiner, Art Unit 2426

Notice of References Cited	Application/Control No. 11/484,510	Applicant(s)/Patent Under Reexamination CAVICCHIA, MARK A.	
	Examiner JUNIOR MENDOZA	Art Unit 2423	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2003/0051246 A1	03-2003	Wilder et al.	725/49
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2423

SEARCHED			
Class	Subclass	Date	Examiner
725	59	6/29/2010	JM
725	48	1/20/2012	JM

SEARCH NOTES		
Search Notes	Date	Examiner
Updated EAST Text Search	1/20/2012	JM
Class 725 Plus Text Search	1/20/2012	JM
Inventor Search	1/20/2012	JM
www.google.com Search for: JumpTV Documentation	1/7/2010	JM
Consulted with Hunter Lonsberry	6/1/2011	JM

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2423

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	08/08/2008	05/28/2009	01/07/2010	06/29/2010	06/01/2011	01/20/2012			
	1	✓	✓	✓	✓	✓	✓			
	2	✓	✓	✓	✓	✓	✓			
	3	✓	✓	✓	✓	✓	✓			
	4	✓	✓	✓	✓	✓	✓			
	5	✓	✓	✓	✓	✓	✓			
	6	✓	✓	✓	✓	✓	✓			
	7	✓	✓	✓	✓	✓	✓			
	8	✓	✓	✓	✓	✓	✓			
	9	✓	✓	✓	✓	✓	✓			
	10	✓	✓	✓	✓	✓	✓			
	11	✓	✓	✓	✓	✓	✓			
	12	✓	✓	✓	✓	✓	✓			
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	14	✓	✓	✓	✓	✓	✓			
	15	✓	✓	✓	✓	✓	✓			
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	31	✓	✓	✓	✓	✓	✓			
	32	✓	✓	✓	✓	✓	✓			
	33	✓	✓	✓	✓	✓	✓			
	34	✓	✓	✓	✓	✓	✓			
	35	✓	✓	✓	✓	✓	✓			
	36	✓	✓	✓	✓	✓	✓			

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	**Art Unit**
	JUNIOR O MENDOZA	2423

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	08/08/2008	05/28/2009	01/07/2010	06/29/2010	06/01/2011	01/20/2012			
	37	✓	✓	✓	✓	✓	✓			
	38	✓	✓	✓	✓	✓	✓			
	39	✓	✓	✓	✓	✓	✓			
	40	✓	✓	✓	✓	✓	✓			
	41	✓	✓	✓	✓	✓	✓			
	42	✓	✓	✓	✓	✓	✓			
	43	✓	✓	✓	✓	✓	✓			
	44	✓	✓	✓	✓	✓	✓			
	45	✓	✓	✓	✓	✓	✓			

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S141	71	("4060849" | "4188662" | "4435755" | "4459661" | "4527194" | "5020129" | "5257106" | "5394560" | "5546396" | "5826030" | "5862160" | "5895462").PN. OR ("6003041").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2012/01/20 12:17
S140	4	("5828945" | "6003041" | "6209131" | "7152236").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/20 12:15
S139	10	unified near program near guide	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/20 12:13
S138	1	"20030051246"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/20 12:10
S137	73	725/48.ccls. and @rlad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/20 11:51
S136	123	S135 and @rlad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/20 11:45
S135	203	(integrat$4 master$4) near2 (EPG GUI IPG UPG ((program tv television grid interactive) near3 (menu schedule$3 list$3 guide table))) same (cable satellite cit$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/20 11:45
S134	2410316	integrat$4 master$4 near2 (EPG GUI IPG UPG ((program tv television grid interactive) near3 (menu schedule$3 list$3 guide table))) same (cable satellite cit$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/20 11:44

S133	44	(sling neear2 media).as. and (slingbox sling near box)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/20 11:38
S132	7721	(sling neear2 media).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/20 11:38
S131	40	multi$4 near2 (cit$3 geographic $4 countr$3) with (EPG GUI IPG UPG ((program tv television grid interactive) near3 (menu schedule$3 list$3 guide table)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/20 11:34
S130	7	("20020097879" | "20090113496" | "7107606" | "20040210932" | "20040213557" | "20040158868" | "20050097624").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/20 09:48
S129	1	"12210218"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/20 08:59
S128	12	(master collect$4) near2 mso and @rlad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/19 21:21
S127	3	S126 and mso and @rlad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/19 21:20
S126	53	plural$4 with (mso cit$3 countr $4) with (EPG GUI IPG UPG ((program tv television grid interactive) near3 (menu schedule$3 list$3 guide table)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/19 21:20
S125	2	plural$4 with (mso cit$3 countr $4) with epg	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/19 21:19
S124	20	epg with (directv comcast warner cox)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/19 21:17

S123	3	10/356,694	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/19 21:14
S122	5	mso same(multiple near2 subscription)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/19 21:08
S121	3	mso with (multiple near2 subscription)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/19 21:07
S120	1	"725".clas. and mso same (multiple with subscription) and @rlad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/19 21:06
S119	22	"725".clas. and mso same (comcast dish warner) and @rlad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/19 21:01
S118	19	"725".clas. and epg with mso and @rlad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/19 20:58
S117	16	"725".clas. and plural$4 with mso and @rlad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/19 20:55
S116	464	"725".clas. and mso and @rlad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/19 20:55
S115	957	"725".clas. and mso	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/19 20:54
S114	11	"725".clas. and plural$6 near2 mso	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/19 20:51
S113	16	09/836239	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/01/19 20:50

1/20/2012 4:45:01 PM
C:\ Documents and Settings\ jmendoza\ My Documents\ EAST\ Workspaces\ 11484510 Global IPG for Cell Phone and Sending Content from Cell Phone to TV.wsp

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2423
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
Customer No.: 24122

To: Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO OFFICE ACTION

Sir:

In response to the Final Office Action of February 2, 2012 (the "Office Action"), Applicant hereby states as follows:

Amendments to the Specification; none

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 11 of this paper.

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (previously presented) A content manager of audio and/or video content comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs;

a device capable of establishing and maintaining a connection with the network via a communications link; and

an interactive program guide application installed on the device that provides and/or displays an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data from the server for the audio and/or video content available on each of the plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network; and wherein the server is distinct from at least one of the plurality of sources.

2. (previously presented) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to a description of each of the channels contained in the IPG and/or a first one of the

plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

3. (previously presented) The content manager of claim 1, further comprising a digital rights management module that obtains viewing rights from one or more of the plurality of sources.

4. (previously presented) The content manager of claim 1, further comprising a GPS receiver and a filtering module that blocks content according to jurisdiction.

5. (previously presented) The content manager of claim 1, wherein at least one of the plurality of sources comprises live television or previously recorded content.

6. (previously presented) The content manager of claim 1, further comprising a voice recognition module that accepts verbal commands and converts them to digital form.

7. (previously presented) The content manager of claim 1, further comprising a display device.

8. (previously presented) The content manager of claim 1, further comprising a relay module for delivering the IPG and data to a display device.

9. (previously presented) The content manager of claim 1, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the plurality of sources to be linked to

one or more of the channels from which the streaming audio and/or video programming may be received.

10. (previously presented) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

11. (previously presented) A content acquisition system for reception of audio and/or video content, comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs;

a device capable establishing and maintaining a connection with a network via a communications link; and

an interactive program guide application installed on the device that provides and/or displays an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data from the server for the audio and/or video content available on each of the plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network;

wherein the server is distinct from at least one of the plurality of sources; and

wherein the application allows for customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

12. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

13. (previously presented) The content acquisition system of claim 11, further comprising a data communication pathway to the communications link comprising a cellular telephone receiving and transmitting device.

14. (previously presented) The content acquisition system of claim 11, wherein the device further comprises a display screen.

15. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application assists the user in obtaining and/or managing rights to receive the streaming audio and/or video programming from one or more of the plurality of sources.

16. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user

with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

17. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG.

18. (original) The content acquisition system of claim 11, further comprising a transmitter for transmitting incoming data and content to a separate viewing apparatus.

19. (previously presented) The content acquisition system of claim 11, further comprising a GPS receiver for determining the location of the device and a filter module that selectively blocks content.

20. (previously presented) The content acquisition system of claim 11, wherein at least one of the plurality of sources comprises live television or previously recorded content.

21. (previously presented) A computer-implemented method for providing an interactive program guide to a user for viewing, selecting and obtaining access to audio and/or video content from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, comprising:

displaying an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video

programming from one of the plurality of sources via a network and a communications link;

providing descriptive program data for the audio and/or video content available on each of the plurality of channels from a server to the IPG via the network, wherein the server is distinct from at least one of the plurality of sources; and

allowing the user to customize the IPG with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the audio and/or video programming may be received.

22. (previously presented) The method of claim 21, wherein at least one of the plurality of sources comprises live television or previously recorded content.

23. (previously presented) The method of claim 21, wherein said description comprises information identifying content source and/or programming summaries.

24. (previously presented) The method of claim 21, further comprising:
allowing the user to customize the IPG with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

25. (previously presented) The method of claim 21, further comprising:
delivering the content to a device specified by the user.

26. (previously presented) The method of claim 25, further comprising automatically authenticating the user to one or more of the content sources prior to delivering the content to the device.

27. (original) The method of claim 21, further comprising obtaining a redundant source for said content in the event that one of said content sources becomes unavailable while in use.

28. (previously presented) The method of claim 25, further comprising obtaining viewing rights from one or more of content sources prior to delivering said content.

29. (previously presented) The method of claim 21, further comprising filtering viewing rights from one or more of content sources in accordance with a geographical location.

30. (previously presented) The method of claim 21, further comprising synchronizing changes made by the user to the interactive program guide in order to preserve a consistent IPG across a plurality of devices.

31. (previously presented) The method of claim 21, wherein the network is the Internet.

32. (previously presented) An interactive program guide application embodied on a non-transitory computer readable medium for receiving and managing only or virtually entirely streaming audio and/or video content from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, comprising code segments:

a. for receiving data that describes said content from a server on a network;

b. for presenting said data in a preferred order identified by a user;

c. for managing viewing rights for said content;

d. for ensuring user authentication to the interactive program guide application; and

e. for receiving said content from the plurality of sources, wherein the server is distinct from at least one of the plurality of sources.

33. (previously presented) The interactive program guide application of claim 32, wherein the data and content are delivered over a communications link to a device specified by the user.

34. (original) The interactive program guide application of claim 32, further comprising code segments for receiving a request for content from the user and delivering said content to a device specified by the user.

35. (original) The interactive program guide application of claim 34, wherein the data that describes the content is displayed on a first device and a request for said content is made on said first device.

36. (original) The interactive program guide application of claim 35, wherein the content requested using the first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

37. (previously presented) The interactive program guide application of claim 36, wherein the second device is an Internet-enabled television.

38. (original) The interactive program guide application of claim 32, further comprising code segments for providing automatic updates in order to minimize user involvement in maintaining the application.

39. (original) The interactive program guide application of claim 32, further comprising code segments for synchronizing changes made by the user across all devices used to access the guide.

40. (original) The interactive program guide application of claim 32, further comprising code segments for enabling control over the application using a remote control device.

41. (original) The interactive program guide application of claim 32, further comprising code segments for providing real-time acquisition of content viewing rights.

42. (original) The interactive program guide application of claim 32, further comprising code segments for filtering content.

43. (original) The interactive program guide application of claim 42, wherein the content is filtered based on the geographic location of the device at the time of viewing said content.

44. (original) The interactive program guide application of claim 32, further comprising code segments for obtaining redundant content in order to reduce interruptions in content delivery to the user.

45. (previously presented) The interactive program guide application of claim 32, wherein the network is the Internet.

Remarks/Arguments

Claims 1-45 are currently pending.

Rejections under 35 U.S.C. 103(a):

On Pages 2-6 of the Office Action, the Examiner rejected claims 1, 3, 5, 7 and 8 under 35 U.S.C. 103(a) as being unpatentable over Herman, Tom COO of JumpTV (http://www.publidatasystems.com/JumpTV/JumpTV.html) July 01, 2006 ("Herman") in view of Karaoguz (Pub No US 2009/007212) ("Karaoguz"). Applicant respectfully traverses these rejections.

Applicant's explanation from the prior response of 10/11/2011 of the distinctions between independent claims 1, 3, 5, 7 and 8 and the cited Herman and Karaoguz references is again set forth below, with added emphasis showing that Herman only teaches ONE source, that is ONE MSO, in contrast to the independent claims which require one or more MSO ***AND*** one or more non-MSO sources. Herman DOES NOT disclose any non-MSO sources, since any content provided to a user of Herman's JumpTV system is part of that same, single MSO. Clearly, the Herman reference does not anywhere teach that a JumpTV subscriber could modify the JumpTV IPG to include programming from channels that JumpTV does not offer and that the subscriber would not pay for. Thus, Herman clearly does not meet the limitation of the claims requiring "a server resident on a network containing descriptive program data about the audio and/or video content available from a **plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs**."

Here again, JumpTV only meets the definition of a SINGLE MSO. JumpTV is the same as a traditional cable MSO using a different pipe – Internet vs. coaxial cable. ***JumpTV's system has complete control over what content customers can or cannot access. A JUMPTV CUSTOMER CANNOT ADD CHANNELS FROM NON-MSO AND/OR OTHER MSO SOURCES THAT ARE NOT PART OF JUMPTV'S CHANNEL SELECTIONS TO THE IPG TO BE VIEWED USING THE CONTENT MANAGER. A JumpTV customer cannot access channels that do not pass through JumpTV's headend. JumpTV customers CAN ONLY WATCH content passing through JumpTV's headend. If JumpTV does not rebroadcast the channel from its headend, JumpTV customers cannot watch the channel.***

The Examiner has incorrectly asserted in his "Response to Arguments" that Applicant has argued that the claims require a plurality of MSOs. The claims allow for a plurality of MSOs, and that is but another distinction over Herman. THE PRIMARY DISTINCTION OVER HERMAN IS THAT HERMAN TEACHES ONLY ONE SOURCE, AS DEFINED BY THE CURRENT CLAIMS 1, 3, 5, 7 AND 8, AND THAT ONE SOURCE IS A SINGLE MSO.

Further, the Examiner incorrectly asserts that JumpTV merely relays content from different geographic locations. JumpTV rebroadcasts such content from its own server or headend. That's why Herman states on page 35 of 39 that "the correct codecs" need to be installed in order to "see and hear our video."

Thus, based upon these deficiencies in the teachings of both Herman and Karaoguz, the combination of Herman in view of Karaoguz clearly fails to render claims 1, 3, 5, 7 or 8 unpatentable under 35 U.S.C. 103(a)

In the specification, the characteristics of a Multiple System Operators (MSO) are described. An MSO is the equivalent of a cable system that receives and broadcasts channels. An MSO controls content availability, thus if an MSO chooses not to purchase rights to broadcast a specific content provider's channel the user cannot access that specific content provider's channel even if a separate content access relationship has been established. [0005, 0010, 0019, 0028 and 0029]. Each cable TV installation serving a community is known as a "cable system", and the operator of the system is called the "system operator". Most system operators run cable systems in more than one community. Therefore, the vast majority of them are Multiple System Operators.

A cable company acquires rights to broadcast individual channels from the owners of those channels – i.e. Viacom, NBC Universal, News Corporation, etc. None of these companies are considered MSOs. MSOs are companies like JumpTV, Dish Network, Comcast, Time Warner Cable, etc. MSOs downlink content and then rebroadcast it from their head-end(s).

JumpTV does not aggregate content from various MSOs, it aggregates content from various channels owners (not distributors or MSOs) and **then REBROADCASTS that content from its own head-end.**

JumpTV meets the above characteristics of a SINGLE MSO. JumpTV is the same as a traditional cable MSO using a different pipe – Internet vs. coaxial cable. JumpTV's system has complete control over what content customers can or cannot access. A JUMPTV CUSTOMER CANNOT ADD CHANNELS FROM NON-MSO AND/OR OTHER MSO SOURCES THAT ARE NOT PART OF JUMPTV'S CHANNEL SELECTIONS TO THE IPG TO BE VIEWED USING THE CONTENT MANAGER. A JumpTV customer cannot access channels that do not pass through JumpTV's headend. JumpTV customers CAN ONLY WATCH content passing through JumpTV's headend. If JumpTV does not rebroadcast the channel from its headend, JumpTV customers cannot watch the channel.

Therefore, Herman merely teaches a typical closed, aggregated content source or MSO which does not allow users to customize the IPG with respect to obtaining content from other MSO content sources (like Cablevision, TimeWarner Cable, Comcast, etc.) and/or non-MSO content sources separate from an MSO (like TRT-1 Turkey: mms://95.0.159.131/TV1, Fox 11 Los Angeles: http://mfile.akamai.com/23073/live/reflector:34194.asx, RAI News 24: http://mediapolis.rai.it/relinker/relinkerServlet.htm?cont=1, etc.) alike.

Thus, Herman teaches that JumpTV is **ONE** MSO.

"Content packages" as defined by Herman are not the equivalent of an MSO as defined by the Applicants. Content packages, e.g. "Arabic Package," are not MSO's. Herman on page 18 provides the following definitions:

Channel: A TV station that partners w/ JumpTV to put it's [sic] signal on the internet.

Package: A collection of more thatn [sic] one TV Station sold as a group or "Package" of stations for one price.

Thus, Herman does not teach a content manager containing descriptive program data from a plurality of sources, wherein the plurality of sources includes one or more MSOs and one or more non-MSOs. Instead, Herman only teaches a "closed" content manager for only a single MSO.

Moreover, Herman does not teach the content manager of claim 1, wherein the descriptive program data is obtained from a source distinct from at least one of the plurality of sources. In Herman, the descriptive program data comes from the JumpTV server which is not distinct from the JumpTV MSO.

These deficiencies of Herman with respect to claim 1 are also not taught or suggested by Karaoguz. Karaoguz teaches a peer-to-peer system for sharing "personal" audio/video content over the "media exchange network 100," using a media processing system (MPS) 102 such as an enhanced set top box provided by an MSO or a PC 117 and using a media guide interface 160 on each such MPS. Clearly, Karaoguz does not teach or suggest the following limitations of claim 1:

> "a server resident on a network containing descriptive program data about the audio and/or video content available from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs;
>
> * * *
>
> and wherein the server is distinct from at least one of the plurality of sources."

All that Karaoguz teaches is that a user may make private content or files available for viewing only by those to whom such content is pushed via a network, via a media guide interface 160 that is resident in a fixed location. Neither Karaoguz nor the combination of Herman/Karaoguz teaches the

content manager of claim 1 having an IPG available for access by a user anywhere such user can connect to the network (such as the Internet) to provide a consistent viewing experience to the user at any such location of content provided by one or more multiple system operators (MSOs) and one or more non-MSOs.

Again, based upon these deficiencies in the teachings of both Herman and Karaoguz, the combination of Herman in view of Karaoguz clearly fails to render claims 1, 3, 5, 7 or 8 unpatentable under 35 U.S.C. 103(a).

On Pages 7-23 of the Office Action, the Examiner rejected claims 2, 9, 10-16, 18, 20-26, 28, 29, 31-37, 39-43 and 45 under 35 U.S.C. 103(a) as being unpatentable over Herman and Karaoguz in view of Mizutome et al. (Patent No US 7,469,413) ("Mizutome"). Applicant respectfully traverses these rejections. Based upon the deficiencies in the teachings of both Herman and Karaoguz as set forth above, the combination of Herman and Karaoguz in view of Mizutome clearly fails to render claims 2, 9, 10-16, 18, 20-26, 28, 29, 31-37, 39-43 or 45 unpatentable under 35 U.S.C. 103(a).

On Pages 23- 24 of the Office Action, the Examiner rejected claim 4 under 35 U.S.C. 103(a) as being unpatentable over Herman and Karaoguz in view of Dew (Pub No US 2003/0110490) ("Dew"). Applicant respectfully traverses this rejection. Based upon the deficiencies in the teachings of both Herman and Karaoguz as set forth above, the combination of Herman and Karaoguz in view of Dew clearly fails to render claim 4 unpatentable under 35 U.S.C. 103(a).

On Pages 24-25 of the Office Action, the Examiner rejected claim 6 under 35 U.S.C. 103(a) as being unpatentable over Herman and Karaoguz in view of Contolini et al. (Patent No US 6,643,620) ("Contolini"). Applicant respectfully traverses this rejection. Based upon the deficiencies in the teachings of both Herman and Karaoguz as set forth above, the combination of Herman and Karaoguz in view of Contolini clearly fails to render claim 6 unpatentable under 35 U.S.C. 103(a).

On Pages 25-27 of the Office Action, the Examiner rejected claims 17, 27, 30, 38 and 44 under 35 U.S.C. 103(a) as being unpatentable over Herman, Karaoguz and Mizutome further in view of Potrebic et al. (Pub No US 2006/0253867) ("Potrebic"). Applicant respectfully traverses these rejections. Based upon the deficiencies in the teachings of both Herman and Karaoguz as set forth above, the combination of Herman, Karaoguz and Mizutome further in view of Potrebic clearly fails to render claims 17, 27, 30, 38 and 44 unpatentable under 35 U.S.C. 103(a).

On Page 27 of the Office Action, the Examiner rejected claim 19 under 35 U.S.C. 103(a) as being unpatentable over Herman, Karaoguz and Mizutome further in view of Dew. Applicant respectfully traverses this rejection. Based upon the deficiencies in the teachings of both Herman and Karaoguz as set

forth above, the combination of Herman, Karaoguz and Mizutome further in view of Dew clearly fails to render claim 19 unpatentable under 35 U.S.C. 103(a).

Applicant has made a diligent effort to place the instant application in condition for allowance. Accordingly, a Notice of Allowance for claims 1-45 is respectfully requested. If the Examiner is of the opinion that the instant application is in condition for disposition other than through allowance, the Examiner is requested to contact the undersigned attorney of record at the telephone number listed below.

Dated: April 2, 2012

Respectfully submitted,

Paul D. Bangor, Jr.
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(412) 394-7767
Attorneys for Applicant

Electronic Acknowledgement Receipt

EFS ID:	12452017
Application Number:	11484510
International Application Number:	
Confirmation Number:	9918
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Customer Number:	24122
Filer:	Paul D. Bangor
Filer Authorized By:	
Attorney Docket Number:	DB001229-000
Receipt Date:	02-APR-2012
Filing Date:	10-JUL-2006
Time Stamp:	18:59:01
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Amendment After Final	01344834.PDF	670744 506ab4bb598fd015e62e66b67d37d27c0c01e9ae	no	15
Warnings:					
Information:					

Total Files Size (in bytes):	670744

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	☐ To be Mailed
11/484,510	07/10/2006	

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)	SMALL ENTITY ☒		OR	OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	04/02/2012	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 45	Minus	** 45	= 0	X $30 =	0	OR	X $ =	
	Independent (37 CFR 1.16(h))	* 4	Minus	***4	= 0	X $125 =	0	OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE	0	OR	TOTAL ADD'L FEE	

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)	OR	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/DIANIECE JACOBS/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2423
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
Customer No.: 24122

To: Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL RESPONSE AND AMENDMENT

Sir:

In response to the Final Office Action of February 2, 2012 (the "Office Action") and further to Applicant's Response filed April 2, 2012 and the Interview with Examiner of April 11, 2012, Applicant hereby states as follows:

Amendments to the Specification; none

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 11 of this paper.

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Amendments to the Specification; none

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 11 of this paper.

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (currently amended) A content manager of audio and/or video content comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider;

a device capable of establishing and maintaining a connection with the network via a communications link; and

an interactive program guide application installed on the device that provides and/or displays an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data from the server for the audio and/or video content available on each of the plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network; and wherein the server is distinct from at least one of the plurality of sources.

2. (previously presented) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to a

description of each of the channels contained in the IPG and/or a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

3. (previously presented) The content manager of claim 1, further comprising a digital rights management module that obtains viewing rights from one or more of the plurality of sources.

4. (previously presented) The content manager of claim 1, further comprising a GPS receiver and a filtering module that blocks content according to jurisdiction.

5. (previously presented) The content manager of claim 1, wherein at least one of the plurality of sources comprises live television or previously recorded content.

6. (previously presented) The content manager of claim 1, further comprising a voice recognition module that accepts verbal commands and converts them to digital form.

7. (previously presented) The content manager of claim 1, further comprising a display device.

8. (previously presented) The content manager of claim 1, further comprising a relay module for delivering the IPG and data to a display device.

9. (previously presented) The content manager of claim 1, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the plurality of sources to be linked to

one or more of the channels from which the streaming audio and/or video programming may be received.

10. (previously presented) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

11. (currently amended) A content acquisition system for reception of audio and/or video content, comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider;

a device capable establishing and maintaining a connection with a network via a communications link; and

an interactive program guide application installed on the device that provides and/or displays an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data from the server for the audio and/or video content available on each of the plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network;

wherein the server is distinct from at least one of the plurality of sources; and

wherein the application allows for customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

12. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

13. (previously presented) The content acquisition system of claim 11, further comprising a data communication pathway to the communications link comprising a cellular telephone receiving and transmitting device.

14. (previously presented) The content acquisition system of claim 11, wherein the device further comprises a display screen.

15. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application assists the user in obtaining and/or managing rights to receive the streaming audio and/or video programming from one or more of the plurality of sources.

16. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user

with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

17. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG.

18. (original) The content acquisition system of claim 11, further comprising a transmitter for transmitting incoming data and content to a separate viewing apparatus.

19. (previously presented) The content acquisition system of claim 11, further comprising a GPS receiver for determining the location of the device and a filter module that selectively blocks content.

20. (previously presented) The content acquisition system of claim 11, wherein at least one of the plurality of sources comprises live television or previously recorded content.

21. (currently amended) A computer-implemented method for providing an interactive program guide to a user for viewing, selecting and obtaining access to audio and/or video content from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider, comprising:

displaying an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources, wherein each of the

channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via a network and a communications link;

providing descriptive program data for the audio and/or video content available on each of the plurality of channels from a server to the IPG via the network, wherein the server is distinct from at least one of the plurality of sources; and

allowing the user to customize the IPG with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the audio and/or video programming may be received.

22. (previously presented) The method of claim 21, wherein at least one of the plurality of sources comprises live television or previously recorded content.

23. (previously presented) The method of claim 21, wherein said description comprises information identifying content source and/or programming summaries.

24. (previously presented) The method of claim 21, further comprising:

allowing the user to customize the IPG with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

25. (previously presented) The method of claim 21, further comprising:

delivering the content to a device specified by the user.

26. (previously presented) The method of claim 25, further comprising automatically authenticating the user to one or more of the content sources prior to delivering the content to the device.

27. (original) The method of claim 21, further comprising obtaining a redundant source for said content in the event that one of said content sources becomes unavailable while in use.

28. (previously presented) The method of claim 25, further comprising obtaining viewing rights from one or more of content sources prior to delivering said content.

29. (previously presented) The method of claim 21, further comprising filtering viewing rights from one or more of content sources in accordance with a geographical location.

30. (previously presented) The method of claim 21, further comprising synchronizing changes made by the user to the interactive program guide in order to preserve a consistent IPG across a plurality of devices.

31. (previously presented) The method of claim 21, wherein the network is the Internet.

32. (currently amended) An interactive program guide application embodied on a non-transitory computer readable medium for receiving and managing only or virtually entirely streaming audio and/or video content from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider, comprising code segments:

a. for receiving data that describes said content from a server on a network;

b. for presenting said data in a preferred order identified by a user;

c. for managing viewing rights for said content;

d. for ensuring user authentication to the interactive program guide application; and

e. for receiving said content from the plurality of sources, wherein the server is distinct from at least one of the plurality of sources.

33. (previously presented) The interactive program guide application of claim 32, wherein the data and content are delivered over a communications link to a device specified by the user.

34. (original) The interactive program guide application of claim 32, further comprising code segments for receiving a request for content from the user and delivering said content to a device specified by the user.

35. (original) The interactive program guide application of claim 34, wherein the data that describes the content is displayed on a first device and a request for said content is made on said first device.

36. (original) The interactive program guide application of claim 35, wherein the content requested using the first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

37. (previously presented) The interactive program guide application of claim 36, wherein the second device is an Internet-enabled television.

38. (original) The interactive program guide application of claim 32, further comprising code segments for providing automatic updates in order to minimize user involvement in maintaining the application.

39. (original) The interactive program guide application of claim 32, further comprising code segments for synchronizing changes made by the user across all devices used to access the guide.

40. (original) The interactive program guide application of claim 32, further comprising code segments for enabling control over the application using a remote control device.

41. (original) The interactive program guide application of claim 32, further comprising code segments for providing real-time acquisition of content viewing rights.

42. (original) The interactive program guide application of claim 32, further comprising code segments for filtering content.

43. (original) The interactive program guide application of claim 42, wherein the content is filtered based on the geographic location of the device at the time of viewing said content.

44. (original) The interactive program guide application of claim 32, further comprising code segments for obtaining redundant content in order to reduce interruptions in content delivery to the user.

45. (previously presented) The interactive program guide application of claim 32, wherein the network is the Internet.

Remarks/Arguments

Claims 1-45 are currently pending.

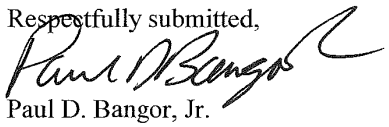
Applicant thanks the Examiners for their time in the Interview conducted on April 11, 2012. Further thereto, each independent claim has been amended as discussed to more clearly distinguish Applicant's invention from the prior art, namely the Herman JumpTV reference. More specifically, each of the independent claims 1, 11, 21 and 32 have been amended to include the limitation, namely: "wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider" to further distinguish over Herman which teaches only one MSO source and no non-MSO source which does not comprise a cable provider.

Applicant's Remarks/Arguments from the Response filed April 2, 2012 are incorporated by reference herein.

Applicant has made a diligent effort to place the instant application in condition for allowance. Accordingly, a Notice of Allowance for claims 1-45 is respectfully requested. If the Examiner is of the opinion that the instant application is in condition for disposition other than through allowance, the Examiner is requested to contact the undersigned attorney of record at the telephone number listed below.

Dated: April 16, 2012

Respectfully submitted,



Paul D. Bangor, Jr.
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Attorneys for Applicant

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2423
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
Customer No.: 24122

To: Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL RESPONSE AND AMENDMENT

Sir:

In response to the Final Office Action of February 2, 2012 (the "Office Action") and further to Applicant's Response filed April 2, 2012 and the Interview with Examiner of April 11, 2012, Applicant hereby states as follows:

Amendments to the Specification; none

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 11 of this paper.

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (currently amended) A content manager of audio and/or video content comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider;

a device capable of establishing and maintaining a connection with the network via a communications link; and

an interactive program guide application installed on the device that provides and/or displays an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data from the server for the audio and/or video content available on each of the plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network; and wherein the server is distinct from at least one of the plurality of sources.

2. (previously presented) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to a

description of each of the channels contained in the IPG and/or a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

3. (previously presented) The content manager of claim 1, further comprising a digital rights management module that obtains viewing rights from one or more of the plurality of sources.

4. (previously presented) The content manager of claim 1, further comprising a GPS receiver and a filtering module that blocks content according to jurisdiction.

5. (previously presented) The content manager of claim 1, wherein at least one of the plurality of sources comprises live television or previously recorded content.

6. (previously presented) The content manager of claim 1, further comprising a voice recognition module that accepts verbal commands and converts them to digital form.

7. (previously presented) The content manager of claim 1, further comprising a display device.

8. (previously presented) The content manager of claim 1, further comprising a relay module for delivering the IPG and data to a display device.

9. (previously presented) The content manager of claim 1, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the plurality of sources to be linked to

one or more of the channels from which the streaming audio and/or video programming may be received.

10. (previously presented) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

11. (currently amended) A content acquisition system for reception of audio and/or video content, comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider;

a device capable establishing and maintaining a connection with a network via a communications link; and

an interactive program guide application installed on the device that provides and/or displays an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data from the server for the audio and/or video content available on each of the plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network;

wherein the server is distinct from at least one of the plurality of sources; and

wherein the application allows for customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

12. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

13. (previously presented) The content acquisition system of claim 11, further comprising a data communication pathway to the communications link comprising a cellular telephone receiving and transmitting device.

14. (previously presented) The content acquisition system of claim 11, wherein the device further comprises a display screen.

15. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application assists the user in obtaining and/or managing rights to receive the streaming audio and/or video programming from one or more of the plurality of sources.

16. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user

with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

17. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG.

18. (original) The content acquisition system of claim 11, further comprising a transmitter for transmitting incoming data and content to a separate viewing apparatus.

19. (previously presented) The content acquisition system of claim 11, further comprising a GPS receiver for determining the location of the device and a filter module that selectively blocks content.

20. (previously presented) The content acquisition system of claim 11, wherein at least one of the plurality of sources comprises live television or previously recorded content.

21. (currently amended) A computer-implemented method for providing an interactive program guide to a user for viewing, selecting and obtaining access to audio and/or video content from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider, comprising:

displaying an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources, wherein each of the

channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via a network and a communications link;

providing descriptive program data for the audio and/or video content available on each of the plurality of channels from a server to the IPG via the network, wherein the server is distinct from at least one of the plurality of sources; and

allowing the user to customize the IPG with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the audio and/or video programming may be received.

22. (previously presented) The method of claim 21, wherein at least one of the plurality of sources comprises live television or previously recorded content.

23. (previously presented) The method of claim 21, wherein said description comprises information identifying content source and/or programming summaries.

24. (previously presented) The method of claim 21, further comprising:

allowing the user to customize the IPG with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

25. (previously presented) The method of claim 21, further comprising:

delivering the content to a device specified by the user.

26. (previously presented) The method of claim 25, further comprising automatically authenticating the user to one or more of the content sources prior to delivering the content to the device.

27. (original) The method of claim 21, further comprising obtaining a redundant source for said content in the event that one of said content sources becomes unavailable while in use.

28. (previously presented) The method of claim 25, further comprising obtaining viewing rights from one or more of content sources prior to delivering said content.

29. (previously presented) The method of claim 21, further comprising filtering viewing rights from one or more of content sources in accordance with a geographical location.

30. (previously presented) The method of claim 21, further comprising synchronizing changes made by the user to the interactive program guide in order to preserve a consistent IPG across a plurality of devices.

31. (previously presented) The method of claim 21, wherein the network is the Internet.

32. (currently amended) An interactive program guide application embodied on a non-transitory computer readable medium for receiving and managing only or virtually entirely streaming audio and/or video content from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider, comprising code segments:

a. for receiving data that describes said content from a server on a network;

b. for presenting said data in a preferred order identified by a user;

c. for managing viewing rights for said content;

d. for ensuring user authentication to the interactive program guide application; and

e. for receiving said content from the plurality of sources, wherein the server is distinct from at least one of the plurality of sources.

33. (previously presented) The interactive program guide application of claim 32, wherein the data and content are delivered over a communications link to a device specified by the user.

34. (original) The interactive program guide application of claim 32, further comprising code segments for receiving a request for content from the user and delivering said content to a device specified by the user.

35. (original) The interactive program guide application of claim 34, wherein the data that describes the content is displayed on a first device and a request for said content is made on said first device.

36. (original) The interactive program guide application of claim 35, wherein the content requested using the first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

37. (previously presented) The interactive program guide application of claim 36, wherein the second device is an Internet-enabled television.

38. (original) The interactive program guide application of claim 32, further comprising code segments for providing automatic updates in order to minimize user involvement in maintaining the application.

39. (original) The interactive program guide application of claim 32, further comprising code segments for synchronizing changes made by the user across all devices used to access the guide.

40. (original) The interactive program guide application of claim 32, further comprising code segments for enabling control over the application using a remote control device.

41. (original) The interactive program guide application of claim 32, further comprising code segments for providing real-time acquisition of content viewing rights.

42. (original) The interactive program guide application of claim 32, further comprising code segments for filtering content.

43. (original) The interactive program guide application of claim 42, wherein the content is filtered based on the geographic location of the device at the time of viewing said content.

44. (original) The interactive program guide application of claim 32, further comprising code segments for obtaining redundant content in order to reduce interruptions in content delivery to the user.

45. (previously presented) The interactive program guide application of claim 32, wherein the network is the Internet.

Remarks/Arguments

Claims 1-45 are currently pending.

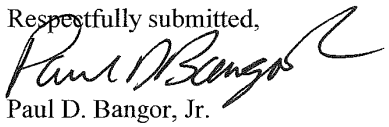
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Applicant's Remarks/Arguments from the Response filed April 2, 2012 are incorporated by reference herein.

Applicant has made a diligent effort to place the instant application in condition for allowance. Accordingly, a Notice of Allowance for claims 1-45 is respectfully requested. If the Examiner is of the opinion that the instant application is in condition for disposition other than through allowance, the Examiner is requested to contact the undersigned attorney of record at the telephone number listed below.

Dated: April 16, 2012

Respectfully submitted,



Paul D. Bangor, Jr.
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Attorneys for Applicant

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (currently amended) A content manager of audio and/or video content comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider;

a device capable of establishing and maintaining a connection with the network via a communications link; and

an interactive program guide application installed on the device that provides and/or displays an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data from the server for the audio and/or video content available on each of the plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network; and wherein the server is distinct from at least one of the plurality of sources.

2. (previously presented) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to a

description of each of the channels contained in the IPG and/or a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

3. (previously presented) The content manager of claim 1, further comprising a digital rights management module that obtains viewing rights from one or more of the plurality of sources.

4. (previously presented) The content manager of claim 1, further comprising a GPS receiver and a filtering module that blocks content according to jurisdiction.

5. (previously presented) The content manager of claim 1, wherein at least one of the plurality of sources comprises live television or previously recorded content.

6. (previously presented) The content manager of claim 1, further comprising a voice recognition module that accepts verbal commands and converts them to digital form.

7. (previously presented) The content manager of claim 1, further comprising a display device.

8. (previously presented) The content manager of claim 1, further comprising a relay module for delivering the IPG and data to a display device.

9. (previously presented) The content manager of claim 1, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the plurality of sources to be linked to

one or more of the channels from which the streaming audio and/or video programming may be received.

10. (previously presented) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

11. (currently amended) A content acquisition system for reception of audio and/or video content, comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider;

a device capable establishing and maintaining a connection with a network via a communications link; and

an interactive program guide application installed on the device that provides and/or displays an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data from the server for the audio and/or video content available on each of the plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network;

wherein the server is distinct from at least one of the plurality of sources; and

wherein the application allows for customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

12. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

13. (previously presented) The content acquisition system of claim 11, further comprising a data communication pathway to the communications link comprising a cellular telephone receiving and transmitting device.

14. (previously presented) The content acquisition system of claim 11, wherein the device further comprises a display screen.

15. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application assists the user in obtaining and/or managing rights to receive the streaming audio and/or video programming from one or more of the plurality of sources.

16. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user

with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

17. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG.

18. (original) The content acquisition system of claim 11, further comprising a transmitter for transmitting incoming data and content to a separate viewing apparatus.

19. (previously presented) The content acquisition system of claim 11, further comprising a GPS receiver for determining the location of the device and a filter module that selectively blocks content.

20. (previously presented) The content acquisition system of claim 11, wherein at least one of the plurality of sources comprises live television or previously recorded content.

21. (currently amended) A computer-implemented method for providing an interactive program guide to a user for viewing, selecting and obtaining access to audio and/or video content from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider, comprising:

displaying an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources, wherein each of the

channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via a network and a communications link;

providing descriptive program data for the audio and/or video content available on each of the plurality of channels from a server to the IPG via the network, wherein the server is distinct from at least one of the plurality of sources; and

allowing the user to customize the IPG with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the audio and/or video programming may be received.

22. (previously presented) The method of claim 21, wherein at least one of the plurality of sources comprises live television or previously recorded content.

23. (previously presented) The method of claim 21, wherein said description comprises information identifying content source and/or programming summaries.

24. (previously presented) The method of claim 21, further comprising:

allowing the user to customize the IPG with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

25. (previously presented) The method of claim 21, further comprising:

delivering the content to a device specified by the user.

26. (previously presented) The method of claim 25, further comprising automatically authenticating the user to one or more of the content sources prior to delivering the content to the device.

27. (original) The method of claim 21, further comprising obtaining a redundant source for said content in the event that one of said content sources becomes unavailable while in use.

28. (previously presented) The method of claim 25, further comprising obtaining viewing rights from one or more of content sources prior to delivering said content.

29. (previously presented) The method of claim 21, further comprising filtering viewing rights from one or more of content sources in accordance with a geographical location.

30. (previously presented) The method of claim 21, further comprising synchronizing changes made by the user to the interactive program guide in order to preserve a consistent IPG across a plurality of devices.

31. (previously presented) The method of claim 21, wherein the network is the Internet.

32. (currently amended) An interactive program guide application embodied on a non-transitory computer readable medium for receiving and managing only or virtually entirely streaming audio and/or video content from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider, comprising code segments:

a. for receiving data that describes said content from a server on a network;

b. for presenting said data in a preferred order identified by a user;

c. for managing viewing rights for said content;

d. for ensuring user authentication to the interactive program guide application; and

e. for receiving said content from the plurality of sources, wherein the server is distinct from at least one of the plurality of sources.

33. (previously presented) The interactive program guide application of claim 32, wherein the data and content are delivered over a communications link to a device specified by the user.

34. (original) The interactive program guide application of claim 32, further comprising code segments for receiving a request for content from the user and delivering said content to a device specified by the user.

35. (original) The interactive program guide application of claim 34, wherein the data that describes the content is displayed on a first device and a request for said content is made on said first device.

36. (original) The interactive program guide application of claim 35, wherein the content requested using the first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

37. (previously presented) The interactive program guide application of claim 36, wherein the second device is an Internet-enabled television.

38. (original) The interactive program guide application of claim 32, further comprising code segments for providing automatic updates in order to minimize user involvement in maintaining the application.

39. (original) The interactive program guide application of claim 32, further comprising code segments for synchronizing changes made by the user across all devices used to access the guide.

40. (original) The interactive program guide application of claim 32, further comprising code segments for enabling control over the application using a remote control device.

41. (original) The interactive program guide application of claim 32, further comprising code segments for providing real-time acquisition of content viewing rights.

42. (original) The interactive program guide application of claim 32, further comprising code segments for filtering content.

43. (original) The interactive program guide application of claim 42, wherein the content is filtered based on the geographic location of the device at the time of viewing said content.

44. (original) The interactive program guide application of claim 32, further comprising code segments for obtaining redundant content in order to reduce interruptions in content delivery to the user.

45. (previously presented) The interactive program guide application of claim 32, wherein the network is the Internet.

Remarks/Arguments

Claims 1-45 are currently pending.

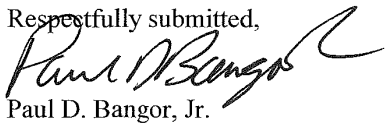
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Applicant has made a diligent effort to place the instant application in condition for allowance. Accordingly, a Notice of Allowance for claims 1-45 is respectfully requested. If the Examiner is of the opinion that the instant application is in condition for disposition other than through allowance, the Examiner is requested to contact the undersigned attorney of record at the telephone number listed below.

Dated: April 16, 2012

Respectfully submitted,



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Attorneys for Applicant

Electronic Acknowledgement Receipt

EFS ID:	12553771
Application Number:	11484510
International Application Number:	
Confirmation Number:	9918
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Customer Number:	24122
Filer:	Paul D. Bangor
Filer Authorized By:	
Attorney Docket Number:	DB001229-000
Receipt Date:	16-APR-2012
Filing Date:	10-JUL-2006
Time Stamp:	18:37:45
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Supplemental Response or Supplemental Amendment	01348816.PDF	426251 b317115dc44ff984a470bb362a1c784c3ddbbaf2	no	11
Warnings:					
Information:					

Total Files Size (in bytes):	426251

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	☐ To be Mailed
11/484,510	07/10/2006	

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)	SMALL ENTITY ☒		OR	OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	04/16/2012	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 45	Minus	** 45	= 0	X $30 =	0	OR	X $ =	
	Independent (37 CFR 1.16(h))	* 4	Minus	***4	= 0	X $125 =	0	OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE	0	OR	TOTAL ADD'L FEE	

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)	OR	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/DIANIECE JACOBS/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/484,510	07/10/2006	Mark A. Cavicchia	DB001229-000	9918

24122 7590 05/29/2012
THORP REED & ARMSTRONG, LLP
ONE OXFORD CENTRE
301 GRANT STREET, 14TH FLOOR
PITTSBURGH, PA 15219-1425

EXAMINER	
MENDOZA, JUNIOR O	
ART UNIT	PAPER NUMBER
2423	

NOTIFICATION DATE	DELIVERY MODE
05/29/2012	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

TRAIP@thorpreed.com
nswarmer@thorpreed.com
cmeshanko@thorpreed.com

Applicant-Initiated Interview Summary	**Application No.** 11/484,510	**Applicant(s)** CAVICCHIA, MARK A.	
	Examiner JUNIOR MENDOZA	**Art Unit** 2423	

All participants (applicant, applicant's representative, PTO personnel):

(1) *JUNIOR MENDOZA*.

(2) *HAI TRAN*.

(3) *PAUL BANGOR*.

(4)_____.

Date of Interview: *11 April 2012*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☐112 ☐102 ☒103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *1,11,21 and 32*.

Identification of prior art discussed: *Herman*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

The examiner suggested further clarifying "wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider" in order to advance prosecution. The suggested amendment appears to overcome the Herman reference. The examiners thank the applicant for his disposition to entertain the examiner's concerns and suggestion.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

	/VIVEK SRIVASTAVA/ Supervisory Patent Examiner, Art Unit 2423

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

———

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Advisory Action Before the Filing of an Appeal Brief	**Application No.** *11/484,510*	**Applicant(s)** CAVICCHIA, MARK A.
	Examiner JUNIOR MENDOZA	**Art Unit** 2423

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 02 April 2012 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

NO NOTICE OF APPEAL FILED

1. ☒ The reply was filed after a final rejection. No Notice of Appeal has been filed. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance;

(2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114 if this is a utility or plant application. Note that RCEs are not permitted in design applications. The reply must be filed within one of the following time periods:

a) ☐ The period for reply expires _____months from the mailing date of the final rejection.

b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action; or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

c) ☐ A prior Advisory Action was mailed more than 3 months after the mailing date of the final rejection in response to a first after-final reply filed within 2 months of the mailing date of the final rejection. The current period for reply expires months from the mailing date of *the prior Advisory Action* or SIX MONTHS from the mailing date of the final rejection, whichever is earlier.

Examiner Note: If box 1 is checked, check either box (a), (b) or (c). ONLY CHECK BOX (b) WHEN THIS ADVISORY ACTION IS THE FIRST RESPONSE TO APPLICANT'S FIRST AFTER-FINAL REPLY WHICH WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. ONLY CHECK BOX (c) IN THE LIMITED SITUATION SET FORTH UNDER BOX (c). See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) or (c) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendments filed after a final rejection, but prior to the date of filing a brief, will not be entered because

a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);

b) ☐ They raise the issue of new matter (see NOTE below);

c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: *See Continuation Sheet*. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☒ Applicant's reply has overcome the following rejection(s): Herman reference in claims 1, 11, 21 and 32.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): (a) ☒ will not be entered, or (b) ☐ will be entered, and an explanation of how the new or amended claims would be rejected is provided below or appended.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing the Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:

_____.

12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____

13. ☒ Other: Note the attached Interview summary.

STATUS OF CLAIMS

14. The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: .

Claim(s) objected to: .

Claim(s) rejected: 1-45.

Claim(s) withdrawn from consideration: .

/VIVEK SRIVASTAVA/ Supervisory Patent Examiner, Art Unit 2423	

Continuation of 3. NOTE: While the proposed amendments appear to overcome the Herman reference, further search and/or consideration is required on the part of the examiner. Since the newly filed amended claims are narrower in scope than that previously considered claims.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2423
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
Customer No.: 24122

To: Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL RESPONSE AND AMENDMENT

Sir:

In response to the Final Office Action of February 2, 2012 (the "Office Action") and further to Applicant's Response filed April 2, 2012 and the Interview with Examiner of April 11, 2012, Applicant hereby states as follows:

Amendments to the Specification; none

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 11 of this paper.

DO NOT ENTER: /J.M./

04/17/2012

Doc code: RCEX
Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	11/484,510	Filing Date	2006-07-10	Docket Number (if applicable)	DB001229-000	Art Unit	2423
First Named Inventor	Mark A. Cavicchia			Examiner Name	Junior O. Mendoza		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☒ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____

☒ Other Amendment

☒ Enclosed

☒ Amendment/Reply

☐ Information Disclosure Statement (IDS)

☐ Affidavit(s)/ Declaration(s)

☐ Other _____

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____ (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

☒ **The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**
The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 200888

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

☐ Applicant Signature

Doc code: RCEX
Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	Paul D Bangor	Date (YYYY-MM-DD)	2012-07-02
Name	Paul D. Bangor, Jr.	Registration Number	34768

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
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Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2423
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
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To: Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL RESPONSE AND AMENDMENT

Sir:

In response to the Final Office Action of February 2, 2012 (the "Office Action") and further to Applicant's Response filed April 2, 2012 and the Interview with Examiner of April 11, 2012, Applicant hereby states as follows:

Amendments to the Specification; none

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 11 of this paper.

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (currently amended) A content manager of audio and/or video content comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider;

a device capable of establishing and maintaining a connection with the network via a communications link; and

an interactive program guide application installed on the device that provides and/or displays an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data from the server for the audio and/or video content available on each of the plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network; and wherein the server is distinct from at least one of the plurality of sources.

2. (previously presented) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to a

description of each of the channels contained in the IPG and/or a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

3. (previously presented) The content manager of claim 1, further comprising a digital rights management module that obtains viewing rights from one or more of the plurality of sources.

4. (previously presented) The content manager of claim 1, further comprising a GPS receiver and a filtering module that blocks content according to jurisdiction.

5. (previously presented) The content manager of claim 1, wherein at least one of the plurality of sources comprises live television or previously recorded content.

6. (previously presented) The content manager of claim 1, further comprising a voice recognition module that accepts verbal commands and converts them to digital form.

7. (previously presented) The content manager of claim 1, further comprising a display device.

8. (previously presented) The content manager of claim 1, further comprising a relay module for delivering the IPG and data to a display device.

9. (previously presented) The content manager of claim 1, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the plurality of sources to be linked to

one or more of the channels from which the streaming audio and/or video programming may be received.

10. (previously presented) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

11. (currently amended) A content acquisition system for reception of audio and/or video content, comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider;

a device capable establishing and maintaining a connection with a network via a communications link; and

an interactive program guide application installed on the device that provides and/or displays an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data from the server for the audio and/or video content available on each of the plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network;

wherein the server is distinct from at least one of the plurality of sources; and

wherein the application allows for customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

12. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

13. (previously presented) The content acquisition system of claim 11, further comprising a data communication pathway to the communications link comprising a cellular telephone receiving and transmitting device.

14. (previously presented) The content acquisition system of claim 11, wherein the device further comprises a display screen.

15. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application assists the user in obtaining and/or managing rights to receive the streaming audio and/or video programming from one or more of the plurality of sources.

16. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user

with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

17. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG.

18. (original) The content acquisition system of claim 11, further comprising a transmitter for transmitting incoming data and content to a separate viewing apparatus.

19. (previously presented) The content acquisition system of claim 11, further comprising a GPS receiver for determining the location of the device and a filter module that selectively blocks content.

20. (previously presented) The content acquisition system of claim 11, wherein at least one of the plurality of sources comprises live television or previously recorded content.

21. (currently amended) A computer-implemented method for providing an interactive program guide to a user for viewing, selecting and obtaining access to audio and/or video content from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider, comprising:

displaying an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources, wherein each of the

channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via a network and a communications link;

providing descriptive program data for the audio and/or video content available on each of the plurality of channels from a server to the IPG via the network, wherein the server is distinct from at least one of the plurality of sources; and

allowing the user to customize the IPG with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the audio and/or video programming may be received.

22. (previously presented) The method of claim 21, wherein at least one of the plurality of sources comprises live television or previously recorded content.

23. (previously presented) The method of claim 21, wherein said description comprises information identifying content source and/or programming summaries.

24. (previously presented) The method of claim 21, further comprising:

allowing the user to customize the IPG with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

25. (previously presented) The method of claim 21, further comprising:

delivering the content to a device specified by the user.

26. (previously presented) The method of claim 25, further comprising automatically authenticating the user to one or more of the content sources prior to delivering the content to the device.

27. (original) The method of claim 21, further comprising obtaining a redundant source for said content in the event that one of said content sources becomes unavailable while in use.

28. (previously presented) The method of claim 25, further comprising obtaining viewing rights from one or more of content sources prior to delivering said content.

29. (previously presented) The method of claim 21, further comprising filtering viewing rights from one or more of content sources in accordance with a geographical location.

30. (previously presented) The method of claim 21, further comprising synchronizing changes made by the user to the interactive program guide in order to preserve a consistent IPG across a plurality of devices.

31. (previously presented) The method of claim 21, wherein the network is the Internet.

32. (currently amended) An interactive program guide application embodied on a non-transitory computer readable medium for receiving and managing only or virtually entirely streaming audio and/or video content from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider, comprising code segments:

a. for receiving data that describes said content from a server on a network;

b. for presenting said data in a preferred order identified by a user;

c. for managing viewing rights for said content;

d. for ensuring user authentication to the interactive program guide application; and

e. for receiving said content from the plurality of sources, wherein the server is distinct from at least one of the plurality of sources.

33. (previously presented) The interactive program guide application of claim 32, wherein the data and content are delivered over a communications link to a device specified by the user.

34. (original) The interactive program guide application of claim 32, further comprising code segments for receiving a request for content from the user and delivering said content to a device specified by the user.

35. (original) The interactive program guide application of claim 34, wherein the data that describes the content is displayed on a first device and a request for said content is made on said first device.

36. (original) The interactive program guide application of claim 35, wherein the content requested using the first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

37. (previously presented) The interactive program guide application of claim 36, wherein the second device is an Internet-enabled television.

38. (original) The interactive program guide application of claim 32, further comprising code segments for providing automatic updates in order to minimize user involvement in maintaining the application.

39. (original) The interactive program guide application of claim 32, further comprising code segments for synchronizing changes made by the user across all devices used to access the guide.

40. (original) The interactive program guide application of claim 32, further comprising code segments for enabling control over the application using a remote control device.

41. (original) The interactive program guide application of claim 32, further comprising code segments for providing real-time acquisition of content viewing rights.

42. (original) The interactive program guide application of claim 32, further comprising code segments for filtering content.

43. (original) The interactive program guide application of claim 42, wherein the content is filtered based on the geographic location of the device at the time of viewing said content.

44. (original) The interactive program guide application of claim 32, further comprising code segments for obtaining redundant content in order to reduce interruptions in content delivery to the user.

45. (previously presented) The interactive program guide application of claim 32, wherein the network is the Internet.

Remarks/Arguments

Claims 1-45 are currently pending.

Applicant thanks the Examiners for their time in the Interview conducted on April 11, 2012. Further thereto, each independent claim has been amended as discussed to more clearly distinguish Applicant's invention from the prior art, namely the Herman JumpTV reference. More specifically, each of the independent claims 1, 11, 21 and 32 have been amended to include the limitation, namely: "wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider" to further distinguish over Herman which teaches only one MSO source and no non-MSO source which does not comprise a cable provider.

Applicant's Remarks/Arguments from the Response filed April 2, 2012 are incorporated by reference herein.

Applicant has made a diligent effort to place the instant application in condition for allowance. Accordingly, a Notice of Allowance for claims 1-45 is respectfully requested. If the Examiner is of the opinion that the instant application is in condition for disposition other than through allowance, the Examiner is requested to contact the undersigned attorney of record at the telephone number listed below.

Respectfully submitted,

Dated: April 16, 2012

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Electronic Acknowledgement Receipt

EFS ID:	13161473
Application Number:	11484510
International Application Number:	
Confirmation Number:	9918
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Customer Number:	24122
Filer:	Paul D. Bangor/Nancy Swarmer
Filer Authorized By:	Paul D. Bangor
Attorney Docket Number:	DB001229-000
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Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	120702_6.pdf	79393 77ca35db4908cc685b1420d4f8ec31503f4f0430	no	2

Warnings:

This is not a USPTO supplied RCE SB30 form.

Information:					
2	Amendment Submitted/Entered with Filing of CPA/RCE	120702_7.pdf	424131 53b4983ff96bf1d2b2833e733dccd8c87b27cd28	no	11
Warnings:					
Information:					
			Total Files Size (in bytes):	503524	

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New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (07-06)
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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	☐ To be Mailed
11/484,510	07/10/2006	

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)	SMALL ENTITY ☒		OR	OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	07/02/2012	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 45	Minus	** 45	= 0	X $30 =	0	OR	X $ =	
	Independent (37 CFR 1.16(h))	* 4	Minus	***4	= 0	X $125 =	0	OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE	0	OR	TOTAL ADD'L FEE	

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)	OR	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/DEBORAH NASH/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/484,510	07/10/2006	Mark A. Cavicchia	DB001229-000	9918

24122 7590 11/23/2012

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EXAMINER	
MENDOZA, JUNIOR O	
ART UNIT	**PAPER NUMBER**
2423	

NOTIFICATION DATE	DELIVERY MODE
11/23/2012	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

TRAIP@thorpreed.com
nswarmer@thorpreed.com
cmeshanko@thorpreed.com

Office Action Summary	Application No.	Applicant(s)	
	11/484,510	CAVICCHIA, MARK A.	
	Examiner	Art Unit	
	JUNIOR MENDOZA	2423	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 July 2012*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1-45* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-45* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 11, 21 and 32 have been considered but are moot because the arguments do not apply to any of the references being used in the current rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 1, 3, 5, 7 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman, Tom COO of JumpTV (http://www.publicdatasystems.com/JumpTV/JumpTV.html July 01, 2006 in view of Wilder et al. (Pub No US 2003/0051246). Hereinafter referenced as Herman and Wilder, respectively.

Regarding **claim 1**, Herman discloses a content manager of audio and/or video content (JumpTV), comprising:

a server resident on a network (JumpTV online network) containing descriptive program data (channel title and information) about the audio and/or video content available (JumpTV channel Listing) from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) (Pages 1, 3 and 18;

JumpTV offers package of channels and individual channels from different MSO distributors around the world);

a device capable of establishing and maintaining a connection with the network via a communications link (Page 1 first paragraph; computers, laptops, internet-enabled television and mobile phone connect to JumpTV network via an internet connection);

and an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) (JumpTV channel Listing) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data (channel title and information) from the server (JumpTV online network) for the audio and/or video content available on each of the plurality of channels (Pages 3-16; channel listing),

wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources (Page 1 second paragraph; TV stations from different countries) via the communications link and the network (Page 1 first paragraph and page 26; add channels to view in JumpTV);

and wherein the server is distinct from at least one of the plurality of sources (Pages 1 and 18; JumpTV online network containing streaming and relaying servers around the world).

However, it is noted that Herman is silent to explicitly disclose that a plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider.

Nevertheless, in a similar field of endeavor Wilder discloses that a plurality of sources includes one or more multiple system operators (MSOs) (e.g. digital television broadcasters 124) and one or more non-MSOs (e.g. Internet 122), wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider (Paragraphs [0029] [0030] figure 2; collecting and combining program guide information into a single electronic program guide 110 from a plurality of sources 122, 124, 126, 128).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Wilder, for the predictable result of allowing the viewer to be able to access different type of distributed data from a broadcast and broadband sources in a single program guide, for easy access for user selection of content.

Regarding **claim 3**, Herman and Wilder disclose the content acquisition system of claim 11; moreover, Herman discloses a digital rights management module that obtains viewing rights from one or more of the plurality of sources (Page 19, page 22; user login and registration to a specific content source for a specific user account).

Regarding **claim 5**, Herman and Wilder disclose the content acquisition system of claim 1; moreover, Herman discloses that at least one of the plurality of sources

comprises live television or previously recorded content (Page 1 first paragraph, page 3; live channels from different countries).

Regarding **claim 7**, Herman and Wilder disclose the content acquisition system of claim 1; moreover, Herman discloses a display device (Page 1 first paragraph; computers, laptops, internet-enabled television and mobile phone connect to JumpTV).

Regarding **claim 8**, Herman and Wilder disclose the content acquisition system of claim 1; moreover, Herman discloses a relay module for delivering the IPG and data to a display device (Pages 3-16; channel listing).

4. **Claims 2, 9 – 16, 18, 20 – 26, 28, 29, 31 – 35, 39 – 43 and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman and Wilder in view of Mizutome et al. (Patent No US 7,469,413). Hereinafter, referenced as Mizutome.

Regarding **claim 2**, Herman and Wilder disclose the content manager of claim 1; moreover, Herman discloses description of each of the channels contained in the IPG (JumpTV channel Listing) and/or the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Page 1, Page 17; geo-custom).

However, it is noted that Herman and Wilder are silent to explicitly disclose an application which allows for customization of the IPG by a user with respect to a description of each of the channels contained in the IPG and/or a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses tan application which allows for customization of the IPG by the user with respect to a description of each of the channels contained in the IPG and/or a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 8 lines 20-32 and lines 62-67 figure 6; customized program guide).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Wilder by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 9**, Herman and Wilder disclose the content manager of claim 1; moreover, Herman discloses description of each of the channels contained in the IPG (JumpTV channel Listing) and/or a aggregated content sources (content packages, e.g.

Arabic package) and non-aggregated content sources (individual channels, e.g. Al Jazeera) to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Page 1). Furthermore, Herman discloses customizing of the interface (Page 17; geo-custom).

However, it is noted that Herman and Wilder are silent to explicitly disclose that the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses that the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 6 lines19-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Wilder by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 10**, Herman and Wilder disclose the content manager of claim 1; moreover, Herman discloses the interactive program guide application (see claim 1).

However, it is noted that Herman and Wilder are silent to explicitly disclose customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

Nevertheless, in a similar field of endeavor Mizutome discloses customization of the IPG by a user with respect to an order of the listing of the channels in the IPG (Col. 8 lines 20-32 figures 5 and 20; customized guide starting at a user defined channel).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Wilder by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 11**, Herman discloses a content acquisition system for reception of audio and/or video content (JumpTV), comprising:

a server resident on a network (JumpTV online network) containing descriptive program data (channel title and information) about the audio and/or video content available (JumpTV channel Listing) from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) (Pages 1, 3 and 18;

JumpTV offers package of channels and individual channels from different MSO distributors around the world);

a device capable of establishing and maintaining a connection with the network via a communications link (Page 1 first paragraph; computers, laptops, internet-enabled television and mobile phone connect to JumpTV network via an internet connection);

and an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) (JumpTV channel Listing) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data (channel title and information) from the server (JumpTV online network) for the audio and/or video content available on each of the plurality of channels (Pages 3-16; channel listing),

wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network (Page 1 first paragraph and page 26; add channels to view in JumpTV);

and wherein the server is distinct from at least one of the plurality of sources (Pages 1 and 18; JumpTV online network containing streaming and relaying servers).

However, it is noted that Herman is silent to explicitly disclose that a plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider.

Nevertheless, in a similar field of endeavor Wilder discloses that a plurality of sources includes one or more multiple system operators (MSOs) (e.g. digital television broadcasters 124) and one or more non-MSOs (e.g. Internet 122), wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider (Paragraphs [0029] [0030] figure 2; collecting and combining program guide information into a single electronic program guide 110 from a plurality of sources 122, 124, 126, 128).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Wilder, for the predictable result of allowing the viewer to be able to access different type of distributed data from a broadcast and broadband sources in a single program guide, for easy access for user selection of content.

However, it is noted that Herman and Wilder are silent to explicitly disclose customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG (Col. 8 lines 20-32 figures 5 and 20; customized guide starting at a user defined channel),

(ii) a description of each of the channels contained in the IPG (Figures 10A and 10B;customize program guide by content genre)

and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide according to source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Wilder by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 12**, Herman, Wilder and Mizutome disclose the content acquisition system of claim 11; moreover, Herman discloses description of each of the channels contained in the IPG (JumpTV channel Listing) and/or a aggregated content sources (content packages, e.g. Arabic package) and non-aggregated content sources (individual channels, e.g. Al Jazeera) to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Page 1, Page 17; geo-custom).

However, it is noted that Herman and Wilder are silent to explicitly disclose allowing for customization of an IPG by a user with respect to (i) an order of the listing of

the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses allowing for customization of an IPG by a user with respect to (i) an order of the listing of the channels in the IPG (Col. 8 lines 20-32 figures 5 and 20; customized guide starting at a user defined channel),

(ii) a description of each of the channels contained in the IPG (Figures 10A and 10B;customize program guide by content genre)

and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide according to source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Wilder by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 13**, Herman, Wilder and Mizutome disclose the content acquisition system of claim 11; moreover, Herman discloses the data communication pathway to the communications link comprising a cellular telephone receiving and

transmitting device (Page 1 first paragraph; mobile phone connect to JumpTV network via an internet connection).

Regarding **claims 14, 15, 16 and 20**, Herman, Wilder and Mizutome disclose all the limitations of claims 14, 15, 16 and 20; therefore, claims 14, 15, 16 and 20 are rejected for the same reasons as in claims 7, 3, 9 and 5, respectively.

Regarding **claim 18**, Herman, Wilder and Mizutome disclose the content acquisition system of claim 11; moreover, Herman discloses a transmitter (JumpTV internet network) for transmitting incoming data and content to a separate viewing apparatus (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 21**, Herman, Wilder and Mizutome disclose all the limitations of claim 21; therefore, claim 21 is rejected for the same reasons as in claims 11 and 12.

Regarding **claims 22, 24, 25 and 28**, Herman, Wilder and Mizutome disclose all the limitations of claims 22, 24, 25 and 28; therefore, claims 22, 24, 25 and 28 are rejected for the same reasons as in claims 5, 9, 18 and 3, respectively.

Regarding **claim 23**, Herman, Wilder and Mizutome disclose the method of claim 21; moreover, Herman discloses the interactive program guide application (see claim 1) and a more information link about a content source (see page 3).

However, it is noted that Herman and Wilder are silent to explicitly disclose that a description comprises information identifying content source and/or programming summaries.

Nevertheless, in a similar field of endeavor Mizutome discloses that a description comprises information identifying content source and/or programming summaries (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide according to source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Wilder by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 26**, Herman, Wilder and Mizutome disclose the method of claim 25; moreover, Herman discloses automatically authenticating the user to one or more of the content sources prior to delivering the content to the device (Page 19, page 22; user login and registration to a specific content source for a specific user account).

Regarding **claim 29**, Herman, Wilder and Mizutome disclose the method of claim 21; moreover, Herman discloses filtering viewing rights from one or more of content sources in accordance with a geographical location (Page 17; see geo-custom and geoblock for a region).

Regarding **claim 31**, Herman, Wilder and Mizutome disclose the method of claim 21; moreover, Herman discloses that the network is the Internet (Page 1 first paragraph; computers, laptops, internet-anabled television and mobile phone connect to JumpTV network via an internet connection).

Regarding **claim 32**, Herman discloses an interactive program guide application embodied on a non-transitory computer readable medium for receiving and managing only or virtually streaming content from a plurality of sources, the plurality of sources includes one or more multiple system operators (MSOs) (Pages 1, 3 and 18; JumpTV offers package of channels and individual channels from different MSO distributors around the world); comprising code segments (JumpTV):

a. for receiving, organizing and storing data that describes said content (Pages 3-16; channel listing description);

c. for managing viewing rights for said content (Page 1 first paragraph and page 26; channel and package registration).

d. for ensuring user authentication to the interactive program guide application (Page 19, page 22; user registration and login to a user account).

e. for receiving said content from the plurality of sources, wherein the server is distinct from at least one of the plurality of sources (Pages 1 and 18; JumpTV online network containing streaming and relaying servers).

However, it is noted that Herman is silent to explicitly disclose that a plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider.

Nevertheless, in a similar field of endeavor Wilder discloses that a plurality of sources includes one or more multiple system operators (MSOs) (e.g. digital television broadcasters 124) and one or more non-MSOs (e.g. Internet 122), wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider (Paragraphs [0029] [0030] figure 2; collecting and combining program guide information into a single electronic program guide 110 from a plurality of sources 122, 124, 126, 128).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Wilder, for the predictable result of allowing the viewer to be able to access different type of distributed data from a broadcast and broadband sources in a single program guide, for easy access for user selection of content.

However, it is noted that Herman and Wilder are silent to explicitly disclose b. presenting data in a preferred order identified by a user.

Nevertheless, in a similar field of endeavor Mizutome discloses b. presenting data in a preferred order identified by a user (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Wilder by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 33**, Herman, Wilder and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses that the data and content are delivered over a communications link to a device specified by the user (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 34**, Herman, Wilder and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses code segments for receiving a request for content from the user and delivering said content to a device specified by the user (Page 1 first paragraph, page 38; using JumpTV from any location

implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 35**, Herman, Wilder and Mizutome disclose the interactive program guide application of claim 34; moreover, Herman discloses that the data that describes the content is displayed on a first device and a request for said content is made on said first device (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 39**, Herman, Wilder and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses code segments for synchronizing changes made by the user across all devices used to access the guide (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access; therefore, changed made from any accessing device will be reflected on any other device used to access JumpTV in the future).

Regarding **claim 40**, Herman, Wilder and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses code segments for enabling control over the application using a receiver (Page 1 first paragraph, page 38; using JumpTV from any location implementing a television).

However, it is noted that Herman is silent to explicitly disclose that the receiver includes a remote control device.

Nevertheless, in a similar field of endeavor Wilder discloses that the receiver includes a remote control device (Paragraph [0049]; remote control).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Wilder, for the purpose of allowing the user to control the program guide from the comfort of their seat.

Regarding **claims 41 and 45**, Herman, Wilder and Mizutome disclose all the limitations of claims 41 and 45; therefore, claims 41 and 45 are rejected for the same reasons as in claims 15 and 31, respectively.

Regarding **claims 42 and 43**, Herman, Wilder and Mizutome disclose all the limitations of claims 42 and 43; therefore, claims 42 and 43 are rejected for the same reasons as in claim 29.

5. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Herman and Wilder in view of Dew et al. (Pub No US 2003/0110490). Hereinafter, referenced as Dew.

Regarding **claim 4**, Herman and Wilder disclose the content manager of claim 1; moreover, Herman discloses a filtering module that blocks content according to jurisdiction (Page 17; see geo-custom and geoblock for a region).

However, it is noted that Herman and Wilder are silent to explicitly disclose a GPS receiver.

Nevertheless, in a similar field of endeavor Dew discloses a GPS receiver (Paragraphs [0008] [0018] [0024] also exhibited on figures 1 and 2; present content exclusively according to location).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Wilder by specifically providing the elements mentioned above, as taught by Dew, for the purpose of targeting content effectively for users based on geographical area, such as advertisement of local business or targeted programs of interest for a specific community.

6. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Herman and Wilder in view of Contolini et al. (Patent No US 6,643,620). Hereinafter, referenced as Contolini.

Regarding **claim 6**, Herman and Wilder disclose the content manager of claim 1; however, it is noted that Herman and Wilder are silent to explicitly discloses a voice recognition module that accepts verbal commands and converts them to digital form.

Nevertheless, in a similar field of endeavor Contolini discloses a voice recognition module that accepts verbal commands and converts them to digital form (Col. 7 lines 1-12, figure 1; voice recognition system which digitized inputted user commands).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Wilder by specifically providing the elements mentioned above, as taught by Contolini, for the purpose of allowing a user to easily and efficiently input commands without the need of manual inputs for user satisfaction.

7. **Claims 17, 27, 30, 38 and 44** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman, Wilder and Mizutome further in view of Potrebic et al. (Pub No US 2006/0253867). Hereinafter, referenced as Potrebic.

Regarding **claim 17**, Herman, Wilder and Mizutome disclose the content acquisition system of claim 11; however, it is noted that Herman, Wilder and Mizutome are silent to explicitly disclose that the interactive program guide application further

provides for synchronization of changes made to the IPG in order to present a consistent IPG.

Nevertheless, in a similar field of endeavor Potrebic discloses that the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG (Paragraphs [0026] [0053] [0055]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman, Wilder and Mizutome by specifically providing the elements mentioned above, as taught by Potrebic, for the purpose providing the most current information related to content line up to the users, which would prevent a discrepancy between the program guide and the actual content being presented.

Regarding **claim 27**, Herman, Wilder and Mizutome disclose the method of claim 21; however, it is noted that Herman, Wilder and Mizutome are silent explicitly disclose obtaining a redundant content source for said content in the event that one of said content sources becomes unavailable while in use.

Nevertheless, in a similar field of endeavor Potrebic discloses obtaining a redundant content source for said content in the event that one of said content sources becomes unavailable while in use (Paragraph [0047]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman, Wilder and Mizutome by specifically providing the elements mentioned above, as taught by Potrebic, for the purpose of

decreasing the chances of a total system failure which provides reliability and stability for the users.

Regarding **claims 30 and 38**, Herman, Wilder, Mizutome and Potrebic disclose all the limitations of claims 30 and 38; therefore, claims 30 and 38 are rejected for the same reasons as in claim 17.

Regarding **claim 44**, Herman, Wilder, Mizutome and Potrebic disclose all the limitations of claim 44; hence, claim 44 is rejected for the same reasons as in claim 27.

8. **Claim 19** is rejected under 35 U.S.C. 103(a) as being unpatentable over Herman, Wilder and Mizutome further in view of Dew.

Regarding **claim 19**, Herman, Wilder and Dew disclose all the limitations of claim 19; therefore, claim 19 is rejected for the same reasons as in claim 4.

9. **Claims 36 and 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman, Wilder and Mizutome further in view of Karaoguz et al. (Pub No US 2009/0007212). Hereinafter, referenced as Karaoguz.

Regarding **claim 36**, Herman, Wilder and Mizutome disclose the interactive program guide application of claim 35; moreover, Herman discloses content requested using the first device (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

However, it is noted that Herman, Wilder and Mizutome are silent to explicitly disclose content requested using a first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

Nevertheless, in a similar field of endeavor Karaoguz discloses content requested using a first device is delivered to a second device having code segments installed for managing the reception and viewing of said content (Paragraphs [0041] [0042] [0087], figure 1A, 1B; the user interface may support the selection and scheduling of media for delivery to a second location).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman, Wilder and Mizutome by specifically providing the elements mentioned above, as taught by Karaoguz, for the predictable result of allowing the viewer to have the flexibility of choosing which the content receiver device, in order to allow viewing of the content in any room of a house.

Regarding **claim 37**, Herman, Wilder and Mizutome disclose the interactive program guide application of claim 36; however, it is noted that Herman, Wilder and

Mizutome is silent to explicitly disclose that the second device is an internet-enabled television.

Nevertheless, in a similar field of endeavor Karaoguz discloses that the second device is an internet-enabled television (Paragraph [0032], figure 1A, 1B; where each of the entities within the media exchange network 100 may be identified using a network or protocol address such as, for example, an Internet protocol IP address).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman, Wilder and Mizutome by specifically providing the elements mentioned above, as taught by Karaoguz, for the purpose providing the most current information related to content line up to the users, which would prevent a discrepancy between the program guide and the actual content being presented.

Citation of Pertinent Prior Art

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Holtz et al. (Pub No US 2002/0053078) – a distribution system that collects and assembles media content from a plurality of sources, including television stations from different cities A and B, abstract and figure 2.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUNIOR MENDOZA whose telephone number is (571)270-3573. The examiner can normally be reached on Monday - Friday 9am - 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571)272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Junior O Mendoza
Examiner
Art Unit 2423

/J. M./
November 5, 2012

/VIVEK SRIVASTAVA/

Supervisory Patent Examiner, Art Unit 2423

Notice of References Cited	Application/Control No. 11/484,510	Applicant(s)/Patent Under Reexamination CAVICCHIA, MARK A.	
	Examiner JUNIOR MENDOZA	Art Unit 2423	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2002/0053078 A1	05-2002	Holtz et al.	725/14
*	B	US-2003/0051246 A1	03-2003	Wilder et al.	725/49
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2423

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
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	36	✓	✓	✓	✓	✓	✓	✓		

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2423

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	08/08/2008	05/28/2009	01/07/2010	06/29/2010	06/01/2011	01/20/2012	11/05/2012		
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	38	✓	✓	✓	✓	✓	✓	✓		
	39	✓	✓	✓	✓	✓	✓	✓		
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	44	✓	✓	✓	✓	✓	✓	✓		
	45	✓	✓	✓	✓	✓	✓	✓		

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L10	12	("2003/0051246").URPN.	USPAT	OR	ON	2012/11/03 20:15
L9	4	("5828945" | "6003041" | "6209131" | "7152236").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/11/03 20:14
L3	88	("4488180" | "5307456" | "5559641" | "6198906" | "5880792" | "5999912" | "6026368" | "6064967" | "6141007" | "6188396" | "6211869" | "20020170068" | "5557724" | "5625570" | "5680639" | "5740549" | "5761417" | "5892507" | "5987501" | "6006241" | "6182050" | "20030206720" | "4242707" | "4972274" | "5189516" | "5388197" | "5659792" | "5737011" | "5918002" | "6018768" | "6133909" | "6157929" | "4400697" | "5274758" | "5434678" | "5537157" | "6204840" | "6437802" | "6441832" | "5833468" | "6029045" | "4631590" | "5001473" | "5420724" | "5450140" | "5659793" | "5664087" | "5682326" | "5826102" | "6198477" | "6216112" | "4768102" | "5262865" | "5442749" | "5724521" | "5752238" | "5892767" | "6119098" | "6160570" | "6442529" | "4283766" | "4689683" | "5115310" | "5148154" | "5237648" | "5519828" | "5565929" | "5764306" | "5805154" | "6011537" | "4232311" | "4272790" | "4559531" | "4982346" | "5036395" | "5166797" | "5487167" | "5602684" | "5774664" | "5778181" | "6084581" | "5852435" | "5872565" | "5931901" | "6038573" | "6084628" | "6223211").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2012/11/03 19:34
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L1	1	"20030051246"	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2012/11/03 19:13

			EPO; JPO; IBM_TDB			

11/3/2012 8:17:59 PM
C:\Users\jmendoza\Documents\EAST\Workspaces\11484510 Global IPG for Cell Phone and Sending Content from Cell Phone to TV.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2423

SEARCHED			
Class	Subclass	Date	Examiner
725	59	6/29/2010	JM
725	48	1/20/2012	JM

SEARCH NOTES		
Search Notes	Date	Examiner
Updated EAST Text Search	11/3/2012	JM
Class 725 Plus Text Search	1/20/2012	JM
Inventor Search	11/3/2012	JM
www.google.com Search for: JumpTV Documentation	1/7/2010	JM
Consulted with Hunter Lonsberry	6/1/2011	JM

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2423
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
Customer No.: 24122

To: Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO OFFICE ACTION

Sir:

In response to the Office Action of November 23, 2012 (the "Office Action"), Applicant hereby states as follows:

Amendments to the Specification; none

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 11 of this paper.

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (previously presented) A content manager of audio and/or video content comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider;

a device capable of establishing and maintaining a connection with the network via a communications link; and

an interactive program guide application installed on the device that provides and/or displays an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data from the server for the audio and/or video content available on each of the plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network; and wherein the server is distinct from at least one of the plurality of sources.

2. (previously presented) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to a

description of each of the channels contained in the IPG and/or a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

3. (previously presented) The content manager of claim 1, further comprising a digital rights management module that obtains viewing rights from one or more of the plurality of sources.

4. (previously presented) The content manager of claim 1, further comprising a GPS receiver and a filtering module that blocks content according to jurisdiction.

5. (previously presented) The content manager of claim 1, wherein at least one of the plurality of sources comprises live television or previously recorded content.

6. (previously presented) The content manager of claim 1, further comprising a voice recognition module that accepts verbal commands and converts them to digital form.

7. (previously presented) The content manager of claim 1, further comprising a display device.

8. (previously presented) The content manager of claim 1, further comprising a relay module for delivering the IPG and data to a display device.

9. (previously presented) The content manager of claim 1, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the plurality of sources to be linked to

one or more of the channels from which the streaming audio and/or video programming may be received.

10. (previously presented) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

11. (previously presented) A content acquisition system for reception of audio and/or video content, comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider;

a device capable establishing and maintaining a connection with a network via a communications link; and

an interactive program guide application installed on the device that provides and/or displays an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data from the server for the audio and/or video content available on each of the plurality of channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network;

wherein the server is distinct from at least one of the plurality of sources; and

wherein the application allows for customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

12. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

13. (previously presented) The content acquisition system of claim 11, further comprising a data communication pathway to the communications link comprising a cellular telephone receiving and transmitting device.

14. (previously presented) The content acquisition system of claim 11, wherein the device further comprises a display screen.

15. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application assists the user in obtaining and/or managing rights to receive the streaming audio and/or video programming from one or more of the plurality of sources.

16. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user

with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

17. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG.

18. (original) The content acquisition system of claim 11, further comprising a transmitter for transmitting incoming data and content to a separate viewing apparatus.

19. (previously presented) The content acquisition system of claim 11, further comprising a GPS receiver for determining the location of the device and a filter module that selectively blocks content.

20. (previously presented) The content acquisition system of claim 11, wherein at least one of the plurality of sources comprises live television or previously recorded content.

21. (previously presented) A computer-implemented method for providing an interactive program guide to a user for viewing, selecting and obtaining access to audio and/or video content from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider, comprising:

displaying an interactive program guide (IPG) listing a plurality of channels of audio and/or video content available from the plurality of sources, wherein each of the

channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via a network and a communications link;

providing descriptive program data for the audio and/or video content available on each of the plurality of channels from a server to the IPG via the network, wherein the server is distinct from at least one of the plurality of sources; and

allowing the user to customize the IPG with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the audio and/or video programming may be received.

22. (previously presented) The method of claim 21, wherein at least one of the plurality of sources comprises live television or previously recorded content.

23. (previously presented) The method of claim 21, wherein said description comprises information identifying content source and/or programming summaries.

24. (previously presented) The method of claim 21, further comprising:

allowing the user to customize the IPG with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

25. (previously presented) The method of claim 21, further comprising:

delivering the content to a device specified by the user.

26. (previously presented) The method of claim 25, further comprising automatically authenticating the user to one or more of the content sources prior to delivering the content to the device.

27. (original) The method of claim 21, further comprising obtaining a redundant source for said content in the event that one of said content sources becomes unavailable while in use.

28. (previously presented) The method of claim 25, further comprising obtaining viewing rights from one or more of content sources prior to delivering said content.

29. (previously presented) The method of claim 21, further comprising filtering viewing rights from one or more of content sources in accordance with a geographical location.

30. (previously presented) The method of claim 21, further comprising synchronizing changes made by the user to the interactive program guide in order to preserve a consistent IPG across a plurality of devices.

31. (previously presented) The method of claim 21, wherein the network is the Internet.

32. (previously presented) An interactive program guide application embodied on a non-transitory computer readable medium for receiving and managing only or virtually entirely streaming audio and/or video content from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider, comprising code segments:

a. for receiving data that describes said content from a server on a network;

b. for presenting said data in a preferred order identified by a user;

c. for managing viewing rights for said content;

d. for ensuring user authentication to the interactive program guide application; and

e. for receiving said content from the plurality of sources, wherein the server is distinct from at least one of the plurality of sources.

33. (previously presented) The interactive program guide application of claim 32, wherein the data and content are delivered over a communications link to a device specified by the user.

34. (original) The interactive program guide application of claim 32, further comprising code segments for receiving a request for content from the user and delivering said content to a device specified by the user.

35. (original) The interactive program guide application of claim 34, wherein the data that describes the content is displayed on a first device and a request for said content is made on said first device.

36. (original) The interactive program guide application of claim 35, wherein the content requested using the first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

37. (previously presented) The interactive program guide application of claim 36, wherein the second device is an Internet-enabled television.

38. (original) The interactive program guide application of claim 32, further comprising code segments for providing automatic updates in order to minimize user involvement in maintaining the application.

39. (original) The interactive program guide application of claim 32, further comprising code segments for synchronizing changes made by the user across all devices used to access the guide.

40. (original) The interactive program guide application of claim 32, further comprising code segments for enabling control over the application using a remote control device.

41. (original) The interactive program guide application of claim 32, further comprising code segments for providing real-time acquisition of content viewing rights.

42. (original) The interactive program guide application of claim 32, further comprising code segments for filtering content.

43. (original) The interactive program guide application of claim 42, wherein the content is filtered based on the geographic location of the device at the time of viewing said content.

44. (original) The interactive program guide application of claim 32, further comprising code segments for obtaining redundant content in order to reduce interruptions in content delivery to the user.

45. (previously presented) The interactive program guide application of claim 32, wherein the network is the Internet.

Remarks/Arguments

Claims 1-45 are currently pending.

On Pages 2-5 of the Office Action, the Examiner rejected claims 1, 3, 5, 7 and 8 under 35 U.S.C. 103(a) as being unpatentable over Herman, Tom COO of JumpTV (http://www.publidatasystems.com/JumpTV/JumpTV.html) July 01, 2006 ("Herman") in view of Wilder et al (Pub No US 2003/0051246) ("Wilder").

Applicant respectfully traverses these rejections.

The Examiner has incorrectly stated on pages 2-3 of the Office Action that:

> Regarding claim 1, Herman discloses a content manager of audio and/or video content (JumpTV), comprising:
>
> A server resident on a network (JumpTV online network) containing descriptive program data (channel title and information) about the audio and/or video content available (JumpTV channel Listing) **from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) (Pages 1, 3 and 18; Jump TV offers package of channels and individual channels from different MSO distributors around the world);**
>
> A device capable of establishing and maintaining a connection with the network via a communications link (Page 1 first paragraph; computers, laptops, internet-enabled television and mobile phone connect to JumpTV network via an internet connection);
>
> And an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) (JumpTV channel Listing) listing a plurality of channels of audio and/or video content available **from the plurality of sources** and descriptive program data (channel title and information) from the server (JumpTV online network) for the audio and/or video content available on each of the plurality of channels (Pages 3-16; channel listing), (*current emphasis added*)

The Examiner's statements above in bold and underlined from the Office Action are incorrect in that Herman only teaches ONE source, that is ONE MSO (JumpTV is an MSO and

only aggregates content from individual television networks, not from other MSOs), in contrast to the independent claims which require one or more MSO ***AND*** one or more non-MSO sources. Further, Herman DOES NOT disclose any non-MSO sources, since any content provided to a user of Herman's JumpTV system is part of that same, single MSO.

Furthermore, neither Herman nor Wilder or any combination thereof teaches the limitation of Applicant's claims reciting:

> "wherein ***each*** of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network; and wherein the server is distinct from at least one of the plurality of sources."

As the Examiner has admitted on page 3 of the Office Action, Herman does not teach or suggest an IPG or EPG having channels selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources, as recited in pending claims 1, 3, 5, 7 and 8, where the plurality of sources includes both one or more MSOs and one or more non-MSOs wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider.

Wilder teaches or suggests only the gathering of EPG data (e.g., programming descriptions), not making such programming from each of an MSO source and a non-MSO source immediately available to a user directly from each such source through the IPG or EPG as recited by the pending claims. Neither Herman nor Wilder or any combination thereof teaches or suggests Applicant's claimed invention for this reason. Combining Wilder with Herman is nonsensical with regard to Applicant's claims in that the resulting EPG will provide descriptions of channels that cannot be selected or provided for viewing via such an EPG. This is because Wilder only teaches providing EPG data or descriptions of programming and Herman is a closed-end MSO that blocks out and certainly does not make available non-MSO programming. Herman provides access to only those television channels it chooses to make available through its closed-end MSO.

In contrast, Applicant's recited invention delivers programming for viewing from at least one MSO cable operator source and at least one non-MSO, non-cable operator source. Herman and Wilder cannot be combined to meet the limitations of Applicant's claims 1, 3, 5, 7 and 8.

Thus, Applicant respectfully requests the withdrawal of the rejection of claims 1, 3, 5, 7 and 8 under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Wilder.

On Pages 5-19 of the Office Action, the Examiner rejected claims 2, 9-16, 18, 20-26, 28, 29, 31-35, 39-43 and 45 under 35 U.S.C. 103(a) as being unpatentable over Herman and Wilder in view of Mizutome et al. (Patent No US 7,469,413) ("Mizutome"). Applicant respectfully traverses these rejections. Based upon the deficiencies in the teachings of both Herman and Wilder as set forth above, the combination of Herman and Wilder in view of Mizutome clearly fails to render claims2, 9-16, 18, 20-26, 28, 29, 31-35, 39-43 and 45 unpatentable under 35 U.S.C. 103(a).

On Page 20 of the Office Action, the Examiner rejected claim 4 under 35 U.S.C. 103(a) as being unpatentable over Herman and Wilder in view of Dew (Pub No US 2003/0110490) ("Dew"). Applicant respectfully traverses this rejection. Based upon the deficiencies in the teachings of both Herman and Wilder as set forth above, the combination of Herman and Wilder in view of Dew clearly fails to render claim 4 unpatentable under 35 U.S.C. 103(a).

On Pages 20-21 of the Office Action, the Examiner rejected claim 6 under 35 U.S.C. 103(a) as being unpatentable over Herman and Wilder in view of Contolini et al. (Patent No US 6,643,620) ("Contolini"). Applicant respectfully traverses this rejection. Based upon the deficiencies in the teachings of both Herman and Wilder as set forth above, the combination of Herman and Wilder in view of Contolini clearly fails to render claim 6 unpatentable under 35 U.S.C. 103(a).

On Pages 21-23 of the Office Action, the Examiner rejected claims 17, 27, 30, 38 and 44 under 35 U.S.C. 103(a) as being unpatentable over Herman, Wilder and Mizutome further in view of Potrebic et al. (Pub No US 2006/0253867) ("Potrebic"). Applicant respectfully traverses these rejections. Based upon the deficiencies in the teachings of both Herman and Wilder as set forth above, the combination of Herman, Wilder and Mizutome further in view of Potrebic clearly fails to render claims 17, 27, 30, 38 and 44 unpatentable under 35 U.S.C. 103(a).

On Page 23 of the Office Action, the Examiner rejected claim 19 under 35 U.S.C. 103(a) as being unpatentable over Herman, Wilder and Mizutome further in view of Dew. Applicant respectfully traverses this rejection. Based upon the deficiencies in the teachings of both Herman

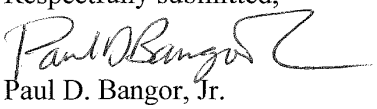
and Wilder as set forth above, the combination of Herman, Wilder and Mizutome further in view of Dew clearly fails to render claim 19 unpatentable under 35 U.S.C. 103(a).

On Pages 23-25 of the Office Action, the Examiner rejected claims 36 and 37 under 35 U.S.C. 103(a) as being unpatentable over Herman, Wilder and Mizutome further in view of Karaoguz (Pub No US 2009/007212)("Karaoguz"). Applicant respectfully traverses this rejection. Based upon the deficiencies in the teachings of both Herman and Wilder as set forth above, the combination of Herman, Wilder and Mizutome further in view of Karaoguz clearly fails to render claims 36 and 37 unpatentable under 35 U.S.C. 103(a).

Applicant has made a diligent effort to place the instant application in condition for allowance. Accordingly, a Notice of Allowance for claims 1-45 is respectfully requested. If the Examiner is of the opinion that the instant application is in condition for disposition other than through allowance, the Examiner is requested to contact the undersigned attorney of record at the telephone number listed below.

Dated: March 25, 2013

Respectfully submitted,



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Attorneys for Applicant

PTO/SB/22 (03-13)
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PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)

Docket Number (Optional): DB001229-000

Application Number: 11/484,510

Filed: July 10, 2006

For: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE

Art Unit: 2423

Examiner: Junior O. Mendoza

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

		Fee	Small Entity Fee	Micro Entity Fee	
☑	One month (37 CFR 1.17(a)(1))	$200	$100	$50	$ 100
☐	Two months (37 CFR 1.17(a)(2))	$600	$300	$150	$
☐	Three months (37 CFR 1.17(a)(3))	$1,400	$700	$350	$
☐	Four months (37 CFR 1.17(a)(4))	$2,200	$1,100	$550	$
☐	Five months (37 CFR 1.17(a)(5))	$3,000	$1,500	$750	$

☑ Applicant asserts small entity status. See 37 CFR 1.27.

☐ Applicant certifies micro entity status. See 37 CFR 1.29.
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☐ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 200888.

☐ Payment made via EFS-Web.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest. See 37 CFR 3.71. 37 CFR 3.73(b) statement is enclosed (Form PTO/SB/96).

☑ attorney or agent of record. Registration number 34768.

☐ attorney or agent acting under 37 CFR 1.34. Registration number _____.

Paul D Bangor

Signature

March 25, 2013

Date

Paul D. Bangor, Jr.

Typed or printed name

412-394-7767

Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

☑ * Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Patent Application Fee Transmittal

Application Number:	11484510
Filing Date:	10-Jul-2006
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Filer:	Paul D. Bangor/Nancy Swarmer
Attorney Docket Number:	DB001229-000

Filed as Small Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Extension - 1 month with $0 paid	2251	1	100	100

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
			Total in USD ($)	**100**

Electronic Acknowledgement Receipt

EFS ID:	15348468
Application Number:	11484510
International Application Number:	
Confirmation Number:	9918
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Customer Number:	24122
Filer:	Paul D. Bangor/Nancy Swarmer
Filer Authorized By:	Paul D. Bangor
Attorney Docket Number:	DB001229-000
Receipt Date:	25-MAR-2013
Filing Date:	10-JUL-2006
Time Stamp:	18:25:15
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$100
RAM confirmation Number	5629
Deposit Account	200888
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)

1	Amendment Copy Claims/Response to Suggested Claims	130325_1.pdf	606030 b3b4dea64c22477bf3768c8ebc05489083b72805	no	14
Warnings:					
Information:					
2	Extension of Time	130325_2.pdf	65491 e5571896d39dbf7260d4b8d1eed583d73df7d39b	no	1
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30282 4c06d1c455071120b4c3fb06a3f877c245d2afa9	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	701803		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

<u>New Applications Under 35 U.S.C. 111</u>
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

<u>National Stage of an International Application under 35 U.S.C. 371</u>
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

<u>New International Application Filed with the USPTO as a Receiving Office</u>
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (07-06)
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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	☐ To be Mailed
11/484,510	07/10/2006	

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)	SMALL ENTITY ☒		OR	OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT		(Column 1)		(Column 2)	(Column 3)	SMALL ENTITY		OR	OTHER THAN SMALL ENTITY	
	03/25/2013	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 45	Minus	** 45	= 0	X $40 =	0	OR	X $ =	
	Independent (37 CFR 1.16(h))	* 4	Minus	***4	= 0	X $210 =	0	OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE	0	OR	TOTAL ADD'L FEE	

AMENDMENT		(Column 1)		(Column 2)	(Column 3)	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MENDOZA, JUNIOR O	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 11/484,510	Applicant(s) CAVICCHIA, MARK A.	
	Examiner JUNIOR MENDOZA	Art Unit 2423	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03/25/2013*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1-45* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-45* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some * c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Interim copies:

a)☐ All b)☐ Some c)☐ None of the: Interim copies of the priority documents have been received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 03/25/2013 have been fully considered but they are not persuasive.

Regarding **claims 1, 11, 21 and 32**, applicant argues that Herman in view of Wilder do not teach that "the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider", remarks pages 11-12.

However, the examiner respectfully disagrees with the applicant. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Herman clearly discloses a JumpTV online system where the interface includes a JumpTV channel listing, as shown on pages 1-3. Furthermore, the JumpTV channels listing consists of content packages, e.g. Arabic package, and individual channels sources, e.g. Al Jazeera, which allows the user to select desired content, see page 3. Indeed Herman teaches at least one MSO (multiple system operator) as noted by the applicant; the examiner points notes that the

claim language merely requires a single MSO (multiple system operator) and a single non-MSO. That is, all the independent claims explicitly state that the plurality of sources includes one or more MSO and one or more non-MSO. Therefore, a plurality of MSOs is not required by the current claim language as argued by the applicant.

On the other hand, Wilder clearly discloses collecting and combining program guide information into a single electronic program guide 110 from a plurality of sources 122, 124, 126, 128, wherein the plurality of sources may include digital television broadcasters 124 and Internet 122; paragraphs [0029] [0030] figure 2. The examiner notes that the Wilder reference was merely introduced to show the common teachings of collecting EPG content from difference sources, MSO and non-MSO, as it would be apparent to one of ordinary skill in the art to combine them with the teachings of Herman.

Moreover, the applicant argues that Wilder does not make the programming from the MSO source and non-MSO source immediately available to the user directly from each source through the EPG; nonetheless, the currently presented claim language does not explicitly claim these features. Even if they were included, Herman teaches the streaming of the selected IPG content over a network to any location where the user is requesting the content from, pages 1 and 38. Therefore, Herman and Wilder clearly disclose the claimed features of the current application as described in the office action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 1, 3, 5, 7 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman, Tom COO of JumpTV (http://www.publicdatasystems.com/JumpTV/JumpTV.html July 01, 2006 in view of Wilder et al. (Pub No US 2003/0051246). Hereinafter referenced as Herman and Wilder, respectively.

Regarding **claim 1**, Herman discloses a content manager of audio and/or video content (JumpTV), comprising:

a server resident on a network (JumpTV online network) containing descriptive program data (channel title and information) about the audio and/or video content available (JumpTV channel Listing) from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) (Pages 1, 3 and 18; JumpTV offers package of channels and individual channels from different MSO distributors around the world);

a device capable of establishing and maintaining a connection with the network via a communications link (Page 1 first paragraph; computers, laptops, internet-enabled television and mobile phone connect to JumpTV network via an internet connection);

and an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) (JumpTV channel Listing) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data (channel title and information) from the server (JumpTV online network) for the audio and/or video content available on each of the plurality of channels (Pages 3-16; channel listing),

wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources (Page 1 second paragraph; TV stations from different countries) via the communications link and the network (Page 1 first paragraph and page 26; add channels to view in JumpTV);

and wherein the server is distinct from at least one of the plurality of sources (Pages 1 and 18; JumpTV online network containing streaming and relaying servers around the world).

However, it is noted that Herman is silent to explicitly disclose that a plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider.

Nevertheless, in a similar field of endeavor Wilder discloses that a plurality of sources includes one or more multiple system operators (MSOs) (e.g. digital television broadcasters 124) and one or more non-MSOs (e.g. Internet 122), wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider (Paragraphs [0029] [0030] figure 2; collecting and combining program guide information

into a single electronic program guide 110 from a plurality of sources 122, 124, 126, 128).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Wilder, for the predictable result of allowing the viewer to be able to access different type of distributed data from a broadcast and broadband sources in a single program guide, for easy access for user selection of content.

Regarding **claim 3**, Herman and Wilder disclose the content acquisition system of claim 11; moreover, Herman discloses a digital rights management module that obtains viewing rights from one or more of the plurality of sources (Page 19, page 22; user login and registration to a specific content source for a specific user account).

Regarding **claim 5**, Herman and Wilder disclose the content acquisition system of claim 1; moreover, Herman discloses that at least one of the plurality of sources comprises live television or previously recorded content (Page 1 first paragraph, page 3; live channels from different countries).

Regarding **claim 7**, Herman and Wilder disclose the content acquisition system of claim 1; moreover, Herman discloses a display device (Page 1 first paragraph; computers, laptops, internet-enabled television and mobile phone connect to JumpTV).

Regarding **claim 8**, Herman and Wilder disclose the content acquisition system of claim 1; moreover, Herman discloses a relay module for delivering the IPG and data to a display device (Pages 3-16; channel listing).

4. **Claims 2, 9 – 16, 18, 20 – 26, 28, 29, 31 – 35, 39 – 43 and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman and Wilder in view of Mizutome et al. (Patent No US 7,469,413). Hereinafter, referenced as Mizutome.

Regarding **claim 2**, Herman and Wilder disclose the content manager of claim 1; moreover, Herman discloses description of each of the channels contained in the IPG (JumpTV channel Listing) and/or the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Page 1, Page 17; geo-custom).

However, it is noted that Herman and Wilder are silent to explicitly disclose an application which allows for customization of the IPG by a user with respect to a description of each of the channels contained in the IPG and/or a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses tan application which allows for customization of the IPG by the user with respect to a description of each of the channels contained in the IPG and/or a first one of the plurality of sources to

be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 8 lines 20-32 and lines 62-67 figure 6; customized program guide).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Wilder by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 9**, Herman and Wilder disclose the content manager of claim 1; moreover, Herman discloses description of each of the channels contained in the IPG (JumpTV channel Listing) and/or a aggregated content sources (content packages, e.g. Arabic package) and non-aggregated content sources (individual channels, e.g. Al Jazeera) to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Page 1). Furthermore, Herman discloses customizing of the interface (Page 17; geo-custom).

However, it is noted that Herman and Wilder are silent to explicitly disclose that the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses that the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 6 lines19-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Wilder by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 10**, Herman and Wilder disclose the content manager of claim 1; moreover, Herman discloses the interactive program guide application (see claim 1).

However, it is noted that Herman and Wilder are silent to explicitly disclose customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

Nevertheless, in a similar field of endeavor Mizutome discloses customization of the IPG by a user with respect to an order of the listing of the channels in the IPG (Col. 8 lines 20-32 figures 5 and 20; customized guide starting at a user defined channel).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Wilder by specifically providing the

elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 11**, Herman discloses a content acquisition system for reception of audio and/or video content (JumpTV), comprising:

a server resident on a network (JumpTV online network) containing descriptive program data (channel title and information) about the audio and/or video content available (JumpTV channel Listing) from a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) (Pages 1, 3 and 18; JumpTV offers package of channels and individual channels from different MSO distributors around the world);

a device capable of establishing and maintaining a connection with the network via a communications link (Page 1 first paragraph; computers, laptops, internet-enabled television and mobile phone connect to JumpTV network via an internet connection);

and an interactive program guide application on a machine readable medium that provides and/or displays an interactive program guide (IPG) (JumpTV channel Listing) listing a plurality of channels of audio and/or video content available from the plurality of sources and descriptive program data (channel title and information) from the server (JumpTV online network) for the audio and/or video content available on each of the plurality of channels (Pages 3-16; channel listing),

wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network (Page 1 first paragraph and page 26; add channels to view in JumpTV);

and wherein the server is distinct from at least one of the plurality of sources (Pages 1 and 18; JumpTV online network containing streaming and relaying servers).

However, it is noted that Herman is silent to explicitly disclose that a plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider.

Nevertheless, in a similar field of endeavor Wilder discloses that a plurality of sources includes one or more multiple system operators (MSOs) (e.g. digital television broadcasters 124) and one or more non-MSOs (e.g. Internet 122), wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider (Paragraphs [0029] [0030] figure 2; collecting and combining program guide information into a single electronic program guide 110 from a plurality of sources 122, 124, 126, 128).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Wilder, for the predictable result of allowing the viewer to be able to access different type of distributed data from a broadcast and broadband sources in a single program guide, for easy access for user selection of content.

However, it is noted that Herman and Wilder are silent to explicitly disclose customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG (Col. 8 lines 20-32 figures 5 and 20; customized guide starting at a user defined channel),

(ii) a description of each of the channels contained in the IPG (Figures 10A and 10B;customize program guide by content genre)

and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide according to source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Wilder by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 12**, Herman, Wilder and Mizutome disclose the content acquisition system of claim 11; moreover, Herman discloses description of each of the channels contained in the IPG (JumpTV channel Listing) and/or a aggregated content sources (content packages, e.g. Arabic package) and non-aggregated content sources (individual channels, e.g. Al Jazeera) to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Page 1, Page 17; geo-custom).

However, it is noted that Herman and Wilder are silent to explicitly disclose allowing for customization of an IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

Nevertheless, in a similar field of endeavor Mizutome discloses allowing for customization of an IPG by a user with respect to (i) an order of the listing of the channels in the IPG (Col. 8 lines 20-32 figures 5 and 20; customized guide starting at a user defined channel),

(ii) a description of each of the channels contained in the IPG (Figures 10A and 10B;customize program guide by content genre)

and (iii) a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide according to source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Wilder by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 13**, Herman, Wilder and Mizutome disclose the content acquisition system of claim 11; moreover, Herman discloses the data communication pathway to the communications link comprising a cellular telephone receiving and transmitting device (Page 1 first paragraph; mobile phone connect to JumpTV network via an internet connection).

Regarding **claims 14, 15, 16 and 20**, Herman, Wilder and Mizutome disclose all the limitations of claims 14, 15, 16 and 20; therefore, claims 14, 15, 16 and 20 are rejected for the same reasons as in claims 7, 3, 9 and 5, respectively.

Regarding **claim 18**, Herman, Wilder and Mizutome disclose the content acquisition system of claim 11; moreover, Herman discloses a transmitter (JumpTV internet network) for transmitting incoming data and content to a separate viewing apparatus (Page 1 first paragraph, page 38; using JumpTV from any location

implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 21**, Herman, Wilder and Mizutome disclose all the limitations of claim 21; therefore, claim 21 is rejected for the same reasons as in claims 11 and 12.

Regarding **claims 22, 24, 25 and 28**, Herman, Wilder and Mizutome disclose all the limitations of claims 22, 24, 25 and 28; therefore, claims 22, 24, 25 and 28 are rejected for the same reasons as in claims 5, 9, 18 and 3, respectively.

Regarding **claim 23**, Herman, Wilder and Mizutome disclose the method of claim 21; moreover, Herman discloses the interactive program guide application (see claim 1) and a more information link about a content source (see page 3).

However, it is noted that Herman and Wilder are silent to explicitly disclose that a description comprises information identifying content source and/or programming summaries.

Nevertheless, in a similar field of endeavor Mizutome discloses that a description comprises information identifying content source and/or programming summaries (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide according to source).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Wilder by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user

to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 26**, Herman, Wilder and Mizutome disclose the method of claim 25; moreover, Herman discloses automatically authenticating the user to one or more of the content sources prior to delivering the content to the device (Page 19, page 22; user login and registration to a specific content source for a specific user account).

Regarding **claim 29**, Herman, Wilder and Mizutome disclose the method of claim 21; moreover, Herman discloses filtering viewing rights from one or more of content sources in accordance with a geographical location (Page 17; see geo-custom and geoblock for a region).

Regarding **claim 31**, Herman, Wilder and Mizutome disclose the method of claim 21; moreover, Herman discloses that the network is the Internet (Page 1 first paragraph; computers, laptops, internet-anabled television and mobile phone connect to JumpTV network via an internet connection).

Regarding **claim 32**, Herman discloses an interactive program guide application embodied on a non-transitory computer readable medium for receiving and managing only or virtually streaming content from a plurality of sources, the plurality of sources includes one or more multiple system operators (MSOs) (Pages 1, 3 and 18; JumpTV offers package of channels and individual channels from different MSO distributors around the world); comprising code segments (JumpTV):

a. for receiving, organizing and storing data that describes said content (Pages 3-16; channel listing description);

c. for managing viewing rights for said content (Page 1 first paragraph and page 26; channel and package registration).

d. for ensuring user authentication to the interactive program guide application (Page 19, page 22; user registration and login to a user account).

e. for receiving said content from the plurality of sources, wherein the server is distinct from at least one of the plurality of sources (Pages 1 and 18; JumpTV online network containing streaming and relaying servers).

However, it is noted that Herman is silent to explicitly disclose that a plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider.

Nevertheless, in a similar field of endeavor Wilder discloses that a plurality of sources includes one or more multiple system operators (MSOs) (e.g. digital television broadcasters 124) and one or more non-MSOs (e.g. Internet 122), wherein each MSO

comprises a cable provider and each non-MSO does not comprise a cable provider (Paragraphs [0029] [0030] figure 2; collecting and combining program guide information into a single electronic program guide 110 from a plurality of sources 122, 124, 126, 128).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Wilder, for the predictable result of allowing the viewer to be able to access different type of distributed data from a broadcast and broadband sources in a single program guide, for easy access for user selection of content.

However, it is noted that Herman and Wilder are silent to explicitly disclose b. presenting data in a preferred order identified by a user.

Nevertheless, in a similar field of endeavor Mizutome discloses b. presenting data in a preferred order identified by a user (Col. 8 lines 20-32 and lines 62-67 figure 6; customized guide).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Wilder by specifically providing the elements mentioned above, as taught by Mizutome, for the purpose of allowing a user to be able to re-arrange and organize a vast amount of information from different sources in a more efficient and precise manner, permitting a user to have access to desired content faster and proficiently.

Regarding **claim 33**, Herman, Wilder and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses that the data and content are delivered over a communications link to a device specified by the user (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 34**, Herman, Wilder and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses code segments for receiving a request for content from the user and delivering said content to a device specified by the user (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 35**, Herman, Wilder and Mizutome disclose the interactive program guide application of claim 34; moreover, Herman discloses that the data that describes the content is displayed on a first device and a request for said content is made on said first device (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

Regarding **claim 39**, Herman, Wilder and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses code segments for

synchronizing changes made by the user across all devices used to access the guide (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access; therefore, changed made from any accessing device will be reflected on any other device used to access JumpTV in the future).

Regarding **claim 40**, Herman, Wilder and Mizutome disclose the interactive program guide application of claim 32; moreover, Herman discloses code segments for enabling control over the application using a receiver (Page 1 first paragraph, page 38; using JumpTV from any location implementing a television).

However, it is noted that Herman is silent to explicitly disclose that the receiver includes a remote control device.

Nevertheless, in a similar field of endeavor Wilder discloses that the receiver includes a remote control device (Paragraph [0049]; remote control).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman by specifically providing the elements mentioned above, as taught by Wilder, for the purpose of allowing the user to control the program guide from the comfort of their seat.

Regarding **claims 41 and 45**, Herman, Wilder and Mizutome disclose all the limitations of claims 41 and 45; therefore, claims 41 and 45 are rejected for the same reasons as in claims 15 and 31, respectively.

Regarding **claims 42 and 43**, Herman, Wilder and Mizutome disclose all the limitations of claims 42 and 43; therefore, claims 42 and 43 are rejected for the same reasons as in claim 29.

5. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Herman and Wilder in view of Dew et al. (Pub No US 2003/0110490). Hereinafter, referenced as Dew.

Regarding **claim 4**, Herman and Wilder disclose the content manager of claim 1; moreover, Herman discloses a filtering module that blocks content according to jurisdiction (Page 17; see geo-custom and geoblock for a region).

However, it is noted that Herman and Wilder are silent to explicitly disclose a GPS receiver.

Nevertheless, in a similar field of endeavor Dew discloses a GPS receiver (Paragraphs [0008] [0018] [0024] also exhibited on figures 1 and 2; present content exclusively according to location).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Wilder by specifically providing the elements mentioned above, as taught by Dew, for the purpose of targeting content

effectively for users based on geographical area, such as advertisement of local business or targeted programs of interest for a specific community.

6. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Herman and Wilder in view of Contolini et al. (Patent No US 6,643,620). Hereinafter, referenced as Contolini.

Regarding **claim 6**, Herman and Wilder disclose the content manager of claim 1; however, it is noted that Herman and Wilder are silent to explicitly discloses a voice recognition module that accepts verbal commands and converts them to digital form.

Nevertheless, in a similar field of endeavor Contolini discloses a voice recognition module that accepts verbal commands and converts them to digital form (Col. 7 lines 1-12, figure 1; voice recognition system which digitized inputted user commands).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman and Wilder by specifically providing the elements mentioned above, as taught by Contolini, for the purpose of allowing a user to easily and efficiently input commands without the need of manual inputs for user satisfaction.

7. **Claims 17, 27, 30, 38 and 44** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman, Wilder and Mizutome further in view of Potrebic et al. (Pub No US 2006/0253867). Hereinafter, referenced as Potrebic.

Regarding **claim 17**, Herman, Wilder and Mizutome disclose the content acquisition system of claim 11; however, it is noted that Herman, Wilder and Mizutome are silent to explicitly disclose that the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG.

Nevertheless, in a similar field of endeavor Potrebic discloses that the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG (Paragraphs [0026] [0053] [0055]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman, Wilder and Mizutome by specifically providing the elements mentioned above, as taught by Potrebic, for the purpose providing the most current information related to content line up to the users, which would prevent a discrepancy between the program guide and the actual content being presented.

Regarding **claim 27**, Herman, Wilder and Mizutome disclose the method of claim 21; however, it is noted that Herman, Wilder and Mizutome are silent explicitly disclose

obtaining a redundant content source for said content in the event that one of said content sources becomes unavailable while in use.

Nevertheless, in a similar field of endeavor Potrebic discloses obtaining a redundant content source for said content in the event that one of said content sources becomes unavailable while in use (Paragraph [0047]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman, Wilder and Mizutome by specifically providing the elements mentioned above, as taught by Potrebic, for the purpose of decreasing the chances of a total system failure which provides reliability and stability for the users.

Regarding **claims 30 and 38**, Herman, Wilder, Mizutome and Potrebic disclose all the limitations of claims 30 and 38; therefore, claims 30 and 38 are rejected for the same reasons as in claim 17.

Regarding **claim 44**, Herman, Wilder, Mizutome and Potrebic disclose all the limitations of claim 44; hence, claim 44 is rejected for the same reasons as in claim 27.

8. **Claim 19** is rejected under 35 U.S.C. 103(a) as being unpatentable over Herman, Wilder and Mizutome further in view of Dew.

Regarding **claim 19**, Herman, Wilder and Dew disclose all the limitations of claim 19; therefore, claim 19 is rejected for the same reasons as in claim 4.

9. **Claims 36 and 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman, Wilder and Mizutome further in view of Karaoguz et al. (Pub No US 2009/0007212). Hereinafter, referenced as Karaoguz.

Regarding **claim 36**, Herman, Wilder and Mizutome disclose the interactive program guide application of claim 35; moreover, Herman discloses content requested using the first device (Page 1 first paragraph, page 38; using JumpTV from any location implementing any device, i.e. television, cell phone, set top box, which has internet access).

However, it is noted that Herman, Wilder and Mizutome are silent to explicitly disclose content requested using a first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

Nevertheless, in a similar field of endeavor Karaoguz discloses content requested using a first device is delivered to a second device having code segments installed for managing the reception and viewing of said content (Paragraphs [0041]

[0042] [0087], figure 1A, 1B; the user interface may support the selection and scheduling of media for delivery to a second location).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman, Wilder and Mizutome by specifically providing the elements mentioned above, as taught by Karaoguz, for the predictable result of allowing the viewer to have the flexibility of choosing which the content receiver device, in order to allow viewing of the content in any room of a house.

Regarding **claim 37**, Herman, Wilder and Mizutome disclose the interactive program guide application of claim 36; however, it is noted that Herman, Wilder and Mizutome is silent to explicitly disclose that the second device is an internet-enabled television.

Nevertheless, in a similar field of endeavor Karaoguz discloses that the second device is an internet-enabled television (Paragraph [0032], figure 1A, 1B; where each of the entities within the media exchange network 100 may be identified using a network or protocol address such as, for example, an Internet protocol IP address).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman, Wilder and Mizutome by specifically providing the elements mentioned above, as taught by Karaoguz, for the purpose providing the most current information related to content line up to the users, which would prevent a discrepancy between the program guide and the actual content being presented.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUNIOR MENDOZA whose telephone number is (571)270-3573. The examiner can normally be reached on Monday - Friday 9am - 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571)272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Junior O Mendoza
Examiner
Art Unit 2423

/J. M./
April 1, 2013

/VIVEK SRIVASTAVA/
Supervisory Patent Examiner, Art Unit 2423

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2423

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
725	59	6/29/2010	JM
725	48	1/20/2012	JM

SEARCH NOTES		
Search Notes	Date	Examiner
Updated EAST Text Search	4/1/2013	JM
Class 725 Plus Text Search	4/1/2013	JM
Inventor Search	4/1/2013	JM
www.google.com Search for: JumpTV Documentation	1/7/2010	JM
Consulted with Hunter Lonsberry	6/1/2011	JM

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L3	78	"725".clas. and 2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/04/01 16:01
L2	126	L1 and @rlad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/04/01 15:55
L1	215	(integrat$4 master$4) near2 (EPG GUI IPG UPG ((program tv television grid interactive) near3 (menu schedule$3 list$3 guide table))) same (cable satellite cit$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/04/01 15:55
S153	1	"12019766"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/03/29 19:09
S152	0	"12019766".app.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/03/29 19:09
S151	2	"10/762,812"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/03/29 19:03
S150	2	"10/762812"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/03/29 19:03
S149	0	"10762812"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/03/29 19:03
S148	2	("20020112239" | "6532589").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/03/29 19:02
S147	1	("20050160461").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/03/29 18:59

4/1/2013 4:25:23 PM
C:\Users\jmendoza\Documents\EAST\Workspaces\11484510 Global IPG for Cell Phone and Sending Content from Cell Phone to TV.wsp

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2423

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE							
Final	Original	08/08/2008	05/28/2009	01/07/2010	06/29/2010	06/01/2011	01/20/2012	11/05/2012	04/01/2013
	1	✓	✓	✓	✓	✓	✓	✓	✓
	2	✓	✓	✓	✓	✓	✓	✓	✓
	3	✓	✓	✓	✓	✓	✓	✓	✓
	4	✓	✓	✓	✓	✓	✓	✓	✓
	5	✓	✓	✓	✓	✓	✓	✓	✓
	6	✓	✓	✓	✓	✓	✓	✓	✓
	7	✓	✓	✓	✓	✓	✓	✓	✓
	8	✓	✓	✓	✓	✓	✓	✓	✓
	9	✓	✓	✓	✓	✓	✓	✓	✓
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	34	✓	✓	✓	✓	✓	✓	✓	✓
	35	✓	✓	✓	✓	✓	✓	✓	✓
	36	✓	✓	✓	✓	✓	✓	✓	✓

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	**Art Unit**
	JUNIOR O MENDOZA	2423

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	08/08/2008	05/28/2009	01/07/2010	06/29/2010	06/01/2011	01/20/2012	11/05/2012	04/01/2013	
	37	✓	✓	✓	✓	✓	✓	✓	✓	
	38	✓	✓	✓	✓	✓	✓	✓	✓	
	39	✓	✓	✓	✓	✓	✓	✓	✓	
	40	✓	✓	✓	✓	✓	✓	✓	✓	
	41	✓	✓	✓	✓	✓	✓	✓	✓	
	42	✓	✓	✓	✓	✓	✓	✓	✓	
	43	✓	✓	✓	✓	✓	✓	✓	✓	
	44	✓	✓	✓	✓	✓	✓	✓	✓	
	45	✓	✓	✓	✓	✓	✓	✓	✓	

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

VIA FACSIMILE 571-273-8300

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2423
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
Customer No.: 24122

To: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

EXAMINER INTERVIEW AGENDA

Regarding Examiner Interview scheduled for Tuesday, 4/23/2013 at 2 PM:

Claims 1-45 are currently pending.

1. The teachings of cited references - Herman, Tom COO of JumpTV (http://www.publidatasystems.com/JumpTV/JumpTV.html) July 01, 2006 ("Herman") and Wilder et al (Pub No US 2003/0051246) ("Wilder").
2. Currently pending claims define over cited references.

Respectfully submitted,

Dated: April 23, 2013

Paul D. Bangor, Jr.
Reg. No. 34,768
THORP REED & ARMSTRONG, LLP
One Oxford Centre
301 Grant Street, 14th Floor
Pittsburgh, PA 15219-1425
(412) 394-7767
Attorneys for Applicant

{01451817}

PAGE 2/2 * RCVD AT 4/23/2013 10:25:07 AM [Eastern Daylight Time] * SVR:W-PTOFAX-001/13 * DNIS:2738300 * CSID:Thorp Reed Armstro * DURATION (mm-ss):00-52

THORP REED & ARMSTRONG

Facsimile

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APR 23 2013

ATTORNEYS AT LAW SINCE 1895

To:	Junior O. Mendoza, Examiner	**Fax Number:**	571-273-8300
Company:		**Phone Number:**	
From:	Paul D. Bangor, Jr.		**Pages:** 2
Date:	April 23, 2013	**Client/Matter No.:**	018503.092527
Re:			

CONFIDENTIAL: ATTORNEY-CLIENT COMMUNICATION WORK PRODUCT

Title: Global Interactive Program Guide Application and Device
Appl. No.: 11/484,510
Applicant: Mark A. Cavicchia
Docket No.: DB001229-000

Please see the attached Examiner Interview Agenda.
Thank you.

Pittsburgh
Philadelphia
Princeton
Wheeling
Wilmington

Thorp Reed & Armstrong, LLP
One Oxford Centre
301 Grant Street, 14th Floor
Pittsburgh, PA 15219-1425
412 394 7711
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IRS CIRCULAR 230 NOTICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/484,510	07/10/2006	Mark A. Cavicchia	DB001229-000	9918

24122 7590 04/26/2013
THORP REED & ARMSTRONG, LLP
ONE OXFORD CENTRE
301 GRANT STREET, 14TH FLOOR
PITTSBURGH, PA 15219-1425

EXAMINER	
MENDOZA, JUNIOR O	
ART UNIT	PAPER NUMBER
2423	

NOTIFICATION DATE	DELIVERY MODE
04/26/2013	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

TRAIP@thorpreed.com
nswarmer@thorpreed.com
cmeshanko@thorpreed.com

Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	11/484,510	CAVICCHIA, MARK A.	
	Examiner	Art Unit	
	JUNIOR MENDOZA	2423	

All participants (applicant, applicant's representative, PTO personnel):

(1) *JUNIOR MENDOZA*. (3)_____.

(2) *PAUL BANGOR*. (4)_____.

Date of Interview: *23 April 2013*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☐112 ☐102 ☒103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *1*.

Identification of prior art discussed: *Herman and Wilder*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

The applicant argued the differences between the claimed MSOs and its meaning in the cable television art, in relation to the provided prior art. However, the examiner noted that the current claim language is broad in scope and recommended explicitly defining the meaning of MSO within the claim language. For example, the examiner noted that the specification of the current application appears to define MSOs by geographical location. The applicant will file a reply.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/Junior O Mendoza/ Examiner, Art Unit 2423	

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

———

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2423
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
Customer No.: 24122

To: Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDED RESPONSE TO OFFICE ACTION

Sir:

In response to the Office Action of April 11, 2013 (the "Office Action"), Applicant hereby states as follows:

Amendments to the Specification; none

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 11 of this paper.

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (currently amended) A content manager of audio and/or video content comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from ~~a plurality of sources, wherein the plurality of sources includes~~ one or more multiple cable system operators (MSOs) and one or more non-MSOs~~, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider~~;

a device capable of establishing and maintaining a connection with the network via a communications link; and

an interactive program guide application installed on the device that provides and/or displays an interactive program guide (IPG) listing at least one channel~~a plurality of channels~~ of audio and/or video content available from each of the one or more MSOs and each of the one or more non-MSOs ~~plurality of sources~~ and descriptive program data from the server for the audio and/or video content available on each of the ~~plurality of~~ channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from its respective MSO or non-MSO source ~~one of the plurality of sources~~ via the communications link and the network; and wherein the server is distinct from at least one of the one or more MSOs and one or more non-MSOs ~~plurality of sources~~.

2. (currently amended) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to a description of each of the channels contained in the IPG and/or a first one of the one or more MSOs or one or more non-MSOs ~~plurality of sources~~ to be linked to each~~one or more~~ of the channels from which the streaming audio and/or video programming may be received.

3. (previously presented) The content manager of claim 1, further comprising a digital rights management module that obtains viewing rights from one or more of the MSOs or one or more non-MSOs~~plurality of sources~~.

4. (previously presented) The content manager of claim 1, further comprising a GPS receiver and a filtering module that blocks content according to jurisdiction.

5. (currently amended) The content manager of claim 1, wherein at least one of the one or more MSOs or one or more non-MSOs ~~plurality of sources~~ comprises live television or previously recorded content.

6. (previously presented) The content manager of claim 1, further comprising a voice recognition module that accepts verbal commands and converts them to digital form.

7. (previously presented) The content manager of claim 1, further comprising a display device.

8. (previously presented) The content manager of claim 1, further comprising a relay module for delivering the IPG and data to a display device.

9. (currently amended) The content manager of claim 1, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the one or more MSOs or one or more non-MSOs~~plurality of sources~~ to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

10. (previously presented) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

11. (currently amended) A content acquisition system for reception of audio and/or video content, comprising:

a server resident on a network containing descriptive program data about the audio and/or video content available from ~~a plurality of sources, wherein the plurality of sources includes~~ one or more multiple cable system operators (MSOs) and one or more non-MSOs~~, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider~~;

a device capable establishing and maintaining a connection with a network via a communications link; and

an interactive program guide application installed on the device that provides and/or displays an interactive program guide (IPG) listing at least one channel ~~a plurality of channels~~ of audio and/or video content available from each of the one or more MSOs and each of the one or more non-MSOs~~the plurality of sources~~ and descriptive program data from the server for the audio and/or video content available on each of the ~~plurality~~

~~of~~ channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from its respective MSO or non-MSO source ~~one of the plurality of sources~~ via the communications link and the network;

wherein the server is distinct from at least one of the one or more MSOs and one or more non-MSOs ~~plurality of sources~~; and

wherein the application allows for customization of the IPG by a user with respect to two or more of (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the one or more MSOs and one or more non-MSOs ~~plurality of sources~~ to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

12. (currently amended) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the one or more MSOs and one or more non-MSOs ~~plurality of sources~~ to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

13. (previously presented) The content acquisition system of claim 11, further comprising a data communication pathway to the communications link comprising a cellular telephone receiving and transmitting device.

14. (previously presented) The content acquisition system of claim 11, wherein the device further comprises a display screen.

15. (currently amended) The content acquisition system of claim 11, wherein the interactive program guide application assists the user in obtaining and/or managing rights to receive the streaming audio and/or video programming from one or more of the MSOs or non-MSOs ~~plurality of sources~~.

16. (currently amended) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the MSOs or non-MSOs ~~plurality of sources~~ to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

17. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG.

18. (original) The content acquisition system of claim 11, further comprising a transmitter for transmitting incoming data and content to a separate viewing apparatus.

19. (previously presented) The content acquisition system of claim 11, further comprising a GPS receiver for determining the location of the device and a filter module that selectively blocks content.

20. (currently amended) The content acquisition system of claim 11, wherein at least one of the MSOs or non-MSOs ~~plurality of sources~~ comprises live television or previously recorded content.

21. (currently amended) A computer-implemented method for providing an interactive program guide to a user for viewing, selecting and obtaining access to audio

and/or video content from one or more multiple cable system operators (MSOs) and one or more non-MSOs, ~~a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider,~~ comprising:

displaying an interactive program guide (IPG) listing at least one channel ~~a plurality of channels~~ of audio and/or video content available from each of the one or more MSOs and each of the one or more non-MSOs ~~plurality of sources~~, wherein each of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from its respective MSO or non-MSO source~~one of the plurality of sources~~ via a network and a communications link;

providing descriptive program data for the audio and/or video content available on each of the ~~plurality of~~ channels from a server to the IPG via the network, wherein the server is distinct from at least one of the one or more MSOs and one or more non-MSOs ~~plurality of sources~~; and

allowing the user to customize the IPG with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the one or more MSOs or non-MSOs ~~plurality of sources~~ to be linked to one or more of the channels from which the audio and/or video programming may be received.

22. (currently amended) The method of claim 21, wherein at least one of the one or more MSOs or non-MSOs ~~plurality of sources~~ comprises live television or previously recorded content.

23. (previously presented) The method of claim 21, wherein said description comprises information identifying content source and/or programming summaries.

24. (currently amended) The method of claim 21, further comprising:

allowing the user to customize the IPG with respect to a second, redundant one of the one or more MSOs or non-MSOs ~~plurality of sources~~ to be linked to one or more of the channels from which the streaming audio and/or video programming may be received.

25. (previously presented) The method of claim 21, further comprising:

delivering the content to a device specified by the user.

26. (currently amended) The method of claim 25, further comprising

automatically authenticating the user to one or more of the MSOs or non-MSOs ~~content sources~~ prior to delivering the content to the device.

27. (currently amended) The method of claim 21, further comprising obtaining a redundant source for said content in the event that one of said MSO or non-MSO ~~content~~ sources becomes unavailable while in use.

28. (currently amended) The method of claim 25, further comprising obtaining viewing rights from one or more of the MSO or non-MSO content sources prior to delivering said content.

29. (currently amended) The method of claim 21, further comprising filtering viewing rights from one or more of the MSO or non-MSO content sources in accordance with a geographical location.

30. (previously presented) The method of claim 21, further comprising synchronizing changes made by the user to the interactive program guide in order to preserve a consistent IPG across a plurality of devices.

31. (previously presented) The method of claim 21, wherein the network is the Internet.

32. (currently amended) An interactive program guide application embodied on a non-transitory computer readable medium for receiving and managing only or virtually entirely streaming audio and/or video content from one or more multiple cable system operators (MSOs) and from one or more non-MSOs ~~a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider,~~ comprising code segments:

a. for receiving data that describes said content from a server on a network;

b. for presenting said data in a preferred order identified by a user;

c. for managing viewing rights for said content;

d. for ensuring user authentication to the interactive program guide application; and

e. for receiving said content from the one or more MSOs and one or more non-MSOs ~~plurality of sources~~, wherein the server is distinct from at least one of the one or more MSOs and non-MSOs~~plurality of sources~~.

33. (previously presented) The interactive program guide application of claim 32, wherein the data and content are delivered over a communications link to a device specified by the user.

34. (original) The interactive program guide application of claim 32, further comprising code segments for receiving a request for content from the user and delivering said content to a device specified by the user.

35. (original) The interactive program guide application of claim 34, wherein the data that describes the content is displayed on a first device and a request for said content is made on said first device.

36. (original) The interactive program guide application of claim 35, wherein the content requested using the first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

37. (previously presented) The interactive program guide application of claim 36, wherein the second device is an Internet-enabled television.

38. (original) The interactive program guide application of claim 32, further comprising code segments for providing automatic updates in order to minimize user involvement in maintaining the application.

39. (original) The interactive program guide application of claim 32, further comprising code segments for synchronizing changes made by the user across all devices used to access the guide.

40. (original) The interactive program guide application of claim 32, further comprising code segments for enabling control over the application using a remote control device.

41. (original) The interactive program guide application of claim 32, further comprising code segments for providing real-time acquisition of content viewing rights.

42. (original) The interactive program guide application of claim 32, further comprising code segments for filtering content.

43. (original) The interactive program guide application of claim 42, wherein the content is filtered based on the geographic location of the device at the time of viewing said content.

44. (original) The interactive program guide application of claim 32, further comprising code segments for obtaining redundant content in order to reduce interruptions in content delivery to the user.

45. (previously presented) The interactive program guide application of claim 32, wherein the network is the Internet.

Remarks/Arguments

Claims 1-45 are currently pending.

On Pages 2-5 of the Office Action, the Examiner rejected claims 1, 3, 5, 7 and 8 under 35 U.S.C. 103(a) as being unpatentable over Herman, Tom COO of JumpTV (http://www.publidatasystems.com/JumpTV/JumpTV.html) July 01, 2006 ("Herman") in view of Wilder et al (Pub No US 2003/0051246) ("Wilder").

Applicant respectfully traverses these rejections.

Applicant also wishes to thank the Examiner for the courtesy of the Interview on April 23, 2013. As discussed in the Interview, the Herman reference discloses and teaches only what the specification, paragraph [0004], refers to as "cable television content consolidator, also known as a Multiple System Operator (MSO)." The CABLE TELEVISION CONTENT CONSOLIDATOR (CTCC) or MSO of Herman is closed-ended in that users can only receive and view channels provided by the JumpTV system. Users cannot view channels not offered through the JumpTV IPG.

As Applicant pointed out during the Interview, Herman only teaches ONE source, that is ONE CABLE TELEVISION CONTENT CONSOLIDATOR (CTCC), also referred to as an MSO in the specification at paragraph [0004]. (JumpTV is a CCTC or MSO and only aggregates content from individual television networks, not from other MSOs), in contrast to the independent claims which require one or more MSO ***AND*** one or more non-MSO sources. Further, Herman DOES NOT disclose any non-MSO sources, since any content provided to a user of Herman's JumpTV system is part of that same, single CTCC or MSO.

APPLICANT HAS AMENDED THE CLAIMS TO MORE CLEARLY RECITE THE DISTINCTION OVER THE CITED REFERENCES, NAMELY, THAT THE INDEPENDENT CLAIMS REQUIRE ONE OR MORE MSO ***AND*** ONE OR MORE NON-MSO SOURCES.

Furthermore, neither Herman nor Wilder or any combination thereof teaches the limitation of Applicant's claims reciting:

> "wherein ***each*** of the channels is selectable for receiving only or virtually entirely streaming audio and/or video programming from one of the plurality of sources via the communications link and the network; and wherein the server is distinct from at least one of the plurality of sources."

Wilder teaches or suggests only the gathering of EPG data (e.g., programming descriptions), not making such programming from each of an MSO source and a non-MSO source immediately available to a user directly from each such source through the IPG or EPG as recited by the pending claims. Neither Herman nor Wilder or any combination thereof teaches or suggests Applicant's claimed invention for this reason. Combining Wilder with Herman is nonsensical with regard to Applicant's claims in that the resulting EPG will provide descriptions of channels that cannot be selected or provided for viewing via such an EPG. This is because

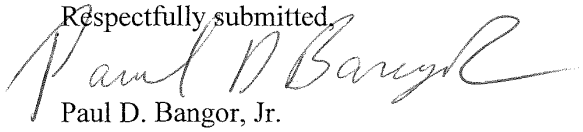
Wilder only teaches providing EPG data or descriptions of programming and Herman is a closed-end MSO that blocks out and certainly does not make available non-MSO programming. Herman provides access to only those television channels it chooses to make available through its closed-end MSO.

In contrast, Applicant's recited invention delivers programming for viewing from at least one CTCC or MSO cable operator source and at least one non-MSO, non-cable operator source. Herman and Wilder cannot be combined to meet the limitations of Applicant's claims 1, 3, 5, 7 and 8. Thus, Applicant respectfully requests the withdrawal of the rejection of claims 1, 3, 5, 7 and 8 under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Wilder.

Applicant has made a diligent effort to place the instant application in condition for allowance. Accordingly, a Notice of Allowance for claims 1-45 is respectfully requested. If the Examiner is of the opinion that the instant application is in condition for disposition other than through allowance, the Examiner is requested to contact the undersigned attorney of record at the telephone number listed below.

Dated: June 10, 2013

Respectfully submitted,



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Attorneys for Applicant

Electronic Acknowledgement Receipt

EFS ID:	15994002
Application Number:	11484510
International Application Number:	
Confirmation Number:	9918
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Customer Number:	24122
Filer:	Paul D. Bangor/Nancy White
Filer Authorized By:	Paul D. Bangor
Attorney Docket Number:	DB001229-000
Receipt Date:	10-JUN-2013
Filing Date:	10-JUL-2006
Time Stamp:	15:13:28
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Amendment After Final	130610_1.pdf	545346 5b5bce6f7586c474153019fc69111e2f960932df	no	13
Warnings:					
Information:					

Total Files Size (in bytes):	545346

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (09-11)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 11/484,510	Filing Date 07/10/2006	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)		
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

		(Column 1)		(Column 2)	(Column 3)		
	06/10/2013	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
AMENDMENT	Total (37 CFR 1.16(i))	* 45	Minus	** 45	= 0	X $40 =	0
	Independent (37 CFR 1.16(h))	* 4	Minus	***4	= 0	X $210 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	0

		(Column 1)		(Column 2)	(Column 3)		
		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
AMENDMENT	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
/JAMES MASON/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/484,510	07/10/2006	Mark A. Cavicchia	DB001229-000	9918

24122 7590 06/27/2013
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EXAMINER	
MENDOZA, JUNIOR O	
ART UNIT	PAPER NUMBER
2423	

NOTIFICATION DATE	DELIVERY MODE
06/27/2013	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

TRAIP@clarkhillthorpreed.com
nwhite@clarkhillthorpreed.com

Applicant-Initiated Interview Summary	**Application No.** 11/484,510	**Applicant(s)** CAVICCHIA, MARK A.	
	Examiner JUNIOR MENDOZA	**Art Unit** 2423	

All participants (applicant, applicant's representative, PTO personnel):

(1) *JUNIOR MENDOZA*.

(2) *HAI TRAN*.

(3) *PAUL BANGOR*.

(4) *MARK CAVICCHIA*.

Date of Interview: *06/20/2013*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☐112 ☐102 ☐103 ☒Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *1*.

Identification of prior art discussed: *Herman and Wilder*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

The applicant explained the differences between MSOs and non-MSOs in view of the cited references. However, the examiners believe that the teachings of the presented prior art reasonably rejected the language of claim 1. No argument was reached. Moreover, it was pointed out that incorporating the language of claim 2 into the independent claims appears to overcome the Herman and Wilder references, provided that the "or" alternative language is changed to "and". The applicant will file a reply.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/Junior O Mendoza/ Examiner, Art Unit 2423	

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

———

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/484,510	07/10/2006	Mark A. Cavicchia	DB001229-000	9918

24122 7590 07/05/2013
THORP REED & ARMSTRONG, LLP
ONE OXFORD CENTRE
301 GRANT STREET, 14TH FLOOR
PITTSBURGH, PA 15219-1425

EXAMINER	
MENDOZA, JUNIOR O	
ART UNIT	PAPER NUMBER
2423	

NOTIFICATION DATE	DELIVERY MODE
07/05/2013	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

TRAIP@clarkhillthorpreed.com
nwhite@clarkhillthorpreed.com

Advisory Action Before the Filing of an Appeal Brief	**Application No.** *11/484,510*	**Applicant(s)** CAVICCHIA, MARK A.
	Examiner JUNIOR MENDOZA	**Art Unit** 2423

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 10 June 2013 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

NO NOTICE OF APPEAL FILED

1. ☒ The reply was filed after a final rejection. No Notice of Appeal has been filed. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance;

(2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114 if this is a utility or plant application. Note that RCEs are not permitted in design applications. The reply must be filed within one of the following time periods:

a) ☐ The period for reply expires _____months from the mailing date of the final rejection.

b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action; or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

c) ☐ A prior Advisory Action was mailed more than 3 months after the mailing date of the final rejection in response to a first after-final reply filed within 2 months of the mailing date of the final rejection. The current period for reply expires months from the mailing date of *the prior Advisory Action* or SIX MONTHS from the mailing date of the final rejection, whichever is earlier.

Examiner Note: If box 1 is checked, check either box (a), (b) or (c). ONLY CHECK BOX (b) WHEN THIS ADVISORY ACTION IS THE FIRST RESPONSE TO APPLICANT'S FIRST AFTER-FINAL REPLY WHICH WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. ONLY CHECK BOX (c) IN THE LIMITED SITUATION SET FORTH UNDER BOX (c). See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) or (c) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendments filed after a final rejection, but prior to the date of filing a brief, will not be entered because

a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);

b) ☐ They raise the issue of new matter (see NOTE below);

c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: *See Continuation Sheet*. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): (a) ☒ will not be entered, or (b) ☐ will be entered, and an explanation of how the new or amended claims would be rejected is provided below or appended.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing the Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.

12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____

13. ☐ Other: _____.

STATUS OF CLAIMS

14. The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: .
Claim(s) objected to: .
Claim(s) rejected: 1-45.
Claim(s) withdrawn from consideration: .

/VIVEK SRIVASTAVA/ Supervisory Patent Examiner, Art Unit 2423	Junior O Mendoza Examiner Art Unit: 2423

Continuation of 3. NOTE: Applicant's proposed amendments do not merely cancel claims, remove issues for appeal, or in some other way require only a cursory review by the examiner. Accordingly, further search and/or consideration is required on the part of the examiner.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2423
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
Customer No.: 24122

To: Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDED RESPONSE TO OFFICE ACTION

Sir:

In response to the Office Action of April 11, 2013 (the "Office Action"), Applicant hereby states as follows:

Amendments to the Specification; none

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 11 of this paper.

DO NOT ENTER: /J.M./
06/21/2013

Doc code: RCEX
Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	11/484,510	Filing Date	2006-07-10	Docket Number (if applicable)	DB001229-000	Art Unit	2423
First Named Inventor	Mark A. Cavicchia			Examiner Name	Junior O. Mendoza		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____

☐ Other _____

☒ Enclosed

☒ Amendment/Reply

☐ Information Disclosure Statement (IDS)

☐ Affidavit(s)/ Declaration(s)

☐ Other _____

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____ (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

☒ **The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**
The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 200888

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

☐ Applicant Signature

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	/Paul D. Bangor, Jr./	Date (YYYY-MM-DD)	2013-08-12
Name	Paul D. Bangor, Jr.	Registration Number	34768

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Patent Application Fee Transmittal

Application Number:	11484510
Filing Date:	10-Jul-2006
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Filer:	Paul D. Bangor
Attorney Docket Number:	DB001229-000

Filed as Small Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Extension - 1 month with $0 paid	2251	1	100	100

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
RCE - 2nd and Subsequent Request	2820	1	850	850
		Total in USD ($)		**950**

Electronic Acknowledgement Receipt

EFS ID:	16570001
Application Number:	11484510
International Application Number:	
Confirmation Number:	9918
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Customer Number:	24122
Filer:	Paul D. Bangor
Filer Authorized By:	
Attorney Docket Number:	DB001229-000
Receipt Date:	12-AUG-2013
Filing Date:	10-JUL-2006
Time Stamp:	22:51:29
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$950
RAM confirmation Number	8048
Deposit Account	200888
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)

1	Extension of Time	01479105.PDF	67355 11c0faa86be1fdda34d9b819ed789b46d94bfdf1	no	1
Warnings:					
Information:					
2	Amendment Submitted/Entered with Filing of CPA/RCE	01479120.PDF	690843 30d87cb5014f0d7e87af7c434414a193dc9f912c	no	16
Warnings:					
Information:					
3	Request for Continued Examination (RCE)	01479104.PDF	79609 6e446310078acc03d4f764460526e7b278200b1c	no	2
Warnings:					
This is not a USPTO supplied RCE SB30 form.					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	32077 aaa7781ef076351664e5f60170d4ecc6ec893e5f	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	869884		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

<u>New Applications Under 35 U.S.C. 111</u>
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

<u>National Stage of an International Application under 35 U.S.C. 371</u>
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

<u>New International Application Filed with the USPTO as a Receiving Office</u>
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/22 (03-13)
Approved for use through 3/31/2013. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)	Docket Number (Optional) DB001229-000
Application Number 11/484,510	Filed July 10, 2006
For GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE	
Art Unit 2423	Examiner Junior O. Mendoza

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

		Fee	Small Entity Fee	Micro Entity Fee	
☑	One month (37 CFR 1.17(a)(1))	$200	$100	$50	$ 100
☐	Two months (37 CFR 1.17(a)(2))	$600	$300	$150	$
☐	Three months (37 CFR 1.17(a)(3))	$1,400	$700	$350	$
☐	Four months (37 CFR 1.17(a)(4))	$2,200	$1,100	$550	$
☐	Five months (37 CFR 1.17(a)(5))	$3,000	$1,500	$750	$

☑ Applicant asserts small entity status. See 37 CFR 1.27.

☐ Applicant certifies micro entity status. See 37 CFR 1.29.
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☑ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 200888.

☐ Payment made via EFS-Web.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest. See 37 CFR 3.71. 37 CFR 3.73(b) statement is enclosed (Form PTO/SB/96).

☑ attorney or agent of record. Registration number 34768.

☐ attorney or agent acting under 37 CFR 1.34. Registration number _____.

Paul D Bangor

Signature

August 12, 2013

Date

Paul D. Bangor, Jr.

Typed or printed name

412-394-7767

Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

☑ * Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 11/484,510
Applicant(s): Mark A. Cavicchia
Filed: 10 July 2006
Title: GLOBAL INTERACTIVE PROGRAM GUIDE APPLICATION AND DEVICE
Art Unit: 2423
Examiner: Junior O. Mendoza

Docket No.: DB001229-000
Customer No.: 24122

To: Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE AND AMENDMENT

Sir:

In response to the Office Action of April 11, 2013 (the "Office Action"), Applicant hereby states as follows:

Amendments to the Specification; none

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 13 of this paper.

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (currently amended) A content manager ~~of audio and/or video content~~ comprising:

a server resident on a network containing descriptive program data about ~~the audio and/or~~ video content available from ~~a plurality of sources, wherein the plurality of sources includes~~ one or more multiple cable system operators (MSOs) and one or more non-MSOs~~, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider~~;

a device capable of establishing and maintaining a connection with the network via a communications link; and

an interactive program guide application installed on the device that provides ~~and/or displays an~~ user-configurable interactive program guide (IPG) listing at least one channel ~~a plurality of channels~~ of ~~audio and/or~~ video content available ~~from~~ from each of the one or more MSOs and each of the one or more non-MSOs ~~plurality of sources~~ and descriptive program data from the server for the ~~audio and/or~~ video content available on each of the ~~plurality of~~ channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming ~~audio and/or~~ video programming from its respective MSO or non-MSO source ~~one of the plurality of sources~~ via the communications link and the network; ~~and~~ wherein the server is distinct from at least one of the one or more MSOs and one or more non-

MSOs, and wherein the application allows for the IPG to be configured by a user with respect to a first one of the one or more MSOs or the one or more non-MSOs to be linked to each of the channels from which the streaming video programming may be received.

2. (currently amended) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to a description of each of the channels contained in the IPG ~~and/or a first one of the plurality of sources to be linked to one or more of the channels from which the streaming audio and/or video programming may be received~~.

3. (currently amended) The content manager of claim 1, further comprising a digital rights management module that obtains viewing rights for at least one of the channels~~from one or more of the plurality of sources~~.

4. (previously presented) The content manager of claim 1, further comprising a GPS receiver and a filtering module that blocks content according to jurisdiction.

5. (currently amended) The content manager of claim 1, wherein the streaming video programming, on at least one of the channels, ~~plurality of sources~~ comprises live television ~~or previously recorded content~~.

6. (previously presented) The content manager of claim 1, further comprising a voice recognition module that accepts verbal commands and converts them to digital form.

7. (previously presented) The content manager of claim 1, further comprising a display device.

8. (previously presented) The content manager of claim 1, further comprising a relay module for delivering the IPG and data to a display device.

9. (currently amended) The content manager of claim 1, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the one or more MSOs or the one or more non-MSOs~~plurality of sources~~ to be linked to each ~~one or more~~ of the channels from which the streaming ~~audio and/or~~ video programming may be received.

10. (previously presented) The content manager of claim 1, wherein the application allows for customization of the IPG by a user with respect to an order of the listing of the channels in the IPG.

11. (currently amended) A content acquisition system for reception of ~~audio and/or~~ video content, comprising:

a server resident on a network containing descriptive program data about the ~~audio and/or~~ video content available from ~~a plurality of sources, wherein the plurality of sources includes~~ one or more multiple cable system operators (MSOs) and one or more non-MSOs~~, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider~~;

a device capable establishing and maintaining a connection with a network via a communications link; and

an interactive program guide application installed on the device that provides ~~and/or displays an~~ user-configurable interactive program guide (IPG) listing at least one channel ~~a plurality of channels~~ of ~~audio and/or~~ video content available from each of the one or more MSOs and each of the one or more non-MSOs~~the plurality of sources~~ and descriptive program data from the server for the ~~audio and/or~~ video content available on each of the ~~plurality of~~ channels, wherein each of the channels is selectable for receiving only or virtually entirely streaming ~~audio and/or~~ video programming from its respective MSO or non-MSO source ~~one of the plurality of sources~~ via the communications link and the network;

wherein the server is distinct from at least one of the one or more MSOs and one or more non-MSOs ~~plurality of sources~~; and

wherein the application allows for customization of the IPG by a user with respect to: at least one~~two or more~~ of (i) an order of the listing of the channels in the IPG and ~~,~~ (ii) a description of each of the channels contained in the IPG and ~~(iii)~~ with respect to a first one of the one or more MSOs or the one or more non-MSOs ~~plurality of sources~~ to be linked to each~~one or more~~ of the channels from which the streaming ~~audio and/or~~ video programming may be received.

12. (currently amended) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the one or more MSOs or the one

or more non-MSOs ~~plurality of sources~~ to be linked to each~~one or more~~ of the channels from which the streaming ~~audio and/or~~ video programming may be received.

13. (previously presented) The content acquisition system of claim 11, further comprising a data communication pathway to the communications link comprising a cellular telephone receiving and transmitting device.

14. (previously presented) The content acquisition system of claim 11, wherein the device further comprises a display screen.

15. (currently amended) The content acquisition system of claim 11, wherein the interactive program guide application assists the user in ~~obtaining and/or~~ managing rights to receive the streaming ~~audio and/or~~ video programming from one or more of the MSOs and non-MSOs ~~plurality of sources~~.

16. (currently amended) The content acquisition system of claim 11, wherein the interactive program guide application allows for customization of the IPG by a user with respect to a second, redundant one of the one or more MSOs or the one or more non-MSOs ~~plurality of sources~~ to be linked to each ~~one or more~~ of the channels from which the streaming ~~audio and/or~~ video programming may be received.

17. (previously presented) The content acquisition system of claim 11, wherein the interactive program guide application further provides for synchronization of changes made to the IPG in order to present a consistent IPG.

18. (original) The content acquisition system of claim 11, further comprising a transmitter for transmitting incoming data and content to a separate viewing apparatus.

19. (previously presented) The content acquisition system of claim 11, further comprising a GPS receiver for determining the location of the device and a filter module that selectively blocks content.

20. (currently amended) The content acquisition system of claim 11, wherein the streaming video programming, on at least one of the channels, ~~plurality of sources~~ comprises live television ~~or previously recorded content~~.

21. (currently amended) A computer-implemented method for providing an interactive program guide to a user for viewing, selecting and obtaining access to ~~audio and/or~~ video content from one or more multiple cable system operators (MSOs) and one or more non-MSOs, ~~a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider,~~ comprising:

displaying user-configurable ~~an~~ interactive program guide (IPG) listing at least one channel ~~a plurality of channels~~ of ~~audio and/or~~ video content available from each of the one or more MSOs and each of the one or more non-MSOs ~~plurality of sources~~, wherein each of the channels is selectable for receiving only or virtually entirely streaming ~~audio and/or~~ video programming from its respective MSO or non-MSO source~~one of the plurality of sources~~ via a network and a communications link;

providing descriptive program data for the ~~audio and/or~~ video content available on each of the ~~plurality of~~ channels from a server to the IPG via the network, wherein the

server is distinct from at least one of the one or more MSOs and one or more non-MSOs ~~plurality of sources~~; and

allowing the user to customize the IPG with respect to (i) an order of the listing of the channels in the IPG, (ii) a description of each of the channels contained in the IPG and (iii) a first one of the one or more MSOs or the one or more non-MSOs ~~plurality of sources~~ to be linked to each ~~one or more~~ of the channels from which the ~~audio and/or~~ video programming may be received.

22. (currently amended) The method of claim 21, wherein the streaming video programming, on at least one of the channels, ~~plurality of sources~~ comprises live television ~~or previously recorded content~~.

23. (previously presented) The method of claim 21, wherein said description comprises information identifying content source and/or programming summaries.

24. (currently amended) The method of claim 21, further comprising:

allowing the user to customize the IPG with respect to a second, redundant one of the one or more MSOs or the one or more non-MSOs ~~plurality of sources~~ to be linked to each ~~one or more~~ of the channels from which the streaming ~~audio and/or~~ video programming may be received.

25. (previously presented) The method of claim 21, further comprising:

delivering the content to a device specified by the user.

26. (currently amended) The method of claim 25, further comprising

automatically authenticating the user to one or more of the MSO or non-MSO ~~content~~ sources prior to delivering the content to the device.

27. (currently amended) The method of claim 21, further comprising obtaining a redundant source for said content in the event that one of said MSO or non-MSO ~~content~~ sources becomes unavailable while in use.

28. (currently amended) The method of claim 25, further comprising obtaining viewing rights from one or more of the MSO or non-MSO ~~content~~ sources prior to delivering said content.

29. (currently amended) The method of claim 21, further comprising filtering viewing rights from one or more of the MSO or non-MSO ~~content~~ sources in accordance with a geographical location.

30. (previously presented) The method of claim 21, further comprising synchronizing changes made by the user to the interactive program guide in order to preserve a consistent IPG across a plurality of devices.

31. (previously presented) The method of claim 21, wherein the network is the Internet.

32. (currently amended) An interactive program guide application embodied on a non-transitory computer readable medium for receiving and managing only or virtually entirely streaming ~~audio and/or~~ video content from one or more multiple cable system operators (MSOs) and from one or more non-MSOs ~~a plurality of sources, wherein the plurality of sources includes one or more multiple system operators (MSOs) and one or more non-MSOs, wherein each MSO comprises a cable provider and each non-MSO does not comprise a cable provider,~~ comprising code segments:

a. for receiving data that describes said content from a server on a network;

b. for presenting said data in ~~a preferred~~ an order configured ~~identified~~ by a user;

c. for managing viewing rights for said content;

d. for ensuring user authentication to the interactive program guide application; ~~and~~

e. for receiving said content from the one or more MSOs and one or more non-MSOs ~~plurality of sources~~, wherein the server is distinct from at least one of the one or more MSOs and non-MSOs, and

f. for allowing the user to configure the IPG with respect to a first one of the one or more MSOs or the one or more non-MSOs to be linked to each channel of the IPG from which the streaming video programming may be received~~plurality of sources~~.

33. (previously presented) The interactive program guide application of claim 32, wherein the data and content are delivered over a communications link to a device specified by the user.

34. (original) The interactive program guide application of claim 32, further comprising code segments for receiving a request for content from the user and delivering said content to a device specified by the user.

35. (original) The interactive program guide application of claim 34, wherein the data that describes the content is displayed on a first device and a request for said content is made on said first device.

36. (original) The interactive program guide application of claim 35, wherein the content requested using the first device is delivered to a second device having code segments installed for managing the reception and viewing of said content.

37. (previously presented) The interactive program guide application of claim 36, wherein the second device is an Internet-enabled television.

38. (original) The interactive program guide application of claim 32, further comprising code segments for providing automatic updates in order to minimize user involvement in maintaining the application.

39. (original) The interactive program guide application of claim 32, further comprising code segments for synchronizing changes made by the user across all devices used to access the guide.

40. (original) The interactive program guide application of claim 32, further comprising code segments for enabling control over the application using a remote control device.

41. (original) The interactive program guide application of claim 32, further comprising code segments for providing real-time acquisition of content viewing rights.

42. (original) The interactive program guide application of claim 32, further comprising code segments for filtering content.

43. (original) The interactive program guide application of claim 42, wherein the content is filtered based on the geographic location of the device at the time of viewing said content.

44. (original) The interactive program guide application of claim 32, further comprising code segments for obtaining redundant content in order to reduce interruptions in content delivery to the user.

45. (previously presented) The interactive program guide application of claim 32, wherein the network is the Internet.

Remarks/Arguments

Claims 1-45 are currently pending.

On Pages 4-7 of the Office Action, the Examiner rejected claims 1, 3, 5, 7 and 8 under 35 U.S.C. 103(a) as being unpatentable over Herman, Tom COO of JumpTV (http://www.publidatasystems.com/JumpTV/JumpTV.html) July 01, 2006 ("Herman") in view of Wilder et al (Pub No US 2003/0051246) ("Wilder").

Applicant respectfully traverses these rejections.

Applicant also wishes to thank the Examiner for the courtesy of the Interviews on April 23, 2013 and June 20, 2013.

APPLICANT HAS AMENDED THE CLAIMS TO RECITE ONE OF THE MAIN DISTINCTIONS OVER THE CITED REFERENCES, NAMELY, THAT THE INDEPENDENT CLAIMS RECITE A "USER-CONFIGURABLE INTERACTIVE PROGRAM GUIDE (IPG)" WHEREIN:

> "***each*** of the channels is selectable for receiving only or virtually entirely streaming video programming from its respective MSO or non-MSO source via the communications link and the network; and wherein the server is distinct from at least one of the one or more MSOs and one or more non-MSOs, and *wherein the application allows for the IPG to be configured by a user with respect to a first one of the one or more MSOs or the one or more non-MSOs to be linked to each of the channels from which the streaming video programming may be received.*" *(emphasis added)*

Neither Herman nor Wilder nor any combination thereof teaches this "user-configurable" limitation of Applicant's claims as currently amended.

Also, another main distinction of the instant claims over the cited references, as discussed in the Interviews, is that the Herman reference discloses and teaches only what the specification, paragraph [0004], refers to as "cable television content consolidator, also known as a Multiple System Operator (MSO)." The MSO of Herman is closed-ended in that users can only receive and view channels provided by the JumpTV system of Herman. Users cannot view channels not offered through Herman's JumpTV IPG.

Thus, as Applicant also pointed out during the Interviews, Herman teaches only ONE MSO source. In contrast, the independent claims each require one or more MSO source ***AND*** one or more non-MSO source. Further, Herman DOES NOT disclose any non-MSO sources, since any content provided to a user of Herman's JumpTV system is part of that same, single MSO.

Wilder teaches or suggests the gathering of IPG data (e.g., programming descriptions), not making such programming from each of an MSO source and a non-MSO source available to a user directly from each such source through the IPG as recited by the pending claims.

Furthermore, neither Herman nor Wilder nor any combination thereof teaches or suggests a content manager wherein the application allows for the IPG to be configured by a user with respect to a first one of the one or more MSOs or the one or more non-MSOs to be linked to each of the channels from which the streaming video programming may be received. Thus, neither Herman nor Wilder nor any combination thereof teaches or suggests Applicant's claimed invention for these reasons. Combining Wilder with Herman is nonsensical with regard to Applicant's claims in that the resulting IPG will provide descriptions of channels that cannot be selected or provided for viewing via such an IPG. This is because Wilder only teaches providing IPG data or descriptions of programming and Herman is a closed-end MSO that blocks out and certainly does not make available programming from other MSOs or non-MSOs. Herman provides access to only those channels it chooses to make available through its closed-ended MSO. In contrast, Applicant's recited invention delivers programming for viewing from at least one MSO source and at least one non-MSO source. Also, Herman presents a non-configurable IPG that cannot be altered or configured by the user, particularly with respect to the content source for each channel on the Herman IPG. Since Herman teaches only a closed-ended MSO, a user is not able to configure Herman's IPG with respect to the content source for each channel on the IPG.

As a result, neither Herman nor Wilder nor any combination thereof teaches or suggests the limitations of Applicant's claims 1, 3, 5, 7 and 8. Thus, Applicant respectfully requests the withdrawal of the rejection of claims 1, 3, 5, 7 and 8 under 35 U.S.C. 103(a) as being unpatentable over Herman in view of Wilder.

On Pages 7-19 of the Office Action, the Examiner rejected claims 2, 9-16, 18, 20-26, 28, 29, 31-35, 39-43 and 45 under 35 U.S.C. 103(a) as being unpatentable over Herman and Wilder in view of Mizutome et al. (Patent No US 7,469,413) ("Mizutome"). Applicant respectfully traverses these rejections. As set forth above, due to the deficiencies in the teachings of both Herman and Wilder, alone or in any combination, none of Herman, Wilder or Mizutome, separately or in any combination, renders any of claims 2, 9-16, 18, 20-26, 28, 29, 31-35, 39-43 and 45 unpatentable under 35 U.S.C. 103(a).

On Page 21 of the Office Action, the Examiner rejected claim 4 under 35 U.S.C. 103(a) as being unpatentable over Herman and Wilder in view of Dew (Pub No US 2003/0110490) ("Dew"). Applicant respectfully traverses this rejection. As set forth above, due to the deficiencies in the teachings of both Herman and Wilder, alone or in any combination, none of Herman, Wilder or Dew, separately or in any combination, renders claim 4 unpatentable under 35 U.S.C. 103(a).

On Page 22 of the Office Action, the Examiner rejected claim 6 under 35 U.S.C. 103(a) as being unpatentable over Herman and Wilder in view of Contolini et al. (Patent No US 6,643,620) ("Contolini"). Applicant respectfully traverses this rejection. As set forth above, due to the deficiencies in the teachings of both Herman and Wilder, alone or in any combination, none of Herman, Wilder or Contolini, separately or in any combination, renders claim 6 unpatentable under 35 U.S.C. 103(a).

On Pages 23-24 of the Office Action, the Examiner rejected claims 17, 27, 30, 38 and 44 under 35 U.S.C. 103(a) as being unpatentable over Herman, Wilder and Mizutome further in view of Potrebic et al. (Pub No US 2006/0253867) ("Potrebic"). Applicant respectfully traverses these rejections. As set forth above, due to the deficiencies in the teachings of both Herman and Wilder, alone or in any combination, none of Herman, Wilder, Mizutome or Potrebic, separately or in any combination, renders any of claims 17, 27, 30, 38 and 44 unpatentable under 35 U.S.C. 103(a).

On Page 25 of the Office Action, the Examiner rejected claim 19 under 35 U.S.C. 103(a) as being unpatentable over Herman, Wilder and Mizutome further in view of Dew. Applicant respectfully traverses this rejection. As set forth above, due to the deficiencies in the teachings of

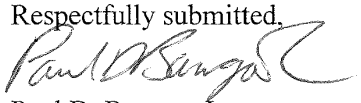
both Herman and Wilder, alone or in any combination, none of Herman, Wilder, Mizutome or Dew, separately or in any combination, renders claim 19 unpatentable under 35 U.S.C. 103(a).

On Pages 25-26 of the Office Action, the Examiner rejected claims 36 and 37 under 35 U.S.C. 103(a) as being unpatentable over Herman, Wilder and Mizutome further in view of Karaoguz (Pub No US 2009/007212)("Karaoguz"). Applicant respectfully traverses this rejection. As set forth above, due to the deficiencies in the teachings of both Herman and Wilder, alone or in any combination, none of Herman, Wilder, Mizutome or Karaoguz, separately or in any combination, renders any of claims 36 and 37 unpatentable under 35 U.S.C. 103(a).

Applicant has made a diligent effort to place the instant application in condition for allowance. Accordingly, a Notice of Allowance for claims 1-45 is respectfully requested. If the Examiner is of the opinion that the instant application is in condition for disposition other than through allowance, the Examiner is requested to contact the undersigned attorney of record at the telephone number listed below.

Dated: August 12, 2013

Respectfully submitted,



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PTO/SB/06 (09-11)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 11/484,510	Filing Date 07/10/2006	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)		
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	08/12/2013	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 45	Minus	** 45	= 0	X $40 =	0
	Independent (37 CFR 1.16(h))	* 4	Minus	***4	= 0	X $210 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	0

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
/DEBORAH NASH/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
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NOTICE OF ALLOWANCE AND FEE(S) DUE

24122 7590 10/07/2013

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PITTSBURGH, PA 15219-1425

EXAMINER
MENDOZA, JUNIOR O

ART UNIT	PAPER NUMBER
2423	

DATE MAILED: 10/07/2013

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/484,510	07/10/2006	Mark A. Cavicchia	DB001229-000	9918

TITLE OF INVENTION: Global Interactive program guide application and device

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$890	$300	$0	$1190	01/07/2014

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

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PTOL-85 (Rev. 02/11)

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(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/484,510	07/10/2006	Mark A. Cavicchia	DB001229-000	9918

TITLE OF INVENTION: Global Interactive program guide application and device

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$890	$300	$0	$1190	01/07/2014

EXAMINER	ART UNIT	CLASS-SUBCLASS
MENDOZA, JUNIOR O	2423	725-039000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

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(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:

❑ Issue Fee

❑ Publication Fee (No small entity discount permitted)

❑ Advance Order - # of Copies _____

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PTOL-85 (Rev. 02/11)

1102.0730

5. **Change in Entity Status** (from status indicated above)

❑ Applicant certifying micro entity status. See 37 CFR 1.29

NOTE: Absent a valid certification of Micro Entity Status (see form PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

❑ Applicant asserting small entity status. See 37 CFR 1.27

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

❑ Applicant changing to regular undiscounted fee status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

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Typed or printed name _____ Registration No. _____

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/484,510	07/10/2006	Mark A. Cavicchia	DB001229-000	9918

24122 7590 10/07/2013

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EXAMINER	
MENDOZA, JUNIOR O	
ART UNIT	PAPER NUMBER
2423	

DATE MAILED: 10/07/2013

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 02/11)

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notices of Allowance and Fee(s) Due mailed between October 1, 2013 and December 31, 2013

(Addendum to PTOL-85)

If the "Notice of Allowance and Fee(s) Due" has a mailing date on or after October 1, 2013 and before January 1, 2014, the following information is applicable to this application.

If the issue fee is being timely paid on or after January 1, 2014, the amount due is the issue fee and publication fee in effect January 1, 2014. On January 1, 2014, the issue fees set forth in 37 CFR 1.18 decrease significantly and the publication fee set forth in 37 CFR 1.18(d)(1) decreases to $0.

If an issue fee or publication fee has been previously paid in this application, applicant is not entitled to a refund of the difference between the amount paid and the amount in effect on January 1, 2014.

Examiner-Initiated Interview Summary	**Application No.** 11/484,510	**Applicant(s)** CAVICCHIA, MARK A.	
	Examiner JUNIOR MENDOZA	**Art Unit** 2423	

All participants (applicant, applicant's representative, PTO personnel):

(1) *JUNIOR MENDOZA*. (3)_____.

(2) *PAUL BANGO*. (4)_____.

Date of Interview: *04 September 2012*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☐112 ☐102 ☐103 ☒Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *1-45*.

Identification of prior art discussed: *N/A*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

The examiner suggested amending and including that "the application allows for the IPG to be configured by a user with respect to adding or deleting channels from any of the one or more MSOs or the one or more non-MSOs" to the independent claims in order to place the current application in conditions for allowance. The suggested feature is supported by paragraph [0040] of the application publication. The applicant agreed to the proposed changes.

Applicant recordation instructions: It is not necessary for applicant to provide a separate record of the substance of interview.

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/Junior O Mendoza/ Examiner, Art Unit 2423	/VIVEK SRIVASTAVA/ Supervisory Patent Examiner, Art Unit 2423

Notice of Allowability	Application No. 11/484,510	Applicant(s) CAVICCHIA, MARK A.	
	Examiner JUNIOR MENDOZA	Art Unit 2423	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *08/12/2013*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *1-45*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov .
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☒ Examiner's Amendment/Comment
6. ☒ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/VIVEK SRIVASTAVA/
Supervisory Patent Examiner, Art Unit 2423

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Paul Bangor on 09/04/2013.

The application has been amended as follows:

- On Claim 1 last four lines, "… wherein the application allows for the IPG to be configured by a user with respect to a first one of the one or more MSOs or the one or more non-MSOs to be linked to each of the channels from which the streaming video programming may be received." should be replaced by:
"… wherein the application allows for the IPG to be configured by a user with respect to adding or deleting channels from anya ~~first one~~ of the one or more MSOs or the one or more non-MSOs ~~to be linked to each of the channels from which the streaming video programming may be received~~."

- On Claims 1 – 10 line 1, “The content manager of claim…” should be replaced by: “The content manager device of claim…”.

- On Claim 11 lines 19 – 20, “wherein the server is distinct from at least one of the one or more MSOs and one or more non-MSOs; and” should be replaced by: “wherein the server is distinct from at least one of the one or more MSOs and one or more non-MSOs; wherein the application allows for the IPG to be configured by a user with respect to adding or deleting channels from any of the one or more MSOs or the one or more non-MSOs; and”

- On Claim 21 lines 16 – 17, “wherein the server is distinct from at least one of the one or more MSOs and one or more non-MSOs; and” should be replaced by: “wherein the server is distinct from at least one of the one or more MSOs and one or more non-MSOs; wherein the application allows for the IPG to be configured by a user with respect to adding or deleting channels from any of the one or more MSOs or the one or more non-MSOs; and”

- On Claim 32 last three lines, “f. for allowing the user to configure the IPG with respect to a first one of the one or more MSOs or the one or more non-MSOs to be linked to each of the channel of the IPG from which the streaming video programming may be received.” should be replaced by:

"f. for allowing the user to configure the interactive program guide~~IPG~~ with respect to adding or deleting channels from any~~a first one~~ of the one or more MSOs or the one or more non-MSOs~~ to be linked to each of the channel of the IPG from which the streaming video programming may be received~~."

- On Claim 32 lines 1-2, "An interactive program guide application embodied on a non-transitory computer readable medium for receiving and managing…" should be replaced by:

  "A non-transitory computer readable medium embodying an~~An~~ interactive program guide application ~~embodied on a non-transitory computer readable medium~~ for receiving and managing …".

- On Claims 33 – 45 line 1, "The interactive program guide application of claim…" should be replaced by:

  "The non-transitory computer readable medium~~interactive program guide application~~ of claim …".

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance:

Regarding **claim 1**, the cited art of record fails to explicitly or implicitly disclose a "… user-configurable interactive program guide (IPG) listing at least one channel video content available from each of the one or more MSOs and each on the one or more non-MSOs …. wherein each of the channels is selectable for receiving only or virtually entirely streaming video programming from its respective MSO or non-MSO source… wherein the application allows for the IPG to be configured by a user with respect to adding or deleting channels from any of the one or more MSOs or the one or more non-MSOs" in combination with the other claimed features. Therefore, claim 1 is held allowable.

Regarding **claims 2 – 10**, these depend from allowable claim 1. Therefore, claims 2 – 10 are also held allowable.

Regarding **claim 11**, the cited art of record fails to explicitly or implicitly disclose a "… user-configurable interactive program guide (IPG) listing at least one channel video content available from each of the one or more MSOs and each on the one or more non-MSOs …. wherein each of the channels is selectable for receiving only or virtually entirely streaming video programming from its respective MSO or non-MSO

source… wherein the application allows for the IPG to be configured by a user with respect to adding or deleting channels from any of the one or more MSOs or the one or more non-MSOs" in combination with the other claimed features. Therefore, claim 11 is held allowable.

Regarding **claims 12 – 20**, these depend from allowable claim 11. Therefore, claims 12 – 20 are also held allowable.

Regarding **claim 21**, the cited art of record fails to explicitly or implicitly disclose a "… user-configurable interactive program guide (IPG) listing at least one channel from each of the one or more MSOs and each on the one or more non-MSOs, wherein each of the channels is selectable for receiving only or virtually entirely streaming video programming from its respective MSO or non-MSO source… wherein the application allows for the IPG to be configured by a user with respect to adding or deleting channels from any of the one or more MSOs or the one or more non-MSOs" in combination with the other claimed features. Therefore, claim 21 is held allowable.

Regarding **claims 22 – 31**, these depend from allowable claim 21. Therefore, claims 22 – 31 are also held allowable.

Regarding **claim 32**, the cited art of record fails to explicitly or implicitly disclose an "…interactive program guide application for at receiving only or virtually entirely streaming video programming from one or more multiple cable system operators (MSOs) or from one or more non-MSOs… for allowing the user to configure the interactive program guide with respect to adding or deleting channels from any of the one or more MSOs or the one or more non-MSOs" in combination with the other claimed features. Therefore, claim 32 is held allowable.

Regarding **claims 33 – 45**, these depend from allowable claim 32. Therefore, claims 33 – 45 are also held allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance.

Citation of Pertinent Prior Art

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Ellis (Pub No US 2007/0157248) – grouping channels from different sources, abstract figure 9.
- Ramraz et al. (Pub No US 2006/0150214) - multisource electronic program guide, abstract figure 12.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUNIOR MENDOZA whose telephone number is (571)270-3573. The examiner can normally be reached on Monday - Friday 9am - 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571)272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Junior O Mendoza
Examiner
Art Unit 2423

/J. M./
September 6, 2013

/VIVEK SRIVASTAVA/
Supervisory Patent Examiner, Art Unit 2423

Examiner-Initiated Interview Summary	**Application No.** 11/484,510	**Applicant(s)** CAVICCHIA, MARK A.	
	Examiner JUNIOR MENDOZA	**Art Unit** 2423	

All participants (applicant, applicant's representative, PTO personnel):

(1) *JUNIOR MENDOZA*. (3)_____.

(2) *PAUL BANGO*. (4)_____.

Date of Interview: *04 September 2012*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☐112 ☐102 ☐103 ☒Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *1-45*.

Identification of prior art discussed: *N/A*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

The examiner suggested amending and including that "the application allows for the IPG to be configured by a user with respect to adding or deleting channels from any of the one or more MSOs or the one or more non-MSOs" to the independent claims in order to place the current application in conditions for allowance. The suggested feature is supported by paragraph [0040] of the application publication. The applicant agreed to the proposed changes.

Applicant recordation instructions: It is not necessary for applicant to provide a separate record of the substance of interview.

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☐ Attachment

/Junior O Mendoza/ Examiner, Art Unit 2423	/VIVEK SRIVASTAVA/ Supervisory Patent Examiner, Art Unit 2423

Notice of References Cited	Application/Control No. 11/484,510	Applicant(s)/Patent Under Reexamination CAVICCHIA, MARK A.	
	Examiner JUNIOR MENDOZA	Art Unit 2423	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2002/0053078 A1	05-2002	Holtz et al.	725/14
*	B	US-2003/0051246 A1	03-2003	Wilder et al.	725/49
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	**Art Unit**
	JUNIOR MENDOZA	2423

CPC		
Symbol	**Type**	**Version**

CPC Combination Sets				
Symbol	**Type**	**Set**	**Ranking**	**Version**

/JUNIOR MENDOZA/ Examiner.Art Unit 2423 (Assistant Examiner)	09/06/2013 (Date)	**Total Claims Allowed:** 45	
/VIVEK SRIVASTAVA/ Supervisory Patent Examiner, Art Unit 2423 (Primary Examiner)	9/9/2013 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	**Art Unit**
	JUNIOR MENDOZA	2423

US ORIGINAL CLASSIFICATION		INTERNATIONAL CLASSIFICATION										
CLASS	SUBCLASS	CLAIMED					NON-CLAIMED					
725	48	H	0	4	N	5 / 445 (2011.01.01)						
CROSS REFERENCE(S)												
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)											
725	47											

/JUNIOR MENDOZA/ Examiner.Art Unit 2423 (Assistant Examiner)	09/06/2013 (Date)	**Total Claims Allowed:** 45	
/VIVEK SRIVASTAVA/ Supervisory Patent Examiner, Art Unit 2423 (Primary Examiner)	9/9/2013 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
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	Examiner	**Art Unit**
	JUNIOR MENDOZA	2423

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	1	17	17	33	33										
2	2	18	18	34	34										
3	3	19	19	35	35										
4	4	20	20	36	36										
5	5	21	21	37	37										
6	6	22	22	38	38										
7	7	23	23	39	39										
8	8	24	24	40	40										
9	9	25	25	41	41										
10	10	26	26	42	42										
11	11	28	27	43	43										
12	12	27	28	44	44										
13	13	29	29	45	45										
14	14	30	30												
15	15	31	31												
16	16	32	32												

/JUNIOR MENDOZA/ Examiner.Art Unit 2423 (Assistant Examiner)	09/06/2013 (Date)	**Total Claims Allowed:** 45	
/VIVEK SRIVASTAVA/ Supervisory Patent Examiner, Art Unit 2423 (Primary Examiner)	9/9/2013 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR O MENDOZA	2423

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
725	59	9/6/2013	JM
725	48	9/6/2013	JM

SEARCH NOTES		
Search Notes	Date	Examiner
Updated EAST Text Search	9/6/2013	JM
Class 725 Plus Text Search	9/6/2013	JM
Inventor Search	9/6/2013	JM
www.google.com Search for: JumpTV Documentation	1/7/2010	JM
Consulted with Hunter Lonsberry	9/6/2013	JM
Consulted with Hai Tran	8/28/2013	JM
Consulted with Vivek Srivastava	9/6/2013	JM

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
All	Claim language search	9/6/2013	JM

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L16	3	(mso and cable and guide).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/09/06 14:01
L15	33	(mso and cable).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/09/06 14:01
L14	1	(mso and non-mso and cable).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/09/06 14:01
L13	177509	(mso non-mso cable).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/09/06 14:00
L12	188	(mso non-mso).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/09/06 14:00
L11	25	9 and 10	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/09/06 13:58
L10	163	725/48.ccls. and @ad<="20060710"	US-PGPUB; USPAT;	OR	ON	2013/09/06 13:58

			USOCR; FPRS; EPO; JPO; IBM_TDB			
L9	155	725/59.ccls. and @ad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/09/06 13:58
L8	32	("5027211" | "5589892" | "5774664" | "5818935" | "5940073" | "5961602" | "5973683" | "6002394" | "6025837" | "6240555" | "6247176" | "6469753").PN. OR ("7152236").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/06 13:57
L6	10	("2006/0150214").URPN.	USPAT	OR	ON	2013/09/06 13:57
L5	23	("20030051246" | "20030135856" | "20040078807" | "20040172654" | "20060015903" | "20060037046" | "20060150214" | "20060259926" | "20070094684" | "20070157248" | "3619583" | "5784095" | "5883677" | "6072983" | "6340997" | "6628301" | "7024676" | "7036137" | "7240356" | "7313806" | "7389523" | "7533400" | "7793321").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/06 13:51
L3	141	("2002/0053078").URPN.	USPAT	OR	ON	2013/09/06 13:50
L1	1	"20040117786"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/09/06 13:49
S171	129	S170 and @rlad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/09/05 17:56
S170	225	(integrat$4 master$4) near2 (EPG GUI IPG UPG ((program tv television grid interactive) near3 (menu schedule$3 list$3 guide table))) same (cable satellite cit$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/09/05 17:56
S169	18	US-20060095471-$.DID. OR US-20060230427-$.DID. OR US-20020133822-$.DID. OR US-6993721-$.DID. OR US-7047547-$.DID. OR US-20060101498-$.DID. OR US-6507951-	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/05 17:56

		$.DID. OR US-6724403-$.DID. OR US-6978471-$.DID. OR US-7194753-$.DID. OR US-20030177495-$.DID. OR US-20040040036-$.DID. OR US-20040034865-$.DID. OR US-20030149981-$.DID. OR US-20040019908-$.DID. OR US-20020144269-$.DID. OR US-20030226147-$.DID. OR US-20030084452-$.DID.				
S168	125	S166 and mso with subscri$6	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/09/05 17:23
S167	531	S166 and mso	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/09/05 17:23
S166	19874	"725"/$.ccls. and @ad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/09/05 17:23
S165	70	(sling neear2 media).as. and (slingbox sling near box)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/09/05 17:22
S164	17	("20010056350" | "20020052746" | "20020052746" | "20020133819" | "20020120925" | "20030028382" | "20030061039" | "20030095212" | "20030095212" | "20030167171" | "20040117852" | "20050144009" | "20050172319" | "20050204401" | "20050204401" | "20050005308" | "20080016526" | "5600775" | "6643620" | "6216267").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/09/05 17:22
S163	1	"13305656"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/07/02 16:51
S162	3	("20070162936" | "20090282428" | "6266098").PN.	US-PGPUB;	OR	ON	2013/07/02 15:55

			USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB			
S161	1	"20060174268"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/07/02 15:49
S160	2	"20060253867"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/07/02 15:49
S159	75	version with updat$4 with compar$4 and "725".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/07/02 15:46
S158	1225	version with updat$4 and "725".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/07/02 15:45
S157	18	("2003/0051246").URPN.	USPAT	OR	ON	2013/06/10 12:21
S156	78	"725".clas. and S155	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/04/01 16:01
S155	126	S154 and @rlad<="20060710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/04/01 15:55
S154	215	(integrat$4 master$4) near2 (EPG GUI IPG UPG ((program tv television grid interactive) near3 (menu schedule$3 list$3 guide table))) same (cable satellite cit$4)	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2013/04/01 15:55

			EPO; JPO; IBM_TDB			
S153	1	"12019766"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/03/29 19:09
S152	0	"12019766".app.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/03/29 19:09
S151	2	"10/762,812"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/03/29 19:03
S150	2	"10/762812"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/03/29 19:03
S149	0	"10762812"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/03/29 19:03
S148	2	("20020112239" | "6532589").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/03/29 19:02
S147	1	("20050160461").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2013/03/29 18:59

9/6/2013 2:17:47 PM

C:\ Users\ jmendoza\ Documents\ EAST\ Workspaces\ 11484510 Global IPG for Cell Phone and Sending Content from Cell Phone to TV.wsp

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR MENDOZA	2423

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	08/08/2008	05/28/2009	01/07/2010	06/29/2010	06/01/2011	01/20/2012	11/05/2012	04/01/2013	09/06/2013
1	1	✓	✓	✓	✓	✓	✓	✓	✓	=
2	2	✓	✓	✓	✓	✓	✓	✓	✓	=
3	3	✓	✓	✓	✓	✓	✓	✓	✓	=
4	4	✓	✓	✓	✓	✓	✓	✓	✓	=
5	5	✓	✓	✓	✓	✓	✓	✓	✓	=
6	6	✓	✓	✓	✓	✓	✓	✓	✓	=
7	7	✓	✓	✓	✓	✓	✓	✓	✓	=
8	8	✓	✓	✓	✓	✓	✓	✓	✓	=
9	9	✓	✓	✓	✓	✓	✓	✓	✓	=
10	10	✓	✓	✓	✓	✓	✓	✓	✓	=
11	11	✓	✓	✓	✓	✓	✓	✓	✓	=
12	12	✓	✓	✓	✓	✓	✓	✓	✓	=
13	13	✓	✓	✓	✓	✓	✓	✓	✓	=
14	14	✓	✓	✓	✓	✓	✓	✓	✓	=
15	15	✓	✓	✓	✓	✓	✓	✓	✓	=
16	16	✓	✓	✓	✓	✓	✓	✓	✓	=
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20	20	✓	✓	✓	✓	✓	✓	✓	✓	=
21	21	✓	✓	✓	✓	✓	✓	✓	✓	=
22	22	✓	✓	✓	✓	✓	✓	✓	✓	=
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28	27	✓	✓	✓	✓	✓	✓	✓	✓	=
27	28	✓	✓	✓	✓	✓	✓	✓	✓	=
29	29	✓	✓	✓	✓	✓	✓	✓	✓	=
30	30	✓	✓	✓	✓	✓	✓	✓	✓	=
31	31	✓	✓	✓	✓	✓	✓	✓	✓	=
32	32	✓	✓	✓	✓	✓	✓	✓	✓	=
33	33	✓	✓	✓	✓	✓	✓	✓	✓	=
34	34	✓	✓	✓	✓	✓	✓	✓	✓	=
35	35	✓	✓	✓	✓	✓	✓	✓	✓	=
36	36	✓	✓	✓	✓	✓	✓	✓	✓	=

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11484510	CAVICCHIA, MARK A.
	Examiner	Art Unit
	JUNIOR MENDOZA	2423

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	08/08/2008	05/28/2009	01/07/2010	06/29/2010	06/01/2011	01/20/2012	11/05/2012	04/01/2013	09/06/2013
37	37	✓	✓	✓	✓	✓	✓	✓	✓	=
38	38	✓	✓	✓	✓	✓	✓	✓	✓	=
39	39	✓	✓	✓	✓	✓	✓	✓	✓	=
40	40	✓	✓	✓	✓	✓	✓	✓	✓	=
41	41	✓	✓	✓	✓	✓	✓	✓	✓	=
42	42	✓	✓	✓	✓	✓	✓	✓	✓	=
43	43	✓	✓	✓	✓	✓	✓	✓	✓	=
44	44	✓	✓	✓	✓	✓	✓	✓	✓	=
45	45	✓	✓	✓	✓	✓	✓	✓	✓	=

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

24122 7590 10/07/2013
CLARK HILL THORP REED
ONE OXFORD CENTRE
301 GRANT STREET, 14TH FLOOR
PITTSBURGH, PA 15219-1425

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/484,510	07/10/2006	Mark A. Cavicchia	DB001229-000	9918

TITLE OF INVENTION: Global Interactive program guide application and device

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	~~$890~~ $480	~~$300~~ $0	$0	~~$1190~~ $480	01/07/2014

EXAMINER	ART UNIT	CLASS-SUBCLASS
MENDOZA, JUNIOR O	2423	725-039000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Paul D. Bangor, Jr.
Clark Hill Thorp Reed
2
3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:
☒ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☒ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number 200888 (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

☐ Applicant certifying micro entity status. See 37 CFR 1.29

NOTE: Absent a valid certification of Micro Entity Status (see form PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

☐ Applicant asserting small entity status. See 37 CFR 1.27

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

☐ Applicant changing to regular undiscounted fee status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature Paul D Bangor Jr

Date January 7, 2014

Typed or printed name Paul D. Bangor, Jr.

Registration No. 34768

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Electronic Patent Application Fee Transmittal

Application Number:	11484510
Filing Date:	10-Jul-2006
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Filer:	Paul D. Bangor/Nancy White
Attorney Docket Number:	DB001229-000

Filed as Small Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Utility Appl Issue Fee	2501	1	480	480
Publ. Fee- Early, Voluntary, or Normal	1504	1	0	0

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**480**

Electronic Acknowledgement Receipt

EFS ID:	17838721
Application Number:	11484510
International Application Number:	
Confirmation Number:	9918
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Customer Number:	24122
Filer:	Paul D. Bangor/Nancy White
Filer Authorized By:	Paul D. Bangor
Attorney Docket Number:	DB001229-000
Receipt Date:	07-JAN-2014
Filing Date:	10-JUL-2006
Time Stamp:	13:34:23
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$480
RAM confirmation Number	11851
Deposit Account	200888
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)

1	Issue Fee Payment (PTO-85B)	140107_3.pdf	122106 df661f22ca0b0d341d03196ae1977c28076d3648	no	2
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	31907 5e4dfebb8d662cc80580d45013cdae902fd51d95	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	154013		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

- On Claims 1 – 10 line 1, "The content manager of claim…" should be replaced by: "The content manager device of claim…".

- On Claim 11 lines 19 – 20, "wherein the server is distinct from at least one of the one or more MSOs and one or more non-MSOs; and" should be replaced by: "wherein the server is distinct from at least one of the one or more MSOs and one or more non-MSOs; wherein the application allows for the IPG to be configured by a user with respect to adding or deleting channels from any of the one or more MSOs or the one or more non-MSOs; and"

Change(s) applied to document, /S.W./ 10/24/2013

- On Claim 21 lines 15 - 17 ~~16 — 17~~, "wherein the server is distinct from at least one of the one or more MSOs and one or more non-MSOs; and" should be replaced by: "wherein the server is distinct from at least one of the one or more MSOs and one or more non-MSOs; wherein the application allows for the IPG to be configured by a user with respect to adding or deleting channels from any of the one or more MSOs or the one or more non-MSOs; and"

- On Claim 32 last three lines, "f. for allowing the user to configure the IPG with respect to a first one of the one or more MSOs or the one or more non-MSOs to be linked to each of the channel of the IPG from which the streaming video programming may be received." should be replaced by:

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.M./

11484510 - GAU: 2623

PTO/SB/08A (04-07)
Approved for use through 09/30/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 4 of 4

Complete if Known	
Application Number	11/484,510
Filing Date	10 July 2006
First Named Inventor	Mark A. Cavicchia
Art Unit	2623
Examiner Name	Not Yet Assigned
Attorney Docket Number	DB001229-000

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 6,510,557	~~10/03/1997~~	Thrift	01-2003
		US- 6,757,707	~~02/04/2000~~	Houghton , et al.	06-2004
		US- 20030115612	~~08/28/2002~~	Mao, Weidong ; et al.	06-2003
		US-20020059642	05-16-2002	Russ, SamuelH.,etal.	
		US-20030059197	03-27-2003	Kamei,Yasukazu et al.	
		US-20030118322	06-26-2003	Kim, Jong Soon	
		US-20030061620	03-27-2003	Denney, Lisa	
		US-			
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		US-			
		US-			
		US-			

Change(s) applied to document, /R.M.L./ 11/6/2013

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]-Number[4]-Kind Code[5] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T[6]

Examiner Signature	/Junior Mendoza/	Date Considered	08/08/2008

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.M./

11484510 - GAU: 2623

PTO/SB/08A (04-07)
Approved for use through 09/30/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 3 of 4

Complete if Known	
Application Number	11/484,510
Filing Date	10 July 2006
First Named Inventor	Mark A. Cavicchia
Art Unit	2623
Examiner Name	Not Yet Assigned
Attorney Docket Number	DB001229-000

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 20060095471	~~07-07-2005~~	Krikorian; Jason ; et al.	05-2006
		US- 20060230427	~~03-30-2005~~	Kunkel; Gerard ; et al.	10-2006
		US- 20020133822	09-19-2002	Yang, Ivan Wong Yin ; et al.	
		US- 6,993,721	~~12-18-2000~~	Rosin , et al.	01-2006
		US- 7,047,547	~~04-24-2003~~	Alten , et al.	05-2006
		US- 20060101498	~~12-20-2005~~	Arling; Paul D. ; et al.	05-2006
		US- 6,507,951	01-~~05-1998~~	Wugofski	2003
		US- 6,724,403	~~10-30-2000~~	Santoro , et al.	04-2004
		US- 6,978,471	~~02-16-2000~~	Klopfenstein	12-2005
		US- 7,194,753	03-~~16-2000~~	Fries , et al.	2007
		US- 20030177495	~~03-12-2002~~	Needham, Bradford H. ; et al.	09-2003
		US- 20040040036	02-26-2004	An, Cheol-hong	
		US- 20040034865	~~08-13-2002~~	Barrett, Peter T. ; et al.	02-2004
		US- 20030149981	08-07-2003	Finster, Paul ; et al.	
		US- 20040019908	~~07-24-2003~~	Williams, Christopher D. ; et al.	01-2004
		US- 20020144269	~~03-30-2001~~	Connelly, Jay H.	10-2002
		US- 20030226147	~~05-31-2002~~	Richmond, Michael S. ; et al.	12-2003
		US- 20030084452	~~09-30-2002~~	Ryan, Timothy L. ; et al.	05-2003
		US- 20030051246	~~08-01-2002~~	Wilder, John Richard ; et al.	03-2003

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]-Number[4]-Kind Code[5] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T[6]

Change(s) applied to document,
/R.M.L/
11/6/2013

Examiner Signature	/Junior Mendoza/	Date Considered	08/08/2008

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/484,510	02/18/2014	8656431	DB001229-000	9918

24122 7590 01/29/2014

CLARK HILL THORP REED
ONE OXFORD CENTRE
301 GRANT STREET, 14TH FLOOR
PITTSBURGH, PA 15219-1425

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment is 41 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Mark A. Cavicchia, Coraopolis, PA;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

PTO/SB/44 (09-07)
Approved for use through 08/31/2013. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 8,656,431

APPLICATION NO.: 11/484,510

ISSUE DATE : February 18, 2014

INVENTOR(S) : Mark A. Cavicchia

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 16, line 40, after "provides" insert - - a - -.

Column 17, line 27, after "provides" insert - - a - -.

Column 17, line 56, delete "plurality of".

Column 17, line 57, delete "sources".

Column 18, line 27, after "displaying" insert - - a - -.

Column 18, line 35, delete "plurality of".

Column 18, line 36, after "network," insert - - wherein the server is distinct from at least one of the one or more MSOs and - -.

MAILING ADDRESS OF SENDER (Please do not use customer number below):

Paul D. Bangor, Jr, Esquire, Clark Hill PLC
301 Grant Street, 14th Floor, One Oxford Centre, Pittsburgh, PA 15219

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Patent Application Fee Transmittal

Application Number:	11484510
Filing Date:	10-Jul-2006
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Filer:	Paul D. Bangor/Nancy White
Attorney Docket Number:	DB001229-000

Filed as Small Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Certificate of Correction	1811	1	100	100
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
			Total in USD ($)	**100**

Electronic Acknowledgement Receipt

EFS ID:	19881206
Application Number:	11484510
International Application Number:	
Confirmation Number:	9918
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Customer Number:	24122
Filer:	Paul D. Bangor/Nancy White
Filer Authorized By:	Paul D. Bangor
Attorney Docket Number:	DB001229-000
Receipt Date:	15-AUG-2014
Filing Date:	10-JUL-2006
Time Stamp:	16:40:34
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$100
RAM confirmation Number	2759
Deposit Account	200888
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Certificate of Correction	140815_9.pdf	44583 5ab04ed57227e167d9ce8aa0753fe4e33e922ae6	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30171 398549079fb787ca5dacc00e309cd823d55bb8ef	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	74754		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 8,656,431 B2
APPLICATION NO. : 11/484510
DATED : February 18, 2014
INVENTOR(S) : Mark A. Cavicchia

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the Claims

Column 16, line 40, after "provides" insert -- a --.

Column 17, line 28, after "provides" insert -- a --.

Column 17, line 57, delete "plurality of".

Column 17, line 58, delete "sources".

Column 18, line 28, after "displaying" insert -- a --.

Column 18, line 37, delete "plurality of".

Column 18, line 38, after "network," insert -- wherein the server is distinct from at least one of the one or more MSOs and --.

Signed and Sealed this
Seventh Day of October, 2014

Michelle K. Lee

Michelle K. Lee
Deputy Director of the United States Patent and Trademark Office

PETITION TO ACCEPT UNINTENTIONALLY DELAYED PAYMENT OF MAINTENANCE FEE IN AN EXPIRED PATENT (37 CFR 1.378(b))

Patent Number	Issue Date	Application Number	Filing Date	Docket Number (if applicable)
8656431	18-Feb-2014	11484510	10-Jul-2006	

CAUTION: Maintenance fee (and surcharge, if any) payment must correctly identify: (1) the patent number and (2) the application number of the actual U.S. application leading to issuance of that patent to ensure the fee(s) is/are associated with the correct patent. 37 CFR 1.366(c) and (d).

Applicants claims the following fee status:

- (◉) Small Entity
- ( ) Micro Entity
- ( ) Regular Undiscounted

Applicants selects the following :

(◉) 3 1/2	( ) 7 1/2	( ) 11 1/2

PETITION FEE
The petition fee required by 37 CFR 1.17(m) (Fee Code 1558/2558) must be paid as a condition of accepting unintentionally delayed payment of the maintenance fee.

MAINTENANCE FEE (37 CFR 1.20(e)-(g))
The appropriate maintenance fee must be submitted with this petition.

STATEMENT
THE UNDERSIGNED CERTIFIES THAT THE DELAY IN PAYMENT OF THE MAINTENANCE FEE TO THIS PATENT WAS UNINTENTIONAL

PETITIONER(S) REQUEST THAT THE DELAYED PAYMENT OF THE MAINTENANCE FEE BE ACCEPTED AND THE PATENT REINSTATED

THIS PORTION MUST BE COMPLETED BY THE SIGNATORY OR SIGNATORIES

37 CFR 1.378(c) states: "Any petition under this section must be signed in compliance with 37 CFR 1.33(b)."

I certify, in accordance with 37 CFR 1.4(d)(4) that I am

- ( ) An attorney or agent registered to practice before the Patent and Trademark Office who has been given power of attorney in this application.
- (◉) An attorney or agent registered to practice before the Patent and Trademark Office
- ( ) A sole patentee
- ( ) A joint patentee; I certify that I am authorized to sign this submission on behalf of all the other patentees as evidenced by the power of attorney in the application
- ( ) A joint patentee; all of whom are signing this e-petition
- ( ) The assignee of record of the entire interest that qualifies as an authorized party under 37 CFR 1.33(b)

Patent Practitioner			
A signature of the applicant or representative is required in accordance with 37 CFR 1.33 and 10.18. Please see 37 CFR 1.4(d) for the form of the signature			
Signature	/Adam Sanderson/		
Name	Adam Sanderson	Registration Number	75065

Electronic Patent Application Fee Transmittal

Application Number:	11484510
Filing Date:	10-Jul-2006
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Filer:	Adam Sanderson
Attorney Docket Number:	DB001229-000

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
MAINTENANCE FEE DUE AT 3.5 YEARS	2551	1	800	800
PET. DELAY PYMT MAINTAIN PATENT IN FORCE	2558	1	1000	1000
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**1800**

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

In re Patent No. 8656431
Issue Date: February 18,2014
Application No. 11484510
Filed: July 10,2006
Attorney Docket No. DB001229-000

:
:DECISION GRANTING PETITION
:UNDER 37 CFR 1.378(b)
:

This is a decision on the electronic petition, filed May 8,2018 ,under 37 CFR 1.378(b) to accept the unintentionally delayed payment of the 3.5 year maintenance fee for the above-identified patent.

The petition is **GRANTED**.

The maintenance fee is accepted, and the above-identified patent reinstated as of May 8,2018 . This decision also constitutes notice that the fee has been accepted. An electronic copy of the petition and this decision has been created as an entry in the Image File Wrapper. Nevertheless, petitioner should print and retain an independent copy.

Telephone inquiries related to this electronic decision should be directed to the Electronic Business Center at 1-866-217-9197.

Electronic Acknowledgement Receipt	
EFS ID:	32567044
Application Number:	11484510
Patent Number:	8656431
Confirmation Number:	9918
Petition Issued Date:	May 8,2018
Title of Invention:	Global Interactive program guide application and device
First Named Inventor/Applicant Name:	Mark A. Cavicchia
Customer Number:	24122
Filer:	Adam Sanderson
Filer Authorized By:	
Attorney Docket Number:	DB001229-000
Receipt Date:	08-MAY-2018
Filing Date:	10-JUL-2006
Time Stamp:	16:15:11
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$1800
RAM confirmation Number	050918INTEFSW16181300
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Petition automatically granted by EFS	petition-request.pdf	32523 b49433491968479faefb67811e8b43b3188d1f20	no	2
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	32280 e6486648aaeea6f2dbead97b867c165cf4e18d63	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	64803		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.
National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.
New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.