IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HISENSE CO LTD.
Petitioner,

v.

MAXELL, LTD
Patent Owner.

U.S. Patent No. 9,578,369

Inter Partes Review No.: IPR2020-01598

PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 9,578,369

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TABLE OF CONTENTS

Petitioner's Exhibit List

Exhibit #	*Description*
1001	U.S. Patent No. 9,578,369 ("the '369 patent")
1002	Prosecution History for U.S. Patent No. 9,578,369 (downloaded from PAIR)
1003	Declaration of Dr. Henry Houh
1004	Complaint in *Maxell, Ltd. v. Hisense Co. Ltd., Hisense International Co. Ltd, Qingdao Hisense Electronics Co., Ltd., Guiyang Hisense Electronics Co., Ltd., Hisense International (Hong King) America Investments, Co., Ltd., Hisense International (HK) Co., Ltd., Hisense Electronica Mexico S.A. de C. V.*, Case No. 5:19-cv-00156 (EDTX)
1005	Service in *Maxell, Ltd. v. Hisense Co. Ltd., Hisense International Co. Ltd, Qingdao Hisense Electronics Co., Ltd., Guiyang Hisense Electronics Co., Ltd., Hisense International (Hong King) America Investments, Co., Ltd., Hisense International (HK) Co., Ltd., Hisense Electronica Mexico S.A. de C. V.*, Case No. 5:19-cv-00156 (EDTX)
1006	U.S. Patent Pub. No. 2007/0165144 ("Bennett-2")
1007	U.S. Patent No. 9,247,175 ("Bennett-3")
1008	U.S. Patent No. 8,321,898 ("Yuasa")
1009	U.S. Patent No. 9,055,194 ("Cho")
1010	U.S. Patent No. 7,136,709
1011	Stay order in *Maxell v. Huawei*, Case No. 5:16-cv-00178-RWS (EDTX).
1012	Prosecution History for U.S. Patent No. 9,197,917 (downloaded from PAIR) (excerpts)
1013	Prosecution History for U.S. Patent No. 8,892,688 (downloaded from PAIR) (excerpts)
1014	U.S. Pat. 6,097,441 ("Allport")

Exhibit #	*Description*
1015	Prosecution History for U.S. Patent No. 8,214,459 (downloaded from PAIR) (excerpts)
1016	U. S. Patent No 10,327,029

I. INTRODUCTION

Pursuant to 35 U.S.C. §§ 311 *et seq*. and 37 C.F.R. §§ 42.1 *et seq*., Hisense Co. Ltd. ("Petitioner") hereby petitions for an *inter partes* review of U.S. Patent No. 9,578,369 ("the '369 patent"). Petitioner respectfully submits that Claims 1-18 (the "Challenged Claims") of the '369 patent are unpatentable under 35 U.S.C. § 103 in view of the prior art references discussed herein, none of which were submitted during prosecution. This Petition demonstrates by a preponderance of the evidence that there is a reasonable likelihood that Petitioner will prevail with respect to at least one of these claims. Accordingly, it is respectfully requested that the Board institute an *inter partes* review of the '369 patent pursuant to 37 C.F.R. § 42.108.

II. OVERVIEW

The Challenged Claims are directed to prior art systems and combinations of conventional components for televisions that can be controlled by a "mobile terminal" that acts as a remote control. As the Background of the '369 patent admits, controlling televisions with "mobile terminals" such as cellular phones was known in the art long prior to the earliest possible priority date for the Challenged Claims. EX-1001 at 1:23-2:13.

To avoid a crowded art, the Patent Owner added significant verbiage to the claims, none of which results in patentability. In simplified essence, the Challenged

Claims recite a television that can be controlled by a "mobile terminal" to display a video that was being displayed on the mobile terminal. The mobile terminal sends a series of communications (the claimed first, second and third "information") that start the video on the television, control the television and terminate displaying the video by swapping the video back to the remote control.

The prior art herein discloses a system as claimed in the '369 patent. For example, U.S. Pat. No. 9,247,175 ("Bennett-3") was filed approximately twenty-two months before the earliest possible priority date of the Challenged Claims. Bennett-3 shows a mobile terminal that acts as a remote control for a television:

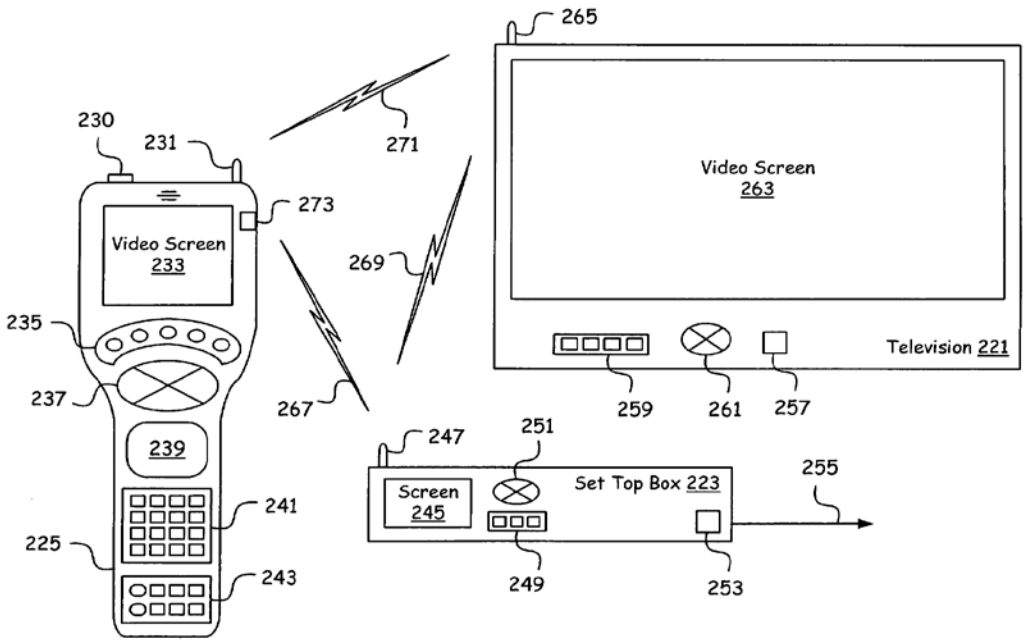


Figure 2

EX-1003 at Fig. 2.

Bennett-3 discloses one, or more, "PTV remote controls" that will display videos on their video screen and "swap" with the video on a controlled television. This is described throughout Bennett-3 and one example is as follows:

> With the PTV remote control 107 in hand in a local premises, a first viewer watches video from a first channel being displayed on the PTV remote video screen 121, while a second viewer watches a second channel, that had been previously viewed on and selected via the PTV remote control 107, on the television video screen 187. Using a swap command delivered via one of a plurality of input interfaces 127, the first viewer may then cause the television video screen 187 to display the first channel, while the PTV remote video screen 121 displays the second. The PTV remote control 107 may also be used to view a media guide or listing from which a particular program or channel may be selected for viewing on either or both of the screens 121 and 187.

EX-1003 at 5:1-13. To effectuate this swap and control of the television, the "PTV remote control" exchanges a series of "control signals" with various information to / from the television. EX-1003 at 5:14-6:62. The PTV remote control can then terminate the video on the television by, for example, "swapping" videos again.

The Bennett-3 claims recite an invention similar to that in the Challenged Claims. For example, Bennett-3's claim 1 recites a remote control that: (a) displays a media guide; (b) selects a video from the media guide to display a video on a different screen (*e.g.*, television); (c) selects a second video to display on the remote control; and (d) uses a "swap command" to terminate the videos on the television

and remote control and swap the video to the other device. EX-1003 at 14:19-48. Indeed, Bennett-3 describes the actions within the Challenged Claims in far greater detail than those actions are described in the '369 patent.

The Examiner allowed the Challenged Claims without a single prior art rejection – a practice that the Examiner had done with the '396 Patent's parent and grandparent applications as well. The '369 Notice of Allowance cut and pasted a prior application's Notice of Allowance from five years earlier – citing references not discussed in the '369 prosecution.

The Challenged Claims were not evaluated against the art herein. Those Claims are clearly invalid and Petitioner respectfully requests this Board to cancel the Claims.

III. GROUNDS FOR STANDING (37 C.F.R. § 42.104(A))

Petitioner certifies that the Patent for which review is sought is available for *inter partes* review and that Petitioner is not barred or estopped from requesting an *inter partes* review of the Challenged Claims on the grounds identified herein. 37 C.F.R. § 42.104(a). This Petition is filed pursuant to 37 C.F.R. § 42.106(a).

IV. RELIEF REQUESTED (37 C.F.R. § 42.22(A))

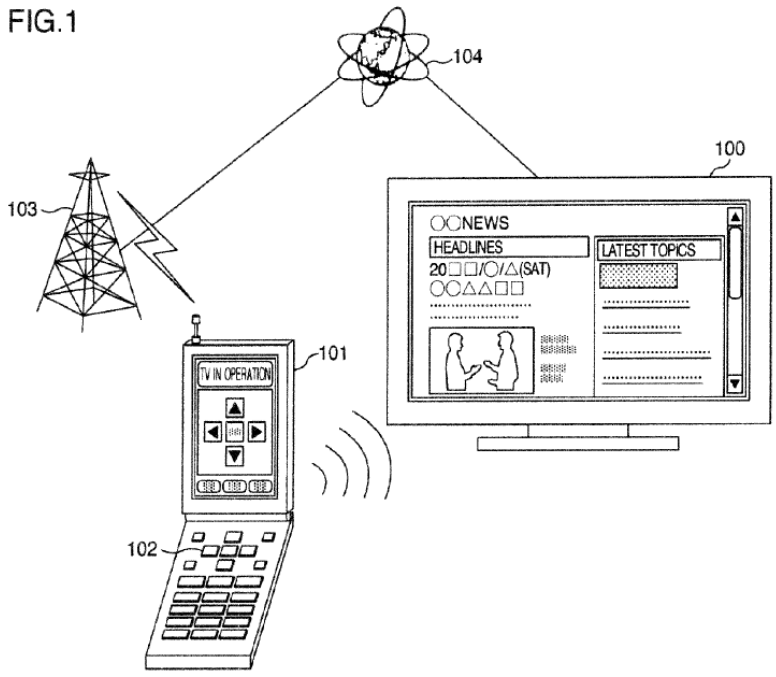
Petitioner respectfully requests institution of an *inter partes* review pursuant to 37 C.F.R. § 42.108 and cancellation of the Challenged Claims of the '369 patent.

V. REASONS FOR THE REQUESTED RELIEF

As explained below and in the attached Declaration of Petitioner's Expert, Henry Houh ("Houh"), EX-1003, the system described and claimed in the '369 patent, was obvious over the prior art to a person of ordinary skill in the art ("POSA") at the time of the invention.

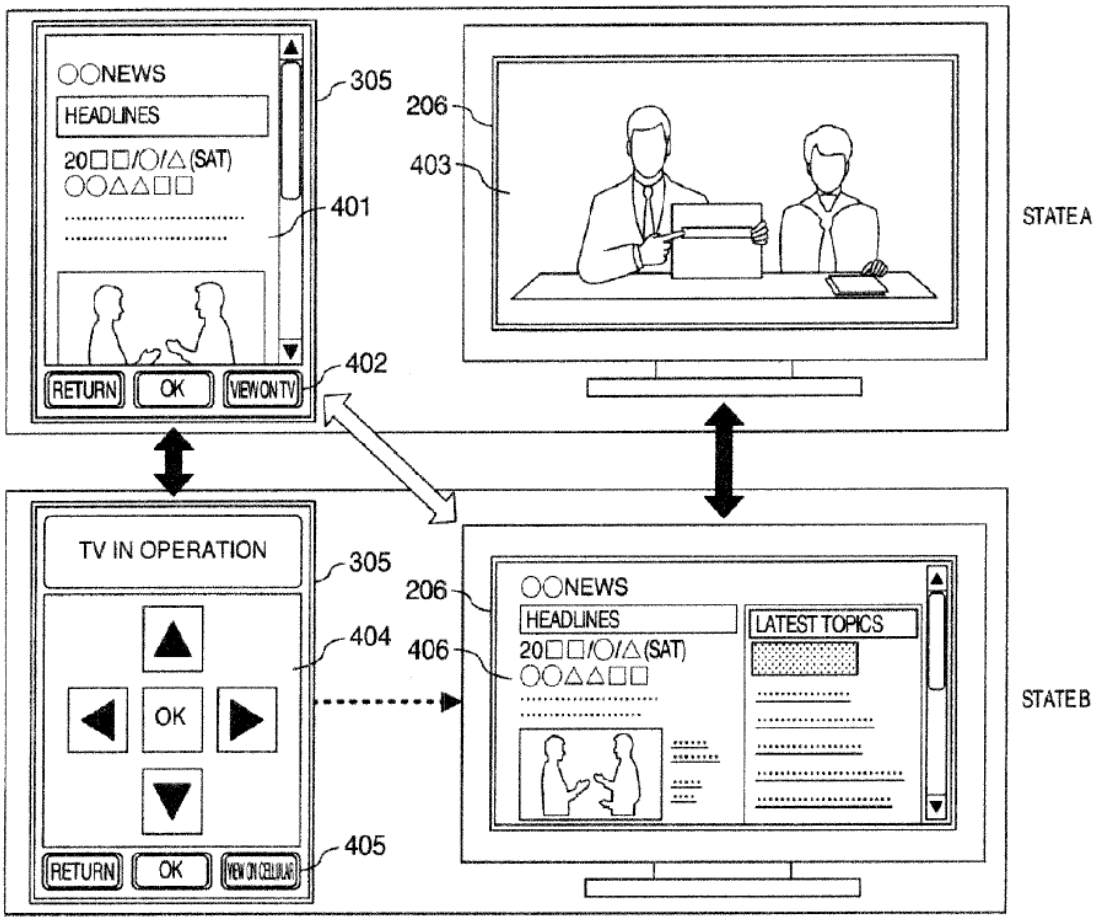
A. Summary of the '369 patent

The '369 patent is directed to using a remote control ("mobile terminal") to control internet browsing on a television as depicted on Figure 1:



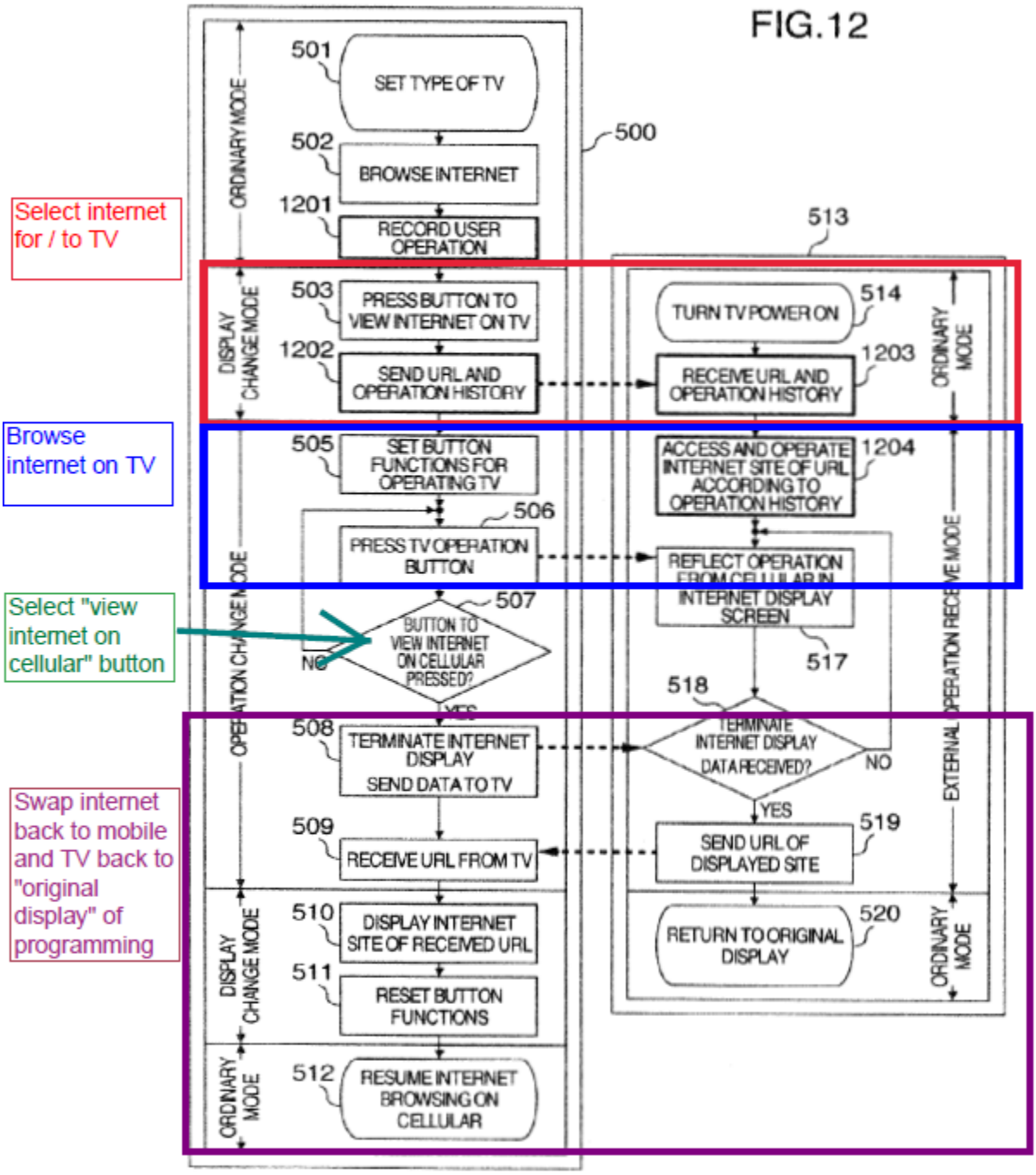
EX-1001 at FIG. 1. The user can use the mobile terminal to move the cursor on the internet page displayed on the television and then select buttons on the page. The '369 patent also describes the ability to swap watching a television program and surfing the internet as depicted in Figure 4:

FIG.4



EX-1001 at FIG. 4. Using the "view on cellular" and "view on TV" buttons (elements 402, 405), the user can control whether an internet page is displayed on the mobile terminal or the phone. When viewing the internet page on the TV, "[t]he browser [in the TV] constructs an image to be displayed as a homepage using the data, converts the image into a video signal to be inputted to the video processing unit 205, and outputs the signal…." EX-1001 at 8:66-9:3. Thus, in the '369 patent, the "video" is that video created, for example, by the television itself from, for example, a static web page.

When the user finishes browsing the internet on the TV, the user terminates the browsing session (presented as "video" on the television) using the "view on cellular" button to swap the internet page back to the mobile terminal. This sequence is depicted in an annotated version of Figure 12 from the '369:



EX-1001 at FIG. 12 (annotated)

The Challenged Claims recite this sequence of events in generic words such as the exchange of "information" or "video" received "via the Internet."

B. Prosecution History Of The '369 patent And Its Ancestor Patents

The '369 patent was the fifth in a lengthy series of continuation patents allowed by the same Examiner. The '369 patent, like several of its ancestor patents and its descendant patents, was allowed without any discussion of prior art.

In the '369 prosecution, the Challenged Claims were added after an indefiniteness and double patenting rejection. EX-1002 at 0112-0125. The Examiner then promptly issued a Notice of Allowance without any further action by cutting and pasting the exact discussion of prior art that the Examiner had included in the great-great-grandparent application in 2012. Compare EX-1002 at 0047 with EX-1015 at 0006-0008 (Notice of Allowance for U.S. Pat. No. 8,214,459).

Despite no prior art being discussed during the '369 prosecution, the Examiner cited the Slotznick, Walker, and Goto references (verbatim from the 2012 Allowance of 8,214,459) in the Notice of Allowance and did not discuss any references submitted during the '369 prosecution. EX-1002 at 0047. As is evident from the Examiner's cut/paste, the Examiner's statements regarding Slotznick, Walker, and Goto have no discernable relationship to the '369 claim elements.

This pattern of prosecution events is highly similar to the '369's ancestors. In the parent patent, U.S. Pat. No. 9,197,917, the Examiner issued a single double-patenting rejection that was obviated by a terminal disclaimer. EX-1012 at 0011-0014. The Examiner then cut and pasted the exact comments regarding Slotznick, Walker, and Goto from the 2012 Notice of Allowance of the '459 patent into the 2015 Allowance of the '917 – even including the statement that "Applicant's remarks filed 12/8/**11** are deemed persuasive…" EX-1012 at 0006-0007.

The prosecution of the grandparent of the '369 (U.S. Patent No. 8,892,688) is even more sparse. The Examiner allowed the claims on a first Office Action allowance and, again, cut/pasted the same passage from the 2012 Allowance into the Notice of Allowance. EX-1013 at 0010-0012. The '688 prosecution includes that the Examiner himself amended the claims in the Notice of Allowance. EX-1013 at 0003-0009.

During this series of prosecutions, additional prior art was submitted and yet the Examiner did not mention this additional prior art. Thus, not only was the art cited herein not submitted during prosecution, based upon the prosecution history of the '369 (and its ancestor patents), the Board should institute because those prosecution histories clearly indicate that the '369 claims were not evaluated against even the art that was submitted.

C. Claim Construction

For purposes of *inter partes* review, the claims should be given "their ordinary and customary meaning" as understood by a person of ordinary skill at the time of the claimed invention. *Phillips v. AWH Corp.,* 415 F.3d 1303, 1312, 1327 (Fed. Cir. 2005).

This interpretation is only applicable to the *inter partes* review sought herein and should not be construed as constituting, in whole or in part, Petitioner's own interpretation of any claims for any other purposes, including any litigation. Accordingly, for purposes of this *inter partes* review, Petitioner proposes that each claim term in the Challenged Claims be given its plain and ordinary meaning, and that no specific construction of any claim term is required because the prior art relied on in this Petition meets each of the claim terms under any reasonable construction.

D. Priority Date of the Challenged Claims

The '369 patent claims priority through a chain of continuation applications to Japanese Application JP 2007-248353 dated September 26, 2007. For purposes of this Petition only, that September 26, 2007 has been used as the priority date. Petitioner expressly reserves the right to challenge any aspect of any assertion that the Challenged claims are entitled to the date of this Japanese Application.

E. Person of Ordinary Skill in the Art

With respect to the Patent, a POSA in September 2007 would have been familiar with display systems such as televisions (including remote controls) and

information control and user interaction. EX-1003, ¶44-45. A POSA would have a working knowledge of computing, networking, networking, and data representation. *Id.*. A POSA would have gained knowledge of these concepts through a mixture of training and work experience, such as by having a Bachelor's degree in computer science, computer communications, electrical engineering, or equivalent degree, coupled with two years of experience; or by obtaining a Master's degree in those fields. *Id.*.

F. State of the Art

The following section describes the state of the art for mobile terminals that displayed videos and served as television remote controllers as of September 2007. The prior art references, and the discussions of what was known to a POSA, provide the factual support for the general description of the state of the art at the time of the invention, the interpretation of the prior art references and provide the basis for the motivation to modify or combine the references. Accordingly, these references are relevant to the *Graham* factors that should be considered by the Board.

As early as 1997 (10 years before the '369 patent), it was known to have a mobile terminal that served as a remote control for a television with the ability to "swap" the videos being shown on the remote control and television. For example, U.S. Pat. 6,097,441 ("Allport") discloses such a system. Allport teaches:

> [T]wo or more cooperating but physically independent displays for enhanced viewing of data streams, where the viewing on one display

> does not interfere with the viewing on the other displays. The type of data streams may be complex streams such as multiple television (TV) broadcast signals or other video signals, internet data… The system includes a hand-held and portable remote control with a motion picture display, and hardware and/or software enabling interaction between a primary display (such as a TV) and the hand-held display.

EX-1014 at Abstract. Allport teaches (and claims) swapping the video between the mobile and television. EX-1014 at 8:21-26, 17:45-18:64 (claims 22-34).

Similarly, long before the '369 patent, many others had disclosed using a mobile phone as a remote control for a television to control traditional video playback functionality including such well-known commands as "play," "pause," "fast-forward," and "stop" – features that the '369 patent does not describe. For example, U.S. Pat. No. 7,136,709 that a "devices such as mobile phones, PDAs, watches, dedicated remotes, and other simple wireless enabled devices may … include several function buttons (*i.e.* TV, Movie, Music, Lighting, etc) and several associated generic transport buttons (*e.g.*, play, stop, shuffle…)." EX-1010 at 13:34-55. "For example, an Internet based video file could be started from within a home entertainment environment, paused by the user (e.g., via pause or save state button on a remote control or PDA) and later resumed in a remote hotel room on a different entertainment environment which is controllable by the user (e.g., via the remote or PDA…." *Id*. at 11:8-12

By September 2007 a POSA understood that it was desirable to have mobile terminals with the capability to display videos and then transmit control signals to cause and control the display of those videos on devices with larger screens, such as televisions.

This prior art provides the motivation for a POSA to modify and combine the prior art identified in the Grounds below to establish that the Challenged Claims recited nothing more than a combination of prior art elements, each used for its normal and intended purpose, and thus the recited limitations are obvious modification of the cited prior art.

VI. IDENTIFICATION OF CHALLENGES

A. Challenged Claims

Claims 1-18 of the '369 patent are challenged in this Petition.

B. Statutory Grounds for Challenges

The Challenges are set forth in detail below and summarized as follows:

Ground	Claims	Basis	Reference
1	1-3, 6-7, 10-12 and 15-16	§ 103	Bennett-3
2	1-3, 6-7, 10-12 and 15-16	§ 103	Bennett-3 combined with Yuasa
3	4-5, 8-9, 13-14, and 17-18	§ 103	Bennett-3 combined with Cho
4	4-5, 8-9, 13-14, and 17-18	§ 103	Bennett-3 combined with Yuasa and Cho

None of the art cited below was considered during the '369 prosecution.

United States Pat. No. 9,247,175 issued January 26, 2016 from an application filed November 30, 2005 ("Bennett-3" (EX-1007)) and is prior art under §102 (a)/(e).

United States Pat. No. 8,321,898 issued November 27, 2012 from an application filed May 12, 2006 ("Yuasa" (EX-1008)) and is prior art under §102 (a)/(e).

United States Pat. No. 9,055,194 issued June 9, 2015 from an application filed November 30, 2006 ("Cho" (EX-1009)) and is prior art under §102 (a)/(e).

Bennett-3, Yuasa, and Cho published as U.S. Pat. Apps. 2007/0124765, 2006/062221, and 2007/0136488, respectively, which are prior art under section §102 (a) and which disclose the same content as cited herein.

The following reference shows the start of the art and/or motivations to combine.

U.S. Pat. Appl. 2007/0165144 published July 19, 2007 from an application filed May 18, 2006 ("Bennett-2" (EX-1006)) and is prior art under §102(a)/(e).

VII. IDENTIFICATION OF HOW THE CHALLENGED CLAIMS ARE UNPATENTABLE

A. The Structure Of The Challenged Claims.

The '369 patent includes 10 independent claims, all having the same structure of elements. The claims all recite a preamble with an "information processing unit" or a "display apparatus" (*e.g.*, a television). The claims then recite elements present in televisions for decades: a "communications unit," a "display unit," and a "control unit." Finally, the claims recite a lengthy "wherein" clause that describes the operation of the "control unit" in communicating with the remote control ("mobile terminal") and displaying video on the television. The "wherein" clauses describe a "first," "second," and "third" information (claims 1-9) or communication (claims 10-18) from the remote control ("mobile terminal") to the television.

The independent claims have minor differences primarily related to the source of the video content (either "broadcast" or "via the internet"). The dependent claims recite the same "video processing unit" element. Finally, claims 4-5, 8-9, 13-14, and 17-18 require a "login" of the mobile terminal to an internet site being used in the course of the processing. For simplicity, the discussion below focuses on claim 1 and notes differences as appropriate or needed for the invalidity analysis.

B. Ground 1: Claims 1-3, 6-7, 10-12 and 15-16 Are Obvious Over Bennett-3.

Bennett-3 discloses, or renders obvious, every element of claims 1-3, 6-7, 10-12 and 15-16. The '369 patent shows, and claims, the type of "swapping" operation that Bennett-3 expressly discloses.

Bennett-3 teaches interactions between a television and one or more remote controls each with a built-in screen. EX-1007 at Abstract (disclosing "[a] remote control with a built-in miniature television screen … manages settings and display of media on an associated television (TV) screen. The remote control's user interface permits media guide perusal and channel selection for display on both of the main and miniature television screens"). Bennett-3's Figure 2 depicts this:

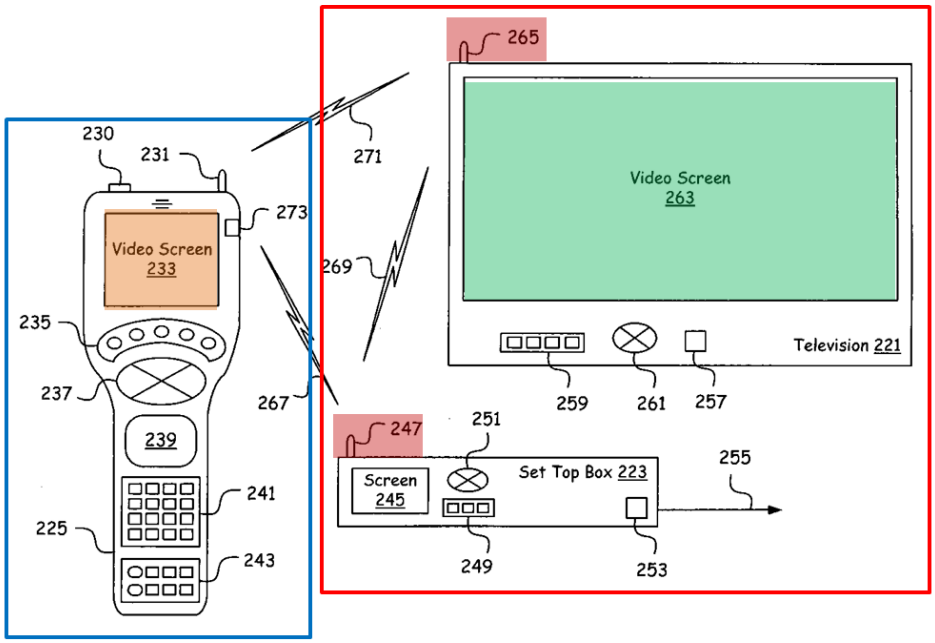


Figure 2

One advantage of Bennett-3 was using a remote controller with built-in screen

to interact with a TV to: select a first video (*e.g.*, from TV broadcasting) for display on TV, select a second video (*e.g.*, from Internet) for display on the remote controller, and "cause the video being displayed on the PTV remote video screen 121 [of the remote controller] and television video screen 187 [of the TV] to be swapped." EX-1007 at 6:5-61.

As detailed below, Bennett-3 teaches all key elements of the Challenged Claims.

1. Bennett-3 Discloses The Preambles And Basic TV Elements

a. Preambles: Information processing apparatus (claims 1 and 10) / display apparatus (all claims except claims 1 and 10) / for displaying a content acquired via the internet (all claims) / for displaying a content acquired via a broadcast signal (all claims except claims 1 and 10)

The Challenged Claims' preambles recite, essentially, a television for displaying content from the internet (all claims) or alternatively a "broadcast signal" (all claims except 1 and 10). Preambles are presumpively non-limiting.

Nontheless, Bennett-3 discloses the Challenged Claims' "information processing apparatus" and "display apparatus" as Bennett-3's television (also referenced as a "media system") (*e.g.*, elements 105, 221/223, 305/306, 413, 511, 621, 827) which "includes a television and possibly a set top box." EX-1007 at FIGs. 1-2; 5:49-53; 9:16-17.

Bennett-3's television (including the integrated set top box ("STB")), displays

content acquired via many sources including the Internet and broadcast sources:

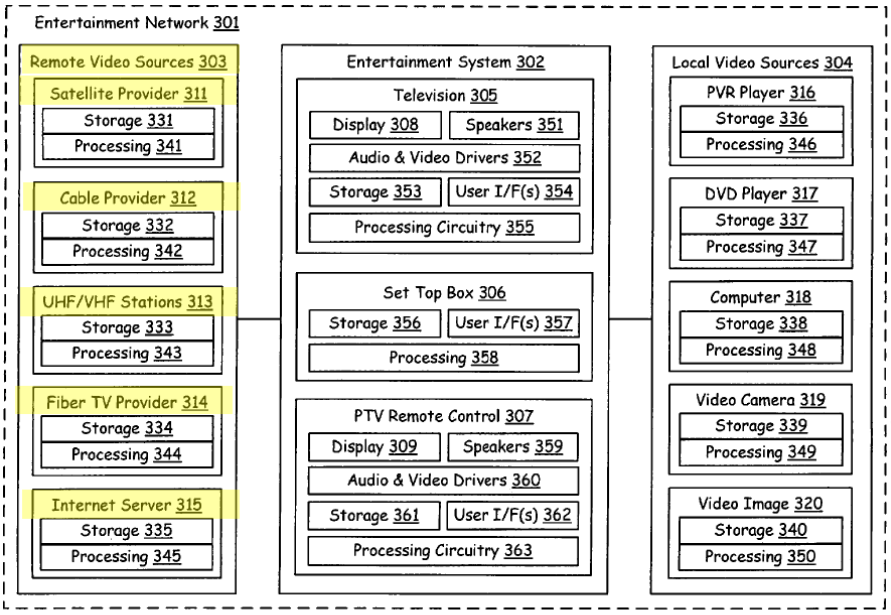


Figure 3A

EX-1007 at FIG. 3A.

These sources include via the Internet from "video sources" which comprise "***Internet*** based servers" and "***TV broadcasting*** sources." EX-1007 at FIGs. 1-3A, 4, 6; 4:33-50; *see also* EX-1007 at Abstract, 3:17-20, 9:28-40, 10:42-47, 11:8-26; claims 5, 10. A user can select any source for display on the PTV remote control and a different source specified for display on the television and then optionally "swap" the two video sources. EX-1007 at 6:5-61, 7:23-61. The television can receive video either directly from the source or indirectly through the remote control. *E.g.*, EX-1007 at 13:7-16. EX-1003 at ¶¶57, 75-81.

b. Communication unit (all claims)

Bennett-3 discloses the "communication unit" in the "information processing

apparatus" and "display apparatus", as Bennett-3's communication interfaces 171 (red) in the TV (red outline). The communication interfaces 171 conducts bi-directional communication with the PTV remote control (red outline) using wired, infrared, and other wireless links such as Bluetooth. EX-1007 at FIGs. 1-2, 5; 5:14-21, 5:49-55, 6:17-21, 6:62-7:50, 8:46-51, 13:42-48, claims 12-17; EX-1003 at ¶¶82-84.

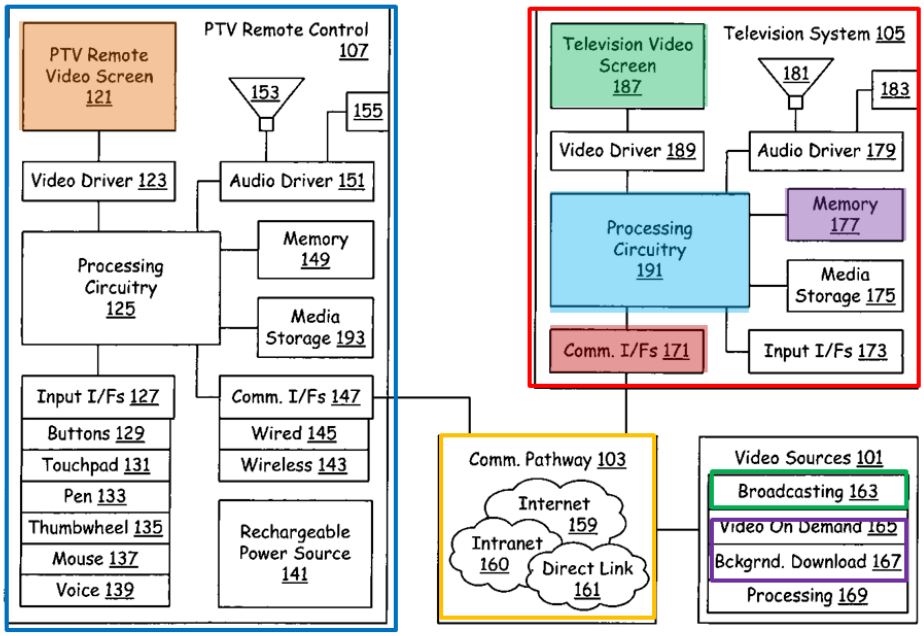


Figure 1

EX-1007 at FIG. 1.

c. Display unit (all claims)

Bennett-3 discloses the "display unit," as Bennett-3's television video screen (*e.g.*, elements 187, 263, 308, 413, 511, 621) (green), which is arranged to display a video content. EX-1007 at FIGs. 1-3A, 4-6; 5:56-62; 6:45-61, 8:42-45, claims 1-2,

9, 18; EX-1003 at ¶¶85-86.

d. <u>Control unit (all claims) / "to control the display unit to display a first video content" (claims 1 and 10) / "control the display unit to display a first video content acquired via the broadcast signal" (all claims except claims 1 and 10)</u>

Bennett-3 discloses the "control unit," as Bennett-3's processing circuitry (*e.g.*, elements 191, 355, 417)(blue) in the TV as shown in Figure 1. EX-1003 at ¶¶87-93.

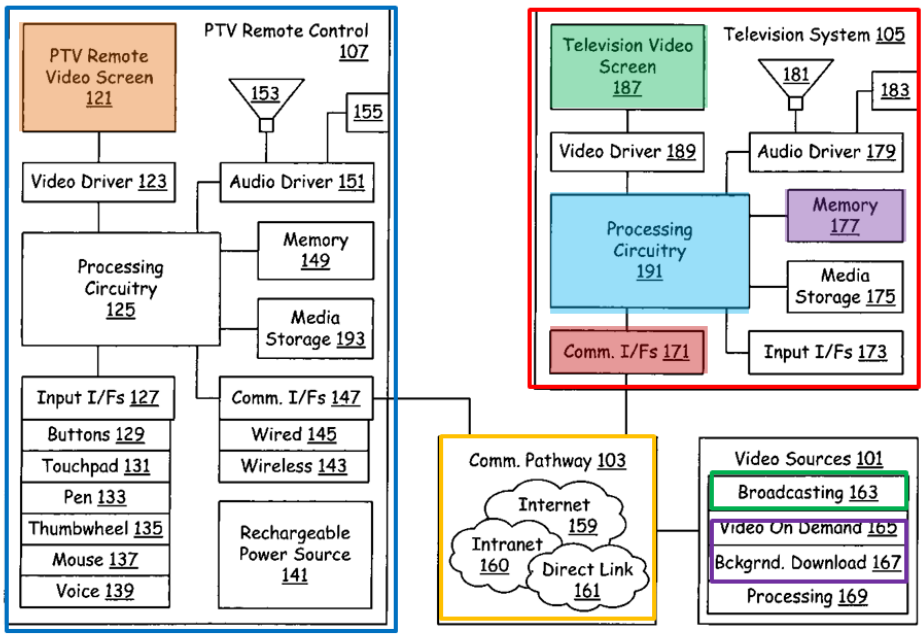


Figure 1

The processing circuitry controls the television screen to display videos based on "control signals" received via the communication interfaces 171. EX-1007 at FIGs. 1-3A, 3C, 6, 8-9; 5:53-6:25; *see also* EX-1007 at 4:5-7, 8:5-7, 8:46-61, 11:8-40, claims 1, 18. The "processing circuitry" can be implemented in hardware or

software. EX-1007 at 4:61-67.

Bennett-3 describes how these "control signals" are generated and sent to the television to cause channels to be displayed.

> [T]he viewer may then deliver a second command to the processing circuitry 125 to cause selection of one of the media guide listings, *i.e.*, a channel, for display on the television screen 187. The processing circuitry 125 responds to the second command by delivering the second command to the processing circuitry 191 via the communication interfaces 147 and 171 and the communication pathway 103. Upon receipt of the second command, the processing circuitry 191 tunes to the selected channel, processes the channel video and audio, delivers the, processed video for display on the television screen 187 ….

EX-1007 at 6:5-25.

If needed, the "control unit" would include the other television components including the video and audio drivers, memory, and interfaces as well as any modules such as decoders, transcoders and / or fitting modules. *E.g.*, EX-1007 at FIGS. 1, 3A, 3C, 5:53-62, 10:7-20. EX-1003 at ¶¶89-93.

Bennett-3 discloses, or at a minimum, renders obvious, that the components identified above comprises a control unit arranged to control the television screen to display video, *e.g.* by "carry[ing] out commands received from the PTV remote control 107." EX-1007 at 5:65-6:25. EX-1003 at ¶¶87-93.

2. Mobile terminal (all claims)

Bennett-3 discloses the "mobile terminal" in its PTV ("parallel TV") remote control (*e.g.*, elements 107, 225, 503, 513)(blue outline). *E.g.*, EX-1007 at FIGS. 1-2. The PTV remote control exchanges bi-directional "control signals" over "infrared" or "any wireless and wired combination of Internet [], intranet [], and direct link" to control televisions and set top boxes (which may be integrated into televisions). EX-1007 at 5:14-21, 8:46-51, 13:42-48, FIGS. 1-3A, 5-9, claims 1-19. Different viewers can each have their own hand-held remote control. EX-1007 at FIG. 5; 5:1-13, 10:58-11:3. EX-1003 at ¶¶94-102.

The '369 patent states "[t]he mobile terminal 101 is a portable information processing terminal." EX-1001 at 4:46-48. The PTV remote is one such information processing terminal. EX-1003 at ¶¶99-102. The PTV remote includes input interface circuitry that accepts commands from controls (buttons, thumbwheel, touchpad…) and it has "processing circuitry" (which "may be implemented utilizing various hardware and/or software modules") to execute programs stored in "memory" to process information such as video, audio, and the display / selection of program guides. EX-1007 at FIGS. 1-2, 3C, 4:61-6:3. The PTV remote displays video and outputs audio through its speakers or headphones. EX-1007 at 5:18-35. Finally, the PTV remote control has a "rechargeable power source 141" which is another hallmark of a mobile device. EX-1007 at FIG. 1.

3. Bennett-3 Discloses The Actions Corresponding To The "First Information" (claims 1-9) / "First Communication" (claims 10-18) In The Wherein Clause.

The Challenged Claims recite a "first information" or a "first communication" sent from the remote control ("mobile terminal"). This first information / communication directs the television to stop displaying its current video and begin displaying the video that was previously displayed on the remote control ("mobile terminal"). EX-1003 at ¶¶103-113.

Bennett-3 discloses (and claims) this exact sequence of events occurring with its "swap" command.

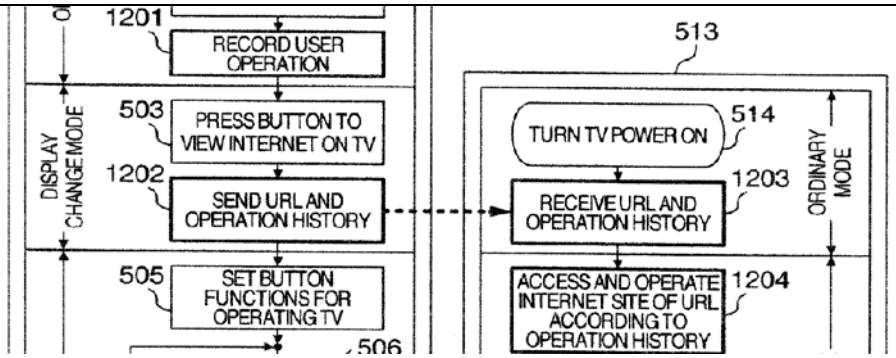
> [A] first viewer watches video from a first channel being displayed on the PTV remote video screen 121, while a second viewer watches a second channel, that had been previously viewed on and selected via the PTV remote control 107, on the television video screen 187. Using a swap command delivered via one of a plurality of input interfaces 127, the first viewer may then cause the television video screen 187 to display the first channel, while the PTV remote video screen 121 displays the second.

EX-1007 at 5:6-10.

Notably, Bennett-3 discloses (and claims) that the swap operation includes an exchange of "all necessary" identifiers for this swap including the video source, video selection and "current offset into the current video selection" which allows the two devices (television and remote control) to take over the state of the current video

display. Bennett-3 pervasively describes (and claims) this "swap" command. EX-1007 at 6:45-61,7:46-62, 11:63-67, 13:31-36, Abstract, FIG. 7 (showing swap operation), FIG. 9 (element 919), claims 1, 9, 17, 18.

The '369 patent shows this "first information" similar to Bennett-3 as the "URL" identifier of the internet content selected by the remote control as depicted in Figure 12 and the associated text:



EX-1001 at FIG. 12 (excerpted)

In step 503, to view the internet site on the TV set, when the user conducts an operation to select a button corresponding to the button display 402 presented on the display unit 305 of the cellular phone, the cellular phone creates transmission data 1100 including a URL 1102 of the internet site as an initial point of the recording …, and then sends the transmission data 1100 to the TV set. After the URL transmission, the system control unit 301 controls the display unit 305 to terminate the display of the internet site on the cellular phone. … at reception of the transmission

> data 1100 (step 1203), the TV set accesses the internet of the URL 1102, conducts the operation indicated by the operation history 900 or 1000 for the internet site, and displays the internet site for which the operation has been conducted (step 1204).
>
> EX-1001 at 19:27-43.

Thus, just like in the earlier Bennett-3, in the '369 patent, the transmission of the identifier specifying the video content (*e.g.*, the URL) results in the television terminating its existing display and displaying the content from the remote control. EX-1003 at ¶¶103-112.

The following sections identify the portions of Bennett-3 corresponding to this action.

a. <u>control the display unit to terminate displaying of the first video content and to start displaying a second video content acquired via the internet (all claims)</u>

Bennett-3 discloses these actions. While a broadcast video content is displayed on the television and an Internet video content is displayed on the PTV remote control, Bennett-3 discloses a swapping command to cause the video being displayed on the remote control and the TV to be swapped, such that the TV terminates displaying the broadcast video and starts displaying the Internet video. EX-1007 at 6:26-61. EX-1003 at ¶¶107-113.

First, a viewer may use the PTV remote to select a video (either broadcast or

Internet) that is to be displayed the television

> [A] viewer may enter a command via the buttons 129 to display a television channel listing, i.e., a media guide, corresponding to available video channel broadcasts from the TV broadcasting 163 of the video sources 101. … the viewer may then deliver a second command to the processing circuitry 125 to cause selection of one of the media guide listings, i.e., a channel, for display on the television screen … the processing circuitry 191 tunes to the selected channel, processes the channel video and audio, delivers the, processed video for display on the television screen ….

EX-1007 at 6:5-25.

Then, with the television displaying this first selected video, the user can select a second video from the video source (including via the Internet as discussed *supra* at § VII.B.1.a) for display on the PTV remote.

> [t]he viewer may enter a third command via the buttons 129 requesting a second media guide from another of the video sources 101, for example, an ***Internet*** based media server … The processing circuitry 125 [of the remote control] responds by requesting the selected video from the media server of the video sources 101. As the selected video is received, the processing circuitry 125 delivers the video to the video driver 123 for display….

EX-1007 at 6:26-44.

At that point, the viewer can then "swap" the videos such that the video on

the remote is now on the TV and the video that previously was on the TV is on the remote:

> [t]he viewer can enter a swapping command via the input interfaces 127. In response, the processing circuitry 125 and 191 coordinate to cause the video being displayed on the PTV remote video screen 121 and television video screen 187 to be swapped…"

EX-1007 at 6:45-61; *see also* EX-1007 at 7:13-62 (also describing the operation of the swap command with additional details).

Thus, Bennett-3 discloses this element. EX-1003 at ¶¶104-113.

b. <u>when the communication unit receives first information from the mobile terminal (claims 1-9) / when a first communication between the mobile terminal and the information processing apparatus is conducted (claim 10) / when a first communication between the mobile terminal and the display apparatus is conducted (claims 11-18)</u>

Bennett-3 discloses the "first information" (received "from the mobile terminal") and the "first communication" (between the mobile terminal and the TV), as Bennett-3's "swap command," "identifiers" and "control information" exchanged by the remote control and TV, associated a media swapping command from the user. EX-1003 at ¶¶104-113.

> [T]he viewer can enter a ***swapping command*** via the input interfaces 127. In response, the processing circuitry 125 and 191 coordinate to cause the video being displayed on the PTV remote video screen 121 and television video screen 187 to be swapped. In particular for

> example, the processing circuitry 125 sends a request to the processing circuitry 191 for ***identifiers associated with the video source, video selection being displayed, and current offset into the current video selection***, if appropriate, of the video being displayed by the television video screen 187. Upon receipt of the identifiers, the processing circuitry 125 [of the remote control] sends all necessary of such types of ***identifiers*** associated with the video being displayed on the PTV remote video screen 121 to the processing circuitry 191 [of the TV system]. Having exchanged identifiers, the processing circuitry 125 and 191 use the exchanged identifiers to access and display the corresponding video and playback the associated audio, completing the swap.

EX-1007 at 6:45-61; *see also* EX-1007 at 7:46-62 (describing exchange of "identifiers," "identifier information," and "control information" needed to effectuate the swap). Bennett-3 expressly claims this swapping of videos between the remote and the televisions in claims 1-19. Just like in the '369 patent, a POSA understood that Bennett-3's disclosure of identifier would include a URL as "an identifier associated with the video source", e.g., "an Internet based media server." EX-1007 6:26-29; 6:49-54.

Thus, just like the (later) '369 patent, Bennett-3 teaches terminating the existing video when the new video identifier information is received by swapping to the new video. EX-1003 at ¶¶104-113.

c. <u>the second video content is a same video content as a video content displayed on the mobile terminal before the mobile terminal sends the first information (claims 1-9) / the second video content is a same video content as a video content displayed on the mobile terminal before the first communication is conducted (claims 10-18)</u>

As detailed above, the video that is originally displayed on the PTV remote control is "swapped" to the television. EX-1007 at 5:6-10, 6:45-61,7:46-62, 11:63-67, 13:31-36, Abstract, FIG. 7 (showing swap operation), FIG. 9 (element 919), claims 1, 9, 17, 18. EX-1003 at ¶¶104-113.

d. <u>a state of displaying of the video content on the mobile terminal at a time when the first information is sent from the mobile terminal is taken over to a state of displaying of the second video content on the display unit at a time when the display unit starts displaying the second video content, based on the first information (all claims)</u>

As detailed above, Bennett-3 discloses (and claims) that associated a swap command, the video content swapped from the remote control to the TV is resumed at the TV based on a "current offset into the current video selection" at the remote control. EX-1007 at FIGS. 1, 7, 8, 6:45-61, claims 1, 13-14, 17-18. After a user enters "a swapping command via the input interfaces," "the processing circuitry 125 [on the remote control] and 191 [on the TV] coordinate to cause the video being displayed on the PTV remote video screen 121 and television video screen 187 to be swapped," where the remote control and the TV exchange "identifiers associated with the video source, video selection being displayed, and ***current offset*** into the

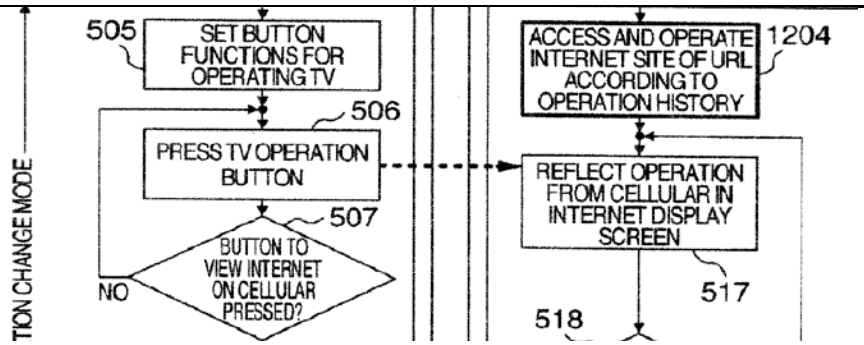
current video selection." EX-1007 at FIG. 1, 6:45-61. The remote control and television exchange "control information" to coordinate this swap of "identifiers" across a link such as Bluetooth. EX-1007 at 7:23-62.

A POSA would recognize that Bennett's exchange of these "identifiers," "offsets," "control information," and "identifier information" allows the television's control unit to have a state of the video content taken over from the remote control to the television to permit, for example, continuation of the video at the point at which it was being displayed on the remote control. EX-1003 at ¶¶114-126.

4. Bennett-3 Discloses The Actions Corresponding To The "Second Information" (claims 1-9) / "Second Communication" (claims 10-18) In The Wherein Clause.

The Challenged Claims recite a "second information" or a "second communication" sent from the remote control ("mobile terminal"). This second information / communication controls the display of the television with respect to the video content that was previously displayed on the remote control.

The '369 patent teaches that this "second information" is almost the same as standard controls sent from a remote control. This is shown in Figure 12 and the associated text in the '369 patent:



EX-1001 at FIG 12 (excerpted)

after the transmission of the URL, the cellular phone enters a state in which the system control unit 301 is capable of operating the TV set, … The display unit 305 presents a display to inform the user of operations which can be conducted by pressing keys as shown, for example, in the screen display 404 (step 505). In this state in which the TV set can be operated, if the user presses an associated key of the input unit 102, an infrared-ray command which indicates an operation for the TV set and which can be interpreted by the TV set designated in step 501 is sent via the infrared-ray transmitting and receiving unit 700 to the TV set. The infrared-ray command includes information almost the same as that of an infrared-ray command sent from a remote control device of the TV set.

EX-1001 at 10:65-11:22.

The '369 patent does not disclose, or require, any specific operations related to the claimed "video" presentation other than these infrared commands from a typical, known remote control using a visual interface. This lack of specificity is

reflected in the vague, generic "second information" or "second communication" terminology recited in the Challenged Claims.[1] The '369 patent discloses operations related to web-surfing (as opposed to video display) on the television such as the ability to "move" a cursor or "select" a button on an Internet page, but those operations obvious do not control the operation of "video" as recited in the Challenged Claims. *E.g.*, EX-1001 at 11:23-29.

As discussed below, Bennett-3 offers known remote-control commands for controlling the operation the display of the video content as referenced in the '369 patent. In particular, after Bennett-3 "swaps" the video to the television, the remote control can then issue "control signals" that control the operation of the display of the video on the television (and also the integrated set-top box ("STB")) as recited in the Challenged Claims. EX-1003 at ¶¶127-149.

a. <u>control displaying of the second video content on the display unit based on second [information / communication] for operating the second video content</u>

During displaying of the second video on the TV, the remote control in

[1] The terms "first information" / "first communication", "second information" / "second communication" and "third information" / "third communication" are generic terms only used in the claims and do not appear in the '369 patent specification.

Bennett-3 transmits a wide variety of control signals to the TV to operate the second video on the TV. These control signals correspond to the many various commands sent to the television and/or "the STB [set-top box that] can be part of the television." EX-1007 at 9:16-17. *See* EX-1003 at ¶¶127-149.

"The PTV remote control 225 has sets of buttons 235, 241 and 243 through which the viewer may control the selection and display of media guides and video selections on the video screens 233, 245 and 263. A rocker button 237 allows a viewer to browse up and down to sample or "surf" video offerings and adjust associated volume." EX1007 at 8:24-29. These are shown in Figure 2:

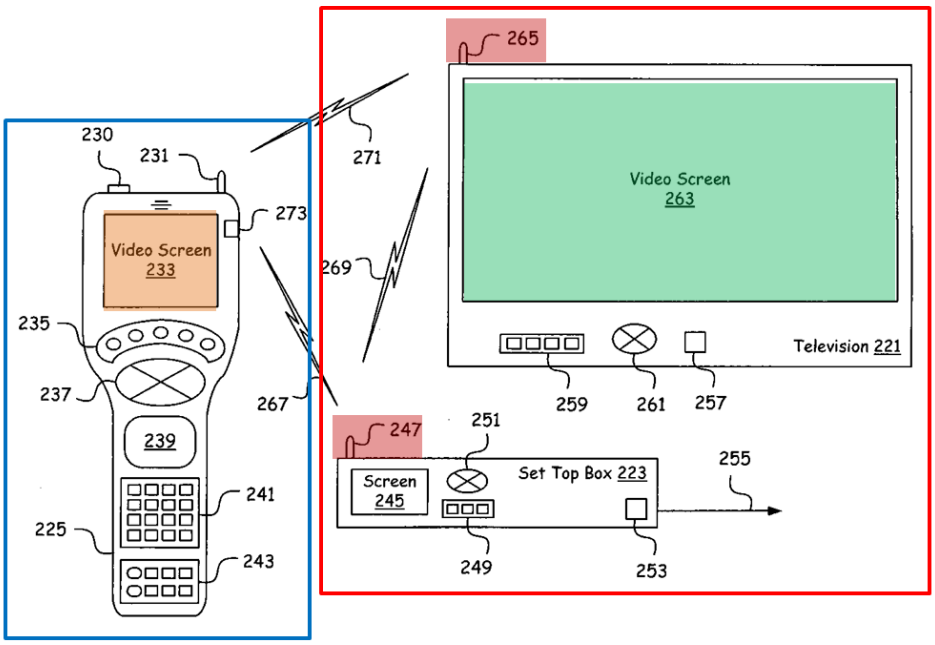


Figure 2

EX-1007 at FIG. 2. Thus, Bennett-3 expressly discloses the remote "control[s] the … display of … video" on the TV. Using a "rocker button" to "sample" or "surf"

the video selections on any of the devices (including the television system) also teaches that Bennett-3's "control signals" can direct the television to perform traditional well-known functions like pausing, starting or stopping the video. EX-1003 at ¶¶133-140, 146-148.

Bennett-3 also emphasizes that the television has "media storage 175 [] used for short and longer-term storage to respectively support buffering and later playback of received video." EX-1007 at 6:2-4. When the "Internet is used as a vehicle delivery mechanism based on control signals of a PTV remote… Any downloaded video from the Internet can be stored locally on a storage media and can be used at a later point in time." EX-1007 at 11:8-13; Fig. 6; *see also id*. at 9:33-40 (storage used for later playback). The Internet sources can be delivered to the television / media system 105 for "non-real time" playback. EX-1007 at 4:46-50. This disclosure, including the ability to sample and surf the video content, teaches a POSA that Bennett-3's control actions include functions such as pause, play, forward, and reverse, as these function were well known and commonly used in remote controls by September 2007 as discussed in the State of the Art section above. EX-1010 13:34-55; EX-1003 at ¶¶146-148.

Bennett-3 discloses that the PTV remote control may control many different forms of devices such as DVD's or "personal video recorders." EX-1007 at 9:45-47, 4:56-60. The PTV remote control would be understood to support the typical

actions for those remote devices as shown in Figures 8 and 9. For example, DVD and video recorders are well understood to have functions related to long-known actions such as "pause" or "fast forward" or "stop" or "slow" that are associated with the display of video. EX-1003 at ¶¶146-147.

The "buffer[ing]" capabilities of the media storage also indicate that the PTV remote control supported these traditional well-known activities (pause, fast forward, …) because those activities use buffering techniques to allow the user to transit through the video at different speeds or in different directions from the standard mode in which video is displayed (and then discarded) as it is received. EX-1003 at ¶¶146-148.

To "sample" a video allows for a user to select portions of that video for review in an efficient manner. For example, the ability to fast-forward or reverse in a video allows for "sampling" of the video. Similarly, in context, Bennett-3's discussing of "'surf' the video offering" also teaches the ability to, for example, fast-forward through the video. These functionalities in Bennett-3, combined with the teachings of media storage, buffering, and internet downloads (as noted above) teach that the Bennett-3 PTV remote control transmitted "control signals" for these traditional, well-known functions to be implemented by the television such as pause, fast-forward, and reverse. These are one example of the claimed "second information" related to the display of the video content as recited in the claims. EX-

1003 at ¶¶147-148.

Bennett-3 controls the video on the TV by transmitting "control signals" to the television. "The PTV remote control 225 delivers ***control signals*** …via an antenna 231 and the wireless links 267 and 271. Also, ***control signals*** can be delivered via an infrared transceiver 230 to both or either of the television 221 and STB 223 via infrared transceivers 257 and 253…." EX-1007 at FIG. 2, 8:46-51. These "control signals" constitute one form of the claimed "second information" or "second communication." EX-1003 at ¶¶133-139, 146-148.

In addition to the ability to control videos based upon the storage, buffering, sampling and surfing techniques above, Bennett-3 describes many other different forms of such "control signals." For example, as depicted in Bennett-3's Figures 8 and 9 (shown below), after a swap at step 919, the operation goes to the step 921 and then returns to step 905 to wait for another user input on the remote control. The user may then enter another input to control commands for the TV (909) or the STB (907) or other video device (911). EX-1007 at 12:48—13:41.

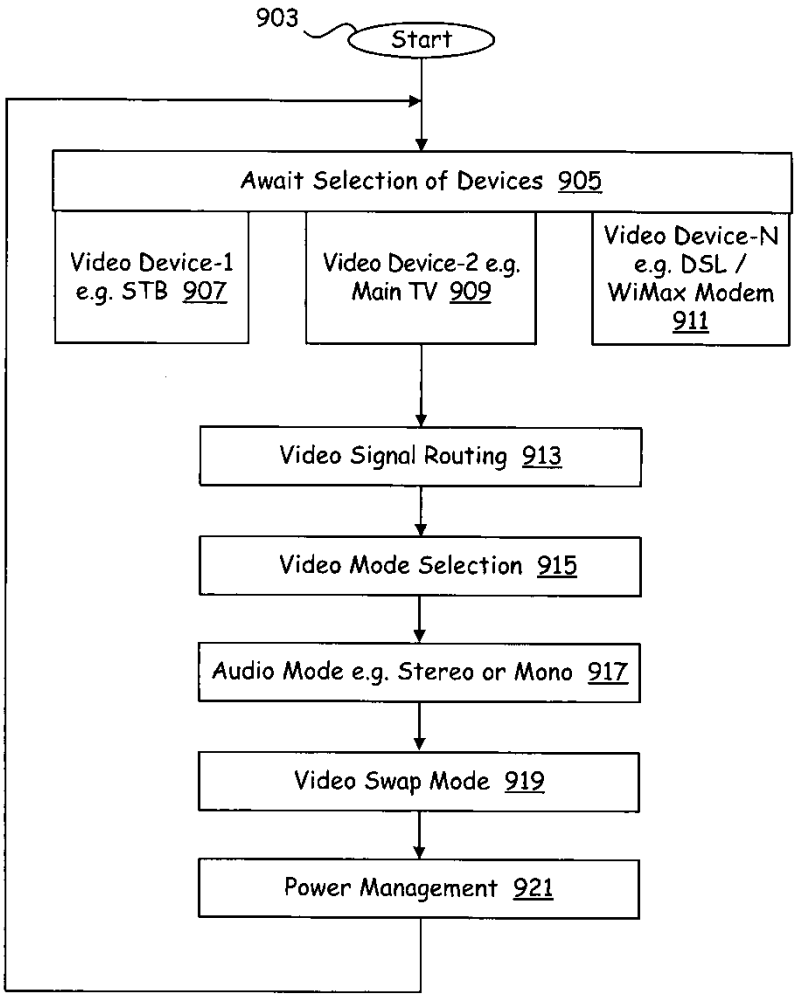


Figure 9

EX-1007 at Fig. 9. Figure 9 shows a "device control mode … for [a device's] control operation." EX-1007 at 12:61-13:2.

For television commands controlling the operation of the video display, Bennett-3 teaches "the ***video mode*** of the television system can be set to color or black and white …." EX-1007 at 13:17-24. Furthermore, "the ***power management options*** can be set or controlled remotely …." 13:37-41. The "audio mode" of the

video can also be controlled. EX-1007 at 13:25-30. EX-1003 at ¶¶141-142.

Regarding the (integrated) STB, Bennett-3 also teaches "control signals" that can perform operations such as channel selection and tuning. EX-1007 at 8:48-61. This information sent to the (integrated) STB includes "an control operation required as requested by the user." EX-1007 at 12:30-36. EX-1003 at ¶¶140-142.

Bennett-3 also teaches that PTV remote control transmits "video setting information … related to the fine-tuning, color setting, brightness control, etc., to optimize the picture displayed on the [television]." EX-1007 at 11:56-61, FIG. 7. Such "information" also corresponds to "second information." EX-1003 at ¶¶140-143.

Bennett-3 further describes the type of control features provided in typical, known, remote controls:

> A typical remote control … has a series of predefined buttons that, when selected, directly interact with a corresponding TV ("Television") to perform a variety of tasks such as changing channels, adjusting TV settings, and controlling power to the TV…. A TV responds to transmissions received from a Remote by displaying on the TV's screen a selected channel, status or information, and/or a visual user interface for managing a control function. Upon receiving the visual user interface on the TV screen, the user may press further buttons on the Remote as needed to complete a task.

EX-1007 at 1:39-55. These are a type of "control signals" and "control operation"

referenced in Bennett-3. EX-1003 at ¶¶143-145. Such a "visual user interface on the TV screen" controlled by "buttons on the Remote" is precisely what is disclosed in the '369 patent. *Supra* at §V.A.

Bennett-3 also teaches that the remote control can be used to send signals to navigate visual interfaces presented upon the television. These control signals include "industry standard protocols" for controlling the television. EX-1007 at 5:14-21; 8:2-6. These signals also constitute the "second information" / "second communication" recited in the claims. Bennett-3 discloses, or renders obvious, having such controls in its PTV remote controller. Thus, just like in the (later) '369 patent, Bennett-3 relies upon known, existing remote control commands to control the video display. EX-1003 at ¶¶143-149.

If Patent Owner argues that "second information" requires some special functionality not disclosed in the '369 patent,[2] a POSA would also understand that Bennett-3 discloses, or at a minimum, renders obvious, well-known remote-control features such as "pause" / "forward" / "backward" or "stop" the current video because the remote control disclosed in Bennett-3 is an alternative or enhancement to the conventional known remote control which already included those video

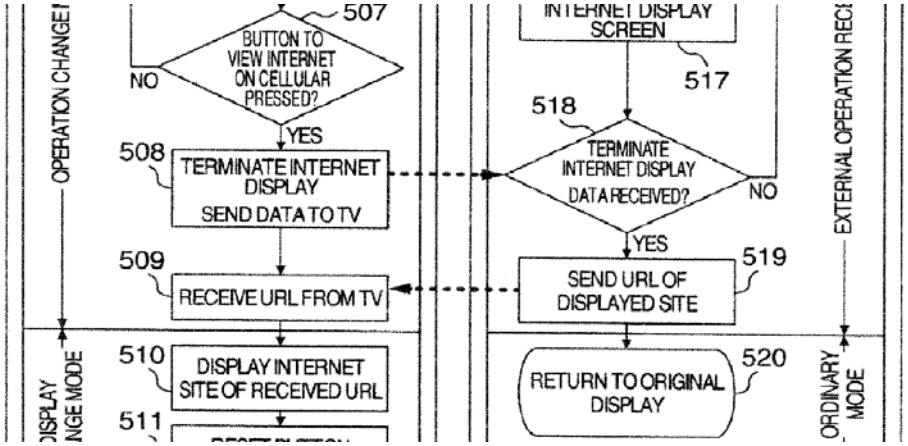
[2] For any arguments regarding the "second information," the Patent Owner should be required to cite specific passages in the '369 patent supporting its arguments.

operation functionalities as discussed above in the State of the Art section. EX-1010 13:34-55; EX-1003 at ¶¶144-145, 149.

5. Bennett-3 Discloses The "Terminate" Action Corresponding To The "Third Information" (claims 1-9) / "Third Communication" (claims 10-18) In The Wherein Clause In The Exact Same Way As Described In The '369 patent.

Bennett-3 discloses "terminating" the video on the television in the same manner that the (later) '369 patent discloses such termination: by swapping the video content from the TV back to the remote control (thus terminating that video on the television).

The '369 patent describes the claimed "third information" in Figure 12 and associated description as the "view internet on cellular pressed" (element 507) and the subsequent operation to "send data to TV" (element 508) as follows:



EX-1001 at FIG. 12 (excerpted)

If the user desires to return from the state in which the user browses the internet site on the TV set to a state in which the user browses the internet site on the

cellular phone, the user conducts an operation to select an item of the button display 405 in the display unit 305 of the cellular phone (step 507). Then, the cellular phone sends data indicating termination of the internet display via the data transmitting and receiving unit 306 to the TV set (step 508). After or in concurrent with the URL transmission, the internet control unit 202 controls, for example, the display unit 206 to terminate the internet site display on the TV set.

When the data transmitting and receiving unit 210 receives the data, the TV set interrupts the internet site display (step 518). Also, the TV set sends the URL of the internet site last displayed on the TV set via the data transmitting and receiving unit 210 to the cellular phone (step 519) and then displays a TV program being displayed before the start of the internet display, for example, as shown in the screen display 403 (step 520).

EX-1001 at 11:30-48.

Thus, the '369 patent terminates the display on the television by the remote control (phone) transmitting a command that causes the television to "interrupt the internet site display" to swap the video back to the cellular phone. The TV then displays its original program. This is what Bennett-3 describes in the "swap" operation.

a. **<u>control the display unit to terminate displaying of the second video content when the communication unit receives third [information / communication]</u>**

Bennett-3 discloses, or renders obvious, these elements in, for example, the operation of a second "swap" command. As shown in Bennett-3's FIG. 9 below, after a video swap at step 919, the operation will return to step 905 to await another user input which may be received to trigger an additional video swap at step 919 again. EX-1007 at 6:46-61.

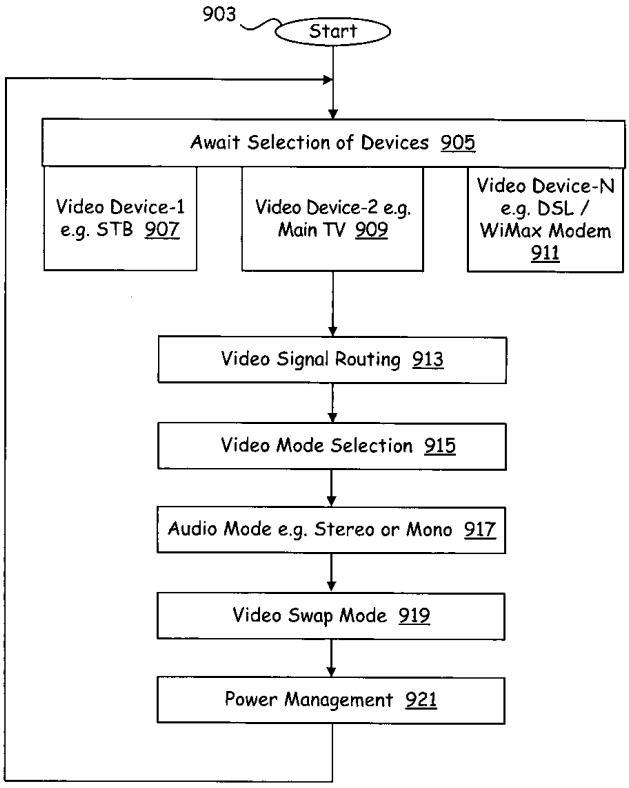


Figure 9

EX-1007 at FIG. 9.

Since the ***additional*** video swap enables the video contents being displayed

on the remote control and the TV to be swapped or switched ***back***, Bennett-3 discloses that displaying of the second video is ***terminated*** at the TV and swapped to the remote control (and the first video is swapped to the TV). This is precisely what the '369 describes as noted above.

As discussed above for the "first information" / "first communication," Bennett-3 teaches that the remote control and television exchange control signals necessary to allow each device may take over the display of the video from the other device referenced, for example, as "identifiers," "control information," "identifier information." *Supra* at §VII.B.3.d. Bennett-3 discloses this claimed "third information" / "third communication" in the "swap command" and these associated transmissions. EX-1003 at ¶¶150-156.

The claims do not recite that the "first," "second," and / or "third" information must be different from each other. This contrasts with child patents of the '369. For example, U.S. Pat. 10,327,029 contains claims that expressly recite a requirement that the "second information is different from the first information." EX-1016 at 21:23-24. Moreover, in Bennett-3, the first swap command is different from the second swap command because the first command has "identifiers" associated with the initial video on the remote control whereas the second command has "identifiers" associated with the video that was swapped to the remote control from the television.

Alternately, Bennett-3 teaches an independent third information /

communication that causes the television to terminate the video display: a command to "power-off" the television. *E.g.*, EX-1007 at FIG. 9 (element 921); 13:37-41; 1:39-43. A "power-off" command terminates the video display on the television and thus meets the claim requirements. EX-1003 at ¶¶157-161.

6. The "third information" / "third communication" in claims 6-9 and 15-18.

Challenged Claims 6-9 and 15-18 require that, after terminating the video received from the remote control, the television resumes displaying the content from a broadcast signal. As discussed for the "first information," Bennett-3 discloses terminating the displaying of the second (Internet based) video content on the TV, in response to a second swap request to swap ***back*** the first (TV broadcasting based) video content. The additional media swap is performed in response to the "third information" (received "from the mobile terminal") or the "third communication" (between the mobile terminal and the TV), which is Bennett-3's swap command and identifiers sent by the remote control to the TV. EX-1007 at FIG. 9, 6:45-61, 7:23-61; *see also supra* at §VII.B.3.a-d. EX-1003 at ¶¶150-156.

7. Video processing unit to conduct video processing to both a video content acquired via the broadcast signal and a video content acquired via the internet (claims 3, 5, 7, 9, 12, 14, 16, 18)

Bennett-3 discloses the "video processing unit" in the "information processing apparatus" and "display apparatus", as at least part of Bennett-3's processing

circuitry in the TV as well as related functional blocks including the video driver and memory.

A POSA would understand that Bennett-3 discloses or renders obvious, that such components, either separately or together, comprise a video processing unit arranged to conduct video processing. EX-1007 at FIGs. 1-2; 4:33-47; 5:53-6:2 ("[t]he processing circuitry 191 also interacts with memory 177 and media storage 175. The [TV] processing circuitry 191 uses program code stored within the memory 177 to conduct video processing…."). EX-1003 at ¶¶167-171. The processing including "decoders" for the video as well as "transcoding" and "fitting" (which formats for the specific screen size) from any of the sources. EX-1007 at FIG. 3C, 10:7-20, 9:48-52, Abstract.

As discussed above, Bennett-3 teaches sources for video including broadcast signals and the Internet. *Supra* at §VII.B.1.a; EX-1007 at FIGS. 3A, 4, 4:33-47.

* * *

The following chart identifies where Bennett-3 teaches or suggests each element of claims 1-3, 6-7, 10-12 and 15-16. As explained above (and below), the independent claims are largely identical except for minor variations in reciting:

- "an information processing apparatus" (claims 1, 10-11) / "display unit" (claims 2-3, 6-7, 11-12, 15-16)

- "Information" sent from the mobile terminal (claims 1-3, 6-7) / "communication" conducted by the mobile terminal; and
- The source of the video signals ("broadcast signal" / "internet").

All of these aspects are disclosed by Bennett and none of these aspects have any impact on the analysis herein. Thus, the chart below highlights the differences between independent claims 1, 2, and 6 with the differences *italicized* for reference. The narrative below the chart explains how claims 10, 11, and 15 correspond to claims 1, 2, and 6, respectively.

Finally, the dependent claims all recite an identical element and are listed together in the following chart.

Table I

US 9,578,369	Bennett-3
[1pre] 1. An information processing apparatus for displaying a content acquired via the internet, the information processing apparatus comprising:	*See* §VII(B)(1), §VII(B)(2)
[1a] a communication unit arranged to conduct communication with a mobile terminal;	*See* §VII(B)(1), VII(B)(2)
[1b] a display unit arranged to display a video content; and	*See* §VII(B)(1)
[1c] a control unit arranged to control the display unit, wherein the control unit is arranged to: control the display unit to display	*See* §VII(B)(3), §VII(B)(3)(a)

a first video content;	
[1d] control the display unit to terminate displaying of the first video content and to start displaying a second video content acquired via the internet when the communication unit receives first information from the mobile terminal,	*See* §VII(B)(3), §VII(B)(3)(a)-(b)
[1e] wherein the second video content is a same video content as a video content displayed on the mobile terminal before the mobile terminal sends the first information to the information processing apparatus, and	*See* §VII(B)(3), §VII(B)(3)(a)-(b)
[1f] wherein a state of displaying of the video content on the mobile terminal at a time when the first information is sent from the mobile terminal is taken over to a state of displaying of the second video content on the display unit at a time when the display unit starts displaying the second video content, based on the first information;	*See* §VII(B)(3), §VII(B)(3)(b)-(c)
[1g] control displaying of the second video content on the display unit based on second information for operating the second video content displayed on the display unit when the communication unit receives the second information from the mobile terminal; and	*See* §VII(B)(4), §VII(B)(4)(a)
[1h] control the display unit to terminate displaying of the second video content when the communication unit receives third information from the mobile terminal.	*See* §VII(B)(5), §VII(B)(4)(a)-(b)
[2pre] 2. A *display apparatus* for displaying a content acquired *via a broadcast signal or* via the internet, the *display apparatus* comprising:	*See* §VII(B)(1), §VII(B)(2), §VII(B)(3)

[2a] [2b] [identical to [1a] [1b] above]	*See* claim 1, [1a] [1b]
[2c] a control unit arranged to control the display unit, wherein the control unit is arranged to: control the display unit to display a first video content *acquired via the broadcast signal*;	*See* claim 1, [1c]
[2d] [identical to [1d] above]	*See* claim 1, [1d]
[2e] [identical to [1e] above]	*See* claim 1, [1e]
[2f] [identical to [1f] above]	*See* claim 1, [1f]
[2g] [identical to [1g] above]	*See* claim 1, [1g]
[2h] [identical to [1h] above]	*See* claim 1, [1h]
CLAIMS [3 / 5 / 7 / 9 / 12 / 14 / 16 / 18]. The [display apparatus / information processing apparatus] according to claim [2 / 4 / 6 / 8 / 11 / 13 / 15 / 17], further comprising: a video processing unit to conduct video processing to both a video content acquired via the broadcast signal and a video content acquired via the internet.	*See* §VII(B)(6).
[6pre] 6. A *display apparatus* for displaying a *video* content acquired *via a broadcast signal or* via the internet, the *display apparatus* comprising:	*See* claim 1, [1pre]

[6a] [6b] [identical to [1a] [1b] above]	*See* claim 1, [1a]
[6c] a control unit arranged to control the display unit, wherein the control unit is arranged to: control the display unit to display a *broadcast* video content *acquired via the broadcast signal*;	*See* claim 1, [1c]
[6d] control the display unit to terminate displaying of the *broadcast* video content and to start displaying an internet video content acquired via the internet when the communication unit receives first information from the mobile terminal,	*See* claim 1, [1d]
[6e] wherein the *internet* video content *acquired via the internet* is a same video content as an internet video content displayed on the mobile terminal before the mobile terminal sends the first information to the *display apparatus*, and	*See* claim 1, [1e]
[6f] wherein a state of displaying of the *internet* video content on the mobile terminal at a time when the first information is sent from the mobile terminal is taken over to a state of displaying of the *internet* video content on the display unit at a time when the display unit starts to display the *internet* video content, based on the first information;	*See* claim 1, [1f]
[6g] control displaying of the *internet* video content on the display unit based on second information for operating the *internet* video content displayed on the display unit when the communication unit receives the second information from the mobile terminal; and	*See* claim 1, [1g]
[6h] control the display unit to terminate	*See* claim 1, [1h].

displaying of the *internet* video content *and to start displaying the broadcast video content acquired via the broadcast signal* when the communication unit receives third information from the mobile terminal.	
7. [See claim 3]	*See* claim 3

Claims 10, 11, and 15 are substantively identical to claims 1, 2, and 6, respectively. Claims 1, 2 and 6 recite a "first information," "second information," and "third information" being received from the mobile terminal by the "information processing apparatus" whereas claims 10, 11 and 15 recite that a "first communication," "second communication," and "third communication" are "conducted." There is no substantive difference between these elements as the prior art discloses both "information" received by the television and "communications" conducted by the television and remote.

C. Ground 2: Claims 1-3, 6-7, 10-12 and 15-16 Are Obvious Over Bennett-3 in view of Yuasa

If the Patent Owner asserts that Bennett-3 does not expressly disclose conventional remote control functionality, Ground 2 identifies that Yuasa expressly discloses the actions of "starting, stopping, and pausing playback" of the video on the television. Yuasa discloses a remote control ("portable operation control apparatus") that can display video and send signals to control the display of a television ("a content display-playback apparatus"). *E.g.*, EX-1008 at claim 1. The proposed combination is to incorporate into Bennett-3 these conventional actions expressly disclosed in Yuasa. As discussed *supra* for Ground 1, Bennett-3's PTV remote control provides for the standard features found in remote controls to control devices such as televisions and set top boxes. However, Bennett-3 does not expressly recite actions such as "pause," "play," or "stop" *in haec verba*.

If Patent Owner argues that the claimed "second" and/or "third" information (or communication) require such actions despite not being disclosed in the '369 patent, Yuasa provides such express disclosure. Furthermore, Yuasa confirms that its "remote controller" is portable and contains elements such as a CPU, wireless communication elements, headphone terminals and display. EX-1008 at FIGs. 1, 6-10, 12:46-13:32, claim 1. Thus, Bennett-3 combined Yuasa discloses, or at minimum render obvious, every element of claims 1-3, 6-7, 10-12 and 15-16.

1. The "first information" / "first communication" (all claims)

As with Bennett-3, Yuasa teaches that a first information (or communication) is sent from a mobile terminal (remote control) to a television causing the television to display a chosen content. Yuasa's operation is shown in, for example, FIGS. 16A-B. At the top of FIG. 16A, the "Display-playback apparatus" (*e.g.*, television) will "play back content A" (operation 205). The "operation control apparatus" (remote control) allows a user to display and select "content B" (operations S208-209). The remote control then "Request Playback of Content B" to the television (operations S216-217). Yuasa's content comes from "broadcasting" or "the Internet." EX-1008 at 8:27-42.

In FIG. 16B, Yuasa's television stops playing video content A at operation S221, and starts playing video content B at operation S224. EX-1008 at 20:51-22:7.

FIG. 16A

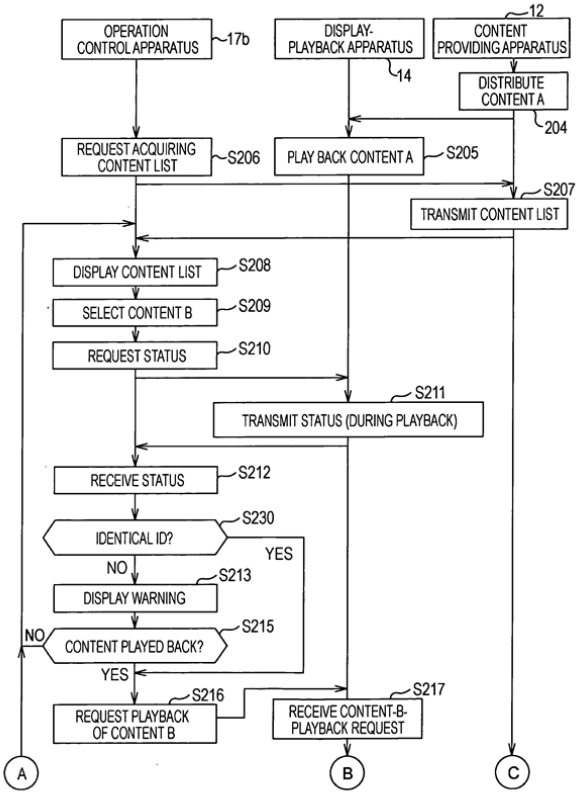
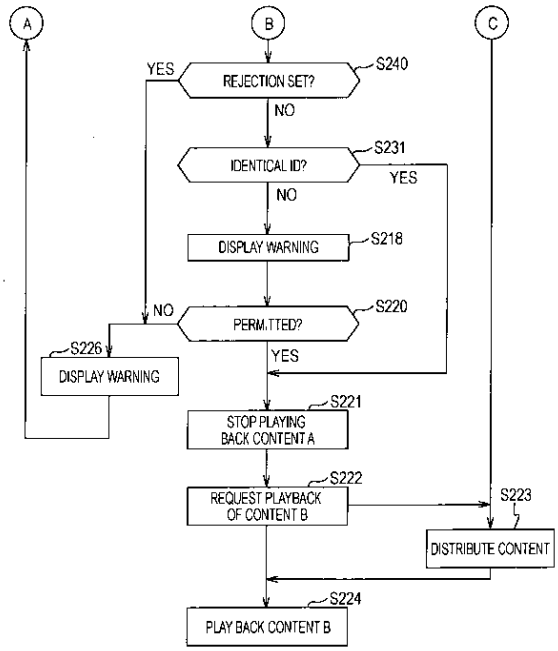


FIG. 16B



Yuasa's Figures 12 and 13 also show how a user selects content using the remote control ("operation control apparatus"), that selection is then transmitted to the television ("display playback apparatus") which retrieves it from a "content providing apparatus"). Bennett-3 supplies disclosure of such a "content-providing apparatus" in its disclosures (discussed *supra*) of different sources for video.

2. "second information" / "second communication" (all claims)

Yuasa discloses that displaying of the "second video content" on the television 14 is controlled based on playback operation signals received from the remote control 17, where the "second video content" was selected by the mobile control 17.

These "playback signals" including "***pausing*** playback" which corresponds to the claimed "second information" ("second communication") because such control the display on the television by, for example, causing the display to "pause." EX-1003 at ¶¶188-193, 202-210.

Yuasa describes these operations. First, the remote selects a particular "display-playback-apparatus" (*e.g.*, television) to control. EX-1008 at 12:23-38. Then, the remote sends "operation signals" to effectuate different actions for the playback on that television:

> [T]he control signal generation unit 62 generates, not only playback operation signals for playing back, stopping, and pausing content on the content display unit 63 of the operation control apparatus 17 itself, but also ***operation signals*** such as ***starting***, stopping, and ***pausing*** playback of the content ***in each of the display-playback apparatuses 14 to 16 in which displaying is selected***."

EX-1008 at 12:39-45.

3. "third information" / "third communication" (all claims)

Yuasa discloses controlling the television to terminate or stop displaying of the second video content selected by the remote control (*e.g.*, element 17), based on operation signals ("third information") received from the mobile control 17. EX-1008 at FIG. 1, 12:39-56. The "stopping" operation signal is an additional "third information" / "third communication" from the remote to the television that

terminates display of the video as recited in the claims. EX-1003, ¶¶211-214. Yuasa also discloses the "power off" to terminate the display. EX-1008 at 10:8-13; EX-1003, ¶215.

Thus, Bennett-3 combined with Yuasa discloses, or at minimum render obvious, other elements of claims 1-3, 6-7, 10-12 and 15-16, in the same manner as described above in Ground 1. *See* §VII(B). EX-1003, ¶216.

4. A POSA would be motivated to combine Bennett-3 and Yuasa with a reasonable expectation of success.

A POSA would be motivated to combine Bennett-3 with the actions recited in Yuasa with a reasonable expectation of success in the combination. Bennett-3's PTV remote includes the standard type functionality that was known in the art for remote controls. Yuasa provides an example of such functionality. This is merely a combination of well-known features and components that operate in their known and expected manner for their intended purposes. EX-1003 at ¶¶217-235.

Yuasa is analogous art that is combinable for additional reasons. Both Yuasa and Bennett-3:

- Teach remote controls that select content and control televisions to display video from a variety of sources including "broadcasting" and "the Internet." EX-1008 at 8:27-42.
- Teach that their system elements (*e.g.*, remote controls and televisions) use well known architectural elements such as CPUs, memories, wireless

communications including infrared, and displays – all performing their well-known and intended functionalities.

EX-1003 at ¶¶219-223.

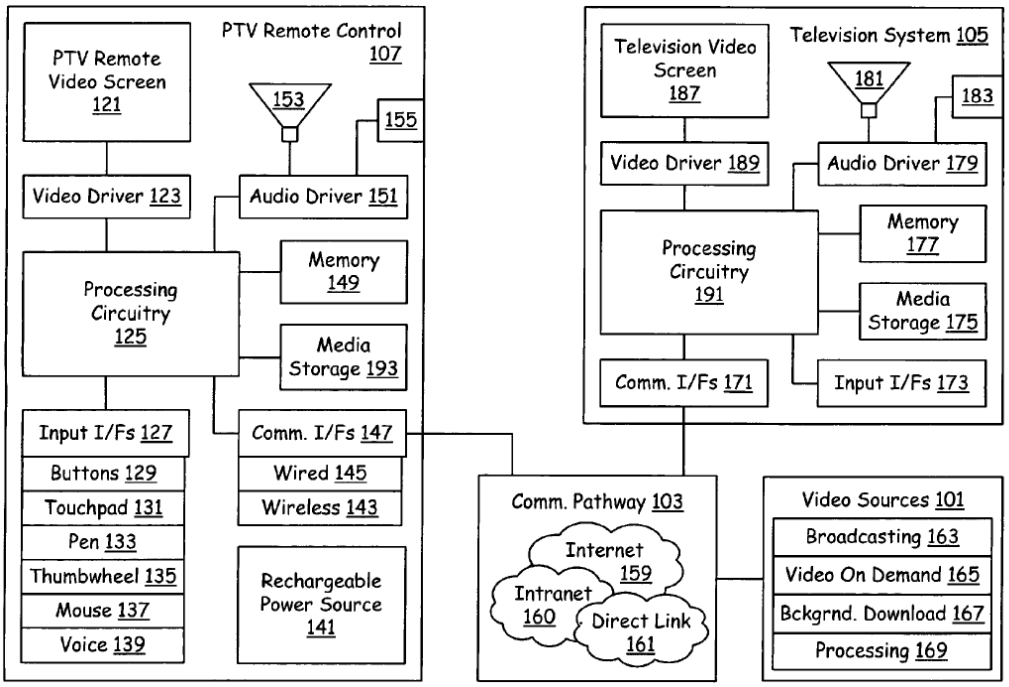
Another reference by the Bennett inventors, Bennett-2, provides an express motivation to add to Bennett-3 the Yuasa functionality of controlling the video with well-known video playback commands such as "starting, stopping, and pausing playback of the content" on the television. EX-1008 at 12:39-45. EX-1003 at ¶¶2226-231.

Bennett-2 has highly similar to disclosure to Bennett-3 but includes additional express functionalities for the remote control and the controlled television. Bennett-2 expressly recites the remote control's "functionalities may… comprise a 'seek' functionality, a 'pause' functionality, a 'play' functionality and a 'play slow' functionality." EX-1006 at [0028].

Bennett-2 supplies an express motivation. Bennett-2 expressly incorporated Bennett-3 by reference. EX-1006 at [0002]. Bennett-3 and Bennett-2 have the same inventorship, were assigned to the same company (Broadcom) and are related to analogous art about controlling a television using a remote control with a built-in display. EX-1003 at ¶¶228-229.

The overlap is highlighted by highly similar Figures. For example, Bennett-3's Figure 1 is substantively identical to Bennett-2's Figure 7:

Bennett-3, Figure 1



Bennett-2, Figure 7

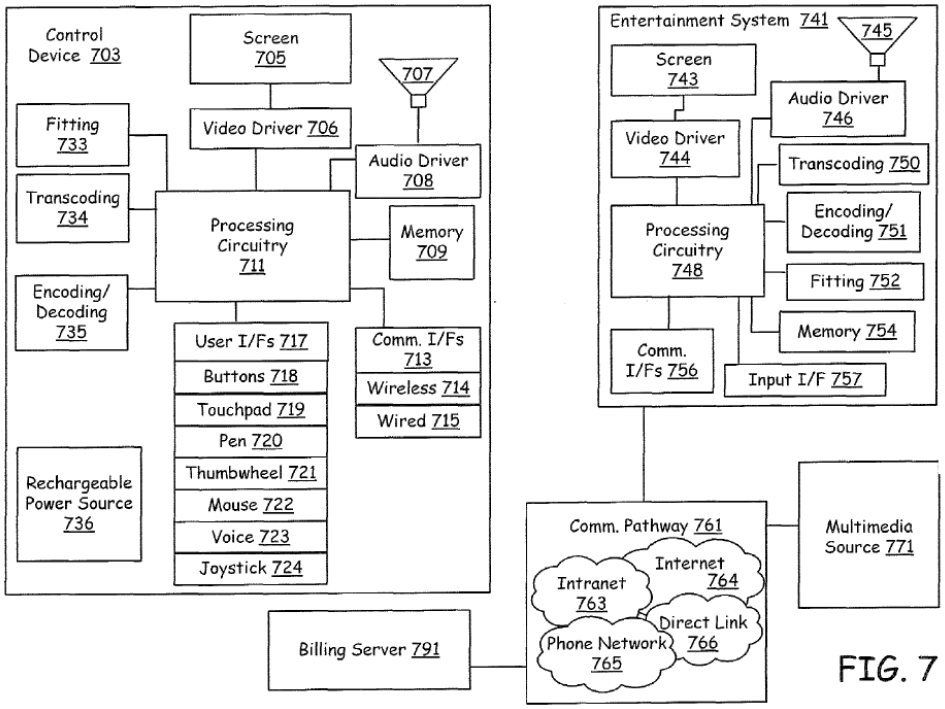
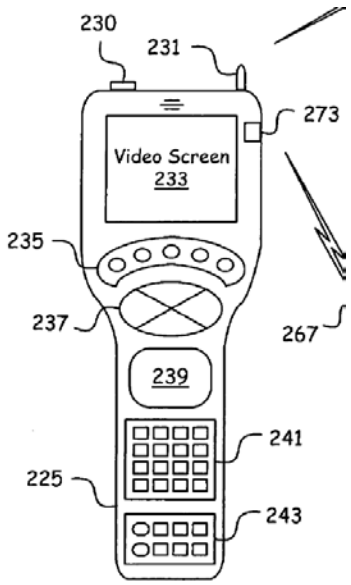
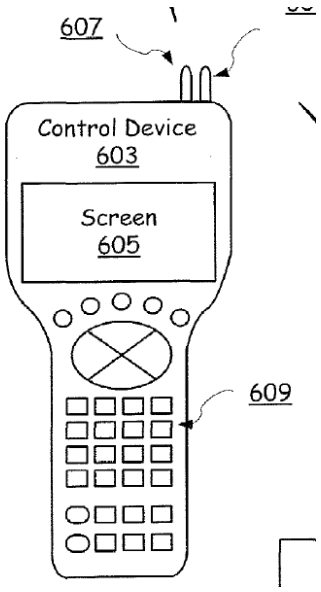


FIG. 7

Bennett-3 and Bennett-2 show the same remote control with same controls:

Bennett-3, Figure 2 (excerpted)	Bennett-2, Figure 6 (excerpted)
	

Bennett-2 teaches largely the same functionality as highlighted for Bennett-3 above. For example, Bennett-2 (like Bennett-3) teaches a remote control that: (a) displays its own separate video content (EX-1006 at FIGS. 1-7, 9; [0039], [0041], ; (b) uses a "swap" command to swap video between the television and remote (EX-1006 at [0033], [0036], [0010]); (c) can use infrared and RF communications to control a television and set-top box (STB) that can be integrated with the television (EX-1006 at [0025-0026], [0033-0034]); (d) displays content from the Internet or broadcast sources (EX-1006 at [0035], [0049-0052]) and (e) performs "standard functionalities" of remote controls (EX-1006 at [0036]). EX-1003 at ¶¶228-229.

Bennett-2, however, does not expressly recite words *in haec verba* of "stopping" the video – which Patent Owner may argue is required for the "third

information" for "terminating display." To remove any doubt, Yuasa supplies this functionality expressly.

Bennett-2 supplies an express motivation to combine Yuasa's known playback functionalities into Bennett-3 because other POSA's had already contemplated and described such a functionality. The advantages include a better user experience – the same reason that such features (pause, play, …) have been present in consumer display devices for at least 40 years. EX-1003 at ¶¶230-231. Such features reflect Bennett-3's disclosure of storage to store the videos for later playback, for buffering, and the ability to sample and surf the video content as discussed above based upon the commands of the PTV remote. *Id*.

Similarly, as discussed in the "State of the Art" (section V.F *supra*), it was well known for mobile devices to have the capability to display video and control televisions to "swap" videos and control the video on the television. Similarly, it was also well-known the "an Internet based video file could be started from within a home entertainment environment, paused by the user (e.g., via pause or save state button on a remote control or PDA)…." *See* section V.F *supra* citing EX-1010 at 11:8-12. These references in this section provide a separate motivation to combine the Yuasa functionality into Bennett-3 because other inventors had already detailed the advantages of such combined technologies.

A POSA would have a reasonable expectation of success. Both use similar

well-known forms of communication (infrared and RF). EX-1003 at ¶¶233-235. Bennett-3 already describes the type of "control signals" that are exchanged between the remote control and the television corresponding to Yuasa's "operation signals." These control signals are processed by the "processing circuitry" (which may be any combination of hardware and software) in the remote and the television. This type of "processing circuitry" in Bennett-3's remote control and television provides the flexibility to implement the Yuasa actions. The television also has media storage memory where the video can be stored while the actions (such as pause or play) are occurring as does the (integrated) set top box. *E.g.*, EX-1007 at FIG. 3C, 5:32-34, 5:65-6:4 (storage allows "later playback of received video"), 9:53-57, 10:7-20, 10:54-58, 11:12-14.

Yuasa's functions relied upon herein reflect known functionalities implemented in known technologies for their known intended purposes. EX-1003 at ¶235.

D. Ground 3: Claims 4-5, 8-9, 13-14, and 17-18 Are Obvious Over Bennett-3 in view of Cho.

Cho teaches the seamless migration of a streaming session from one device to another device. Cho teaches a user watching a video on a mobile terminal (phone) that can then push a button on the phone to exchange information with a television that allows the television to continue the video at the point of the phone's presentation. Cho's teachings are similar to Bennett-3's teaching of transmitting the "identifier" information including the "offsets" for the videos swapped between the remote control and television.

Cho adds disclosure pertaining to claims 4-5, 8-9, 13-14, and 17-18 that relates to "login" information used by the mobile phone in accessing the video on, for example, an internet site.

Cho bolsters Bennett-3 by adding details about: (1) "first information" sent from mobile to TV for content migration as discussed in Ground 1; and (2) login or authentication information in the "first information" for claims 4-5, 8-9, 13-14, and 17-18. EX-1003 at ¶¶238-250. If Patent Owner argues that the claimed "mobile terminal" requires a "mobile phone," Cho expressly discloses a mobile phone operating to control a television that includes functionality analogous to Bennett-3 and which could readily incorporate the functionality of Bennett-3's PTV remote control.

Claims 4-5, 8-9, 13-14 and 17-18 are substantively identical to claims 2-3, 5-

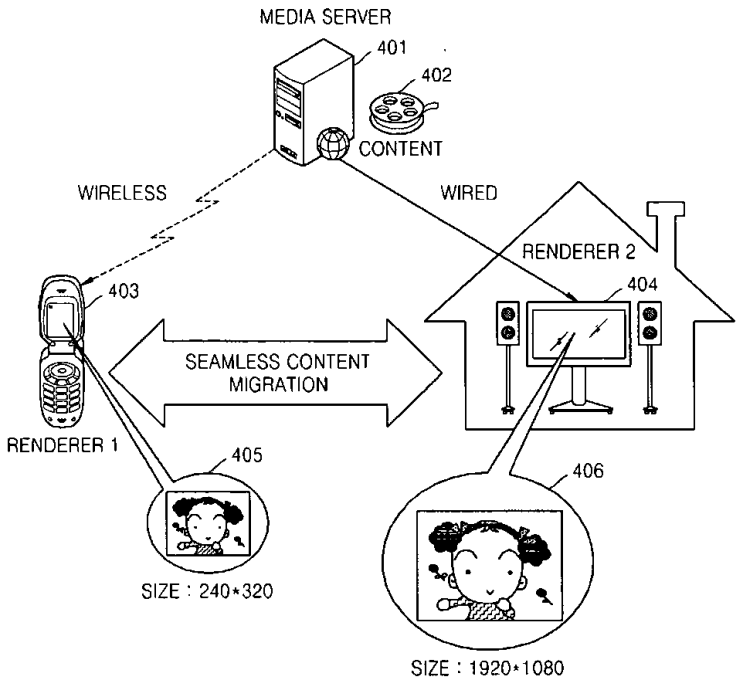
6, 11-12, and 15-16 (respectively) with respect to all elements except that the "first information"/"first communication" limitation includes "login" information discussed below. Thus, for other elements, the Bennett-3 and Cho combination relies upon the Ground 1 analysis.

Bennett-3 combined with Cho discloses, or at minimum render obvious, every element of claims 4-5, 8-9, 13-14, and 17-18.

1. "first information" / "first communication" (all claims)

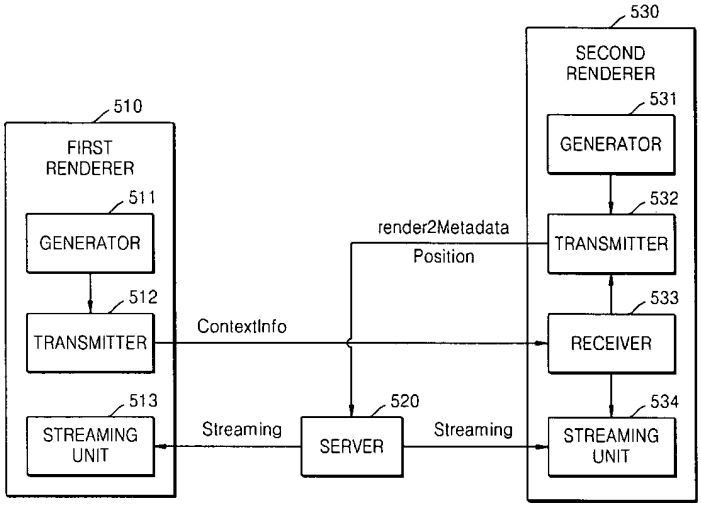
In addition to the login information, Cho supplements Bennett-3 with express disclosures related to the first information / communication that results in the television displaying video previously displayed on the remote control. Cho discloses that after a user presses a button of the mobile device (such as a mobile phone), the mobile device can transmit a playback environment information to the TV for continuing on TV a video previously displayed on the mobile device. The playback environment information is directly transmitted from mobile device to TV as part of "seamless content migration" as shown in Cho's Figure 2.

FIG. 2



Cho's FIG. 5 shows this playback information transmitted as "ContextInfo."

FIG. 5



The playback environment information includes: a current playback position,

a URL of the currently played content, and authentication information for access to the currently played content. EX-1009 at FIGS. 5, 6 (element 705), 4:21-41, 5:24-35, 6:33-39. This transmission teaches the claimed "first information" in all claims that allows the television to take over a state of the video displayed on the mobile. EX-1003 at ¶¶254-255.

Cho describes this migration:

> [t]he streaming unit 534 plays the content based on the playback environment information of the first renderer 510, which is transmitted from the receiver 533, and thus, the playback environment of the first renderer 510 is maintained. That is, the content is played ***from the playback position of the first renderer 510 when the first renderer 510 requests the second renderer 530 to play the content***, and the playback environment including volume, caption setting, screen ratio and the like is maintained.

EX-1009 at 5:51-59; *see also* EX-1009 at 10:25-31, claim 1-7 (streaming playback "from the playback position").

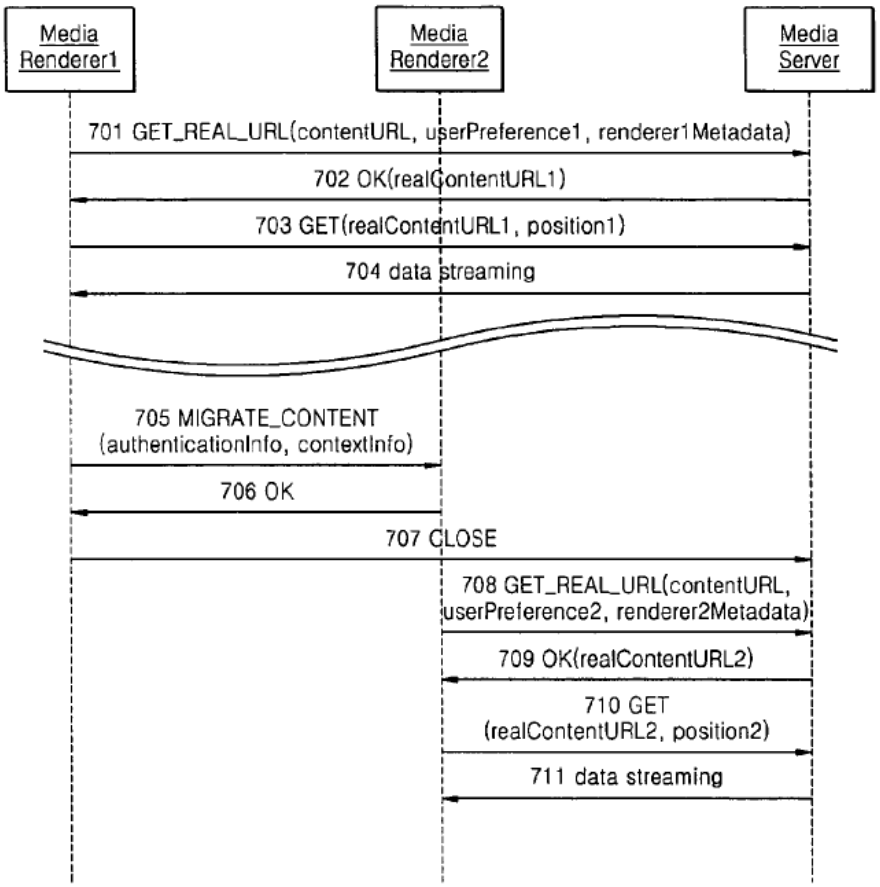
2. "first information" / "first communication" with "login" information (claims 4-5, 8-9, 13-14, 17-18)

Claims 4-5 and 8-9 require that the "first information" including "information relating to that the mobile terminal logins to [said/the] internet site." Claims 13-14 and 17-18 recite indefinite language regarding "when a first communication between the mobile terminal and the display apparatus is conducted during the mobile

terminal logins to said internet site." E.g., EX-1001 at 24:63-65. This language appears to require the "first communication" occur while the mobile terminal is already logged into the site.

Cho discloses that the "first information" sent from mobile to TV includes login or authentication information for access to the currently played content at the mobile. EX-1003 at ¶¶241-245, 252-253, 256-257. For example, Cho's Figure 6 (at element 705) depicts this login information in the "authenticationInfo" field transmitted with the "contextInfo" field:

FIG. 6



EX-1009 at FIG.6.

Cho describes this authentication information:

> the playback environment information may include information about a current playback position, volume, caption setting, a URL of the currently played content, ***authentication information for access to the currently played content***, and the like. The transmitter 512 transmits the playback environment information generated by the generator 511 to the second renderer 530.

EX-1009 at 5:28-34; *see also* EX-1009 at 6:32-39.

Notably, Cho's authentication information matches the only reference to "login" in the '369 specification. *E.g.,* EX-1001 at 17:36-38 ("mobile terminal 101 is displaying a screen after the login of an internet site for which authentication is required."), 17:65-18:11, 18:37, 19:49-20:3 (all referencing "authentication"). EX-1003 at ¶256.

For Challenged Claims 13-14 and 17-18, Cho's mobile device was already authenticated and logged into the internet site during the time of the seamless migration – which is what allows for the seamless migration because the viewer was already viewing the video on the phone. The playback environment information includes URL of the currently played content at the mobile. A POSA would recognize that Cho discloses, or renders obvious, that the "first communication" between mobile and TV is conducted when the mobile is in a login state of the

Internet site. EX-1009 at 4:21-41; 5:36-59. EX-1003 at ¶257. This was one purpose of "seamless" migration so that a user would not have to terminate the mobile video session and then search (and do "additional operations") to resume the video. *E.g.*, EX-1009 at 1:37-2:15.

3. A POSA Would Be Motivated To Combine Bennett-3 And Cho With A Reasonable Expectation Of Success.

A POSA would be motivated to combine these references by incorporating functionality and structure from Cho's method and system of "switching media renders" into Bennett-3's system:

a) Cho's "playback environment" which provides implementation alternatives and details of Bennett-3's "identifiers associated with the video source, video selection being displayed, and ***current offset*** into the current video selection." (EX-1007 at FIG. 1, 6:45-61; EX-1003 at ¶259); and

b) Separately, Cho's playback environment information includes authentication information for access to the currently played content (an implementation feature of the "control signals" / "control information" not detailed in Bennett-3). EX-1007 at 6:45-61; 7:23-62. A POSA would recognize the advantages that Cho provides in transmitting authentication login information for use in accessing internet videos. EX-1003 at ¶¶260-261.

Cho is analogous art that is combinable for additional reasons. Both Cho and Bennett-3:

- Teach the "media switching" or "media swapping" between media renders like mobile and TV each has a screen for displaying the video content.
- Teach that "media switching" or "media swapping" can happen during video streaming from e.g. Internet.
- Are assigned to industry leaders in the telecommunications / cellular industry (Broadcom / Samsung).

EX-1003 at ¶¶262

Moreover, a POSA would have had a reasonable expectation of success in such a combination because the information being added from Cho to Bennett-3's "identifier" information is consistent with the information already disclosed in Bennett-3 and information that could readily be processed by the processing circuitry, memory and communication interfaces present in Bennett-3. EX-1003 at ¶263.

E. Ground 4: Claims 4-5, 8-9, 13-14, and 17-18 Are Obvious Over Bennett-3 in view of Yuasa and Cho.

Ground 4 merely relies upon the exact same analysis as Grounds 1-3. If Patent Owner asserts that the Challenged Claims require a particular form of second or third information / communication such as a "pause," or "stop" command, then Yuasa supplies those commands for Ground 3 in the same fashion that Yuasa supplied those commands in the discussion of Ground 2 above. EX-1003 at ¶¶264-268. Thus, in this combination, Yuasa is augmenting Bennett-3 with details of the "second" and

"third" information/communications and Cho is augmenting with details related to the "first" information. These augmentations are separate and largely unrelated. Thus, the separate analyses provided for Grounds 2 and 3 would apply.

A POSA would have a reason to combine these references and have a reasonable expectation of success for all of the reasons cited in Grounds 2 and 3 above. All of the references teach using a mobile terminal to control the display of Internet and broadcast video on a television. There are no conflicts in the augmentations provided by Yuasa and Cho. Each is desirable and a POSA is motivated for such combination for the reasons in Grounds 2 and 3. EX-1003 at ¶¶269-270.

VIII. THE BOARD SHOULD NOT DENY INSTITUTION UNDER SECTION 314

The Board should not deny institution of this petition under § 314 on the basis of the Litigation because Petitioner was diligent in seeking review of the asserted patents. Denying review would be manifestly unfair given the unique circumstance herein and the lack of review of the Challenged Claims during the initial prosecution.

A. Background

Maxell filed its Complaint on November 22, 2019 naming multiple foreign Hisense entities. The parties agreed to a waiver of service dated February 3, 2020 providing for a response date 90 days therefrom. EX-1005.

The Complaint alleges infringement of 8 patents, spanning 185 total claims. EX-1027. No reasonable patentee would believe that a district court would allow eight patents with 185 claims to go to trial. Asserting so many patents/claims frustrates Petitioner's right to seek *inter partes* review, by making it impracticable and cost-prohibitive to do so. For example, the PTO filing fees alone exceed $250,000 for 8 patents. On July 13, 2020, Maxell served infringement contentions that reduced the number of asserted claims to 39 across the eight patents.

The Litigation might proceed to trial before the FWD, if the district court is able to maintain its pre-pandemic docket schedule. However, in the interests of system efficiency, fairness, and patent quality, the Board should nevertheless institute this Petition.

B. Analysis

In *Apple Inc. v. Fintiv, Inc.*, the Board set forth six factors. In the present case the "other circumstances" factor should be dispositive such that the Board should not deny institution. For example, the circumstances described herein demonstrate the rational for Congress enacting 12-month petition deadline instead of a 6-month one.

Congress's stated purpose for imposing a 12-month deadline as opposed to a proposed 6-month deadline was that defendants are "often sued by [patentees] asserting multiple patents with large numbers of vague claims, making it difficult to determine in the first few months of the litigation which claims will be relevant and how these claims are alleged to read on the defendant's products . . . the section 315(b) deadline affords defendants a reasonable opportunity to identify and understand the patent claims that are relevant to the litigation." 157 Cong. Rec. S5429 (daily ed. Sept. 8, 2011). Here, Maxell's Complaint asserted a large number of vague claims, and it was only on July 13, 2020 that Petitioner received the asserted 39 claims over 8 patents – a number still far too numerous for trial. Thus, the delay in identifying a reasonable number of patents/claims should preclude Maxell from now urging the Board to deny institution.

Moreover, when reviewing the factors specifically set forth in *Fintiv* as a whole, they weigh in favor of granting institution.

First factor. Petitioner intends to file a motion to stay the Litigation pending institution of the IPR. In prior cases in this same Court involving Patent Owner, the District Court granted a stay on the parties' joint request after the Board instituted petitions on some of the patents-in-suit. EX-1026 at 1.

The Challenged Claims include all '369 claims asserted in the Litigation. Thus, this factor weighs against denial.

Second factor. The scheduled Litigation trial date is November 15, 2021. The Board's institution decision would be approximately March 2021, with a trial in January 2022 and a final written decision ("FWD") in approximately March 2022.

This close proximity, combined with the inherent uncertainties of litigation scheduling, the potential for significant COVID-19 disruptions, and the possibility that the district court enters a stay resulting from Institution means there is a significant chance that any Litigation trial date will ultimately fall beyond the Board's FWD. Moreover, the Litigation trial date does not account for the months of post-trial motions. In this regard, the trial date is similar to the Board's trial date that occurs several months before the FWD.

Furthermore, some of Hisense's technical witnesses based in China may face government-imposed travel restrictions, which may make the travel to United States for the Litigation difficult. Thus, this factor weighs against denial.

Third factor. The district court and the parties have not invested substantially in invalidity. The parties have exchanged infringement contentions and will engage in Markman briefing starting September 30, and thus the district court has invested no time into considering any invalidity positions.

Moreover, the district court schedule requires that Maxell to make a Preliminary Election of asserted claims on December 9, 2020 and Final Election of Claims on April 13, 2021. Thus, the number of claims subject to an invalidity challenge in the district court will be substantially reduced and without any certainty that the asserted patents and claims will match up with the Challenged Claims, as it is up to the sole discretion of Maxell. Further, the litigation remains in early stages: fact discovery has barely commenced, no depositions have been taken, expert reports are not yet due until May 11, 2021, and substantive motion practice is yet to come. Thus, at this stage, only preliminary efforts have been made by the parties and the district court has invested very little effort, if any, on the validity issue. Thus, this factor weighs against discretionary denial.

Fourth factor. To eliminate any doubt as to overlap between the proceedings, Petitioner will not challenge the validity of the '369 patent in the litigation based on any Grounds herein for which institution is granted. *Sand Revolution II, LLC. v. Continental Intermodal Group – Trucking LLC*, IPR2019-01393, Paper 24, p.12

(PTAB June 16, 2020) (informative). Thus, this factor weighs against discretionary denial.

Fifth factor. Petitioner is a defendant in the Litigation. Thus, this factor weighs against discretionary denial.

Sixth factor. The other circumstances in this case strongly weigh in favor against discretionary denial. First, as discussed above, Maxell asserted an unreasonable number of claims/patents in both the Complaint and the Infringement Contentions and should not be rewarded by allowing Maxell to argue that the Board should exercise deny institution. Here, Petitioner acted diligently and without much delay in exercising its statutory right to file a Petition once Maxell reduced the number of claims asserted. *See Apple Inc., v. Seven Networks, LLC*, IPR2020-00235 Paper 10 July 28, 2020.

Second, an *inter partes* trial here avoids potentially complicated and overlapping jury issues of 8 patents, while allowing the panel to focus on multiple issues in depth that involve only the '369 patent. Therefore, this *inter partes* trial will provide the parties with an in-depth analysis of the '369 patent, providing a full record that will enhance the patent system's integrity. *Seven Networks*, p. 19.

Third, this Petition is extremely strong. The prior art discloses the exact elements alleged in the '369's Background to be missing. For example, the '369 asserts that "there exists a desire in which a content just being viewed by a portable

terminal is to be passed to a video playback device to continuously viewed the content." EX-1001 at 2:32-36. This is exactly what Bennett-3 and Yuasa disclose.

Fourth, as discussed *supra* at §V(B), the Challenged Claims were not subject to rigorous examination or any substantive rejections – continuing a pattern that pervades the '369's parent and grandparent applications which also did not receive any substantive rejections or any apparent consideration of prior art at all.

This demonstrates a very weak examination in view of the very developed state of the art. This is a clear-cut example of a patentee asserting infringement of a patent that was never subject to rigorous examination, and thus the PTAB should not frustrate the ability of Petitioner to benefit from the main "purpose of the [IPR] section [to] provid[e] quick and cost effective alternatives to litigation." H. R. Rep. No. 112-98, pt. 1, 48 (2011).

Thus, when considering all factors together, they weigh heavily against discretionary denial. Declining to institute would serve only to permit the patent owner to continue to abuse an invalid patent, rather that serving Congress's stated purpose in creating the AIA.

IX. MANDATORY NOTICES UNDER 37 C.F.R. §42.8

A. Real Party-in-Interest (37 C.F.R. § 42.8(b)(1))

The real party-in-interest in this Petition is Hisense Co. Ltd..

Out of an abundance of caution in light of prior challenges to the named real-parties-in-interest in unrelated IPR petitions, Petitioner also identifies Hisense International Co. Ltd, Qingdao Hisense Electronics Co., Ltd., Guiyang Hisense Electronics Co., Ltd., Hisense International (Hong King) America Investments, Co., Ltd., Hisense International (HK) Co., Ltd., Hisense Electronica Mexico S.A. de C. V. as real parties-in-interest for the IPR requested by this Petition without admitting that they are in fact real parties-in-interest, solely to the extent that patent owner contends that separate legal entities should be named as real-parties-in-interest, and Petitioners do so to avoid the expenditure of resources to resolve such a challenge. No unnamed entity is funding, controlling, or otherwise has an opportunity to control or direct this Petition or Petitioners' participation in any resulting IPR. Petitioner notes that Petitioner has many corporate affiliates entities, each of which agrees to be estopped under the provisions of 35 U.S.C. § 315 to the same extent that Petitioner is estopped.

B. Related Matters (37 C.F.R. § 42.8(b)(2))

1. Judicial Matters

As of the filing date of this Petition and to the best knowledge of Petitioner, the '369 patent is involved in the following litigations:

Maxell, Ltd. v. Hisense Co. Ltd., Hisense International Co. Ltd, Qingdao Hisense Electronics Co., Ltd., Guiyang Hisense Electronics Co., Ltd., Hisense

International (Hong King) America Investments, Co., Ltd., Hisense International (HK) Co., Ltd., Hisense Electronica Mexico S.A. de C. V., Case No. 5:19-cv-00156 (EDTX). *See* EX-1004.

2. Administrative Matters:

As of the filing date of this Petition and to the best knowledge of Petitioner, the '369 patent was not subject to any petitions for Inter Partes Review:

3. Related Patents

To the best of Petitioner's knowledge, the '369 patent is related to the following United States Patent Nos.: 8,214,459; 8,549,109; 8,892,688; 9,197,917; 9,883,225; 9,794,629; 10,116,948; 10,110,944; 10,219,020; 10,219,019; 10,271,085; 10,200,736; 10,271,086; 10,200,735; 10,327,029; and 10,484,733.

C. Lead/Back-up Counsel (37 C.F.R. § 42.8(b)(3)):

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D. Notice of Service Information (37 C.F.R. § 42.8(b)(4)):

Please direct all correspondence to lead and back-up counsel at the above addresses. Petitioner consents to electronic service at the email addresses above.

E. Fees Under 37 C.F.R. § 42.103

Petitioners submit fees of $32,300. If more fees are necessary to accord this Petition a filing date, authorization is granted to charge the same to Deposit Account No. 04-1679.

X. CONCLUSION

Petitioner has established a reasonable likelihood of prevailing with respect to all Challenged Claims of the '369 patent and requests the Board institute *inter partes* review and then cancel all claims as unpatentable.

Respectfully submitted,

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Dated: September 11, 2020

CERTIFICATION OF SERVICE ON PATENT OWNER

Pursuant to 37 C.F.R. §§ 42.6(e), 42.8(b)(4) and 42.105, the undersigned certifies that on September 11, 2020, a complete and entire copy of this Petition for *Inter Partes* Review of U.S. Patent No. 9,578,369 and all supporting exhibits were served to Maxell, LTD under prior agreement with the counsel identified below for Maxell, LTD, via electronic mail and/or other electronic download:

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CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24 *et seq*., the undersigned certifies that this document complies with the type-volume limitations. This document contains 13,977 words as calculated by the "Word Count" feature of Microsoft Word 2010, the word processing program used to create it.

Dated: September 11, 2020

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