



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/459,507	06/02/1995	JOHN C. HARVEY	5634.232	4340

70813 7590 10/01/2007
GOODWIN PROCTER LLP
901 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20001

EXAMINER

OMETZ, DAVID LOUIS

ART UNIT	PAPER NUMBER
----------	--------------

2622

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

10/01/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

AAAlpha-Kpetewama@goodwinprocter.com
bhenry@goodwinprocter.com
HMCPEAKE@GOODWINPROCTER.COM



UNITED STATES DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
---------------------------------	-------------	---	---------------------

EXAMINER

ART UNIT	PAPER
----------	-------

20070926

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

See Attachment.

/Dave Ometz/
David L. Ometz
SPE
Art Unit: 2622

Suspension of Action, At the Initiation of the Office

1. The instant application has a specification that is identical to one or more patents that are currently under reexamination. The issues present in the reexamination proceedings are related to the issues in the instant application. The final decisions/determinations made at the end of the reexamination proceedings are likely to affect the outcome of the application. To this end, it is appropriate to suspend prosecution on the instant application.

Per applicant's request, however, prosecution in 08/470,571 (INTE) and 08/487,526 (MULT) will not be suspended in order to pursue the issues that have been fully developed in these applications. The outcome of these issues is also likely to affect the outcome of the present application.

37 CFR 1.103(e) provides that the Office will notify applicant if the Office suspends action in an application on its own initiative.

Accordingly, *Ex parte* prosecution is SUSPENDED FOR A PERIOD OF SIX (6) MONTHS FROM THE DATE OF THIS LETTER. Upon expiration of the period of suspension, applicant should make an inquiry as to the status of the application.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Ometz, whose telephone number is (571) 272-7593. The examiner can normally be reached on Monday-Thursday from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Fridays. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Andrew I. Faile
Director
TC 2600



David L. Ometz
SPE
Art Unit 2622



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
08/459,507	06/02/1995	JOHN C. HARVEY	5634.232

70813
GOODWIN PROCTER LLP
901 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20001

CONFIRMATION NO. 4340



OC000000025391927

Date Mailed: 08/15/2007

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 08/03/2007.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Office of Initial Patent Examination (571) 272-4000, or 1-800-PTO-9199
OFFICE COPY



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
08/459,507	06/02/1995	JOHN C. HARVEY	5634.232

21967
 HUNTON & WILLIAMS LLP
 INTELLECTUAL PROPERTY DEPARTMENT
 1900 K STREET, N.W.
 SUITE 1200
 WASHINGTON, DC 20006-1109

CONFIRMATION NO. 4340



OC000000025391875

Date Mailed: 08/15/2007

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 08/03/2007.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

Office of Initial Patent Examination (571) 272-4000, or 1-800-PTO-9199

OFFICE COPY

**RECEIVED
CENTRAL FAX CENTER**

AUG 03 2007

FAX TRANSMISSION**DATE:** August 3, 2007**PTO IDENTIFIER:** Application Number 08/459,507
Patent Number**Inventor:** John C. Harvey**MESSAGE TO:** US Patent and Trademark Office**FAX NUMBER:** (571) 273-8300**FROM:** GOODWIN PROCTER LLP

Carl Benson

PHONE: (202) 346-4000**PAGES (Including Cover Sheet):** 4**CONTENTS:**

Certificate of Transmission under 37 CFR 1.8

If your receipt of this transmission is in error, please notify this firm immediately by collect call to sender at (202) 346-4000 and send the original transmission to us by return mail at the address below.

This transmission is intended for the sole use of the individual and entity to whom it is addressed, and may contain information that is privileged, confidential and exempt from disclosure under applicable law. You are hereby notified that any dissemination, distribution or duplication of this transmission by someone other than the intended addressee or its designated agent is strictly prohibited.

GOODWIN PROCTER LLP901 New York Avenue, NW, Washington, DC 20001
Telephone: (202) 346-4000 Facsimile: (202) 346-4444

**RECEIVED
CENTRAL FAX CENTER**

AUG 03 2007

Application No. (if known): 08/459,507

Certificate of Transmission under 37 CFR 1.8

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office.

on August 3, 2007
Date

- 1) **Statement Under 37 CFR 3.73(b)**
- 2) **Power of Attorney to Prosecute Applications Before the USPTO**



Signature

Carl Benson

Typed or printed name of person signing Certificate

38,378

Registration Number, if applicable

(202) 346-4000

Telephone Number

Note: Each paper must have its own certificate of transmission, or this certificate must identify each submitted paper.

PTO/SB/86 (04-07)

Approved for use through 09/30/2007. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(b)**RECEIVED
CENTRAL FAX CENTER**Applicant/Patent Owner: John C. Harvey, et al.Application No./Patent No.: 08/459,607Filed/Issue Date: June 2, 1995

AUG 03 2007

Entitled: SIGNAL PROCESSING APPARATUS AND METHODS

Personalized Media Communications, LLC. , a Corporation
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.
 (The extent (by percentage) of its ownership interest is _____ %)
 in the patent application/patent identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 011069 ,
 Frame 0096 , or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: _____ To: _____
 The document was recorded in the United States Patent and Trademark Office at
 Reel _____ , Frame _____ , or for which a copy thereof is attached.
2. From: _____ To: _____
 The document was recorded in the United States Patent and Trademark Office at
 Reel _____ , Frame _____ , or for which a copy thereof is attached.
3. From: _____ To: _____
 The document was recorded in the United States Patent and Trademark Office at
 Reel _____ , Frame _____ , or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☐ As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Carl L. Benson
 Signature

August 3, 2003
 Date

Carl L. Benson, Reg. No. 38,378
 Printed or Typed Name

(202) 346-4018
 Telephone Number

Attorney For Applicant
 Title

RECEIVED
CENTRAL FAX CENTER

AUG 03 2007

PTO/SB/98 (01-03)

Approved for use through 12/31/2003 CMB 0551-0039
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1996, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(b).

I hereby appoint:

☐ Practitioner(s) associated with the Customer Number:

OR

☒ Practitioner(s) named below (If more than ten patent practitioners are to be named, then a customer number shall be used).

Name	Registration Number	Name	Registration Number
Thomas J. Scott, Jr.	27,836		
Joseph M. Guiliano	36,539		
Carl L. Benson	38,378		

as attorney(s) or agent(s) to represent me/ us before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(b) to:

☒

The address associated with Customer Number.

000070813

OR

☐ Firm or Individual Name		
Address		
City	State	Zip
Country		
Telephone	Email	

Assignee Name and Address

Personalized Media Communications, LLC
708 3rd Avenue, 35th Floor
New York, NY 10017

A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/98 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application to which this Power of Attorney is to be filed.

SIGNATURE of Assignee of Record

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee.

Signature	<i>Gerald T. Holtzman</i>	Date	5/29/07
Name	Gerald T. Holtzman	Telephone	281.980.5553
Title	General Counsel		

This collection of information is required by 37 CFR 1.31, 1.32 and 1.53. The information is required to obtain or retain a benefit by the public which is to be used by the USPTO to process an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. The collection is estimated to take 3 minutes to complete, including searching, preparing, and providing the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the burden or time you require to complete the form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEE OR COMPLETED FORMS TO THIS ADDRESS SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-5139 and select option 2



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/459,507	06/02/1995	JOHN C. HARVEY	5634.232	4340

21967 7590 08/18/2005

HUNTON & WILLIAMS LLP
INTELLECTUAL PROPERTY DEPARTMENT
1900 K STREET, N.W.
SUITE 1200
WASHINGTON, DC 20006-1109

EXAMINER

OMETZ, DAVID LOUIS

ART UNIT PAPER NUMBER

2615

DATE MAILED: 08/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Suspension of Action

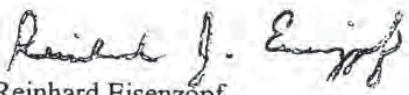
1. As per the consolidated agreement between the applicants and the PTO, the prosecution on merits of the instant B application is suspended and held in abeyance pending the outcome of the corresponding "SYNC" group "A" application 08/448,644.

Accordingly, *Ex parte* prosecution is SUSPENDED FOR A PERIOD OF SIX (6) MONTHS FROM THE DATE OF THIS LETTER. Upon expiration of the period of suspension, applicant should make an inquiry as to the status of the application.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Faile, whose telephone number is (703) 305-4380. The examiner can normally be reached on Monday-Thursday from 8:00AM to 5:30 PM. The examiner can also be reached on alternate Fridays. The fax number for this Group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

AIF:aif


Reinhard Eisenzopf
Acting Director TC 2600



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/459,507	06/02/1995	JOHN C. HARVEY	5634.232	4340

21967 7590 06/18/2002

HUNTON & WILLIAMS
INTELLECTUAL PROPERTY DEPARTMENT
1900 K STREET, N.W.
SUITE 1200
WASHINGTON, DC 20006-1109

EXAMINER

MEHTA, BHAVESH M

ART UNIT	PAPER NUMBER
----------	--------------

2611

DATE MAILED: 06/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

The request for deferral/suspension of action under 37 CFR 1.103 has been approved.



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: ASSISTANT COMMISSIONER FOR PATENTS

Washington, D.C. 20231

APPLICATION NO/ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
--------------------------------	-------------	---	---------------------

08/459,507

EXAMINER

ART UNIT PAPER

24

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

This communication is responsive to the Request for Reconsideration under 37 C.F.R. § 1.111 filed August 21, 2001. The Request for Reconsideration requests withdrawal of the determination, in the Office communication mailed March 21, 2001, that certain of applicants' replies were not fully responsive to the prior Office action for failure to comply with the Administrative Requirement imposed by the Office.

In order to resolve conflicts between applicants' applications, the Administrative Requirement was imposed in this application and in certain of applicants' co-pending applications. Under the Administrative Requirement, applicants are required to:

- (1) file terminal disclaimers in each of the related co-pending applications terminally disclaiming each of the other co-pending applications;
- (2) provide an affidavit attesting to the fact that all claims in the co-pending applications have been reviewed by applicant and that no conflicting claims exist between the applications; or
- (3) resolve all conflicts between claims in the identified co-pending applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the identified co-pending applications.

In application Serial No. 08/470,571, applicants filed a petition under 37 C.F.R. § 1.181 requesting, inter alia, that the Commissioner order that the Administrative Requirement be withdrawn. However, as agreed upon in a telephonic interview conducted with applicants' representative on February 8, 2002, applicants have withdrawn the petition under 37 C.F.R. § 1.181 in application Serial No. 08/470,571. Further, applicants have agreed to comply with the Administrative Requirement at such time that written notification is provided that this application is otherwise in condition for allowance.

The Office recognizes that applicants have consistently asserted the Administrative Requirement to be improper and have not conceded its propriety. After a review of applicants' responses to the Administrative Requirement, the Office deems them to be a bona fide attempt to advance the application to final action. However, the issue of the propriety of the Administrative Requirement is now rendered moot by applicants' agreement to comply with the Administrative Requirement at such time that written notification is provided that this application is otherwise in condition for allowance.

In view of applicants' agreement to comply with the Administrative Requirement and applicants' timely filed Request for Reconsideration, this application remains pending. No further response to the communication mailed March 21, 2001, is required by applicants in order to avoid the abandonment of this application. An action on the merits of this application will follow this communication in due course.

Additionally, as per the consolidated agreement between the applicants and the PTO, the prosecution on merits of the instant B application is suspended and held in abeyance pending the outcome of the corresponding "A" application. Ex parte prosecution is

08/459,507

SUSPENDED FOR A PERIOD OF SIX MONTHS from the date of this letter. Upon expiration of the period of suspension, applicant should make an inquiry as to the status of the application.



Bhavesh M Mehta
Primary Examiner
Art Unit: 2611



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

2699
PATENT

In re Application of:

John C. Harvey and James W. Cuddihy:

Group Art Unit: 2699

Serial No.: 08/459,507

Examiner: Luther, W.

Filed: June 2, 1995

Atty. Docket: 05634.0232

For: **SIGNAL PROCESSING APPARATUS
AND METHODS**

TRANSMITTAL LETTER

BOX: NON-FEE AMENDMENTAssistant Commissioner of Patents
Washington, D.C. 20231RECEIVED
AUG 24 2001
Technology Center 2600

- ☒ Request for Reconsideration under 37 C.F.R. § 1.111
☒ Petition for Extension of Time Pursuant to 37 C.F.R. § 1.136(a)
☒ Associate Power of Attorney
☐ An additional claim fee is required, and is calculated as shown below:

	(Col 1)		(Col 2)	(Col 3)		
	Claims Remaining After Amendment		Highest No. Previously Paid for	Present Extra	Rate	Additional Fee
Total	*1	Minus	**	=0	x \$ 18.00	\$0.00
Indep.	*1	Minus	***	=0	x \$ 78.00	\$0.00
First Presentation of Mult. Dep. Claim					x \$ 260.00	\$0.00
Total Additional Filing Fee for Request for Extension of Time						\$1,390.00
Total Fee Enclosed						\$1,390.00

- * If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3.
** If the "Highest Number Previously Paid For" in this space is less than 20, write "20" in this space.
*** If the "Highest Number Previously Paid For" in this space is less than 3, write "3" in this space. "The Highest Number Previously Paid For" (Total or Independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment or the number of claims originally filed.

- ☒ P.M.C., L.L.C. check no. 3625 in the amount of \$1,390.00 is enclosed.
☒ The Commissioner is hereby authorized to charge any additional fees, or credit any overpayment to Deposit Account No. 50-0206.

- ☒ Any filing fees under 37 CFR 1.16 for the presentation of extra claims.
☒ Any patent application processing fees under 37 CFR 1.17.

Respectfully submitted,

Thomas J. Scott, Jr.
Reg. No. 27,836
Donald J. Lecher
Reg. No. 41,933
Attorneys for Applicants
Tel: (202) 955-1938Date: August 20, 2001
HUNTON & WILLIAMS
1900 K Street, N.W.
12th Floor
Washington, D.C. 20006



Serial No. 08/459,507
Atty. Docket No. 05634.0232

22 / leg for
reconsider
9-1-01
NP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

John C. Harvey and James W. Cuddihy:

Serial No.: 08/459,507

Filed: June 2, 1995

For: **SIGNAL PROCESSING APPARATUS
AND METHODS**

Group Art Unit: 2699

Examiner: Luther, W.

Attorney Docket: 05634.0232

Box: Fee-Amendment

RECEIVED
AUG 24 2001
Technology Center 2600

REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.111

Hon. Commissioner for Patents
Washington, DC 20231

Sir:

The paper is responsive to the Office communication mailed on March 21, 2001 (March '01 Communication) by the Patent and Trademark Office (PTO). The March '01 Communication provides a one month period for response that may be extended under 37 C.F.R. § 1.136(a). This response is timely filed with a petition for an extension of time submitted herewith.

The March '01 Communication asserts that the reply filed on July 6, 1999 Response is not fully responsive to the prior Office action issued on March 2, 1998 Action. The March '01 Communication asserts that the reply failed to sufficiently supplement the allegedly deficient September 2, 1998 Response(s), which, in turn, allegedly failed to comply with the Administrative Requirement (described in detail below) contained in the March 2, 1998 Action.

Applicants respectfully request withdrawal of the determination in the March '01 Communication that applicants' prior filings were non-responsive so that substantive examination on the merits of the instant application can resume.

First, applicants respectfully maintain that the July 6, 1999 Response and the September 2, 1998 Response(s) each fully complied with the requirements of 37 C.F.R. § 1.111 because

applicants carefully pointed out the errors in replying to every ground of objection and rejection in the March 2, 1998 Action.

Second, the March '01 Communication was untimely and improper. On that basis alone, it should be withdrawn.

Third, applicants respectfully maintain that the Administrative Requirement is unjust and contrary to law. In particular, none of 37 C.F.R. §§ 1.56, 63, and 78(b) support or sanction the Administrative Requirement, nor the affirmative duties it seeks to unjustly impose.

Fourth, to the extent the PTO seeks to maintain the Administrative Requirement, the "rejection" based thereon should be maintained as provisional and held in abeyance until other issues on the merits are resolved and the application is otherwise in form for consideration.

Fifth, any administrative action, such as abandonment of the application, allegedly authorized by and undertaken pursuant the Administrative Requirement, should be deferred because it would be premature in view of the fact that applicants' challenge to the Administrative Requirement is still pending before the Commissioner on petition.

Sixth, the instant application has been designed as a "B" Application pursuant to the consolidation agreement between the PTO and applicants. According to that agreement, the PTO has agreed to hold any rejections on such applications in abeyance pending resolution of all matters for the corresponding "A" Application.

Applicants respectfully request reconsideration of this application in view of the following remarks.

I. DESCRIPTION OF THE ACTIVITIES PRIOR TO THIS RESPONSE

This application is one of a number of related applications filed by applicants. Applicants originally filed Application Serial No. 317,510 on November 3, 1981 (1981 Application). The 1981 Application issued as U.S. Pat. No. 4,694,490. Applicants have filed a series of continuation and continuation-in-part applications based on the 1981 Application. Application Serial No. 096,096 filed September 11, 1987 (1987 Application) is a continuation-

in-part of the 1981 Application. Subsequent applications include the disclosure of this continuation-in-part application.

On August 30, 1993, Application Serial No. 08/113,329 ('329 Application) was filed. In the period between March 2, 1995, and June 7, 1995, applicants filed 328 applications, including the instant application, which were continuations of the '329 Application. Accordingly, the '329 Application and its 328 continuations represented a total of 329 related applications. These related applications were disclosed to the PTO in compliance with applicants' duty of disclosure under 37 C.F.R. § 1.56.

During the prosecution of this application, the PTO mailed the March 2, 1998 Action, which was made final. The March 2, 1998 Action included, *inter alia*, an assertion that conflicting claims exist between applicants' related applications. The assertion was supported with an appendix comparing 5 pairs of claims selected from the related applications. Notably, none of the claims in the appendix were selected from this application. In order to resolve the alleged potential conflicts between applications, the Administrative Requirement was imposed. The Administrative Requirement compels applicants to either:

- (1) file terminal disclaimers in each of the related applications terminally disclaiming each of the other applications, or
- (2) file an affidavit attesting to the fact that all claims in the applications have been reviewed by applicant and that no conflicting claims exists between the applications, or
- (3) resolve all conflicts between claims in the related applications by identifying how all the claims in each application are distinct and separate inventions from all the claims in the other related applications.

The March 2, 1998 Action asserted that failure to comply with this Administrative Requirement would result in abandonment of this application. The Administrative Requirement was also imposed in many of applicants' copending applications.

Applicants timely filed the September 2, 1998 Response in response to the March 2, 1998 Action. In the September 2, 1998 Response, applicants specifically addressed the Administrative Requirement. Applicants demonstrated that the Administrative Requirement was improperly imposed. Applicants also properly responded to all other issues raised in the March 2, 1998

Action.

Applicants' amendment filed July 6, 1999 cancelled claims 3-43 and amended a sole remaining claim in consonance with the consolidation agreement with the PTO.

In order to advance the prosecution of these related applications, from November 1998 through June 1999, applicants' representatives conducted a series of interviews with PTO management. During these interviews, senior PTO management suggested that further examination of applicants' related applications could be expedited by reducing the number of pending applications.

In response to this suggestion, applicants agreed to consolidate the claims into 56 subject matter groups. The PTO then indicated that the claims in each group are not patentably distinct and that it would be proper and desirable to examine all of the claims together.

Accordingly, for each subject matter group the applications were separated based on whether priority was claimed to the 1981 Application or the 1987 Application. The claims from all applications in a group with the same priority claim were added to a single application designated an "A" Application. There are currently 79 "A" applications pending. The remaining applications were abandoned with the exception of one "B" Application corresponding to each "A" Application.

According to this arrangement, the PTO agreed to hold prosecution of the "B" applications in abeyance pending final action in the corresponding "A" applications. Applicants and the PTO agreed that, in order to expedite allowance of patentable claims, if there were claims that remained finally rejected in an application, those claims were to be moved to the "B" Application for further action, and the "A" Application would be allowed to issue. This agreed-upon process was diagramed in a flowchart produced at an interview with Examiner Faile on February 25, 1999, and is attached as Exhibit A. An additional acknowledgement by the PTO confirming this "consolidation agreement" appears in the PTO's Notices mailed on January 16

and January 18, 2001.¹ Further acknowledgements by the PTO confirming the consolidation agreement appear in Office Actions and correspondence in applicants' related cases.²

In good faith reliance on the consolidation agreement, applicants abandoned 169 of their 329 pending applications. Applicants filed numerous amendments adding to the designated "A" applications various claims that had been pending in the abandoned applications and the designated "B" applications. In so doing, applicants incurred costs of over \$500,000 in filing fees alone in order to comply with the consolidation agreement.

On March 7, 2000, applicants filed a petition to the Commissioner under 37 C.F.R. § 1.181 for application serial number 08/470,571 requesting that the Examiner be required to withdraw the improper Administrative Requirement. Applicants have received no action on this petition to date.

On March 21, 2001, the PTO mailed the March '01 Communication, which asserts that the July 6, 1999 Response is not fully responsive to the March 2, 1998 Action for failure to comply with the Administrative Requirement.

II. APPLICANTS' SUBMISSIONS WERE FULLY RESPONSIVE TO THE MARCH 2, 1998 ACTION AND IN FULL COMPLIANCE WITH 37 C.F.R. § 1.111

A review of the instant application demonstrates that the September 2, 1998 Response(s) and the July 6, 1999 Response (collectively, the "Responses") unquestionably comply with 37 C.F.R. § 1.111. In accordance therewith, the Responses are, and do appear throughout to be, a *bona fide* attempt to advance the application to final action. In their Responses, applicants

¹ These notices were mailed in connection with Application Serial Nos.: 08/459,216, 08/438,206, 08/438,659, 08/437,044, 08/437,937, 08/440,837, 08/483,980, 08/442,165, 08/442,335, 08/442,507, 08/482,573, 08/445,290, 08/446,429, 08/449,413, 08/449,800, 08/483,054, 08/449,702, 08/449,110, 08/483,174, 08/469,078, 08/471,024, 08/470,476, 08/477,564, 08/487,649, and 08/478,794. The PTO's acknowledgement of the consolidation agreement in the January 16 and 18, 2001 Notices comes in the form of an assertion that applicants did not complete the consolidation process in a timely manner. Applicants refuted this allegation in responses filed on March 19, 2001 to each of the above identified applications' attached Appendix B beginning at page 18.

² See, e.g., the June 8, 2000 PTO interview summary, a copy of which was filed as Appendix D in applicants' responses filed on March 19, 2001 to each of the applications identified in footnote 1.

addressed each and every of the many objections and rejections raised by the Examiner in the March 2, 1998 Action, including a multiple page response to the Administrative Requirement.

In fact, the completeness of the Responses is tacitly acknowledged by the PTO's failure to object to the initial September 2, 1998 Response for years after the September 2, 1998 Response. Moreover, the circumstances indicate that the PTO had initially considered the Response to be responsive. This is confirmed by the extensive period of time that has passed and by the extensive interviews that took place.

In view of the circumstances described above, Applicant's response was fully responsive and the requirement of the March '01 Communication should be withdrawn.

III. THE MARCH '01 COMMUNICATION IS UNTIMELY AND IMPROPER

In the March '01 Communication, the Examiner now contends at this late date that the September 2, 1998 Response(s) and July 6, 1999 Response were not fully responsive to the March 2, 1998 Action. The communication is untimely and improper.

The assertion that the Responses were nonresponsive is untimely. After filing the September 2, 1998 Response, applicants conducted a series of interviews with PTO management from November '98 through June '99. At no point during these discussions did the PTO indicate or even suggest that the response for this application (or any other co-pending related application) was nonresponsive based on the Administrative Requirement.

To now assert, some **31 months** after applicants' original response in this application, that the response for this application was nonresponsive, is untimely. Moreover, making the assertion after the PTO had conducted extensive interviews during a six month period without making mention of this "deficiency," simply highlights the overall inequity of the Examiner's action.

Not only does a basic sense of fairness counsel that the March '01 Communication is untimely; so does the Manual of Patent Examining Practice (MPEP). Section 714.05 of the MPEP mandates that "[a]ctions by applicants . . . should be inspected immediately upon filing to determine whether they are completely responsive to the preceding Office action so as to prevent abandonment of the application." Thus, the MPEP expressly instructs the Examiner to examine responses promptly in order to avoid abandonment.

Here, the Examiner did not comply with the MPEP's dictate, yet the Examiner is explicitly threatening to abandon this and other co-pending applications. By not complying with the requirements of the MPEP himself, the Examiner has placed this and other co-pending applications at risk of the very thing the MPEP seeks to avoid — abandonment. This is improper.

In sum, applicants respectfully submit that the March '01 Communication is untimely and improper and, on that basis alone, the requirement of the March '01 Communication should be withdrawn.

IV. THE ADMINISTRATIVE REQUIREMENT IS UNJUSTIFIED, UNSUPPORTED BY LEGAL AUTHORITY AND IMPOSED IN VIOLATION OF THE ADMINISTRATIVE PROCEDURES ACT

In the March 2, 1998 Action, the Examiner imposed the following Administrative Requirement on applicants. The March 2, 1998 Action compels applicants to: 1) file terminal disclaimers in each of applicants' related applications; 2) provide an affidavit stating that no conflicting claims exists between the applications and identifying the specific steps taken to insure that no conflicting claims exist between the applications; or 3) resolve all conflicts between claims in the various applications.

By explicitly requiring applicants to comply with one of these requirements to obtain

allowance of the application, the Examiner has imposed a condition that will result in abandonment if applicants fail to comply with the Administrative Requirement. Applicants should not be forced to comply because the Administrative Requirement is unjustified and unsupported by applicable law and regulations, and because the Administrative Requirement constitutes an unlawfully promulgated substantive rule which contradicts the PTO's established regulatory scheme.

A. The Examiner's Imposition Of The Administrative Requirement Is Unjustified

1. The Allegation That Examination Is Burdensome And Onerous Is Obviated By Applicants' Extensive Submissions

The Examiner's justification for imposing the Administrative Requirement is that an analysis of all claims in the then-pending 328 related application³ would be an extreme burden on the PTO requiring millions of claim comparisons. Contrary this assertion, the burden of comparing the claims in the pending application to the claims in other related applications is manageable within the context of an examination of a patent application for patentability. Such an examination includes, for instance, a determination that the claims are not obvious in view of all printed publications, including millions of issued U.S. patents published more than a year prior to the filing date of the application. Of course, the PTO does not compare each pending claim to every printed publication, but rather relies on the expertise of the Examiner and careful classification of prior patents and technical literature to focus on the prior art that is most pertinent.

In this case, applicants have diligently worked to educate the Examiner regarding

³ The Examiner's assertion regarding the burden is largely overcome by events now that 169 of the 329 applications have been abandoned pursuant to the consolidation agreement between applicants and the PTO. This point illustrates the difficulties that are created by the PTO's untimely response on this issue and why any double patenting rejection should be held in abeyance until other prosecution issues are fully resolved. *See* Section V, *infra*.

classifications and the differences between the claims of the co-pending applications. Specifically, applicants have provided the PTO with applicants' classifications of the various applications and have submitted extensive documents on paper and in electronic form to assist the Examiner in analyzing and comparing the claims at issue. Applicants and their representatives have conducted numerous interviews in an effort to answer all the Examiner's questions as to claims distinctions and similarities. In fact, after applicants provided the various conceptual groups used by applicants to classify and organize the pending applications, the PTO requested that all claims in each group be consolidated into groups of two to four applications. Applicants complied with this request in an effort to eliminate any excessive burden of claim comparison on the Examiner. In sum, applicants have submitted all information necessary to enable the Examiner to focus on the most pertinent claims for comparison under a double patenting analysis.

Despite applicants' efforts to work with the PTO in providing supplemental material to assist with the Examiner's task of claim comparisons, the Examiner has imposed the Administrative Requirement which effectively requires applicants to compare the claims and make a determination for the Examiner on the double patenting issue. When an Examiner is unable to articulate any reason for rejecting a patent application, 35 U.S.C. § 131 mandates issuance. By requiring a statement from applicants regarding conflicting claims, the Examiner has ignored the material submitted by applicants to assist the Examiner in making such claim comparisons. The Examiner can not ignore the record made by applicants as to the relationship among the claims and simply require a blanket statement which ignores the facts of record. Considering the record in the case and the materials applicants have submitted, the Examiner is not justified in electing not to examine each case in order to make proper and complete

determinations on the double patenting issue.

2. The Examiner Has A Duty To Examine An Application

Under 35 U.S.C. § 131, the Commissioner “shall cause an examination to be made of the application . . . and if on such examination it appears that the applicant is entitled to a patent under the law, the Commissioner shall issue a patent therefor.” The statute clearly mandates an examination to occur on behalf of the Commissioner through his agent, the Examiner. The use of the mandatory word “shall” imposes a duty on the examiner which may not be shifted to applicants. The duty to examine is the examiner’s primary role. *See also* 35 U.S.C. §§ 101-103 (A person shall be entitled to a patent unless —)

Moreover, under 35 U.S. C. § 132, “[w]henver, on examination, any claim for a patent is rejected ... the Commissioner shall notify the applicant thereof, stating the reasons for such rejection” This statute provides that the Commissioner must give reasons for rejecting a claim for a patent. MPEP § 706 provides that the “goal of examination is to clearly articulate any rejection early in the prosecution process so that the applicant has the opportunity to provide evidence of patentability and otherwise reply completely at the earliest opportunity.” 37 C.F.R. § 1.104 further delineates the examiner’s duty to examine and provide reasons for any and all rejections of a patent.

The facts at hand show that applicants have fully complied with their obligations under the Patent Statute, while the Examiner has effectively attempted to abrogate his statutorily-assigned obligation to conduct a full examination and notify the applicants of the specific reasons for the rejection of any claims.

First, applicants endeavored in good faith to present non-conflicting claims in the initially filed applications. Evidence of applicants’ good faith is further demonstrated by their consolidation of the applications into 56 subject matter categories and abandonment of 169

applications. **Second**, applicants fully disclosed all information known to be material to patentability. In particular, applicants disclosed the identity of all related copending applications that might be relevant to any obviousness-type double patenting analysis that the Examiner might see fit to conduct. **Third**, with applicants having disclosed all such knowledge in their possession, it is now the Examiner's duty to accept or reject applicant's position. **Finally**, if applicants' position is rejected, the Examiner must provide a reasoned basis as to why so that applicants can address the Examiner's specific rejections.

Turning to the specifics of this application, the Examiner attempts to shift the burden of examination and notification onto applicants through an untenable reinterpretation of the patent regulations. The Examiner argues in the March '01 Communication that "under 37 C.F.R. § 1.63 and § 1.56, the applicants are required to 1) review and understand the contents of each specification, including all claims and amendments, and 2) **eliminate conflicting claims or notify the Office of conflicting claims.**" March '01 Communication, P. 4 (emphasis added). There is no support whatsoever found in the text of either rule for the Examiner's second contention. Moreover, applicants are not aware of any case law or other authority supporting the Examiner's proposition that Rule 56 and 63 cooperate to create an affirmative duty on applicants to preemptively perform double patenting analysis and to identify to the Examiner any claims that applicants "believes" or "knows" are conflicting.

Applicants acknowledge their duty to disclose all information known to be material to patentability. As set forth above, applicants have complied with their duty in disclosing all co-pending claims to the Examiner. Contrary to the Examiner's novel interpretation, Rules 56 and 63 do not require an applicant to affirmatively make a determination in order to identify claims that **may** conflict. If an applicant "knew" that certain claims conflicted then perhaps applicants

might be obliged to notify the Office of conflicting claims. However, absent such knowledge, no law or regulation places a burden upon applicants to examine and compare each co-pending claim and make a conclusive determination on the issue of double patenting.⁴ It is the Examiner's responsibility, not applicants', to identify claims that arguably do conflict and articulate those arguments as to why such claims do conflict. For applicants to undertake this task, as the Examiner suggests, would effectively reverse the examination process mandated by statute under which the Examiner has the burden and the duty to determine whether and why a claim should be rejected for double patenting.

The Examiner's conclusion that the Administrative Requirement "is not controversial" fails to take into account the applicants' perspective on this issue. Rather than conducting a thorough examination and articulating his basis for a rejection in the instant application, the Examiner has essentially presumed obvious-type double patenting and has required applicants to resolve the issue of obviousness-type double patenting by complying with the Administrative Requirement. Even if the Administrative Requirement was justified or proper, none of the options presented in the requirement are reasonable, practical or prudent.

If applicants were to concede the validity of the double patenting rejection by filing terminal disclaimers, they may lose years of patent coverage. A loss of valuable years of coverage is an unreasonable and unfair result when the Examiner has failed to establish a prima facie case of obviousness-type double patenting.

If applicants were to traverse the double patenting rejection under the second or third option of the Administrative Requirement, they would be, contrary to the requirements of law, forced to perform the task of examination themselves, i.e., ensuring that no conflicting claims

⁴ It should be noted that potentially conflicting claims are not deemed unpatentable until one of the applications containing allegedly conflicting claims issues.

exist or resolving all potential conflicts between claims.

The statute and rules clearly impose on the Examiner a duty to examine an application for a patent. There is no legal authority to shift this duty to applicants. The Examiner's argument in the March '01 Communication that the Administrative Requirement requires nothing more than what the applicants "have been and are required to do anyway" is erroneous and misleading. If the Examiner's argument were true, there would be no need to impose the Administrative Requirement — the Examiner could simply reject the claims based on existing rules. The Examiner does not reject the claims based on existing rules because existing rules require the Examiner — not applicants — to examine the application. The unsanctioned Administrative Requirement impermissibly seeks to shift the burden of examination and should be withdrawn for that reason.

**3. Only When The Examiner Has Made A Prima Face Case
May The Burden Shift To The Applicant**

When rejecting claims, the Examiner bears the initial burden of presenting a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992). Only if that burden is met, does the burden of coming forward with evidence or argument shift to the applicant. *Id.* If the Examiner fails to establish a prima facie case, the rejection is improper and will not stand. *In re Fine*, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988).

To support obviousness-type double patenting rejections, the Examiner must conduct the factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 U.S.P.Q. 459 (1966). These factual determinations form the basis for the obviousness-type double patenting analysis. MPEP §804 mandates that the analysis employed in an obviousness-type double patenting determination parallels the factual and legal analysis for a 35 U.S.C. § 103(a) rejection. Thus,

when making obviousness-type double patenting rejections, the Examiner should identify (a) the differences between the inventions defined by the conflicting claims, and (b) the reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim at issue is an obvious variation of the invention defined in the allegedly conflicting claim. MPEP § 804. Therefore, the MPEP procedure for determining whether conflicting claims exist in related applications makes clear that the double patenting analysis is a duty of the Examiner, which may not be forced upon the applicants under threat of abandonment.

4. Administrative Convenience Is Not Sufficient Justification For Imposing The Burden Of Examination On The Applicants

In the instant case, the Examiner's justification for the Administrative Requirement is the apparent burden of addressing and analyzing "millions of claim comparisons." As discussed above, the apparent burden of making claim comparisons is obviated by applicants' extensive submissions to assist and simplify the Examiner's task of comparing claims. Additionally, applicants' abandonment of 169 applications pursuant to the consolidation agreement provides further relief from the workload issue raised by Examiner.⁵ These important points notwithstanding, administrative convenience is simply not a valid reason for avoiding a fact-specific analysis of claims necessitated by a proper obviousness-type double patenting rejection:

Per se rules that eliminate the need for fact-specific analysis of claims and prior art may be administratively convenient for PTO examiners and the Board. Indeed, they have been sanctioned by the Board as well. But reliance on *per se* rules of obviousness is legally incorrect and must cease. Any such administrative convenience is simply inconsistent with section 103, which, according to *Graham* and its progeny, entitles an applicant to issuance of an otherwise proper patent unless the PTO establishes that the invention *as claimed* in the application is obvious over cited prior art, based on the specific comparison of that prior art with claim limitations.

⁵ See footnote 1, *supra*.

In re Ochiai, 71 F.3d 1565, 1572, 37 U.S.P.Q.2d 1127, 1133 (Fed. Cir. 1995); *see also Transco Products Inc. v. Performance Contracting, Inc.*, 38 F.3d 551(1), 32 U.S.P.Q.2d 1077 (Fed. Cir. 1994), *cert. denied*, 513 U.S. 1151 (1995) (“[a]ctions . . . taken by the PTO primarily for administrative convenience, should not increase the burden on an applicant regarding his ability to obtain patent protection”).

Contrary to the Examiner’s assertion, much of the analysis involved in the examination of the first of the related applications is directly applicable to the examination of the other related applications. Due to the overlap in search areas and relevant prior art, the allegation of an undue administrative burden made by the Examiner is simply not justified. No court has ever implied that inconvenience to the PTO could ever be an excuse for foregoing the actual examination of a patent application required for a double patenting rejection.⁶

5. The Chart Of Apparent Conflicts In The Claims Is Insufficient To Support The Administrative Requirement

To the March 2, 1998 Action, the Examiner attaches an appendix which the Examiner contends to be a demonstration of claim conflicts. The appendix fails to demonstrate any conflicts between claims of the **present application** and claims of the co-pending applications. Rather, the office action appendix compares representative claims of **other applications** in an

⁶ The PTO may impose an administrative requirement on patent applicants only under clearly defined and specified circumstances. When an application claims more than one independent and distinct invention, an examiner may impose a restriction requirement pursuant to 35 U.S.C. § 121 to ease the burden of examining that subject matter, thereby requiring an applicant to file one or more divisional applications. Under MPEP § 809.02(a), the examiner may identify each of the disclosed species to which claims are restricted. However, in some cases, such as where a large number of claims exist or the species are not easily discernible, an examiner may identify at least exemplary ones of disclosed species. In such a case, an examiner may impose on an applicant the duty of grouping the claims in appropriate species for administrative convenience. The applicant in such circumstances is assisting the examiner in a formal procedural matter. The recognized PTO procedure of requiring an applicant to divide the claims into groups in response to a restriction requirement is clearly distinguishable from the Administrative Requirement imposed upon applicants. Under the Examiner’s Administrative Requirement in the pending application, the examiner is requiring **substantive determinations of patentability** from the applicants. This task of examination is statutorily reserved for the Examiner, 35 U.S.C. § 131. No authority exists in any part of the Patent Act for its imposition upon an applicant.

attempt to establish that "conflicting claims exist between the 329 related copending applications." Absent any evidence of conflicting claims between the applicants' present application and any other of applicants' co-pending applications, any requirement imposed upon applicants to resolve such alleged conflicts is improper.

B. The Administrative Requirement Is Unsupported By Relevant Legal Authority And Is A Substantive Rule Imposed In Violation Of The Administrative Procedures Act

1. The Terms Of The Administrative Requirement Are Unsupported By 37 C.F.R. § 1.78(b)

The Examiner can not reasonably rely on 37 C.F.R. § 1.78(b) as authority to impose the Administrative Requirement. Rule 78(b) provides that:

Where two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application.

Rule 78(b) requires the elimination of conflicting claims from all but one co-pending application. It cannot be construed to sanction the imposition of the present Administrative Requirement.

In the March 2, 1998 Action, the Examiner did not establish a procedure for the elimination of conflicting claims from all but one application or provide an analysis of such conflicts to effect such elimination. Instead, he has required applicants to: 1) file terminal disclaimers in each of the related applications; 2) provide an affidavit verifying that no conflicts exist; or 3) resolve all conflicts between claims in the related applications. None of the options compelled by the Administrative Requirement is authorized by Rule 78(b). Therefore, applicants respectfully submit that the imposition of such a requirement is improper.

To implement the requirements of Rule 78(b), MPEP § 822.01 directs the Examiner to treat conflicting claims as follows:

Under 37 C.F.R. § 1.78(b), the practice relative to overlapping claims in applications copending before the examiner..., is as follows: Where claims in one application are unpatentable over claims of another application of the same inventive entity because they recite the same invention, *a complete examination should be made of the claims of each application* and all appropriate rejections should be entered in each application, including rejections based upon prior art. *The claims of each application may also be rejected on the grounds of provisional double patenting on the claims of the other application* whether or not any claims avoid the prior art. Where appropriate, the same prior art may be relied upon in each of the applications. MPEP § 822.01 (6th Ed., Rev. 3, 1997), (*emphasis added*).

Contrary to the express directives of MPEP § 822.01 and 37 C.F.R. § 1.78(b), the Examiner here has made no effort to examine the co-pending applications, nor has he made any rejection to achieve the elimination of conflicting claims from all but one co-pending application. He has simply ignored these mandates.

2. The Examiner's Conditioning Of Further Examination And Allowance Of The Applications On Compliance With The Administrative Requirement Exceeds His Authority

The Examiner has stated that failure to comply with the Administrative Requirement will result in abandonment of the present application. Applicants respectfully submit that abandonment of an application can properly occur only:

- (1) for failure to respond within a provided time period (37 C.F.R. § 135);
- (2) as an express abandonment (37 C.F.R. § 138); or
- (3) as the result of failing to timely pay the issue fee (37 C.F.R. § 316).

The PTO rules include no provision permitting abandonment for failure to comply with any of the requirements presented by the Examiner. To impose an improper requirement upon applicants and then to hold the application as abandoned for failure to comply with the improper requirement violates the PTO rules and exceeds the Examiner's authority. Furthermore, the Examiner has created a substantive rule which is above and beyond the rulemaking authority of the PTO, and is therefore invalid.

In the *Application of Mott*, 539 F.2d 1291, 190 U.S.P.Q. 536 (C.C.P.A. 1976), the applicant had conflicting claims in multiple applications. The C.C.P.A. held that action by the Examiner which would result in automatic abandonment of the application was legally untenable. *Id.* at 1296, 190 U.S.P.Q. at 541. In the present application, the Examiner has asserted that there are conflicting claims in multiple applications, and by affirmatively requiring action by the applicants, the Examiner has imposed a condition that will effectively result in an automatic abandonment upon failure to comply with the Administrative Requirement. Therefore, under *Mott's* analysis, the conditional abandonment of this application is legally untenable.

**3. The Examiner's Administrative Requirement Is
An Unlawfully Promulgated Substantive Rule Imposed
In Violation Of The Administrative Procedures Act**

The Administrative Procedure Act, 5 U.S.C. § 555 (1999), (APA), requires federal agencies to publish all substantive in advance for the public's notice and comment. *See generally Paralyzed Veterans of Am. v. West*, 138 F.3d 1434, 1435-1436 (Fed. Cir. 2000) (discussing the notice and comment requirements under §§ 552 and 553 of the APA). Any regulation established by the PTO must comply with the notice and comment requirement imposed by the APA. *See* 35 U.S.C. § 2(b)(B). The Administrative Requirement imposed on applicants is a substantive rule, as that term has been defined by case law interpreting section 553 of the APA, which should be voided for the PTO's failure to comply with the APA.

In contrast to "interpretive rules," which do not require notice and comment, the issuance of "substantive rules" require agencies to publish a proposed rule in the Federal Register and allow for the public's opportunity to comment on the proposed rule. *See* 5 U.S.C. § 553 (1999). The Federal Circuit has described the difference between "substantive rules" and "interpretive rule" as follows:

In general terms, case law has defined “substantive rules” as those that effect a change in existing law or policy or which affect individual rights and obligations. “Interpretive rules,” on the other hand, clarify or explain existing law or regulations and are exempt from notice and comment under section 553(b)(A). As our sister circuit has explained: “[a]n interpretive statement simply indicates an agency’s reading of a statute or rule. It does not intend to create new rights or duties, but only reminds affected parties of existing duties.” *Orengo Caraballo v. Reich*, 11 F.3d 186, 195 (D.C. Cir. 1993) (internal quotes omitted).

Paralyzed Veterans of Am., 138 F.3d at 1436.

The Administrative Requirement at issue goes beyond merely interpreting or clarifying existing PTO regulations because it imposes upon the applicants new duties to make affirmative determinations regarding conflicting claims or file terminal disclaimers at a premature time to avoid abandonment. In fact, far from merely interpreting or clarifying the PTO’s regulations, the terms of the Administrative Requirement directly contradict the PTO’s guidelines addressing the Examiner’s responsibilities regarding double patenting issues. *See* Section III.B.1., *supra*. Contrary to the Examiner’s position articulated in the March ’01 Communication, none of the provisions contained in the Administrative Requirement restate or remind applicants of their existing duties under the PTO’s regulations. Instead, the Administrative Requirement drastically changes the scheme under which the Examiner is required to address double patenting concerns by imposing new obligations on applicants that plainly affect their individual rights and obligations under existing patent laws and regulations.

Additionally, the Examiner and the PTO lack the legislative authority to impose the terms of the Administrative Requirement even if the PTO complied with the provisions of the APA. Because the PTO lacks the requisite statutory authority to issue substantive rules, the PTO cannot unilaterally impose the Administrative Requirement, which substantively changes the applicants’ rights and obligations under the patent laws.

A fundamental premise of administrative law is that administrative agencies must act solely within their statutory grant of power. *See Chevron v. Natural Resources Defense Council*, 467 U.S. 837, 842-845 (1984). The PTO's authority to establish regulations are set forth in 35 U.S.C. § 2(b)(2) (West 2001). Under section 2(b)(2), the PTO can only issue regulations that "govern the conduct of the proceedings in the [PTO]" and govern other procedural aspects of the application process. *Cf. Animal Legal Defense Fund v. Quigg*, 932 F.2d 920, 930, 18 U.S.P.Q.2d 1677, 1686 (Fed. Cir. 1991) (concluding that the broadest grant of rulemaking authority (at the time, 35 U.S.C. § 6(a) permitting the Commissioner to promulgate regulations directed to "the conduct of proceedings" in the PTO) does not grant the Commissioner authority to issue substantive rules of patent law).

As the PTO Commissioner has no power to promulgate substantive rules, the Commissioner receives no deference in his interpretation of the statutes and laws that allegedly give rise to the instant requirement. *See Merck & Co., Inc. v. Kessler*, 80 F.3d 1543, 1550 (Fed. Cir. 1996), citing, *Chevron v. Natural Resources Defense Council*, 467 U.S. 837 (1984). When agency rules either (a) depart from existing practice or (b) impact the substantive rights and interests of the affected party, the rule must be considered substantive. *See National Ass'n of Home Health Agencies v. Scheiker*, 690 F.2d 932, 949 (D.C. Cir. 1982), *cert. denied*, 459 U.S. 1205 (1983). The Administrative Requirement is clearly a substantive rule impacting applicants' rights and interests under the patent laws.

a. The Administrative Requirement Is Substantive Because It Radically Changes Long Existing Patent Practice By Creating A New Obligation Upon Applicants Not Authorized By 37 C.F.R. § 1.78(b)

The Examiner's Administrative Requirement departs from long existing practice under 37 C.F.R. § 1.78(b), because (1) it creates and imposes a new obligation on applicants to avoid

abandonment of the application based on the unsupported allegation that conflicts exist between claims of the related co-pending applications, and (2) it effectively creates a final double patenting rejection result without requiring the PTO to affirmatively make a double patenting rejection. Long existing patent practice recognizes only two types of double patenting: 1) double patenting based on 35 U.S.C. § 101 (statutory double patenting) and 2) double patenting analogous to 35 U.S.C. § 103 (the well-known obviousness type double patenting).⁷ These two well established types of double patenting use an objective standard to determine when they are appropriate⁸ and have a determinable result on the allowability of the pending claims.

The Examiner's new Administrative Requirement represents a radical departure from long existing patent practice relevant to conflicting claims between co-pending applications of the same inventive entity. The two well established double patenting standards are based on the conduct of an objective analysis of comparing pending and allowed claims. However, in the present application, there are no **allowed** claims and the Examiner has not conducted any objective analysis of the claims. The Examiner's requirement to avoid a double patenting rejection presumes that conflicts exist between pending claims in the present application and pending claims in the co-pending applications. This presumption of conflicts between claims represents a radical departure from long existing patent practice as defined by 37 C.F.R.

§ 1.78(b), which states:

⁷ M.P.E.P. § 804(B)(1) states, in an admittedly awkward fashion, that the inquiry for obviousness type double patenting is analogous to a rejection under 35 U.S.C. § 103: "since the analysis employed in an obvious-type double patenting determination parallels the guidelines for a 35 U.S.C. § 103 rejection, the factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 U.S.P.Q. 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are employed when making an obvious-type double patenting analysis".

⁸ The objective test for same invention double patenting is whether one of the claims being compared could be literally infringed without literally infringing the other. The objective test for obviousness type double patenting is the same as the objective nonobviousness requirement of patentability with the difference that the disclosure of the first patent may not be used as prior art.

Where two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application.

Clearly, the only requirement authorized by the rule is the elimination of conflicting claims from all but one application where conflicting claims have been determined to exist. Furthermore, in order to determine that conflicting claims do in fact exist in multiple applications, the only possible analysis is obviousness-type double patenting, since there are no allowed or issued claims by which to employ the 35 U.S.C. § 101 statutory double patenting analysis. Once obviousness-type double patenting analysis has been applied and conflicting claims have been determined to exist, M.P.E.P. § 804 mandates that only a **provisional** obviousness-type double patenting rejection is possible until claims from one application are allowed.

In summary, the Examiner's new Administrative Requirement departs from long-established practice. As such, the Examiner's Administrative Requirement is a substantive rule beyond the authority of the PTO and imposed in violation of the APA.

b. The Administrative Requirement Is A Substantive Rule Because It Adversely Impacts The Rights And Interests of Applicants Under The Patent Laws

The rights and benefits accorded to an owner of a U.S. patent are solely statutory rights. *Merck & Co., Inc. v. Kessler*, 80 F.3d 1543 (Fed. Cir. 1996). The essential statutory right in a patent is the right to exclude others from making, using and selling the claimed invention during the term of the patent. Courts have recognized that some purported new procedural rules of the PTO are actually substantive rules, e.g., when the new rule made a substantive difference in the ability of the applicant to claim his discovery. *See Fressola v. Manbeck*, 36 U.S.P.Q.2d 1211,

1214 (D.D.C. 1995) (citing *In re Pilkington*, 411 F.2d 1345, 1349; 162 U.S.P.Q. 145 (C.C.P.A. 1969) and *In re Stepan*, 394 F.2d 1013, 1019; 156 U.S.P.Q. 143 (C.C.P.A. 1967)).

The Administrative Requirement, on its face and as applied here, is an instance of a PTO rule resulting in a substantive difference in applicants' ability to claim their invention and, therefore, must be considered a substantive rule. The Administrative Requirement imposes unwarranted obligations or requirements on the applicants and denies applicants' rights and benefits expressly conferred by the patent statute. The measure of the value of these denied rights and benefits is that the Administrative Requirement, as applied here, would deny applicants the full and complete PTO examination of applicants' claims on their merits, as specified by 37 C.F.R. § 1.105. To require applicants to file terminal disclaimers in each related application terminally disclaiming each of the other applications based on the PTO's incomplete examination on the merits would deny applicants the benefit of the full patent term of 17 years on each of the applicants' respective applications. To require applicants to resolve all conflicts compels them to narrow their claims without the benefit of a substantive determination regarding how the Examiner may potentially interpret applicants' claims. Indeed, to require applicants to resolve all potential conflicts, where no conflicts have been identified, denies applicants the benefit of the full scope of the pending claims. Applicants respectfully submit that the Administrative Requirement has a profound impact on their rights and interests in the presently claimed invention.

C. Conclusion Regarding The Administrative Requirement

By imposing the Administrative Requirement on applicants, the Examiner has reversed the statutorily imposed scheme governing examination by improperly shifting the burden of examination to the applicants. The imposition of this obligation on the applicants, which has a

serious impact on the their interests and substantive rights under the patent laws and regulations, is not justified by the circumstances or supported by 37 C.F.R. §§ 1.56, 1.63, 1.78(b) or other applicable legal authority. Without justification or authority, the Examiner has imposed a requirement affecting applicants' substantive rights and obligations that exceeds the PTO's statutory authority and violates the requirements of the APA.

V. ANY FURTHER RESPONSE TO THE ADMINISTRATIVE REQUIREMENT SHOULD BE DEFERRED IN ORDER TO ADVANCE PROSECUTION

Even if the PTO's stance on the Administrative Requirement was proper and within its statutory authority — which applicants adamantly maintain is not the case — any compliance with the Administrative Requirement should be deferred because compliance at this stage hinders the advancement of prosecution. This is because the claims may not be in their final form, and the filing of terminal disclaimers based on claims that may change is premature and counterproductive.

The MPEP directives regarding double patenting rejections spell out a straightforward procedure that is clearly intended to streamline prosecution. First, to implement the requirements of Rule 78(b), which addresses conflicting claims among applications, MPEP § 822.01 directs the Examiner to treat conflicting claims as follows:

Where claims in one application are unpatentable over claims of another application of the same inventive entity because they recite the same invention, a complete examination should be made of the claims of each application and all appropriate rejections should be entered in each application, including rejections based upon prior art. The claims of each application may also be rejected on the grounds of provisional double patenting on the claims of the other application whether or not any claims avoid the prior art. MPEP § 822.01 (7th Ed., July, 1998), (emphasis added).

As set forth above in Section IV, the Examiner here has made no effort to examine the co-pending applications nor made any rejection to achieve the elimination of conflicting claims from all but one co-pending application. He has simply ignored these mandates.

That notwithstanding, once the Examiner has identified conflicting claims, MPEP § 822.01 then mandates that only a **provisional** obviousness-type double patenting rejection is to be made, and that the provisional rejection is to be maintained until claims from one application are allowed:

The “provisional” double patenting rejection should continue to be made by the examiner in each application as long as there are conflicting claims in more than one application unless that “provisional” double patenting rejection is the only rejection remaining in one of the applications. If the “provisional” double patenting rejection in one application is *the only rejection remaining* in that application, the examiner should then withdraw that rejection and permit the application to issue as a patent, thereby converting the “provisional” double patenting rejection in the other application(s) into a double patenting rejection at the time the one application issues as a patent. MPEP § 822.01 (7th Ed., July, 1998), (*emphasis added*).

Therefore, the MPEP requires that only a **provisional** double patenting rejection is to be issued until all other bases for rejection (e.g., 35 U.S. C. §§ 102, 103, 112) are removed. The clear import of this requirement is that imposing a nonprovisional double patent rejection before that point would be **counterproductive to orderly advancement of prosecution**.

Premature imposition of a nonprovisional double patenting rejection is counterproductive because pending claims may undergo significant amendment (or even cancellation) based on, e.g., statutory rejections under §§ 102, 103 and 112, and so forth.

For example, amendments and cancellations of the claims in response to statutory rejections will often remove preexisting conflicts, thereby rendering a previously-made provisional double patenting rejection moot. In that scenario, not only have the applicants and PTO wasted valuable resources in addressing a later-mooted double patenting issue, but applicants may have unnecessarily terminally-disclaimed a portion of his/her patent term.

In the application at hand, the claims have not been allowed and, therefore, the claims are quite possibly not in their final form. Therefore, resolution of any potential double patenting

issues is premature and should be deferred until the claims are otherwise in condition for allowance.

In summary, the MPEP clearly requires that the Examiner can issue double patenting rejections only as provisional rejections until all other rejections have been resolved. Applicants respectfully request that any further action demanded by the PTO in response to the Administrative Requirement be deferred until the claims are deemed to be otherwise allowable.

VI. FOR THE EXAMINER TO ACT TO ABANDON THIS APPLICATION WOULD BE PREMATURE WHEN THE ISSUE OF THE ADMINISTRATIVE REQUIREMENT IS PRESENTLY PENDING BEFORE THE COMMISSIONER ON PETITION

On March 7, 2000, applicants filed a petition to the Commissioner under 37 C.F.R. § 1.181 for application serial number 08/470,571 requesting that the Examiner be required to withdraw the Administrative Requirement as improper. Thus, this petition has been pending with the Commissioner for nearly 18 months and likely will result in a decision in the near future.

In view of the fact that this issue is now before the Commissioner on a related application, any decision by the Examiner to abandon this application based on the Administrative Requirement would be premature. It is in both the PTO's and applicants' best interests to defer any such decision on the present application until the Commissioner makes a final determination on the above petition.

VII. AS A DESIGNATED "B" APPLICATION PURSUANT TO THE CONSOLIDATION AGREEMENT, THIS APPLICATION IS TO BE HELD IN ABEYANCE PENDING RESOLUTION OF ALL MATTERS IN THE "A" APPLICATION COUNTERPART

As set forth in Section I above, pursuant to the consolidation agreement, 169 of the 329 copending relating applications were abandoned as a result of applicants' consolidation of the applications into "A" applications and "B" applications. Nearly all of the claims were placed in the 79 "A" applications, which would be prosecuted with special dispatch until the claims were

in allowable form. If an "A" Application included claims that became finally rejected, these claims would be moved to the "B" Application counterpart. Under the consolidation agreement, the PTO agreed to hold each "B" Application in abeyance until final resolution was achieved in its "A" Application counterpart.

The instant application is a "B" Application. Because prosecution of this application's "A" Application counterpart is still ongoing, the instant application should be held in abeyance. Therefore, separate and apart from any issue regarding the Administrative Requirement, the instant application should not be caused to be abandoned by the Examiner for this reason alone.

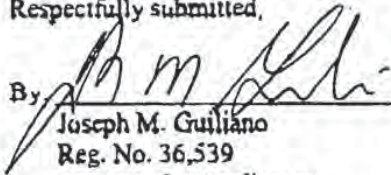
Serial No. 08/459,507
Any. Docket No. 05634 0232

VIII. CONCLUSION

Applicants respectfully request withdrawal of the determination in the March '01 Communication that applicants' prior filings were nonresponsive and earnestly solicit reconsideration of the instant application.

Respectfully submitted,

By

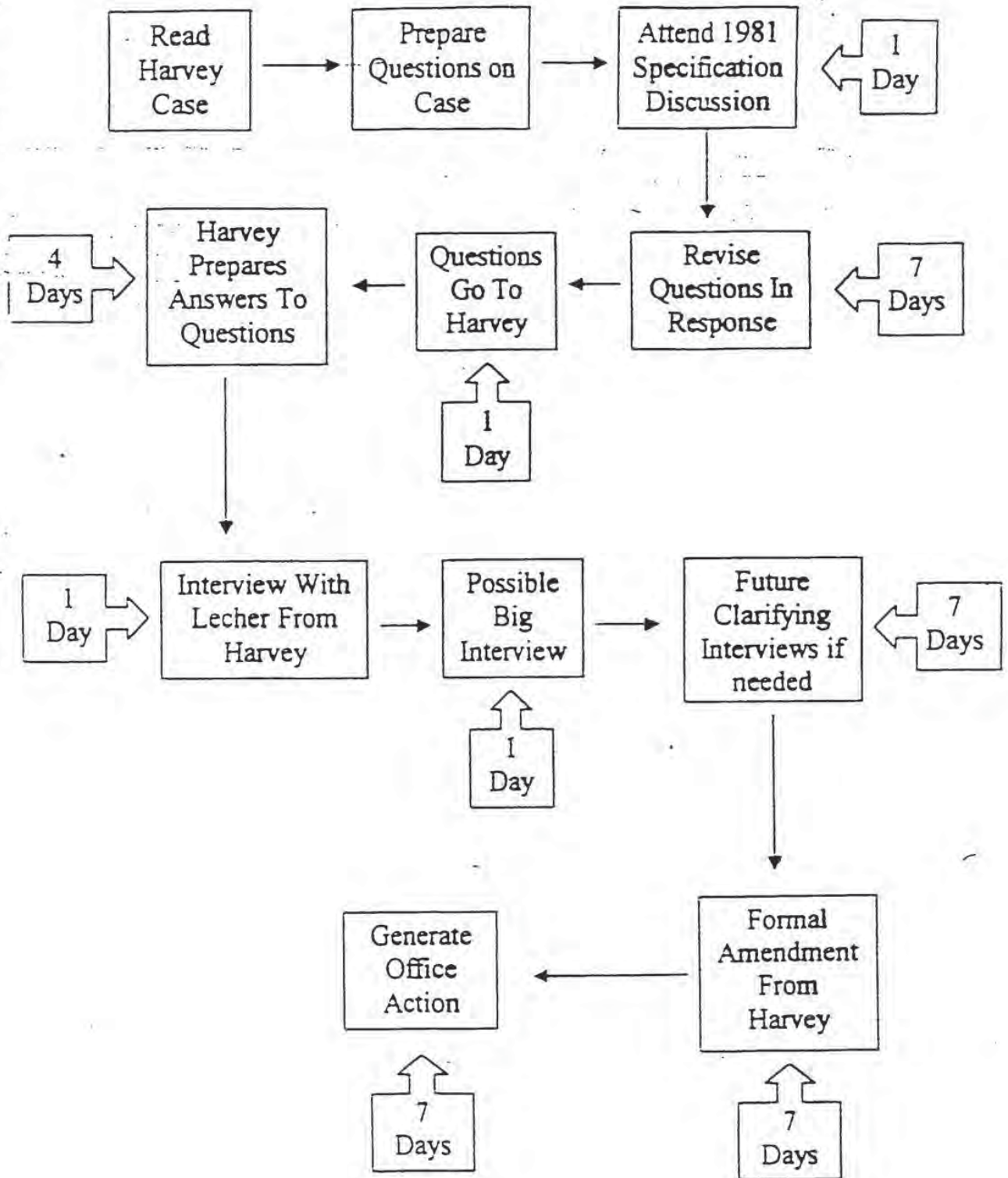

Joseph M. Guiliano
Reg. No. 36,539

Attorney for Applicants
c/o FISH & NEAVE
1251 Avenue of the Americas
New York, New York 10020-1104
Tel.: (212) 596-9000
Fax: (212) 596-9090

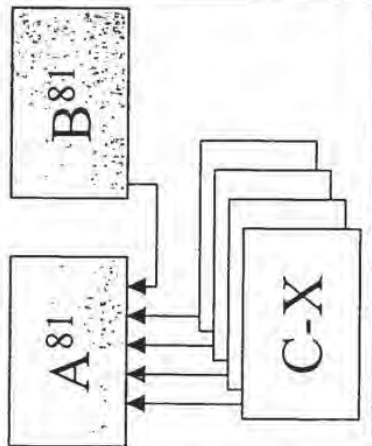
Date: August 21, 2001

EXHIBIT A

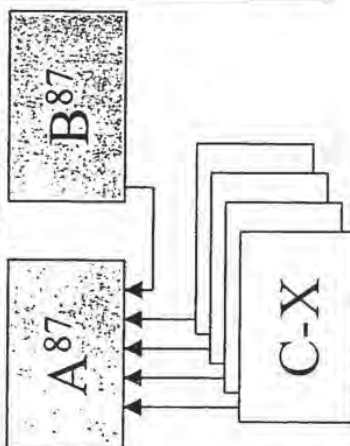
Harvey Project Process



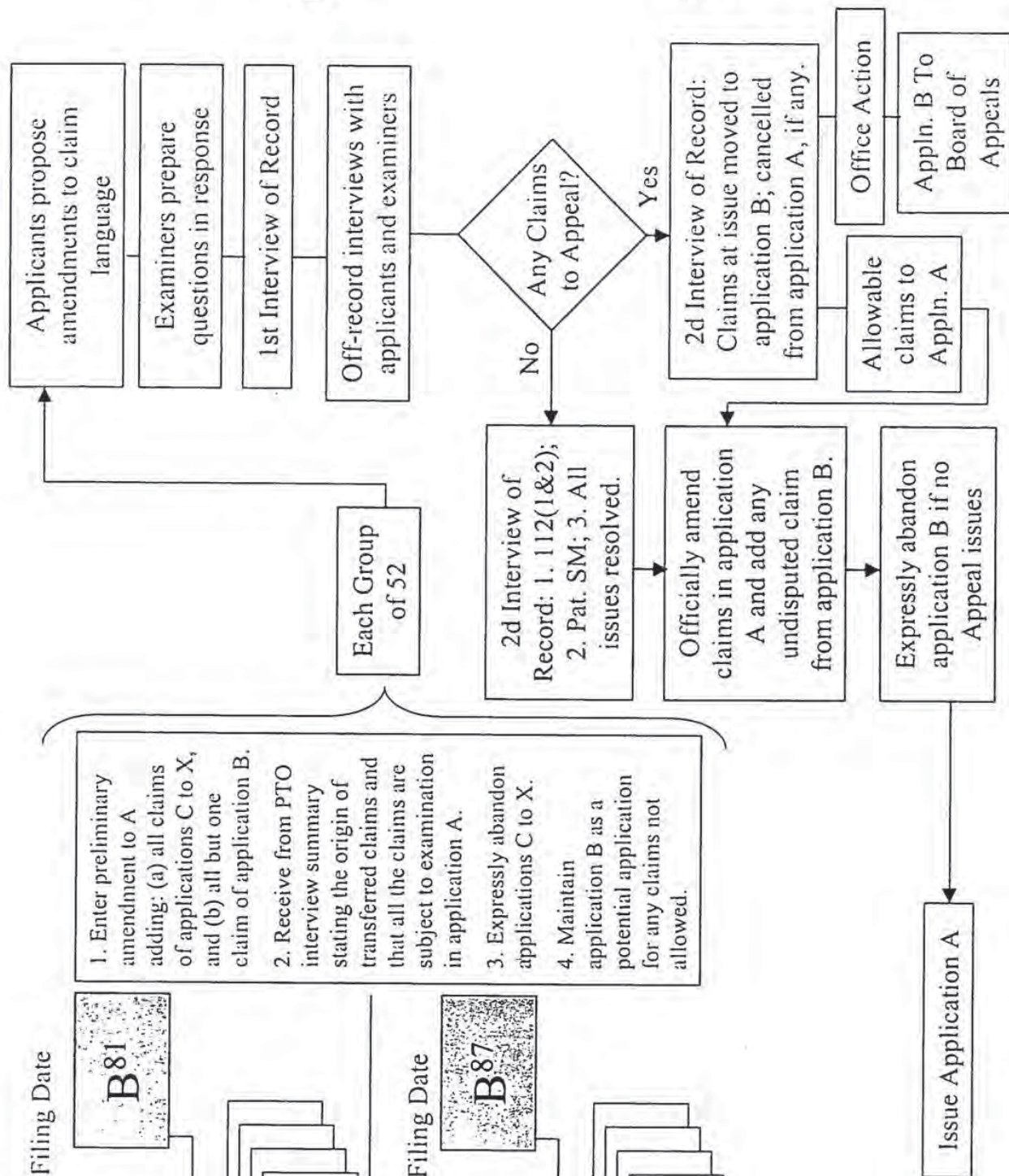
1981 Effective Filing Date



1987 Effective Filing Date



1. Enter preliminary amendment to A adding: (a) all claims of applications C to X, and (b) all but one claim of application B.
2. Receive from PTO interview summary stating the origin of transferred claims and that all the claims are subject to examination in application A.
3. Expressly abandon applications C to X.
4. Maintain application B as a potential application for any claims not allowed.





PATENT

21/leg for
ht
9-1-01
4
NP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

John C. Harvey and James W. Cuddihy

Group Art Unit: 2699

Appl. No.: 08/459,507

Examiner: Luther, W.

Filing Date: June 2, 1995

Docket No.: 05634.0232

For: **SIGNAL PROCESSING APPARATUS
AND METHODS**

RECEIVED
AUG 24 2001
Technology Center 2600

Box: Fee-Amendment

Assistant Commissioner for Patents
Washington DC 20231

REQUEST FOR EXTENSION OF TIME PURSUANT TO 37 C.F.R. § 1.136(a)

Applicants respectfully request a **four**-month extension of time in which to respond to the Office Action mailed March 21, 2001, for which a response period expiring on April 21, 2001, was set. The extended period expires on August 21, 2001.

Check No. 3625 is included in the amount of **\$1,390.00** for the 37 C.F.R. § 1.136(a) extension. Please charge any additional fees required in connection with this communication to the deposit account of **Hunton & Williams**, deposit account number **50-0206**.

Respectfully submitted,

Thomas J. Scott, Jr.
Registration No. 27,836
Donald J. Lecher
Registration No. 41,933
Attorneys for Applicants
(202) 955-1938 (telephone)

Dated: August 20, 2001

HUNTON & WILLIAMS
1900 K Street, N.W.,
12th Floor
Washington, DC 20006-1109

08/22/2001 SHINASS1 00000107 08459507

01 FC:118

1390.00 OP



#23
9-1-01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of

John C. Harvey and James W. Cuddihy

Serial No. 08/459,507

Filed: June 2, 1995

For: **SIGNAL PROCESSING APPARATUS
AND METHODS**

Examiner: Luther, W.

Group Art Unit: 2699

Atty. Docket No. 05634.0232

ASSOCIATE POWER OF ATTORNEY

Commissioner for Patents
Washington, DC 20231

Sir:

The undersigned, Mr. Donald J. Lecher, attorney of record in the present application,
hereby appoints

Joseph M. Guiliano, Reg. No. 36,539

as Associate Attorney with full power to prosecute the above-identified application and to
transact all business connected therewith in the U.S. Patent and Trademark Office.

Respectfully submitted,

By:

Donald J. Lecher

Reg. No. 41,933

Date: August 20, 2001

HUNTON & WILLIAMS

1900 K Street, N.W.
Washington, D.C. 20006-1109
Telephone: (202) 955-1938
Facsimile: (202) 778-2201

RECEIVED
AUG 24 2001
Technology Center 2600



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/459,507	06/02/95	HARVEY J	5634.202

021967
HUNTON AND WILLIAMS
1900 K STREET N W
WASHINGTON DC 20006

WM11/0321

EXAMINER
LUTHER, W

ART UNIT	PAPER NUMBER
2699	

DATE MAILED: 03/21/01 ^{2a}

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Art Unit: 2664

The reply filed on July 6, 1999, is not fully responsive to the prior Office action issued on March 2, 1998, because of the following omission(s) or matter(s): the deficient July 6, 1999, reply failed to sufficiently supplement the deficient September 2, 1998, reply which failed to comply with the Administrative Requirement. See 37 CFR § 1.111.

The applicants object strenuously to the Office's requirement that they review their hundred of applications, containing over ten thousand claims, and eliminate conflicting claims or else certify that there are no conflicting claims. The applicants argue that the USPTO requirement is "contrary to law" and constitutes substantive rulemaking absent notice and comment.

In fact, under 37 C.F.R. § 1.63 and § 1.56, the applicants are required to 1) review and understand the contents of each specification, including all claims and amendments, and 2) eliminate conflicting claims or notify the Office of conflicting claims. Upon review by the Office of a sampling of the specifications and the thousands of claims, it is a fact that some of the claims are conflicting. Assuming the oaths made under 37 C.F.R. § 1.63, are sound, then the applicants must not be familiar with their own applications.

These regulations do not shift the burden of examination onto the applicants, as the applicants have contended. The Office may examine each application regardless of the content of the applicants' certifications. However, the applicants must present claims properly. In re Ochiai, et

Art Unit: 2664

al., 71 F.3d 1565, 1572 (Fed. Cir. 1995), citing In re Dillon, 919 F.2d 2d 688, 695 (Fed. Cir. 1990). The PTO regulations simply require that the applicants certify that they have reviewed and understand *all* of their own specifications, including claims and amendments, and that they either 1) cancel or withdraw unpatentable claims, or else 2) disclose to the Office all information material to the patentability of each claim. In short, the regulations require good faith filings by the applicants. The reiteration of these regulatory principles by the primary examiner, in the form of the Administrative Requirement, is not controversial. The Office merely asked for something the applicants have been and are required to do anyway, before being entitled to USPTO examination of their applications. Under the Administrative Requirement mailed in the Office action issued on March 2, 1998, the applicants are given reasonable choices:

- (1) file terminal disclaimers in each of the [related] applications terminally disclaiming each of the other . . . applications, or;
- (2) provide an affidavit attesting to the fact that all claims in the [related] applications have been reviewed by [the applicants] and that no conflicting claims exists between the applications. [The applicants] should provide all relevant factual information including the specific steps taken to insure that no conflicting claims exist between the applications, or;
- (3) resolve all conflicts between claims in the [identified] applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the [related] applications. (Note: the five examples [in the Administrative Requirement Appendix] are merely illustrative of the overall problem. Only correcting the five identified conflicts would not satisfy the requirement.)

It is not solely the burden of the Office, as the applicants imply, to review each of the over ten

Art Unit: 2664

thousand of the applicants' claims and determine, for each claim, whether the applicants are violating their regulatory duties of knowledge of claims and disclosure or elimination of conflicting material. Rather, the applicants have an initial and continuing burden to comply with 37 C.F.R. § 1.56 and 1.63, regardless of whether the Office discovers that the applicants are in violation of the regulations under 37 C.F.R. § 1.78(b). Given documented evidence, through discovery of various conflicting claims, the applicants should review their compliance with 37 C.F.R. § 1.56 and 1.63 (as well as § 1.75, requiring that claims "differ substantially" and are not "unduly multiplied"). An Office requirement including a request for additional assurances is not only reasonable in view of the applicants own knowledge of over ten thousand claims, but advisable in the protection of the "public interest." 37 C.F.R. § 1.56(a).

As the applicants assert, a substantive rule is one that "affects individual rights and obligations." Animal Legal Defense Fund, et al. v. Quigg, et al., 932 F.2d 920, 927 (Fed. Cir. 1991). The applicants identify no statutory "right" that the Administrative Requirement abrogates. The applicants cannot credibly argue they have a "right" to file conflicting claims, or to be unaware of the contents of their own specifications, amendments, or claims. The applicants have no "right" to fail to remove conflicting claims from co-pending applications, and certainly, the applicants have no "right" to fail to notify the Office of conflicting claims. The applicants also have no "right" to shop among the USPTO examiners for conflicting interpretations of the applicants' claims, as implied by the petition under 37 C.F.R. § 1.181, filed on March 7, 2000, in

Art Unit: 2664

co-pending application no. 08/470,571, which demands an exercise of the supervisory authority of the Commissioner. See the co-pending application no. 08/470,571, Petition at page 32 lines 10-12.

To the contrary, the applicants have an initial and continuing obligation to understand the contents of their own claims, and either eliminate conflicts or notify the Office of the conflicts. In fact, the additional option of terminal disclaimer, given the applicants in the Administrative Requirement, allows the applicants an option the USPTO is not required to offer. The USPTO could simply have required the applicants to review their over ten thousand of claims and either eliminate conflicts or certify that no conflicts exist.

The Commissioner has the right to conduct "orderly proceedings within his office so long as he does not violate the statute." Ethicon, Inc., v. Quigg, 849 F.2d 1422, 1428 (Fed. Cir. 1988). As The applicants have alleged no statutory rights that the Requirement abrogates, the Commissioner is well within his discretion to impose this procedural Administrative Requirement.

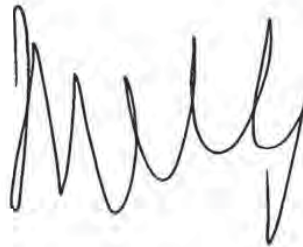
Application/Control Number: 08/459,507

Page 6

Art Unit: 2664

The applicants are given a TIME PERIOD of ONE (1) MONTH or THIRTY (30) DAYS from the mailing date of this notice, whichever is longer, within which to supply the omission or correction in order to avoid abandonment. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR § 1.136(a).

Primary Examiner
William Luther
A.U. 2664

A handwritten signature in black ink, appearing to read 'W. Luther', with a stylized, cursive script.



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

Paper No. 19

THOMAS J. SCOTT, JR.
HUNTON & WILLIAMS
1900 K STREET, N.W.
12TH FLOOR
WASHINGTON, D.C. 20006

In re Application of
John C. Harvey et al.
Application No. 08/459,507
Filed: June 2, 1995
Attorney Docket No. 05634.232

COPY MAILED

FEB 23 2001

**OFFICE OF PETITIONS
A/C PATENTS**

NOTICE

This is a notice regarding your request for acceptance of a fee deficiency submission under 37 CFR 1.28. On September 1, 1998, the Court of Appeals for the Federal Circuit held that 37 CFR 1.28(c) is the sole provision governing the time for correction of the erroneous payment of the issue fee as a small entity. See DH Technology v. Synergystex International, Inc. 154 F.3d 1333, 47 USPQ2d 1865 (Fed. Cir. Sept. 1, 1998).

The Office no longer investigates or rejects original or reissue applications under 37 CFR 1.56. 1098 Off. Gaz. Pat. Office 502 (January 3, 1989). Therefore, nothing in this Notice is intended to imply that an investigation was done.

Your fee deficiency submission under 37 CFR 1.28 is hereby **ACCEPTED**.

Inquiries related to this communication should be directed to the Office of Petitions Staff at (703) 305-9285.

This file is being forwarded to Technology Center 2600.

Irvin Dingle
Irvin Dingle

Petitions Examiner
Office of Petitions
Office of the Deputy Commissioner
for Patent Examination Policy



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
John C. Harvey and James W. Cuddihy:

Serial No.: 08/459,507

Filed: June 2, 1995

For: **SIGNAL PROCESSING APPARATUS
AND METHODS**

Group Art Unit: 2737
Examiner: FAILE, A.
Attorney Docket: 05634.0232

#18

**ATTN: APPLICATION PROCESSING DIVISION,
SPECIAL PROCESSING & CORRESPONDENCE BRANCH**

Commissioner for Patents and Trademarks
Washington, D.C. 20231

RECEIVED

JAN 4 2001

OFFICE OF PETITIONS

**NOTIFICATION OF CHANGE IN STATUS UNDER 37 C.F.R. § 1.28(B) AND
PAYMENT OF FEE DEFICIENCIES UNDER 37 C.F.R. § 1.28(C)**

Sir:

Upon review of the claims as filed in the above-referenced application and the "field of use" clause in the application's assignee's license contract with a firm that is a large entity, it has come to the applicant's attention that the present application requires large entity status.

Pursuant to 37 C.F.R. § 1.28(b), Attorneys for Applicants hereby provide notification that Personalized Media Communications, L.L.C. ("PMC"), the assignee of the above referenced application Serial No. 08/459,507 does not qualify for small entity status under M.P.E.P. § 509.02 and 37 C.F.R. § 1.9 for paying reduced patent fees for the above referenced application and that the claim for small entity status for the above referenced application Serial No. 08/459,507 is hereby withdrawn.

Enclosed herewith is assignee's check no. 3174 for the recalculated fees of **\$365.00** to convert the above-referenced application from small to large entity in accordance with 37 C.F.R. § 1.28(c). The following table identifies each of applicant's

01/04/2001 SLUANG1 00000006 08459507

01 FC:699

365.00 OP

Adjustment date: 01/04/2001
01/04/2001 SLUANG1 00000006 08459507
01 FC:699 -365.00 OP
01/08/2001 LG1BBS 00000038 08459507
01 FC:197 365.00 OP

submissions to the Patent and Trademark Office ("PTO") necessitating the enclosed payment and the amount to bring the application in conformity to large entity status.

Description of Submission to PTO	Amount Deficient
New application filing:	\$365.00
Preliminary amendments:	
Response to first action new claim fees:	
Response to first action extension of time:	
Response to second action new claim fees:	
Response to second action extension of time:	
Response to final action new claim fees:	
Response to final action extension of time:	
1.129(a) submission:	
TOTAL	\$365.00

Applicants respectfully request the records of the PTO be revised to indicate that the above-referenced application should now be considered the application of a large entity.

The Commissioner is hereby authorized to charge or credit the deposit account of **Hunton & Williams**, Deposit Account No. **50-0206**, for any insufficient funds or overpayments in connection with the filing of the instant papers.

Date: December 29, 2000
HUNTON & WILLIAMS
1900 K Street, N.W.
12th Floor
Washington, D.C. 20006

Respectfully submitted,



Thomas J. Scott, Jr.
Reg. No. 27,836
Donald J. Lecher
Reg. No. 41,933
Attorneys for Applicants
Tel: (202) 955-1938

Transaction List

Search by

☐ Accounting Date:
(MMDDYY)

Operator ID:

Accounting Date

Starts:

Ends:

☒ Name/Number:

☐ Attny Docket No:

☐ Deposit Account No.:

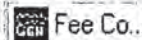


Accounting Date	Operator ID	Seq. No.	Txn Src	Fee Code	St	Amount	Name/Number	Dep Acct
10/05/1998	DSAVOY	15	SALE	117	R	950.00	08459507	
10/05/1998	DSAVOY	14	SALE	102	V	82.00	08459507	
10/05/1998	DSAVOY	13	SALE	103	V	88.00	08459507	
03/28/1997	340BA	7701	CRDA	103	A	374.00	08459507	
03/28/1997	340BA	7601	CRDA	117	A	930.00	08459507	
07/21/1995	030MP	3006301	CRDA	101	A	365.00	08459507	083038
07/19/1995	24QAH	4502	CRDA	101	A	365.00	08459507	
07/19/1995	24QAH	4501	CRDA	201	A	365.00	08459507	
06/19/1995	24QAH	8404	CRDA	201	A	365.00	08459507	



Adjustment Detail

Authorization Detail



2:58 PM

Serial No. 08/459,507
Docket No. 05634.0232

17/Supp
E
7-23-99
NP

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
John C. Harvey and James W. Cuddihy:

Serial No.: 08/459,507

Filed: June 2, 1995

For: **SIGNAL PROCESSING APPARATUS
AND METHODS**

Group Art Unit: 2737

Examiner: FAILE, A.

Attorney Docket: 05634.0232

Received

JUL 06 1999

Group 2700

Assistant Commissioner for Patents
Washington, D.C. 20231

SUPPLEMENTAL AMENDMENT UNDER 37 C.F.R. § 1.115

Sir:

Applicants herewith submit the following Supplemental Amendment and
Remarks.

I. AMENDMENT

In the Claims:

*Claim 2 has been amended. Claims 3-43 have been cancelled. Claim 2 remains as
the sole claim in the application.*

Please cancel claims 3-43 without prejudice.

Please amend claim 2 as follows:

2. (Three Times Amended) A method of processing signals at a receiver
station, said receiver station having a processor for processing digital data
included in a broadcast or cablecast transmission, said method comprising the
steps of:

receiving a first broadcast or cablecast transmission;

E1
Cont

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT

In re Application of:

John C. Harvey and James W. Cuddihy:

Group Art Unit: 2737

Serial No.: 08/459,507

Examiner: FAILE, A.

Filed: June 2, 1995

Atty. Docket: 05634.0232

For: SIGNAL PROCESSING APPARATUS
AND METHODS

Received

JUL 06 1999

Group 2700

TRANSMITTAL LETTER

BOX: NON-FEE AMENDMENT

Assistant Commissioner of Patents
Washington, D.C. 20231

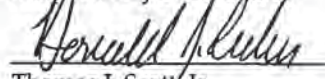
- [X] Amendment under 37 C.F.R. § 1.115
[] Request for Extension of Time Pursuant to 37 C.F.R. § 1.136(a)
[] An additional claim fee is required, and is calculated as shown below:

	(Col 1)		(Col 2)	(Col 3)		
	Claims Remaining After Amendment		Highest No. Previously Paid for	Present Extra	Rate	Additional Fee
Total	*1	Minus	**	=	x \$ 18.00	\$0.00
Indep.	*1	Minus	***	=	x \$ 78.00	\$0.00
First Presentation of Mult. Dep. Claim					x \$ 260.00	\$0.00
Total Additional Filing Fee for Request for Extension of Time						\$0.00
Total Fee Enclosed						\$0.00

- * If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3.
** If the "Highest Number Previously Paid For" in this space is less than 20, write "20" in this space.
*** If the "Highest Number Previously Paid For" in this space is less than 3, write "3" in this space. "The Highest Number Previously Paid For" (Total or Independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment or the number of claims originally filed.

- [] Howrey & Simon check no. _____ in the amount of \$0.00 is enclosed.
[X] The Commissioner is hereby authorized to charge any additional fees, or credit any overpayment to Deposit Account No. 08-3038.
[x] Any filing fees under 37 CFR 1.16 for the presentation of extra claims.
[x] Any patent application processing fees under 37 CFR 1.17.

Respectfully submitted,



Thomas J. Scott, Jr.
Reg. No. 27,836
Donald J. Lecher
Reg. No. 41,933
Attorneys for Applicants
Tel: (202) 383-6790

Date: July 6, 1999
HOWREY & SIMON
1299 Pennsylvania Avenue, N.W.
Washington, D.C. 20004

demodulating said first broadcast or cablecast transmission to detect an information transmission thereon, said information transmission including said digital data;

detecting said digital data in said information transmission and passing said detected digital data to said processor;

storing at least some of said detected digital data at a processor interrupt signal detector at said receiver station;

*E1
canceled*
causing said processor interrupt signal detector to delete or discard said at least some of said detected digital data stored at said processor interrupt signal detector;

inputting a control signal designating a second broadcast or cablecast transmission; and

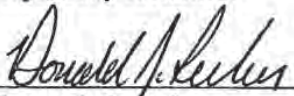
correlating said processor to cause said receiver station to cease storing selectively only some of said stored at least some of said detected digital data with said step of inputting.

II. REMARKS

In consonance with the agreement between Applicants and the Office regarding the co-pending U.S. patent applications related to this application, Applicants hereby cancel claims 3-43. Claims corresponding to the claims cancelled from the instant application have been added to App. Ser. No. 08/448,644, Atty. Dkt. No. 05634.0163. Applicants respectfully request that further prosecution of the instant application be held in abeyance pending further action in App. Ser. No. 08/448,644.

Date: July 6, 1999
HOWREY & SIMON
1299 Pennsylvania Avenue, N.W.
Washington, D.C. 20004

Respectfully submitted,


Thomas J. Scott, Jr.
Reg. No. 27,836
Donald J. Lecher
Reg. No. 41,933
Attorneys for Applicants
Tel: (202) 383-6790

PATENT

R. Ward
10/29/98
#15/amt
D
Ent.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of

John C. Harvey and James W. Cuddihy

Serial No. 08/459,507

Filed: June 02, 1995

For: **SIGNAL PROCESSING APPARATUS
AND METHODS**

Examiner: Faile, A.

Group Art Unit: 2737

Atty. Dkt. 05634.0232

Assistant Commissioner of Patents
and Trademarks
Washington, D.C. 20231

Received
SEP 02 1998
Group 2700

Sir:

**I. AMENDMENT AND REQUEST FOR RECONSIDERATION
UNDER 37 C.F.R. § 1.111**

This amendment is responsive to the Office Action mailed March 2, 1998. Applicants respectfully request that the following amendments be entered into the above-captioned application:

In the Claims

Applicants request entering the below amendments to the claims. Claims 2-4, 8-9, 15, 31, 33, 35 and 38 are amended. For the PTO's convenience, claims that remain unchanged are included below in order to allow the Examiner to review all pending claims from this response in their numerical order.

2. (Twice Amended) A method of processing signals at a receiver station, said receiver station having a processor for processing digital data [detected] included in a broadcast or cablecast transmission, said method comprising the steps of:

DCand
receiving a first broadcast or cablecast transmission;
demodulating said first broadcast or cablecast transmission to detect an information transmission thereon, said information transmission including [embedded] said digital data;
detecting said [embedded] digital data in said information transmission and passing said detected [embedded] digital data to said processor;
storing at least some of said detected [embedded] digital data at said receiver station;
inputting a control signal designating a second [received] broadcast or cablecast transmission; and
[causing] correlating said processor to cause said receiver station to cease storing selectively only some of said stored at least some of said detected [embedded] digital data [in response to said inputted control signal] with said step of inputting.

2
DCand
3. (Twice Amended) A method of communicating one or more control signals to one or more receiver stations each of which includes a processor for storing and processing [embedded] digital data [detected] included in at least one broadcast or cablecast transmission, comprising the steps of:

[(1)] receiving a first broadcast or cablecast transmission to be transmitted, said broadcast or cablecast transmission including said [embedded] digital data;

[(2)] receiving a first control signal which at said one or more receiver stations operates to designate a second broadcast or cablecast transmission;

[(3)] receiving a second control signal which operates at a transmitter station to communicate said first control signal to a first transmitter; and

[(4)] transmitting said first broadcast or cablecast transmission, said [embedded] digital data, and said first control signal, wherein said first control signal is operative at said one or more receiver stations to cause said processor to cease storing said [embedded] digital data.

4. (Twice Amended) A method of communicating one or more control signals to one or more receiver stations each of which includes a processor for storing and processing [embedded]digital data [detected]included in at least one broadcast or cablecast transmission, comprising the steps of:

*Da
Cand*
[(1)] receiving a first broadcast or cablecast transmission to be transmitted and delivering said first broadcast or cablecast transmission to one or more transmitters, said first broadcast or cablecast transmission containing said [embedded]digital data;

[(2)] receiving and storing a first control signal which at said one or more receiver stations operates to designate a second broadcast or cablecast transmission; and

[(3)] causing said first control signal to be communicated to a first of said one or more transmitters at a specific time, thereby to transmit said first broadcast or cablecast transmission, said [embedded]digital data, and said first control signal, wherein said first control signal is operative at said one or more receiver stations to cause said processor to cease storing said [embedded]digital data.

5. The method of claim 4, wherein said first control signal is received at a memory, said method further comprising the steps of:

generating said first control signal before said specific time; and
communicating said first control signal to said memory.

6. The method of claim 5, further comprising the steps of:
receiving a schedule at a controller; and
communicating one of said first control signal and a second control signal in accordance with said schedule.

7. The method of claim 4, further comprising the steps of:
receiving an intermediate generation set; and

generating said first control signal in accordance with said intermediate generation set.

8. (Amended) The method of claim 7, further comprising the [step]steps of:

storing, before said specific time, formula or item information to serve as a basis for generating said first control signal; and

using said formula or item information to serve as a basis for generating said first control signal.

9. (Amended) The method of claim 4, wherein said first control signal operates to control said one or more receiver stations to detect information contained in said second broadcast or cablecast transmission, said method further comprising the step of communicating to said first transmitter a synchronizing control signal [which enables]for enabling said processor to output at least some of said detected information.

10. The method of claim 9, wherein said synchronizing control signal is embedded in said second broadcast or cablecast transmission, said method further comprising the step of communicating said second broadcast or cablecast transmission to said first transmitter.

11. The method of claim 10, wherein said synchronizing control signal enables said one or more receiver stations to execute one or more controlled functions in response to at least a portion of said information contained in said second broadcast or cablecast transmission, said method further comprising the step of transmitting said at least a portion of said information after said specific time.

12. The method of claim 9, further comprising the step of transmitting said synchronizing control signal following said specific time.

13. The method of claim 4, further comprising the step of communicating said first broadcast or cablecast transmission to a second of said one or more transmitters prior to said specific time.

14. The method of claim 4, further comprising the step of multiplexing a signal containing said first and second broadcast or cablecast transmissions.

D4 15. (Amended) The method of claim 3, wherein said first control signal operates at said one or more receiver stations to designate a memory, said method further comprising the [step]steps of:

transmitting a third control signal, said third control signal operating at said memory [with operates at said memory to store or output programming contained in said second broadcast or cablecast transmission];

storing or outputting, at said memory, programming contained in said second broadcast or cablecast transmission in response to said third control signal.

16. The method of claim 3, wherein said first control signal enables said one or more receiver stations to execute one or more controlled functions in response to information contained in said second broadcast or cablecast transmission, said method further comprising the step of transmitting a series of instructions in said first control signal.

17. The method of claim 16, wherein a first one or more of said series of instructions controls one or more of a converter, a mass medium programming receiver, and a portion receiver to receive said information contained in said second broadcast or cablecast transmission.

18. The method of claim 17, wherein a second of said series of instructions operates at said one or more receiver stations to synchronize processing of said information contained in said second broadcast or cablecast transmission.

19. The method of claim 16, further comprising the step of transmitting operating instructions which program said one or more of said plurality of receiver stations to execute said controlled functions in response to said information contained in said second broadcast or cablecast transmission.

20. The method of claim 19, wherein a selective communications device is operatively connected to a receiver at said transmitter station and said operating instructions program said one or more receiver stations to execute said controlled functions in response to one or more receiver station execution instructions contained in said second broadcast or cablecast transmission, said method further comprising the step of outputting said selective communications device to said transmitter in response to said second control signal.

21. The method of claim 20, wherein said selective communications device comprises a memory which stores said one or more execution instructions in at least some of a message stream and said operating instructions program said one of said plurality of receiver stations to process at least one message, said method further comprising the steps of:

detecting one or more transmitter station execution instructions in said message stream;
and

programming at least one processor at said transmitter station to respond to said one or more transmitter station execution instructions.

22. The method of claim 21, wherein said operating instructions program said one or more receiver stations to detect at least a first synchronizing control signal, said method further comprising the steps of:

programming at least one processor at said transmitter station to detect said at least a first synchronizing instruction; and

generating one or more second synchronizing control signals which are effective to synchronize said one or more receiver stations.

23. The method of claim 22, wherein one or more of said first and second synchronizing control signals is an end of file signal.

24. The method of claim 3, further comprising the step of transmitting said first broadcast or cablecast transmission based on said second control signal.

25. The method of claim 24, wherein said second control signal is a schedule, said method further comprising the step of generating said first control signal in accordance with said schedule.

26. The method of claim 24, wherein one or more transmitter stations include a memory operatively connected to said first transmitter, said method further comprising the step of outputting said memory in response to said second control signal.

27. The method of claim 26, wherein said first control signal is embedded in one of said first broadcast or cablecast transmission and said second broadcast or cablecast transmission, said method further comprising the step of storing at least some of said one of said first broadcast or cablecast transmission and said second broadcast or cablecast transmission at said memory.

28. The method of claim 3, wherein at least one transmitter station includes a second transmitter, said method further comprising the step of communicating one of said first broadcast or cablecast transmission and said second broadcast or cablecast transmission to said second transmitter in accordance with said second control signal.

29. The method of claim 28, wherein said at least one transmitter station transmits a plurality of channels of programming, said method further comprising the step of multiplexing signals containing said first and second broadcast or cablecast transmissions.

30. The method of claim 28, wherein said at least one transmitter station comprises an intermediate transmission station, said method further comprising the step of embedding said first control signal in said second broadcast or cablecast transmission.

D⁵ 31. (Amended) The method of claim 2, wherein at least some of said detected [embedded] digital data is stored at a processor interrupt signal detector, said method further comprising the step of causing said processor interrupt signal detector to delete or discard said [stored] at least some of said detected [embedded] digital data stored at said processor interrupt signal detector.

32. The method of claim 2, wherein said step of inputting a control signal designating a second received broadcast or cablecast transmission comprises tuning a first receiver to receive said second broadcast or cablecast transmission in response to said control signal.

D⁶ 33. (Amended) The method of claim [2]32, wherein said control signal is embedded in said second received broadcast or cablecast transmission, said method further comprising the step of receiving at least some of said second broadcast or cablecast transmission at a second receiver.

34. The method of claim 2, further comprising the step of programming said receiver station to interrupt said processor whenever a tuner is tuned or a receiver is actuated.

D⁷ 35. (Amended) The method of claim 2, further comprising the step of controlling a selective communications device to communicate said first broadcast or cablecast transmission to a receiver.

36. The method of claim 35, wherein said selective communications device is a converter.

37. The method of claim 35, wherein said selective communications device is a storage device.

D⁸ 38. (Amended) The method of claim 2, further comprising the steps of:
detecting digital data in said second broadcast or cablecast transmission; and
discarding said [detected] digital data detected in said second broadcast or cablecast transmission until a synchronizing control signal is detected.

Please add the following new claims:

D⁹ 39. (New) A method of processing signals at a receiver station, said receiver station having a processor for processing digital data included in a broadcast or cablecast transmission, said method comprising the steps of:
receiving a first broadcast or cablecast transmission;
demodulating said first broadcast or cablecast transmission to detect an information transmission thereon, said information transmission including said digital data and a first control signal;

detecting said digital data in said information transmission and passing said detected digital data to said processor;

storing at least some of said detected digital data at said receiver station;

detecting said first control signal designating a second broadcast or cablecast transmission; and

causing said processor to cause said receiver station to cease storing selectively only some of said stored at least some of said detected digital data in correlation with said step of detecting said first control signal.

40. (New) The method of claim 39, further comprising the step of tuning a tuner at said receiver station to receive said second broadcast or cablecast transmission in response to said first control signal.

41. (New) The method of claim 39, wherein said second broadcast or cablecast transmission contains video, said method further comprising the step of displaying said video at said receiver station.

42. (New) The method of claim 39, wherein said second broadcast or cablecast transmission contains audio, said method further comprising the step of outputting said audio at said receiver station.

43. (New) The method of claim 39, wherein said second broadcast or cablecast transmission contains a second control signal, said method further comprising the step of processing said second control signal.

II. REMARKS

A. Introduction

The Office Action dated March 2, 1998 (Office Action) has been carefully reviewed and the foregoing amendments made in response thereto.

Claims 2-4, 8-9, 15, 31, 33, 35 and 38 are amended and new claims 39-43 are added. Claims 2-43 are pending in the application.

Claims 2-38 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

The specification is objected to because of an informality.

Claims 2-38 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Claim 2 is rejected under 35 U.S.C. § 103 (a) as being unpatentable over Nishihara, JP 156270.

Claims 31, 32, and 34-38 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Nishihara, JP 156270.

Claims 2, 3, 4, and 33 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Campbell et al., U.S. Patent No. 4, 536,791.

Claims 5-19 and 24, and 26 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Campbell et al., U.S. Patent No. 4, 536,791.

Claims 20-23, 25, and 27-30 are not rejected over any prior art of record and Applicants assume that the claims are allowable but for the rejections under 35 U.S.C. § 112.

Claims 2-43 remain active in this application. No new matter is presented in the foregoing amendments. Approval and entry of same is respectfully requested.

B. Withdrawal of Previous Rejection

Applicants note with appreciation the withdrawal of the rejection of the claims in the instant application under double patenting based on the broad analysis of *In re Schneller* as set forth in paragraphs 7-10 of the previous Office Action.

C. Response to Requirement Imposed Upon Applicants to Resolve Alleged Conflicts Between Applicants' Applications.

Applicants respectfully traverse the requirements of the Office Action paragraph 5 Paragraph 5 of the Office Action requires Applicants to either:

- (1) file terminal disclaimers in each of the related 328 applications terminally disclaiming each of the other 327 applications; or
- (2) provide an affidavit attesting to the fact that all claims in the 328 applications have been reviewed by applicant and that no conflicting claims exist between the applications; or
- (3) resolve all conflicts between claims in the related 328 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the above identified 328 applications.

In addition, Examiner states that failure to comply with any one of these requirements will result in abandonment of the application.

Examiner states that the requirement has been made because conflicts exist between claims of the related co-pending applications, including the present application. Examiner sets forth only the serial numbers of the co-pending applications without an indication of which claims are conflicting. Examiner has also attached an Appendix providing what is deemed to be clear evidence that conflicting claims exist between the 328 related co-pending applications and the present application. Further, Examiner states that an analysis of all claims in the 328 related co-pending applications would be an extreme burden on the Office requiring millions of claim comparisons.

Applicants respectfully traverse these requirements in that Examiner has both improperly imposed the requirements, and has incorrectly indicated that abandonment will occur upon

failure to comply with the requirement. Applicants' traversal is supported by the fact that 37 C.F.R. § 1.78 (b) does not, under the present circumstances, provide Examiner with authority to require Applicants to either: 1) file terminal disclaimers; 2) file an affidavit; or 3) resolve all apparent conflicts. Additionally, the penalty of abandonment of the instant application for failure to comply with the aforementioned requirement is improper for being outside the legitimate authority to impose abandonment upon an application. The following remarks in Section (B) will explain Applicants' basis for this traversal.

1. The PTO's New Requirement is an Unlawfully Promulgated Substantive Rule Outside the Commissioner's Statutory Grant of Power

The PTO Commissioner obtains his statutory rulemaking authority from the Congress through the provisions of Title 35 of the United States Code. The broadest grant of rulemaking authority -- 35 U.S.C. § 6 (a) -- permits the Commissioner to promulgate regulations directed only to "the conduct of proceedings in the [PTO]". This provision does NOT grant the Commissioner authority to issue substantive rules of patent law. Animal Legal Defense Fund v. Quigg, 932 F.2d 920, 930, 18 USPQ2d 1677, 1686 (Fed. Cir. 1991).¹ Applicants respectfully submit that the Examiner's creation of a new set of requirements based upon 37 CFR § 1.78(b) constitutes an unlawful promulgation of a substantive rule in direct contradiction of a long-established statutory and regulatory scheme.

2. The PTO's Requirement is a Substantive Rule

The first determination is whether the requirement as imposed by the PTO upon Applicants is substantive or a procedural rule. The Administrative Procedure Act offers general guidelines under which all administrative agencies must operate. A fundamental premise of administrative law is that administrative agencies must act solely within their statutory grant of

¹ Accord Hoechst Aktiengesellschaft v. Quigg, 917 F.2d 522, 526, 16 USPQ2d 1549, 1552 (Fed. Cir. 1990); Glaxo Operations UK Ltd. v. Quigg, 894 F.2d 392, 398-99, 13 USPQ2d 1628, 1632-33 (Fed. Cir. 1990); Ethicon Inc. v. Quigg, 849 F.2d 1422, 1425, 7 USPQ2d 1152, 1154 (Fed. Cir. 1988).

power. *Chevron v. Natural Resources Defense Council*, 467 U.S. 837 (1984). The PTO Commissioner has NOT been granted power to promulgate substantive rules of patent law. *Merck & Co., Inc. v. Kessler*, 80 F.3d 1543 (Fed. Cir. 1996), citing, *Animal Legal Defense Fund v. Quigg*, 932 F.2d 920, 930, 18 USPQ2d 1677, 1686 (Fed. Cir. 1991).

The appropriate test for such a determination is an assessment of the rule's impact on the Applicants' rights and interests under the patent laws. *Fressola v. Manbeck*, 36 USPQ2d 1211, 1215 (D.D.C. 1995). As the PTO Commissioner has no power to promulgate substantive rules, the Commissioner receives no deference in his interpretation of the statutes and laws that give rise to the instant requirement. *Merck & Co., Inc. v. Kessler*, 80 F.3d 1543 (Fed. Cir. 1996), citing, *Chevron v. Natural Resources Defense Council*, 467 U.S. 837 (1984). When agency rules either (a) depart from existing practice or (b) impact the substantive rights and interests of the effected party, the rule must be considered substantive. *Nat'l Ass'n of Home Health Agencies v. Scheiker*, 690 F.2d 932, 949 (D.C. Cir. 1982), *cert. denied*, 459 U.S. 1205 (1983).

a. The PTO Requirement is Substantive Because it Radically Changes Long Existing Patent Practice by Creating a New Requirement Upon Applicants Outside the Scope of 37 C.F.R. § 1.78 (b)

The Examiner's requirement is totally distinguishable from the well articulated requirement authorized by 37 CFR § 1.78 (b), because it (1) creates and imposes a new requirement to avoid abandonment of the application based on the allegation that conflicts exist between claims of the related 328 co-pending applications, and (2) it results in an effective final double patenting rejection without the PTO's affirmative double patenting rejection of the claims. Long existing patent practice recognizes only two types of double patenting, double patenting based on 35 U.S.C. § 101 (statutory double patenting) and double patenting analogous to 35 U.S.C. § 103 (the well-known obviousness type double patenting).² These two well

²MPEP § 804(B)(1) states, in an admittedly awkward fashion, that the inquiry for obviousness type double patenting is analogous to a rejection under 35 U.S.C. 103: "since the analysis employed in an obvious-type double patenting determination parallels the guidelines for a 35 U.S.C. 103 rejection, the factual inquiries set forth in Graham v. John

established types of double patenting use an objective standard to determine when they are appropriate³ and have a determinable result on the allowability of the pending claims.

The Examiner's new requirement represents a radical departure from long existing patent practice relevant to conflicting claims between co-pending applications of the same inventive entity. Two well established double patenting standards are based on an objective analysis of comparing pending and *allowed* claims. However, in the present application, there are no *allowed* claims. The Examiner's new requirement to avoid a double patenting rejection presumes that conflicts exist between claims in the present application and claims in the 327 copending applications. This presumption of conflicts between claims represents a radical departure from long existing patent practice as defined by 37 C.F.R. § 1.78 (b), which states:

Where two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application.

Clearly, the only requirement authorized by the rule is the elimination of conflicting claims from all but one application where conflicting claims have been determined to exist. Furthermore, in order to determine that conflicting claims do in fact exist in multiple applications, the only possible analysis is obviousness-type double patenting, since there are no allowed or issued claims by which to employ the 35 U.S.C. § 101 statutory double patenting analysis. Once obviousness-type double patenting analysis has been applied and conflicting claims have been determined to exist, only a *provisional* obviousness-type double patenting rejection is possible until claims from one application are allowed.

Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are employed when making an obvious-type double patenting analysis".

³ The objective test for same invention double patenting is whether one of the claims being compared could be literally infringed without literally infringing the other. The objective test for obviousness type double patenting is the same as the objective nonobviousness requirement of patentability with the difference that the disclosure of the first patent may not be used as prior art.

In summary, the Examiner's new requirement departs from long-established practice because it (1) creates and imposes a new requirement to avoid abandonment of the application based on the allegation that conflicts exist between claims of the related 328 co-pending applications, and (2) it results in an effective final double patenting rejection without the PTO's affirmative double patenting rejection of the claims.

Therefore, the Examiner's new requirement departs from existing practice and therefore is a substantive rule beyond the authority of the PTO and is therefore, invalid.

**b. The New Requirement is Also a Substantive Rule
Because it Adversely Impacts the Rights and
Interests of Applicants to Benefits of the Patent**

The rights and benefits of a U.S. patent is solely a statutory right. *Merck & Co., Inc. v. Kessler*, 80 F.3d 1543 (Fed. Cir. 1996). The essential statutory right in a patent is the right to exclude others from making, using and selling the claimed invention during the term of the patent. Courts have recognized that sometimes new procedural rules of the PTO are actually substantive rules, e.g. when the new rule made a substantive difference in the ability of the applicant to claim his discovery. *Fressola v. Manbeck*, 36 USPQ2d 1211, 1214 (D.D.C. 1995) (emphasis added), citing, *In re Pilkington*, 411 F.2d 1345, 1349; 162 USPQ 145 (CCPA 1969); and *In re Steppan*, 394 F.2d 1013, 1019; 156 USPQ 143 (CCPA 1967).

The new requirement, on its face and as applied here, is an instance of a PTO rule making a substantive difference in Applicants' ability to claim their invention and, therefore, must be considered a substantive rule. The requirement denies Applicants rights and benefits expressly conferred by the patent statute. The measure of the value of these denied rights and benefits is that the requirement, as applied here, would deny Applicants the full and complete PTO examination of Applicants' claims on their merits, as specified by 37 C.F.R. § 1.105. In addition, to file terminal disclaimers in each of the related 328 applications terminally disclaiming each of the other 327 applications based on the PTO's incomplete examination on the merits would deny Applicants the benefit of the full patent term of 17 years on each of

Applicants' respective applications. Applicants respectfully submit that the requirement has a huge impact on their rights and interests in the presently claimed invention.

c. Conclusion: Substantive Rule

In summary, the requirement is a change to long existing practice and/or has a substantive impact on the rights and interests of Applicants to their invention. Either finding means that the new requirement is a substantive rule. Since the Commissioner has no power to issue substantive rules, the requirement is an improperly promulgated substantive rule having no force of law.

3. The PTO Requirement is Outside the Scope of 37 C.F.R. § 1.78 (b)

Rule 78 (b) states that:

Where two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application.

The only **requirement** that Rule 78 (b) authorizes is the elimination of conflicting claims from all but one co-pending applications.

In the instant Office Action, Examiner has not required the elimination of all conflicting claims from all but one application, but instead has required Applicants to: 1) file terminal disclaimers in each of the related 328 applications; 2) provide an affidavit; or 3) resolve all conflicts between claims in the related 328 applications. None of the options in the requirement is authorized by Rule 78 (b), and therefore Applicants respectfully submit that such a requirement is improper.

With respect to the PTO's authority to act within Rule 78 (b) regarding the rejection of conflicting claims, MPEP § 822.01 states that:

Under 37 CFR § 1.78 (b), the practice relative to overlapping claims in applications copending before the examiner..., is as follows: Where claims in one application are unpatentable over claims of another application of the same inventive entity because they recite the same invention, *a complete examination should be made of the claims of each application* and all appropriate rejections

should be entered in each application, including rejections based upon prior art. *The claims of each application may also be rejected on the grounds of **provisional double patenting on the claims of the other application** whether or not any claims avoid the prior art. Where appropriate, the same prior art may be relied upon in each of the applications. MPEP 822.01 (6th Ed., Rev. 3, 1997), (*emphasis added*).*

In light of the requirement of the Office Action, MPEP § 822.01 and 37 CFR § 1.78 (b) are not applicable since there has not been any rejection with regard to the elimination of conflicting claims from all but one co-pending application.

4. The Assertion That Failure to Comply with the Requirement Will Result in Abandonment of Applicants' Application is Improper

Applicants' prospective failure to comply with the above requirements cannot properly result in abandonment of the present application. Applicants respectfully submit that abandonment of an application can properly occur only:

- (1) for failure to respond within a provided time period (under Rule 135);
- (2) as an express abandonment (under Rule 138); or
- (3) the result of failing to timely pay the issue fee (under Rule 316).

There is no provision in the rules permitting abandonment for failure to comply with any of the presented requirements. To impose an improper requirement upon Applicants and then hold the application is to be abandoned for failure to comply with the improper requirement violates the rules of practice before the USPTO. Furthermore, Examiner is in effect attempting to create a substantive rule which is above and beyond the rulemaking authority of the USPTO, and therefore is invalid.

In the *Application of Mott*, 539 F.2d 1291, 190 USPQ 536 (CCPA 1976), the applicant had conflicting claims in multiple applications. The CCPA held that action by the Examiner which would result in automatic abandonment of the application was legally untenable. *Id.* at 1296, 190 USPQ at 541. In the present application, Examiner has asserted that there are conflicting claims in multiple applications, and that non-compliance of the Office Action's

requirement will result in an automatic abandonment. Therefore, under *Mott's* analysis, the Office Action's result of abandonment of Applicants' application is legally untenable.

5. Response to Apparent Conflict of Claims

Applicants submit that the presentation of the Office Action Appendix fails to demonstrate any conflicts between claims of the present application and claims of the co-pending applications. Rather, the Office Action Appendix compares representative claims of *other* applications in attempt to establish that "conflicting claims exist between the 328 related co-pending applications." Absent any evidence of conflicting claims between the Applicants' present application and any other of Applicants' co-pending applications, any requirement imposed upon Applicants to resolve such alleged conflicts is improper.

6. Request for Withdrawal of Requirement

Therefore, Applicants respectfully request that Examiner reconsider and withdraw the requirement that Applicants: (1) file terminal disclaimers in each of the related 328 applications terminally disclaiming each of the other 327 applications; (2) provide an affidavit attesting to the fact that all claims in the 328 applications have been reviewed by applicant and that no conflicting claims exist between the applications; or (3) resolve all conflicts between claims in the above identified 328 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the above identified 328 applications, which upon failing to do so will abandon the application.

7. Filing of Supplemental Oath

Notwithstanding the foregoing, Applicants will file a supplemental oath under 37 C.F.R. § 1.67 for each application when Examiner identifies allowable subject matter. Applicants respectfully propose that the filing of individual supplemental oaths attesting to the absence of claim conflicts between previously patented claims and subsequently allowed claims is a more reasonable method of ensuring the patentable distinctness of subsequently allowed claims.

Under 37 C.F.R. § 1.105, § 1.106 & § 1.78 (b), Examiner has the duty to make every applicable rejection, including double patenting rejection. Failure to make every proper rejection denies Applicants all rights and benefits related thereto, e.g., Applicants' right to appeal, etc. Once obviousness-type double patenting analysis has been applied and conflicting claims have been determined to exist, only a *provisional* obviousness-type double patenting rejection is possible until claims from one application are allowed.

D. Information Disclosure Statement

The Applicants appreciate the Examiner's review of the Information Disclosure Statements filed 12/11/95, 12/22/95, 2/6/96, 4/17/96 and 4/7/97 and have addressed those specific concerns raised in paragraph 6 of the Office Action. It is the Applicants' understanding that the Examiner raised the following 5 issues:

- (1) the reasons for such a large number of references cited,
- (2) foreign language references cited without a statement of relevance or translation have not been considered,
- (3) the relevancy of numerous references listed in the Information Disclosure Statements are subsequent to the Applicants' latest effective filing date of 9/11/87,
- (4) citation of references apparently unrelated to the subject matter of the claimed invention, and
- (5) citation of database search results listed in foreign languages where no copy was provided.

1. Reason for Citation of Large Number of References

The reason that the Applicants submitted such a large number of references in the Information Disclosure Statements was that a large portion of the information cited by the Applicants was brought to the Applicants' attention in the discovery processes in a previous litigation in the United States District Court for the Eastern District of Virginia (*Personalized Mass Media Corp. v. The Weather Channel, Inc.* Docket No. 2:95 cv 242) and an investigation

by the International Trade Commission (*In the Matter of Certain Digital Satellite System (DSS) Receivers And Components Thereof*, No. 337 TA 392, which was direct to U.S. Pat. No. 5,335,277) regarding claims in the Applicants' related issued patents. The documents listed in the Information Disclosure Statement were cited during the previous litigation/investigative proceedings by the alleged infringers in the aforementioned proceedings as being relevant and material to patentability of the claims in the related patents. The Applicants submitted those materials in the Information Disclosure Statement to the PTO at the earliest possible time in order to file them in compliance with the 3 month requirement stated in the certification used to submit the Information Disclosure Statement before the Office Action was issued as is necessary under 37 CFR § 1.97 (c) (1). In such haste, entries were inadvertently submitted which do not appear on their face to be material to the patentability of the present application. Applicants have corrected this error with the submission of the corrected Information Disclosure Statement as shown in Appendix B. However, it is the Applicants' understanding that not all references cited must be material to patentability in order for such references to be considered. In § 609 of the MPEP, it states,

"[t]hese individuals also may want the Office to consider information for a variety of reasons: e.g., without first determining whether the information meets any particular standard of materiality, or because another patent office considered the information to be relevant in a counterpart or related patent application filed in another country, or to make sure that the examiner has an opportunity to consider the same information that was considered by the individuals that were substantially involved in the preparation or prosecution of a patent application."

Applicants' position is that information that was considered material in previous litigation would fall into the 'variety of reasons' category as stated above. Applicants intention was not to confuse or make difficult the examination process for the Examiner, but was instead to be forthright and open in disclosing all information deemed to be relevant to the application in issue by third parties.

2. Citations of Foreign Language References

Applicants have re-examined the foreign references listed in all of the Information Disclosure Statements and have either eliminated such references from the list, included translations herewith or provided statements as to the relevancy of such references (APPENDIX A). The inclusion of translations with this response is in compliance with 37 C.F.R. § 1.97 (f) which states in part, "[I]f a bona fide attempt is made to comply with 37 C.F.R. § 1.98, but part of the required content is inadvertently omitted, additional time may be given to enable full compliance." The omission of any translations and/or relevancy statements for foreign references were inadvertent and unintentional and are herein submitted in accordance with 37 C.F.R. § 1.97 (f).

3. References in the Information Disclosure Statements Subsequent to Applicants' Latest Effective Filing Date of 9/11/87

Examiner stated "[n]umerous references listed in the IDS are subsequent to the applicant's latest effective filing date of 9/11/87, therefore, the relevancy of those references is unclear." Upon further examination, the Applicants have eliminated those patents and publications after the effective filing date for the present application. It is the Applicants' understanding that the effective filing date for the present application is 9/11/87.

4. Citation of Unrelated References

Applicants appreciate the Examiner pointing out such references that were listed yet on their face appear to be unrelated to the subject matter of the present application. In response to such information, the Applicants have reviewed the cited references and removed any such references which appear to be unrelated on their face to the claimed subject matter such as the patent for a beehive, the patent for a chemical compound and numerous computer printout search results.

5. Citation of Database Search Results

Database search results listed in foreign languages where no copy was provided have been eliminated from the substitute Information Disclosure Statement included with this office action.

The Applicants offer the corrected Information Disclosure Statement (APPENDIX B) as a substitute to the previously filed Information Disclosure Statement filed 4/7/97. No new entries have been entered, only citations which have, upon further examination, been determined not to be relevant to the claimed subject matter have been eliminated, typographical errors have been corrected, dates inserted where possible and the list shortened as a result. It is the Applicants' intention that such corrected Information Disclosure Statement will help clarify any issues previously raised by the Examiner and aid in the prosecution of the present patent application.

E. Response to Rejections under 35 U.S.C. § 112

1. Specification Support of Claims 2-38

Paragraph 9 of the Office Action rejects claims 2-38 under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The Office Action specified language of the claims as not being supported by the specification as originally filed.

The following tables list Applicants' claim language in the left column which corresponds to the specification support in the right column.

a. Claim 2

A method of processing signals at a receiver station, said receiver station having a processor for processing digital data included in a broadcast or cablecast transmission	For example, page 248, lines 13-35 and page 14, line 35 through page 15, line 9.
demodulating said first broadcast	For example, page 250, line 34 through page 251, line 3

or cablecast transmission to detect an information transmission thereon, said information transmission including said digital data	with page 14, line 35 through page 15, line 2.
detecting said digital data in said information transmission and passing said detected digital data to said processor	For example, page 251, lines 7-14
storing at least some of said detected digital data at said receiver station	For example, page 251, lines 3-6.
inputting a control signal designating a second broadcast or cablecast transmission	For example, page 253, lines 10-11.
correlating said processor to cause said receiver station to cease storing selectively only some of said stored at least some of said detected digital data with said step of inputting	For example, page 253, lines 2-14.

b. Claim 3

A method of communicating one or more control signals to one or more receiver stations each of which includes a processor for processing digital data included in at least one broadcast or cablecast transmission	For example, page 367, lines 25-35 with page 324, lines 14-17. For example, page 13, lines 25-30, page 470, line 35 through page 471, line 1 or page 534, lines 1-2. For example, Fig. 2 or 3A; for example, page 14 line 35 through page 15, line 2.
receiving a first broadcast or cablecast transmission to be transmitted, said broadcast or cablecast transmission including said digital data	For example, page 366, lines 21-22 with lines 19-20. For example, page 366, lines 24-28 with page 40, lines 16-23 and page 43, lines 32-33.
receiving a second control signal which operates at a transmitter station to communicate said first control signal to a first transmitter	For example, page 366, line 34 through page 367, line 9 with page 367, line 30 through page 368, line 7 and page 59, lines 29-31.
transmitting said first broadcast or cablecast transmission, said digital data, and said first control signal, wherein said first control signal is operative at said one or more	For example, page 366, lines 21-28 and page 367, line 25 through page 368, line 7. For example, page 478, lines 27-30 with page 479, line 33 through page 480, line 4;

receiver stations to cause said processor to cease storing said digital data	Page 480, lines 18-23 and page 514 lines 9-13.
--	--

c. Claim 4

receiving a first broadcast or cablecast transmission to be transmitted and delivering said first broadcast or cablecast transmission to one or more transmitters	For example, page 366, lines 21-22 with lines 19-20, Figs. 6A and 6B.
transmit said first broadcast or cablecast transmission, said digital data, and said first control signal, wherein said first control signal is operative at said one or more receiver stations to cause said processor to cease storing said digital data.	For example, page 366, lines 21-28 and page 367, line 25 through page 368, line 7. For example, page 478, lines 27-30 with page 479, line 33 through page 480, line 4; Page 480, lines 18-23 and page 514 lines 9-13.

d. Claim 5

generating said first control signal before said specific time	For example, page 431, lines 25-30.
communicating said first control signal to said memory	For example, page 431, lines 30-31.

e. Claim 6

receiving a schedule at a controller	For example, page 326, lines 30-31.
communicating one of said first control signal and a second control signal in accordance with said schedule	For example, page 366, lines 19-20, page 367, line 25 through page 368, line 7.

f. Claim 7

receiving an intermediate generation set	For example, page 42, lines 8-11 and page 359, lines 1-9
generating said first control signal in accordance with said	For example, page 363, line 34 through page 364, line 1 and/or page 371, lines 12-16.

intermediate generation set	
-----------------------------	--

g. Claim 8

formula or item information to serve as a basis for generating said first control signal	For example, page 358, lines 10-20 and page 363, lines 11-23.
--	---

h. Claim 9

communicating to said first transmitter a synchronizing control signal for enabling said processor to output at least some of said detected information	For example, page 368, lines 8-23 with page 367 lines 25-31.
---	--

i. Claim 10

embedded in said second broadcast or cablecast transmission, said method further comprising the step of communicating said second broadcast or cablecast transmission to said first transmitter	For example, page 367, lines 31-33 For example, page 367, lines 25-27, Figs. 6A and 6B
---	---

j. Claim 11

said synchronizing control signal enables said one or more receiver stations to execute one or more controlled functions in response to at least a portion of said information contained in said second broadcast or cablecast transmission	For example, page 481, lines 9-13 and page 44 lines 22-25 with, for example, page 481, lines 23-35, page 514, lines 11-13 and page 368, lines 29-31.
transmitting said at least a portion of said information after said specific time	For example, page 369, lines 29-31 after page 367, line 25 through page 368, line 7.

k. Claim 15

said first control signal operates at one or more receiver stations to designate a memory	For example, page 368, lines 6-7 For example, page 368, line 2.
a third control signal which operates at said memory to store or output programming contained in said second broadcast or cablecast transmission	For example, page 369, lines 23-30 with page 482, line 32 through page 483, line 2 or page 372, line 2, page 505, line 33, page 506, lines 8-21 and page 501, lines 21-25 with page 482, line 32 through page 483, line 2.

l. Claim 16

said first control signal enables said one or more receiver stations to execute one or more controlled functions in response to information contained in said second broadcast or cablecast transmission	For example, page 481, lines 9-13 and page 44 lines 22-25 with, for example, page 481, lines 23-35, page 514, lines 11-13 and page 368, lines 29-31.
transmitting a series of instructions in said first control signal	For example, page 367, lines 30-33 with, for example, page 368, lines 31-32 and page 22, lines 1-5 with page 23, line 25.

m. Claim 17

a first one or more of said series of instructions controls one or more of a converter, a mass medium programming receiver, and a portion receiver to receive said information contained in said second broadcast or cablecast transmission	For example, page 294, lines 30-33 with page 295, lines 4-12. For example, page 367, line 34 through page 368, line 3 with page 478, lines 28-29, page 479, lines 25-30 and Fig. 7E, page 462, lines 6-12 with page 35, lines 7-11.
---	--

n. Claim 18

a second of said series of instructions operates at said one or more receiver stations to synchronize processing of said information contained in said	For example, page 368, lines 19-20 with lines 8-17.
--	---

second broadcast or cablecast transmission	
--	--

o. Claim 31

at least some of said detected digital data is stored at said processor interrupt signal detector	For example, page 480, lines 1-3 with page 407, lines 18-30.
Causing said processor interrupt signal detector to delete or discard said stored at least some of said detected digital data	For example, page 407, lines 23-30.

p. Claim 32

Tuning a first receiver to receive said second broadcast or cablecast transmission in response to said control signal	For example, page 253, lines 19-28 or page 252 lines 18-35.
---	---

q. Claim 33

Receiving at least some of said second broadcast or cablecast transmission at a second receiver	For example, page 252, line 31 through page 253, line 2.
---	--

r. Claim 34

Programming said receiver station to interrupt said processor whenever a tuner is tuned or a receiver is actuated	For example, page 407, lines 1-8 or page 91, lines 18-20, For example, page 88, lines 29-31 and page 248, line 13 et. seq.
---	---

s. Claim 38

detecting digital data in said second broadcast or cablecast transmission	For example, page 479, line 1.
discarding said detected digital data until a synchronizing control signal is detected	For example, page 480, lines 4-6 and page 480, line 26 through page 481, line 9.

2. Rejections Under 35 U.S.C. §112, Second Paragraph

Claims 2-38 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention.

Regarding claim 2, Applicants have amended the claim to further clarify that the data which is detected is stored in the processor. Furthermore, Applicants contend that the recitation of “a second received broadcast or cablecast transmission” in lines 11 and 12 is a positive recitation of the limitation. Further, Applicants have amended the claim to correct the antecedent basis problems noted in the Office Action. Applicants have further amended the last recitation of the claim to recite correlating said processor to cause said receiver station to cease storing selectively only some of said stored at least some of said detected digital data with said step of inputting. Applicants contend that this amendment more clearly defines the scope of the invention.

Regarding claims 3 and 4, Applicants contend that all limitations are properly positively recited.

Regarding claim 8, Applicants have amended the claim to positively recite all of the claim limitations in order to clarify the claim as suggested.

Regarding claim 9, Applicants have amended the claim to positively recite all of the claim limitations in order to clarify the claim as suggested.

Regarding claims 11 and 16, Applicants contend that the recitation of “said synchronizing control signal enables said one or more receiver stations to execute...” is a positive recitation of both enabling and executing.

Regarding claim 14, Applicants contend that the claim clearly recites multiplexing the first and second broadcast or cablecast signals.

Regarding claim 15, Applicants have amended the claim to positively recite all of the claim limitations in order to clarify the claim as suggested.

Regarding claims 17-22, Applicants contend that all limitations are positively recited as required.

Regarding claim 20, Applicants contend that the claim properly discloses the output of the selective communications device.

Regarding claim 31, the Applicants have amended the claim to correct the antecedent basis problem.

Regarding claim 33, the Applicants have amended the claim to depend from claim 32.

Regarding claim 35, Applicants have amended the claim to correct the antecedent basis problem.

Regarding claim 38, Applicants have amended the claim to correct the antecedent basis problem. Furthermore, Applicants contend that the recitation of "until a synchronization control signal is detected" is appropriate recitation as a part of the positive recitation of the limitation of which it is a part.

3. Conclusion

Applicants respectfully submit that claims 5-7, 10-14, 16-30, 32, 34, 36-38 and amended claims 2-4, 8-9, 15, 31, 33, 35 and 38 of the subject application particularly point out and claim the subject matter sufficiently for one of ordinary skill in the art to comprehend the bounds of the claimed invention. The test for definiteness of a claim is whether one skilled in the art would understand the bounds of the patent claim when read in light of the specification, and if the claims so read reasonably apprise those skilled in the art of the scope of the invention, no more is required. *Credle v. Bond*, 25 F.3d 1556, 30 USPQ2d 1911 (Fed. Cir. 1994). The legal standard for definiteness is whether a claim reasonably apprises those of skill in the art of its scope. *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994). Applicants have amended the claims to enhance clarity and respectfully submit that all pending claims are fully enabled by the specification and distinctly indicate the metes and bounds of the claimed subject matter.

Applicants believe that the above recited changes are sufficient to overcome the rejections under 35 U.S.C. 112, first and second paragraph, and respectfully request withdrawal

of these rejections. Applicants provide these specific embodiments in support of the pending claims by way of example only. The claims must be read as broadly as is reasonable in light of the specification, and Applicants in no way intend that their submission of excerpts/examples be construed to unnecessarily restrict the scope of the claimed subject matter.

F. Response to Obviousness Rejection of Claims

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference to combine the teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references combined) must teach or suggest all the claim recitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not based on Applicants' disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). MPEP 706.02(j).

1. 35 U.S.C. § 103 (a) Rejection over Nishihara, JP 156270

Claims 2, 31, 32, and 34-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishihara, JP 156270. As an initial matter, Applicants contend that the Nishihara abstract does not provide an enabling disclosure and does not teach or suggest the limitations of the present claims. For at least this reason, Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claim 2 over Nishihara be withdrawn. However, in order to further prosecution of the present application, Applicants will address the rejection set forth in the Office Action.

a. Independent Claim 2

With respect to Applicants' claim 2, Nishihara fails to, *inter alia*, teach or suggest all the claim recitations, i.e., A method of processing signals at a receiver station, said receiver station having a processor for processing digital data included in a broadcast or cablecast transmission.

There is no suggestion in Nishihara of processing digital data. In fact, there is no suggestion in Nishihara of digital data whatsoever.

Nishihara fails to teach, *inter alia*, the Applicants' claim limitation of demodulating said first broadcast or cablecast transmission to detect an information transmission thereon, said information transmission including said digital data. There is no suggestion of demodulating the received transmission in Nishihara. Furthermore, since there is no digital data disclosed in Nishihara, there is certainly no suggestion of an information transmission including digital data.

Nishihara fails to teach, *inter alia*, the Applicants' claim limitation of detecting said digital data in said information transmission and passing said detected digital data to said processor. Since there is no suggestion of digital data in Nishihara, there can be no detection of such digital data. It follows that Nishihara fails to teach the Applicants' claim limitation of storing at least some of said detected digital data at said receiver station.

Nishihara fail to teach, *inter alia*, the Applicants' claim limitation of inputting a control signal designating a second broadcast or cablecast transmission. The Office Action suggests that Nishihara teaches such a limitation, but offers no support for such a conclusion. In fact, there is no suggestion in Nishihara of a second received broadcast or cablecast transmission. There is no teaching of such a second transmission in Nishihara whatsoever.

Nishihara fails to teach, *inter alia*, the Applicants' claim limitation of correlating said processor to cause said receiver station to cease storing selectively only some of said stored at least some of said detected digital data with said step of inputting. The Office Action states that the present claim "differs from the showing of Nishihara only in that claim 2 recites that the processor ceases the storing of the embedded data in response to the inputted control signal; i.e. Nishihara indicates that the CPU of the processor is reset." The Office Action further states that "it would at least have been obvious to one skilled in the art that the changing of the channel in Nishihara, an [sic] the resulting resetting of the CPU of the processor in Nishihara, would have caused the acquisition and storage of teletext page data by the processor to have been ceased." Applicants contend that there is no suggestion Nishihara of ceasing storing selectively as in the

presently amended claim. There is certainly no suggestion of ceasing the storing of digital data, as Nishihara fails to teach any such digital data. There is no concept in Nishihara of correlating the processor to perform any function with the step of inputting a control signal. As noted above, no such control signal is taught in Nishihara in any event. There is no suggestion in Nishihara that only some of the stored data is selectively ceased to be stored as presently claimed.

Nishihara merely suggests that the CPU is reset when a second channel is chosen. There is certainly no suggestion of the processor causing the receiver station to selectively cease storing as in the presently claimed invention. In fact, because the purpose of Nishihara is to display what is in the memory, it would be contrary to the teaching of Nishihara to retain any portion of the first channel after switching to the second channel.

Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claim 2 be withdrawn.

b. Dependent Claims 31, 32, and 34-38

Claims 31, 32, and 34-38 depend upon independent claim 2. As discussed *supra*, Nishihara fails to disclose every element of independent claim 2 and thus, *ipso facto*, Nishihara fails to anticipate dependent claims 31, 32, and 34-38, and therefore, this rejection should be withdrawn and the claims be permitted to issue. If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

2. 35 U.S.C. § 103 (a) Rejection over Campbell et al., U.S. Patent No. 4,536,791.

Claims 2-19, 24, 26 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al., U.S. Patent No. 4,536,791.

a. Independent Claim 2

With respect to Applicants' claim 2, Campbell et al. fails to, *inter alia*, teach or suggest all the claim recitations, i.e., correlating said processor to cause said receiver station to cease

storing selectively only some of said stored at least some of said detected digital data with said step of inputting. The Office Action suggests that although Campbell et al. fails to expressly disclose such a limitation, it would have been obvious to one of ordinary skill in the art that the receipt of the "emergency alert word" would cause the receiver station to stop receiving the original transmission, and therefore, stop storing the original transmission. There is no suggestion that the original program or the emergency alert word is stored in any fashion. The only thing that is stored is the eligibility codes. Therefore, it is not possible for Campbell et al. to disclose the deletion of any transmission that is not stored to begin with. There is certainly no suggestion of storing any digital data as presently claimed since Campbell et al. fails to teach such digital data. There is no concept in Campbell et al. of correlating the processor to perform any function with the step of inputting a control signal. As noted above, no such control signal is taught in Campbell et al. in any event. There is certainly no suggestion of selectively ceasing the storage of any data in Campbell et al. There is certainly no concept in Campbell et al. of a processor causing the receiver station to cease storing selectively only some of said stored at least some of said detected digital data as presently claimed.

Campbell et al. fails to teach, *inter alia*, the Applicants' claim limitation of A method of processing signals at a receiver station, said receiver station having a processor for processing digital data included in a broadcast or cablecast transmission. There is no suggestion in Campbell et al. of processing digital data. Campbell et al. fails to teach any digital data whatsoever.

Campbell et al. fails to teach, *inter alia*, the Applicants' claim limitation of detecting said digital data in said information transmission and passing said detected digital data to said processor. Since there is no suggestion of digital data in Campbell et al., there can be no detection of such digital data. It follows that Campbell et al. fails to teach the Applicants' claim limitation of storing at least some of said detected digital data at said receiver station.

Campbell et al. fails to teach, *inter alia*, the Applicants' claim limitation of inputting a control signal designating a second broadcast or cablecast transmission. The Office Action

suggests that the emergency alert word is analogous to Applicants' control signal designating a second received broadcast or cablecast transmission. There is no suggestion that the emergency alert word performs any such designating. In fact, the emergency alert word merely switches the receiver to a particular channel or turns on the converter. There is no concept of a control signal designating a second received broadcast or cablecast transmission.

Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claim 2 be withdrawn.

b. Independent Claim 3

With respect to Applicants' claim 3, Campbell et al. fails to, *inter alia*, teach or suggest all the claim recitations, i.e., receiving a first control signal which at said one or more receiver stations operates to designate a second broadcast or cablecast transmission. The Office Action suggests that the emergency alert word is analogous to Applicants' control signal designating a second received broadcast or cablecast transmission. There is no suggestion that the emergency alert word performs any such designating. In fact, the emergency alert word merely switches the receiver to a particular channel or turns on the converter. There is no concept of a control signal which designates a second received broadcast or cablecast transmission.

Campbell et al. fails to teach, *inter alia*, Applicants' claim limitation of receiving a second control signal which operates at a transmitter station to communicate said first control signal to a first transmitter. There is no suggestion of a second control signal in Campbell et al. There is certainly no suggestion of any signal which operates to communicate a first control signal. In fact, as noted above, since there is no teaching of a first control signal, there can be no teaching of communicating such a control signal.

Campbell et al. fails to teach, *inter alia*, the Applicants' claim limitation of transmitting said first broadcast or cablecast transmission, said digital data, and said first control signal, wherein said first control is signal operative at said one or more receiver stations to cause said processor to cease storing said digital data. The Office Action suggests that although Campbell et al. fails to expressly disclose such a limitation, it would have been obvious to one of ordinary

skill in the art that the receipt of the "emergency alert word" would cause the receiver station to stop receiving the original transmission, and therefore, stop storing the original transmission. There is no suggestion that the original program or the emergency alert word is stored in any fashion. The only thing that is stored is the eligibility codes. Therefore, it is not possible to cease storing any transmission that is not actually stored to begin with. Furthermore, since there is no teaching of a first control signal as presently claimed, there can be no teaching of a transmission of such a control signal. As noted above, there is no teaching of digital data in Campbell et al. as in the presently amended claim. Therefore, there can be no teaching of any limitation related to digital data.

Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claim 3 be withdrawn.

c. Independent Claim 4

With respect to Applicants' claim 4, Campbell et al. fails to, *inter alia*, teach or suggest all the claim recitations, i.e., receiving and storing a first control signal which at said one or more receiver stations operates to designate a second broadcast or cablecast transmission. The Office Action suggests that the emergency alert word is analogous to Applicants' control signal designating a second received broadcast or cablecast transmission. There is no suggestion that the emergency alert word performs any such designating. In fact, the emergency alert word merely switches the receiver to a particular channel or turns on the converter. There is no concept of a control signal which designates a second received broadcast or cablecast transmission. There is certainly no concept of storing a control signal as presently claimed. The Office Action suggests that such storing is inherent to the system in Campbell et al. "[A] retrospective view of inherency is not a substitute for some teaching or suggestion supporting...[a] rejection." *In re Rijckaert*, 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993).

Campbell et al. fails to teach, *inter alia*, the Applicants' claim limitation of causing said first control signal to be communicated to a first of said one or more transmitters at a specific time, thereby to transmit said first broadcast or cablecast transmission, said digital data, and said

first control signal, wherein said first control signal is operative at said one or more receiver stations to cause said processor to cease storing said digital data. There is no suggestion of any transmission of a control signal taking place at a specific time as presently claimed. The Office Action suggests that the transmission at any time is a *specific* time. Applicants contend that there is a distinction between a random time and a specific time as claimed. The Office Action suggests that although Campbell et al. fails to expressly disclose the Applicants' limitation of causing said processor to cease storing said digital data, it would have been obvious to one of ordinary skill in the art that the receipt of the "emergency alert word" would cause the receiver station to stop receiving the original transmission, and therefore, stop storing the original transmission. There is no suggestion that the original program or the emergency alert word is stored in any fashion. The only thing that is stored is the eligibility codes. Therefore, it is not possible to cease storing any transmission that is not actually stored to begin with. As noted above, there is no teaching of digital data in Campbell et al. as in the presently amended claim. Therefore, there can be no teaching of any limitation related to digital data.

Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claim 4 be withdrawn.

d. Dependent Claims 5-19, 24, 26, and 33

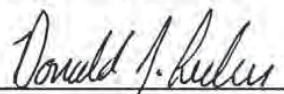
Claims 5-14 depend upon independent claim 4. Claims 15-19 and 24 and 26 depend upon independent claim 3. Claim 33 depends upon independent claim 2. As discussed *supra*, Campbell et al. fails to disclose every element of independent claims 2, 3, and 4 and thus, *ipso facto*, Campbell et al. fails to anticipate dependent claims 5-19, 24, 26, and 33, and therefore, this rejection should be withdrawn and the claims be permitted to issue. If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

III. CONCLUSION

In accordance with the foregoing it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. Further, all pending claims are patentably distinguishable over the prior art of record, taken in any proper combination. Thus, there being no further outstanding objections or rejections, the application is submitted as being in a condition for allowance, which action is earnestly solicited.

If the Examiner has any remaining informalities to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such informalities.

Respectfully submitted,



Thomas J. Scott, Jr.
Reg. No. 27,836
Donald J. Lecher
Reg. No. 41,933
Attorneys for Applicants
Tel: (202) 383-6790

Date: September 2, 1998
HOWREY & SIMON
1299 Pennsylvania Avenue, NW
Washington, D.C. 20004

APPENDIX A

APPENDIX A

The following foreign reference has been cited by Applicants in the Information disclosure Statements filed 12-11-95, 12-22-95, 2-6-96, 4-17-96 and 4-7-97. Applicants have further included the following relevancy statement as well as an English abstract (in the case of foreign patents), thus meeting the requirements as set forth in 37 CFR 1.98 and MPEP § 609.

For the Information Disclosure Statement filed 12-22-95:

23 38 330 February 13, 1975 Germany

This reference discloses television receivers that transmit control signals to a decoder/processor combination.

For the Information Disclosure Statement filed 2-6-96:

61-050470 March 12, 1986 Japan

This reference discloses a program engagement device that displays the program content at a television receiver and includes a display output control device.

60-61935 April 9, 1985 Japan

This reference discloses a system that generates, detects, communicates, and/or converts digital signals.

For the Information Disclosure Statement filed 4-17-96:

2 058 681 June 15, 1972 Germany

This reference discloses a television mode arrangement for transmitting, receiving, and presenting coded information.

For the Information Disclosure Statement filed 4-7-97:

0 020 242 December 10, 1980 European

This reference discloses a teletext character alignment process.

0 046 108 February 17, 1982 European

This reference discloses a integrated circuit interface between a television receiver and recorder.

0 049 184 April 7, 1982 European

This reference discloses a pocket teaching aid using a television receiver with a teletext system.

0 055 167 June 30, 1982 European

This reference discloses a teletext CRT display for messages from a composite memory.

0 077 712 April 27, 1983 European

This reference discloses a multi-channel digital packet television broadcasting system.

0 078 185 May 4, 1983 European

This reference discloses a digital packet broadcasting system using television transmissions.

2 496 376 June 18, 1982 France

This reference discloses a teletext display of data on the television screen.

2 516 733 May 5, 1983 France

This reference discloses an error controller for a teletext television decoder.

2 823 175 November 29, 1989 Germany

This reference discloses a teletext information display for television transmission.

24 53 441 May 13, 1976 Germany

This reference discloses a wideband signal transmission with digital to image signal conversion.

DE 30339949 May 6, 1982 Germany

This reference discloses a method for the generation of teletext display having a color character contrast.

DE 3112249 October 7, 1982 Germany

This reference discloses a processing signals from either a colored television receiver or from a video text decoder.

DE 3020787 December 17, 1981 Germany

This reference discloses a television transmission system that sends extra data during a blanking period.

WO 80/00292 February 21, 1980 Japan

This reference discloses a decoder for a television receiver that has a color component that splits signals and recombines the signals into a composite drive current signal.

WO 83/00789 March 3, 1983 Japan

This reference discloses an image display unit which displays received image signals via a memory, wherein the image signals include teletext displays of weather reports or television programs.

Graf, P.H., "Antiope-Uebertragung fuer Breitbandige Videotex-Verteildienste," 1981.

This reference shows an Antiope demodulator/detector.

Heller, Arthur, "VPS - Ein Neues System Zuragsgesteuerten Programmanfezeichnung, Rundfunk technisde Mitteilungen, pp. 162-169.

This reference discloses a decoding system for use with a VCR.

Marti, B et al., Discrete, service de television cryptee, Revue de radiodiffusion - television (1975), pp. 24-30.

This reference discloses an analog decryption system.

Strauch, D., "(Las Media De Telecommunication Devant la Rapture. Les Nonvellas Methodes Presentees a L'Eposition International 1979 de Radio (Et Television)) 1979.

This reference is a discussion of videotext, teletext, ceefax, oracle, and antiope.

Serial No. 08/459,507
Docket No. 5634.0232

APPENDIX B

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

CITATION FORM

Attorney Docket No.

05634.0232

Serial No.

08/459,507

Applicant(s)

John C. Harvey and James W. Cuddihy

Filing Date

June 02, 1995

Group Art Unit

2737

UNITED STATES PATENT DOCUMENTS

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	Re 27,810	November 20, 1973	Buehrle	325/321	
	2,418,127	April 1, 1947	Labin	178/44	
	2,563,448	August 7, 1951	Aram	178/5.1	
	3,071,649	January 1, 1963	Goodall	179/1.5	
	3,107,274	October 15, 1963	Roschke	178/5.1	
	3,133,986	May 19, 1964	Morris et al.	178/5.1	
	3,251,051	May 10, 1966	Harries	340/345	
	3,470,309	September 30, 1969	Nyberg	178/5.1	
	3,478,166	November 11, 1969	Reiter et al.	178/5.1	
	3,526,843	September 1, 1970	Sanville	329/104	
	3,546,684	December 8, 1970	Maxwell et al.	340/172.5	
	3,639,686	February 1, 1972	Walker et al.	178/5.8R	
	3,649,749	March 14, 1972	Gibson	178/5.6	
	3,651,261	March 21, 1972	Guanella	178/22	
	3,666,888	May 30, 1972	Sekimoto	178/69.5 TV	
	3,723,637	March 27, 1973	Fujio et al.	178/5.2R	
	3,746,799	July 17, 1973	Gentges	178/22	
	3,755,624	August 28, 1973	Sekimoto	178/69.5 TV	
	3,769,579	October 30, 1973	Harney	325/31	
	3,773,979	November 20, 1973	Kirk, Jr. et al.	179/15 FD	
	3,777,053	December 4, 1973	Wittig et al.	178/5.1	
	3,789,131	January 29, 1974	Harney	178/5.1	
	3,794,922	February 26, 1974	Osborn et al.	325/53	
	3,795,763	March 5, 1974	Golding et al.	178/5.6	
	3,813,482	May 28, 1974	Blonder	178/5.1	
	3,826,863	July 30, 1974	Johnson	178/5.1	
	3,859,596	January 7, 1975	Jannery et al.	325/31	
	3,882,289	May 6, 1975	Walding et al.	200/11 D	
	3,885,089	May 20, 1975	Callais et al.	178/5.1	
	3,889,054	June 10, 1975	Nagel et al.	178/6.8	
	3,894,177	July 8, 1975	Howell et al.	178/5.6	
	3,896,262	July 22, 1975	Hudspeth et al.	178/5.1	

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	3,896,266	July 22, 1975	Waterbury	179/1 SB	
	3,916,091	October 28, 1975	Kirk, Jr. et al.	178/5.1	
	3,924,059	December 2, 1975	Horowitz	178/5.1	
	3,950,618	April 13, 1976	Bloisi	179/2 AS	
	3,958,081	May 18, 1976	Ehram et al.	178/22	
	3,975,585	August 17, 1976	Kirk, Jr. et al.	178/5.1	
	3,990,012	November 2, 1976	Karnes	325/308	
	3,996,586	December 7, 1976	Dillon et al.	340/347 DD	
	4,004,085	January 18, 1977	Makino et al.	340/324	
	4,008,369	February 15, 1977	Theurer et al.	358/84	
	4,013,875	March 22, 1977	McGlynn	235/150.2	
	4,015,286	March 29, 1977	Russell	358/13	
	4,019,201	April 19, 1977	Hartung et al.	358/124	
	4,020,419	April 26, 1977	Caspari et al.	325/421	
	4,024,574	May 17, 1977	Nieson	358/117	
	4,024,575	May 17, 1977	Harney et al.	358/118	
	4,027,267	May 31, 1977	Larsen	329/106	
	4,027,331	May 31, 1977	Nicol	358/135	
	4,042,958	August 16, 1977	Saylor et al.	358/141	
	4,044,376	August 23, 1977	Porter	358/84	
	4,045,814	August 30, 1977	Hartung et al.	358/124	
	4,054,911	October 18, 1977	Fletcher et al.	358/141	
	4,064,490	December 20, 1977	Nagel	364/2000	
	4,070,693	January 24, 1978	Shutterly	358/123	
	4,075,660	February 21, 1978	Horowitz	358/124	
	4,079,419	March 14, 1978	Seigle et al.	358/193	
	4,081,754	March 28, 1978	Jackson	325/396	
	4,081,832	March 28, 1978	Sherman	358/124	
	4,086,434	April 25, 1978	Bocchi	79/2 AM	
	4,088,958	May 9, 1978	Suzuki et al.	325/396	
	4,091,417	May 23, 1978	Nieson	358/117	
	4,095,258	June 13, 1978	Sperber	358/120	
	4,096,542	June 20, 1978	Pappas et al.	361/196	
	4,104,681	August 1, 1978	Saylor et al.	358/141	
	4,107,734	August 15, 1978	Percy et al.	358/84	
	4,107,735	August 15, 1978	Frobach	358/84	
	4,112,317	September 5, 1978	Everswick	307/308	
	4,112,383	September 5, 1978	Burgert	329/50	
	4,114,841	September 19, 1978	Muhlfelder et al.	244/166	
	4,120,003	October 10, 1978	Mitchell et al.	358/142	
	4,124,887	November 7, 1978	Johnson et al.	364/107	
	4,126,762	November 21, 1978	Martin et al.	179/2A	
	4,135,213	January 16, 1979	Wintfeld et al.	358/142	

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	4,142,156	February 27, 1979	Freund	325/309	
	4,145,717	March 20, 1979	Guif et al.	358/121	
	4,148,066	April 3, 1979	Saylor	358/127	
	4,156,253	May 22, 1979	Steudel	358/11	
	4,156,931	May 29, 1979	Adelman et al.	364/900	
	4,163,252	July 31, 1979	Mistry et al.	358/118	
	4,180,709	December 25, 1979	Cosgrove et al.	179/2 AM	
	4,199,656	April 22, 1980	Saylor	178/66.1	
	4,199,781	April 22, 1980	Doumit	358/83	
	4,199,809	April 22, 1980	Pasahow et al.	364/200	
	4,207,524	June 10, 1980	Purchase	375/22	
	4,214,273	July 22, 1980	Brown	358/188	
	4,215,366	November 13, 1984	Davidson	358/124	
	4,216,497	August 5, 1980	Ishman et al.	358/84	
	4,222,068	September 9, 1980	Thompson	358/120	
	4,225,884	September 30, 1980	Block et al.	358/122	
	4,245,246	January 13, 1981	Cheung	358/124	
	4,246,611	January 20, 1981	Davies	358/194	
	4,247,947	January 27, 1981	Miyamoto	455/38	
	4,250,521	February 10, 1981	Wright	358/8	
	4,258,386	March 24, 1981	Cheung	358/84	
	4,266,243	May 5, 1981	Shutterly	358/121	
	4,272,784	June 9, 1981	Saito et al.	358/127	
	4,273,962	June 16, 1981	Wolfe	179/7.1R	
	4,292,650	September 29, 1981	Hendrickson	358/123	
	4,295,155	October 13, 1981	Jarger et al.	358/12	
	4,301,542	November 17, 1981	Weintraub et al.	455/353	
	4,305,101	December 8, 1991	Yarbrough et al.	360/69	
	4,310,854	January 12, 1982	Baer et al.	358/143	
	4,316,217	February 16, 1982	Rifken	358/86	
	4,318,047	March 2, 1982	Dawson	328/112	
	4,323,921	April 6, 1982	Guillou	358/114	
	4,323,922	April 6, 1982	den Toonder et al.	358/117	
	4,329,711	May 11, 1982	Cheung	358/114	
	4,335,426	June 15, 1982	Maxwell et al.	364/200	
	4,340,906	July 20, 1982	den Toonder et al.	358/124	
	4,341,925	July 27, 1982	Doland	178/22.17	
	4,343,042	August 3, 1982	Schrock et al.	455/5	
	4,348,696	September 7, 1982	Beier	358/188	
	4,354,201	October 12, 1982	Sechet et al.	358/122	
	4,355,415	October 19, 1982	George et al.	455/185	
	4,358,672	November 9, 1982	Hyatt et al.	235/380	
	4,360,881	November 23, 1982	Martinson	364/493	

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	4,361,848	November 30, 1982	Poignet et al.	358/1	
	4,361,851	November 30, 1982	Asip et al.	358/84	
	4,361,903	November 30, 1982	Ohta	455/2	
	4,365,267	December 21, 1982	Tsuda	358/84	
	4,378,470	March 29, 1983	Murto et al.	179/2 C	
	4,382,256	May 5, 1983	Nagata	340/825.44	
	4,385,384	May 24, 1983	Rosbury et al.	371/22	
	4,386,436	May 31, 1983	Kocher et al.	455/151	
	4,388,643	June 14, 1983	Aminetzah	358/123	
	4,388,644	June 14, 1983	Ishman et al.	358/84	
	4,390,898	June 28, 1983	Bond et al.	358/1199	
	4,390,901	June 28, 1983	Keiser et al.	358/147	
	4,392,135	July 5, 1983	Ohyagi	340/825.44	
	4,393,277	July 12, 1983	Besen et al.	179/2 A	
	4,408,345	October 4, 1983	Yashiro et al.	455/3	
	4,411,017	October 18, 1983	Talbot	455/26	
	4,414,621	November 8, 1983	Bown et al.	364/200	
	4,415,771	November 15, 1983	Martinez	179/5R	
	4,418,425	November 29, 1983	Fennel et al.	455/27	
	4,424,533	January 3, 1984	Rzeszewski	358/167	
	4,425,578	January 10, 1984	Haselwood et al.	358/84	
	4,425,579	January 10, 1984	Merrell	358/86	
	4,425,664	January 10, 1984	Sherman et al.	375/8	
	4,427,968	January 24, 1984	York	340/310	
	4,429,385	January 31, 1984	Cichelli et al.	370/92	
	4,430,731	February 7, 1984	Gimple et al.	370/30	
	4,434,438	February 28, 1984	Rzeszewski	358/167	
	4,439,785	March 27, 1984	Leonard	358/120	
	4,450,481	May 22, 1984	Dickinson	358/114	
	4,450,531	May 22, 1984	Kenyon et al.	364/604	
	4,454,538	June 12, 1984	Toriumi	358/86	
	4,468,701	August 28, 1984	Burcher et al.	358/181	
	4,471,352	September 11, 1984	Soulliard et al.	340/825.44	
	4,475,123	October 2, 1984	Dumbauld et al.	358/114	
	4,476,535	October 9, 1984	Loshing et al.	364/480	
	4,484,218	November 20, 1984	Boland et al.	358/86	
	4,484,328	November 20, 1984	Schlaflly	370/85	
	4,488,179	December 11, 1984	Kruger et al.	358/181	
	4,489,220	December 18, 1984	Oliver	179/2 AM	
	4,489,316	December 18, 1984	MacQuivey	340/700	
	4,494,142	January 15, 1985	Mistry	358/118	
	4,496,975	January 29, 1985	Noirel	358/147	
	4,504,831	March 12, 1985	Jahr et al.	340/870.03	

Serial No. 08/459,507
Docket No. 05634.0232

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	4,506,387	March 9, 1985	Walter	455/612	
	4,510,623	April 9, 1985	Bonneau et al.	455/181	
	4,528,589	July 9, 1985	Block et al.	358/122	
	4,531,020	July 23, 1985	Wechselberger et al.	178/22.08	
	4,531,021	July 23, 1985	Bluestein et al.	178/22.08	
	4,540,849	September 10, 1985	Oliver	179/2 AM	
	4,543,616	September 24, 1985	Brooks	358/335	
	4,547,804	October 15, 1985	Greenberg	358/142	
	4,554,584	November 19, 1985	Elam et al.	358/165	
	4,558,464	December 10, 1985	O'Brien, Jr.	455/4	
	4,563,702	January 7, 1986	Heller et al.	358/119	
	4,566,030	January 21, 1986	Nickerson et al.	358/84	
	4,570,930	February 18, 1986	Matheson	273/1 E	
	4,578,536	March 25, 1986	Oliver et al.	179/2 AM	
	4,578,718	March 25, 1986	Parker et al.	360/10.3	
	4,592,546	June 3, 1986	Fascenda et al.	273/1 E	
	4,594,609	July 10, 1986	Romao et al.	358/119	
	4,595,952	June 17, 1986	Filliman	358/47	
	4,600,918	July 15, 1986	Belisomi et al.	340/711	
	4,600,921	July 15, 1986	Thomas	340/825.31	
	4,605,964	August 12, 1986	Chard	358/147	
	4,611,227	September 9, 1986	Brockhurst et al.	358/147	
	4,613,901	September 23, 1986	Gilhousen et al.	358/122	
	4,621,259	November 4, 1986	Schepers et al.	340/707	
	4,621,285	November 4, 1986	Schilling et al.	358/120	
	4,623,920	November 18, 1986	Dufresne et al.	358/122	
	4,626,892	December 2, 1986	Nortrup et al.	358/21 R	
	4,633,297	December 30, 1986	Skerlos et al.	358/22	
	4,636,858	January 13, 1987	Hague et al.	358/147	
	4,638,357	January 20, 1987	Heimbach	358/121	
	4,639,779	January 27, 1987	Greenberg	358/142	
	4,646,145	February 24, 1987	Percy et al.	358/84	
	4,649,533	March 10, 1987	Chorley et al.	370/58	
	4,658,290	April 14, 1987	McKenna	358/84	
	4,677,685	June 30, 1987	Kurisu	455/4	
	4,694,490	September 15, 1987	Harvey et al.	380/20	
	4,704,725	November 3, 1987	Harvey et al.	380/48	
	4,706,121	November 10, 1987	Young	358/142	
	4,710,919	December 1, 1987	Oliver et al.	370/96	
	4,710,955	December 1, 1987	Kauffman	380/10	
	4,718,107	January 5, 1988	Hayes	455/4	
	4,723,302	February 2, 1988	Fulmer et al.	455/2	
	4,736,422	April 5, 1988	Mason	380/120	

Serial No. 08/459,507
Docket No. 05634.0232

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	4,744,080	May 10, 1988	Brennand et al.	280/21	
	4,751,732	June 14, 1988	Kamitake	380/20	
	4,754,326	June 28, 1988	Kram et al.	364/900	
	4,768,144	August 30, 1988	Winter et al.	364/200	
	4,768,229	August 30, 1988	Benjamin et al.	380/20	
	4,782,401	November 1, 1988	Faerber et al.	358/335	
	4,785,420	November 15, 1988	Little	364/513.5	
	4,796,181	January 3, 1989	Wiedmer	364/406	
	4,803,725	February 7, 1989	Horne et al.	380/44	
	4,805,020	February 14, 1989	Greenberg	358/147	
	4,809,274	February 28, 1989	Walker et al.	371/37	
	4,816,904	March 28, 1989	McKenna et al.	358/84	
	4,841,386	June 20, 1989	Schiering	360/69	
	4,843,482	June 27, 1989	Hegendorfer	358/335	
	4,855,842	August 8, 1989	Hayes et al.	358/342	
	4,862,268	August 9, 1989	Campbell et al.	358/141	
	4,879,611	November 7, 1989	Fukui et al.	360/69	
	4,885,579	December 5, 1989	Sandbank	340/825.72	
	4,888,796	December 19, 1989	Olivo, Jr.	379/101	
	4,982,430	January 1, 1991	Frezza et al.	380/50	
	4,993,066	February 12, 1991	Jenkins	380/16	

* If Pertinent

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY	CLASS/ SUBCLASS	TRANSLATION YES NO	
	0 020 242	December 10, 1980	European	G09G 1/16		X
	0 046 108	February 17, 1982	European	H04N 5/76		X
	0 049 184	April 7, 1982	European	G09B 7/08		X
	0 055 167	June 30, 1982	European	G09G 1/16		X
	0 056 649	July 28, 1982	European	H04N 5/44	X	
	0 077 712	April 27, 1983	European	H04N 7/00		X
	0 078 185	May 4, 1983	European	H04N 7/00		X
	1,189,612	June 25, 1985	Canada	Ho4n 7/08	X	
	1,216,977	June 8, 1983	Canada	H04M 11/00	X	
	1,396,981	June 11, 1975	United kingdom	H04H 1/00	X	
	1,523,307	August 31, 1978	Great Britain	H03K 5/08	X	
	1,543,502	April 4, 1979	United Kingdom	G08B9/00	X	
	1,582,563	January 14, 1981	United Kingdom	G08B9/00	X	
	1,584,111	February 4, 1981	United Kingdom	G08B9/00	X	
	2,051,527	January 14, 1981	Great Britain	G06F 3/153	X	
	2,067,379	July 22, 1981	Great Britain	H04L 1/24	X	
	2,090,504	July 7, 1982	Great Britain	H04N 3/16	X	
	2,103,455	February 16, 1983	Great Britain	H04N 1/00 7/12	X	
	2,496,376	June 18, 1982	France	H04N 7/00		X
	2,516,733	May 5, 1983	France	H04N 7/00		X
	2,823,175	November 29, 1979	German	G06F 3/12		X
	24 53 441	May 13, 1976	Germany	H04L 9/00		X
	DE 3039949	May 6, 1982	German	H04M 3/42		X
	DE 3112249	October 7, 1982	German	G09G 1/28		X
	80/02901	December 24, 1980	France	H04N 7/16		X
	857,862	January 4, 1961	United Kingdom	40 (1)	X	
	DE 3020787	December 17, 1981	Germany	H04N 7/08		X
	GB 2 081 948 A	February 24, 1982	United Kingdom	H04Q 9/00	X	
	WO80/00292	February 21, 1980	Japan	H04N9/16		X
	WO83/00789	March 3, 1983	Japan	H04N 7/08		X

OTHER DOCUMENTS

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Hanas et al., "An Addressable Satellite Encryption System For Preventing Signal Piracy", November 1981, pp. 631-635.
	National Cable Television Association Executive Seminar Series, <u>Videotex Services</u> , October 1980, pp. 1-155.
	Kokado et al., "A Programmable TV Receiver", February 1976, pp. 69-82.
	J. Hedger et al., "Telesoftware-Value Added Teletext", August 1980, pp. 555-567.
	Marti, B., "The Concept Of A Universal "Teletext" June 1979, pp.1-11
	Article re: America's Talk-Back Television Experiment: Qube
	Article re: "Teletext-Applications in Electronic Publishing"
	Article re: A Description of the Broadcast Telidon System, IEEE Transactions on Consumer Electronics, Vol. CE - 26, August 1980
	Article re: EPEOS--Automatic Program Recording System by G. Degoulet
	Article re: Teletext signals transmitted in UK...
	Article re: New services offered by a packet data broadcasting system, no. 149 February 1975
	Article re: Philips TV set indicates station tunign and color settings on screen, Electronics, Nov. 27, 1975
	Vincent, A. et al., "Telidon Teletest System Field Trials" IEEE Transactions on Consumer Electronics, Vol. CE - 27, No. 3, Aug. 1981, pp. 530-335
	Rzeszeewski, T., "A New Telletex Channel"
	Kaplinsky, C.H., "The D**(2)B A One Logical Wire Bus for Consumer Applications" 1981
	Sechet, C., "Antiope Teletext Captioning" 1980
	Lambert, O. et al., "Antiope and D.R.C.S." 1980
	"LSI Circuits for Teletext and Viewdata -- The Lucy Generation" published by Mullard Limited, Mullard House (1981)
	Nicholas Negroponte in SID 80 Digest titled, "17.4/10:25 a.m.: Soft Fonts", pp. 184-185
	IEEE Consumer Electronics July 1979 issue from Spring Conference titled, "Consumer Text Display Systems", pp. 235-429
	Videotext '81 published by Online Conferences Ltd., for the May 20-22, 1981 Confernece, pp. 1-470
	"Teletext and Viewdata Costs as Applied to the U.S. Market" Published by Mullard House (1979), pp. 1-8
	Dalton, C.J., "International Broadcasting Convention" (1968), Sponsors: E.E.A., I.E.E., I.E.E.E., I.E.R.E., etc.
	Shorter, D.E.L., "The Distribution of Television Sound by Pulse-Code Modulation Signals Incorporated in the Video Waveform"
	Chorky, J.M., Shorter, D.E.L., "International Broadcasting Convention" (1970), pp. 166-169
	"The Implementation of the Sound-in-Sync project for Eurovision (Feb. 1975), pp. 18-22, No. 140 E.B.U. Review
	Maegele, Manfred, "Digital Transmissions of Two Television Sound Channels in Horizontal Banking", pp. 68-70
	Weston, J.D., "Digital TV Transmission for the European Communications Satellite" (1974), pp. 318-325
	Golding, L., "A 15 to 25 Mhz Digital Television System for Transmission of Commercial Color Television" (1967), pp. 1-26
	Huth, Gaylord K., "Digital Television System Design Study: Final Report (11/28/76), prepared for NASA Lyndon B. Johnson Space Center

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Weston, J.D., "Transmission of Television by Pulse Code modulation", Electrical Communication (1967), pp. 165-172
	Golding, L., "F1-Ditec-A-Digital Television Communications System for Satellite Links," Telecommunications Numeriques Par Satellite
	Haberle, H. et al., "Digital TV Transmission via Satellite", Electrical Communications (1974)
	Dirks, H. et al., "TV-PCM6 Integrated Sound and Vision Transmission System, Electrical Communication (1977), pp. 61-67
	Talygin, N.V. et al., The "Orbita" Ground Station for Receiving Television Programs Relayed by Satellites, Elektrovinz, pp. 3-5
	Portions of Electronic Engineer's Reference Book (1989) - Multichannel sound systems, Teletext transmission, cable television, ISDN applications, etc.
	Collin, Simon, PC Text II (Hardware Review (Shortlist), PC User (1990)
	Alfonzetti, Salvatore, "Interworking between teletext and OSI systems," Computer Communications (1989)
	Voorman, J.O. et al., A one-chip Automatic Equalizer for Echo Reduction in Teletext, IEEE Transactions on Consumer Electronics, pp. 512-529
	"Teletext (Broadcast Videotext) Begins in the United States" by Richard H. Veith, Logica, Inc. at National Online Meeting: Proceedings - 1982 sponsored by Online Review, pp. 547 - 551
	MacKenzie, G.A., A Model for the UK Teletext Level 2 Specification (Ref: GTV2 242 Annex 6" based on the ISO Layer model
	Chambers, J.P., A Domestic Television Program Delivery Services, British Broadcasting Corporation, pp. 1-5
	McKenzie, G.A., UK Teletext - The Engineering Choices, Independent Broadcasting Authority, pp. 1-8
	Adding a new dimension to British television, Electronic Engineering (1974)
	Jones, Keith, The Development of Teletext, pp. 1-6
	Ando, Heiichero et al., Still-Picture Broadcasting - A new Informational and Instructional Broadcasting System, IEEE Transactions on Broadcasting (1973), pp. 68-76
	B.B.C.I.B.A., Specification of Standards for information transmission by digitally coded signals in the field - blanking interval of 625-line systems (1974), pp. 5-40
	Tarrant, D.R., "Teletext for the World" (date unknown)
	Clifford, Colin et al., "Microprocessor Based, Software Defined Television Controller", IEEE Transaction on Consumer Electronics (1978), pp. 436-441
	Hughes, William L. et al., "Some Design Considerations for Home Interactive Terminals", IEEE Transactions on Broadcasting (1971)
	Mothersdale, Peter L., "Teletext and viewdata: new information systems using the domestic television receiver", Electronics Record (1979), pp. 1349-1354
	Betts, W.R., "Viewdata: the evolution of home and business terminals", PROC.IEE (1979), pp. 1362-1366
	Hutt, P.R., "Thical and practical ruggedness of UK teletext transmission", PROC.IEE (1979), pp. 1397-1403
	Rogers, B.J., "Methods of measurement on teletext receivers and decoders", PROC.IEE (1979), pp.1404-1407
	Green, N., "Subtitling using teletext service - technical and editorial aspects", PROC.IEE (1979), pp. 1408-1416
	Chambers, M.A., "Teletext - enhancing the basic system", PROC.IEE (1979), pp. 1425-1428
	Crowther, G.O., "Adaptation of UK Teletex System for 525/60 Operation", IEEE Transactions on Consumer Electronics (1980), pp. 587-596

Serial No. 08/459,507
Docket No. 05634.0232

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Lopinto, John, "The Application of DRCS within the North American Broadcast Teletext Specification", IEEE Transactions on Consumer Electronics (1982), pp. 612-617
	BBC, BBC Microcomputer: BBC Microcomputer with Added Processor and Teletex Adaptor (Manual)
	Green, N.W., "Picture Oracle," On Independent Television Companies Association Limited Letterhead
	National Captioning Institute, Comments on the Matter of Amendment of Part 73, Subpart E. of the Federal Communications Rules Government Television Stations to Authorize Teletext (before F.C.C.) 03-26-81
	Balchin, C., "Videotext and the U.S.A.", I.C. Product Marketing Memo
	EIA Teletext SubCommittee Meetings, Report on USA Visit
	Brighton's Experience with Software for Broadcast (Draft) 1981
	The Institution of Electronic and Radio Engineers, Conference on Electronic Delivery of Data and Software, Pub. no. 69, 9/1986
	AT&T, "Videotex Standard Presentation Level Protocol", 1981
	Various Commissioner statements on Authorization of Teletext Transmissions by TV Stations, BC Docket No. 81-741, 03-31-83
	Report and Order of FCC on the Matter of Amendment of Parts 2,73, and 76 of the Commission's Rules to Authorize the Transmission of Teletext by TV Stations, pp. 1-37, 05-20-83
	IBA Technical Review of Digital Television by F. Howard Steele, pp. 1-64, 6/1973
	National Cable Television Association report, "Videotex Services" given at Executive Seminar, pp. iii-155
	Electronic Industries Association - Teletext Subcommittee Task Group A - Systems Minutes of Meeting 3/30/81 at Zenith plus attachments
	Electronic Industries Association - Teletext Subcommittee Task Group A - Systems Interim Report, 3/30/81 by Stuart Lipoff, Arthur D. Little Inc.
	Minutes of Electronic Industries Association Teletext Subcommittee Task Force B - Laboratory & Field Tests 3/30/81
	National Captioning Institute Report, "The 1980 Closed-Captioned Television Audience"
	Electronic Industries Assoc. - Teletext Subcommittee - Steering Committee Minutes of Meeting on 3/31/81
	Various Articles following cover sheet titled "QVP - Pay Per View" 11/29/82
	National Cable Television Association report, "Videotex Services" October 1980
	Scala Info Channel Advertisement, "The Art of Conveying A Message"
	Zenith Corporation's Z-Tac Systems information includes Z-tac specifications, access list, etc. (various articles)
	Report by Cablesystems Engineering Ltd. on, "Zenith Addressable System and Operating Procedures" and Advertising documents, Nov. 1981
	Memo from W. Thomas to G. Kelly on 1/21/82 Re: Modified ZTAC/Multi Channel
	Notations by Walt Ciciora dated 8/19/81 referring to Virtext figures, 8/19/81
	"Preliminary Specification for Basic Text" Stamped Zenith Confidential, 2/17/81
	Petition to FCC dated 3/26/81 titled, "Petition for Rulemaking of Unighted Kingdom Teletext Industry Group," also 1 page of handwritten notes from Walter Ciciora
	"Enhanced Computer Controlled Teletext for 525 Line Systems (Usecc) SAA 5245 User Manual" report by J.R. Kinghorn, August 1, 1981
	"Questions and Answers about Pay TV" by Ira Kamen, 1973
	Oak Industries 1981 Annual Report
	Article, "50 Different Uses For At Home 2-Way Cable TV Systems" by Morton Dubin

Serial No. 08/459,507
Docket No. 05634.0232

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Derwent Info Ltd. search. Integrated broadcasting & Computer Processing system. Inventor J. Harvey/J. Cuddihy
	"Relevant papers for Weather Channel V PMMC"
	Letter to Peter Hatt Re: BVT: Advisory UK Industry Contact Group, 6/24/81
	Memo RE: Next Moves by British teletext and video proponents toward gaining support of systems in US.
	Memo - Re: British Teletext -- ABC
	Notes to Section 22.4: Simple Block Encipherment Algorithm
	Internal Correspondence to John Meyer from Mike Clader RE: Teletext Business Posture, Sept. 18, 1981 and Internal Correspondence to Mike Calder from John Nemec RE: Trips to Zenith, Sept. 9, 1981
	Memo to Bernie Kotten about National Cable TV Association meeting and efforts to encourage Sony to integrate teletext chip sets into its TV, March 25, 1986
	Kahn, et al., "Advances in Packet Radio Technology," Proceedings of the IEEE, Vol. 66, No. 11, Nov. (1978) pp. 1468-1495
	Clifford, C., "A Universal Controller for Text Display Systems," IEEE Transactions on Consumer Electronics, (1979) pp. 424-429
	Harden, B., "Teletext/Viewdata LSI," IEEE Transactions on Consumer Electronics, (1979), pp. 353-358
	Bown, H. et al., "Comparative Terminal Realizations with Alpha-Geometric Coding," IEEE Transaction on Consumer Electronics, (1980), pp. 605-614
	Crowther, "Dynamically Redefinable Character Sets--D.R.C.S.," IEEE Transaction on Consumer Electronics, (1980), pp. 707-716
	Chambers, John et al., "The Development of a Coding Hierarchy for Enhanced UK Teletext," IEEE Transaction on Consumer Electronics, (1981), pp. 536-540
	In Re Reexamination of U.S. Patent No. 4,706,121
	U.S. Patent Application by T. Diepholz (Serial No. 266900), filing date 5-26-81
	88908836.5 International Application to John C. Harvey
	Kruger, H. E., "Memory Television, The ZPS Digital Identification System." pp. 1 - 9

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).	

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

John C. Harvey and James W. Cuddihy:

Serial No.: 08/459,507

Filed: June 02, 1995

For: **SIGNAL PROCESSING APPARATUS
AND METHODS**

Group Art Unit: 2737

Examiner: Faile, A.

Atty Dkt: 05634.0232

Received
SEP 02 1998
Group 2700

TRANSMITTAL

Assistant Commissioner of Patents
Washington, D.C. 20231

- ☒ Amendment
- ☒ Request for Extension of Time Pursuant to 37 C.F.R. § 1.136(a) (in duplicate)
- ☒ An additional claim fee is required, and is calculated as shown below:

	(Col 1)		(Col 2)	(Col 3)		
	Claims Remaining After Amendment		Highest No. Previously Paid for	Present Extra	Rate	Additional Fee
Total	41	Minus	37	= 4	x \$ 22.00	\$ 88.00
Indep.	4	Minus	3	= 1	x \$ 82.00	\$ 82.00
First Presentation of Mult. Dep. Claim					x \$ 270.00	\$ 0.00
Total Additional Filing Fee for Request for Extension of Time						\$ 950.00
Total Fee Required						\$ 1120.00

- * If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3.
- ** If the "Highest Number Previously Paid For" in this space is less than 20, write "20" in this space.
- *** If the "Highest Number Previously Paid For" in this space is less than 3, write "3" in this space. "The Highest Number Previously Paid For" (Total or Independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment or the number of claims originally filed.

10/28/1998 DFORTE 00000004 08459507

- ☒ Howrey & Simon check no. 164603 in the amount of \$ 950.00 is enclosed.
- ☒ The Commissioner is hereby authorized to charge any additional fees, or credit any overpayment to Deposit Account No. 08-3038. This sheet is submitted in triplicate.

- ☒ \$ 170.00 additional fees under 37 CFR 1.16 for the presentation of extra claims.
- ☒ Any patent application processing fees under 37 CFR 1.17.

10/28/1998 DFORTE 00000005 083038 08459507

01 FC:102 82.00 CH
02 FC:103 88.00 CH

Respectfully submitted,

Donald J. Lecher

Thomas J. Scott, Jr.
Registration No. 27,836
Donald J. Lecher
Registration No. 41,933
Attorney for Applicants

Date: September 2, 1998
10/05/1998 DFORTE 00000015 08459507
HOWREY & SIMON

01 FC:102 88.00 CH
02 FC:103 82.00 CH
1299 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
Tel: (202) 383-6790

10/05/1998 DFORTE 00000016 08459507
01 FC:102 88.00 CH
02 FC:103 82.00 CH
03 FC:117 88.00 CH

10/28/1998 DFORTE 00000004 08459507

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

John C. Harvey and James W. Cuddihy

Appl. No. 08/459,507

Filed: June 02, 1995

For: SIGNAL PROCESSING
APPARATUS AND METHODS

Art Unit: 2737

Examiner: Faile, A.

Atty. Docket: 05634.0232

R. Ward
10/29/98
#147 Reg. m
Received
SEP 02 1998
Group 2700

Petition For Extension of Time Under 37 C.F.R. § 1.136

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

It is hereby requested that the period for responding to the outstanding Office Action be extended three months from June 2, 1998 to September 2, 1998 by the filing of this Petition and fee payment.

The petition fee (37 C.F.R. §1.17(a)) is believed to be \$950.00 for a 3 month extension for a large entity. Fee payment is provided in our accompanying Check No. 164603. However, if extensions of time under 37 C.F.R. § 1.136 other than those provided herewith are required to prevent abandonment of the present patent application, then such extensions of time are hereby petitioned.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 08-3038. A duplicate copy of this Petition is enclosed.

Respectfully submitted,

Donald J. Lecher

Thomas J. Scott, Jr. (Reg. No. 27,836)

Donald J. Lecher (Reg. No. 41,933)

Date: September 2, 1998
HOWREY & SIMON
1299 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2402
(202) 383-6790

THREE
EXTENSION GRANTED
By Petitioner
Primary Examiner
10/29/98
Merk, Group 260
pat



2714
8/12/98

#16

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

John C. Harvey and James W. Cuddihy:

Serial No.: 08/459,507

Filed: June 2, 1995

For: SIGNAL PROCESSING APPARATUS AND METHODS

Group Art Unit: 2619

Examiner: GROODY, J.

Atty Dkt: 05634.02

RECEIVED
98 MAY 14 AM 8:41
GROUP 2700

ASSOCIATE POWER OF ATTORNEY

Box: Non-Fee Amendment

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

The undersigned, Mr. Thomas J. Scott, Jr., attorney of record in the present application, hereby appoints

Michael J. Strauss, Reg. No. 32,443, and
Donald J. Lecher, Reg. No. 41,933

as Associate Attorneys with full power to prosecute the above-identified application and to transact all business connected therewith in the U.S. Patent and Trademark Office.

Please address future correspondence to the below address and direct all future phone calls and facsimile transmissions regarding the prosecution of this matter to:

HOWREY & SIMON

Box No. 34

1299 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2402

Telephone 202-383-6790
Facsimile 202-383-7195

Respectfully submitted,

Thomas J. Scott, Jr.
Registration No. 27,836
Attorney for Applicants
Tel: (202) 383-6790

Date: May 12, 1998

HOWREY & SIMON

1299 Pennsylvania Avenue, NW
Washington, D.C. 20004



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
08/459,507	06/02/95	HARVEY	J 5634,232

THOMAS J SCOTT JR
HOWREY & SIMON
1299 PENNSYLVANIA AVENUE NW
WASHINGTON DC 20004

LM11/0302

EXAMINER

ART UNIT	PAPER NUMBER
2737	11

DATE MAILED: 03/02/98

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☒ Responsive to communication(s) filed on 3/13/97

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 (three) month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 2-3P

Of the above, claim(s) _____ is/are pending in the application.

☐ Claim(s) _____ is/are withdrawn from consideration.

☒ Claim(s) 2-3P is/are allowed.

☐ Claim(s) _____ is/are rejected.

☐ Claims _____ is/are objected to.

_____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of Reference Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

PTOL-326 (Rev. 10/95)

* U.S. GPO: 1998-409-290/40129

Art Unit: 2737

DETAILED ACTION

1. This Office Action is responsive to the amendment(s) filed 3/13/97.

DOUBLE PATENTING V.S. PATENTS

2. After reviewing the restriction requirement under 35 USC 121 in US Patent 5,233,654 it is believed that the claims of the instant application are subject to a double patenting analysis against US Patent 5,233,654 and US Patent 5,335,277.

3. In view of further analysis and applicant's arguments, the rejection of the claims in the instant application under double patenting based on the broad analysis of *In re Schneller* as set forth in paragraphs 7-10 of the previous Office Action has been withdrawn.

DOUBLE PATENTING BETWEEN APPLICATIONS

4. Conflicts exist between claims of the following related co-pending applications which includes the present application:

#	Ser. No.	#	Ser. No.	#	Ser. No.
1	397371	2	397582	3	397636

Serial Number: 08/459,507

Page 3

Art Unit: 2737

4	435757	5	435758	6	437044
7	437045	8	437629	9	437635
10	437791	11	437819	12	437864
13	437887	14	437937	15	438011
16	438206	17	438216	18	438659
19	439668	20	439670	21	440657
22	440837	23	441027	24	441033
25	441575	26	441577	27	441701
28	441749	29	441821	30	441880
31	441942	32	441996	33	442165
34	442327	35	442335	36	442369
37	442383	38	442505	39	442507
40	444643	41	444756	42	444757
43	444758	44	444781	45	444786
46	444787	47	444788	48	444887
49	445045	50	445054	51	445290
52	445294	53	445296	54	445328
55	446123	56	446124	57	446429
58	446430	59	446431	60	446432
61	446494	62	446553	63	446579

Serial Number: 08/459,507

Page 4

Art Unit: 2737

64	447380	65	447414	66	447415
67	447416	68	447446	69	447447
70	447448	71	447449	72	447496
73	447502	74	447529	75	447611
76	447621	77	447679	78	447711
79	447712	80	447724	81	447726
82	447826	83	447908	84	447938
85	447974	86	447977	87	448099
88	448116	89	448141	90	448143
91	448175	92	448251	93	448309
94	448326	95	448643	96	448644
97	448662	98	448667	99	448794
100	448810	101	448833	102	448915
103	448916	104	448917	105	448976
106	448977	107	448978	108	448979
109	449097	110	449110	111	449248
112	449263	113	449281	114	449291
115	449302	116	449351	117	449369
118	449411	119	449413	120	449523
121	449530	122	449531	123	449532

Serial Number: 08/459,507

Page 5

Art Unit: 2737

124 449652

125 449697

126 449702

127 449717

128 449718

129 449798

130 449800

131 449829

132 449867

133 449901

134 450680

135 451203

136 451377

137 451496

138 451746

139 452395

140 458566

141 458699

142 458760

143 459216

144 459217

145 459218

146 459506

147 459507

148 459521

149 459522

150 459788

151 460043

152 460081

153 460085

154 460120

155 460187

156 460240

157 460256

158 460274

159 460387

160 460394

161 460401

162 460556

163 460557

164 460591

165 460592

166 460634

167 460642

168 460668

169 460677

170 460711

171 460713

172 460743

173 460765

174 460766

175 460770

176 460793

177 460817

178 466887

179 466888

180 466890

181 466894

182 467045

183 467904

Art Unit: 2737

184	468044	185	468323	186	468324
187	468641	188	468736	189	468994
190	469056	191	469059	192	469078
193	469103	194	469106	195	469107
196	469108	197	469109	198	469355
199	469496	200	469517	201	469612
202	469623	203	469624	204	469626
205	470051	206	470052	207	470053
208	470054	209	470236	210	470447
211	470448	212	470476	213	470570
214	470571	215	471024	216	471191
217	471238	218	471239	219	471240
220	472066	221	472399	222	472462
223	472980	224	473213	225	473224
226	473484	227	473927	228	473996
229	473997	230	473998	231	473999
232	474119	233	474139	234	474145
235	474146	236	474147	237	474496
238	474674	239	474963	240	474964
241	475341	242	475342	243	477547
244	477564	245	477570	246	477660
247	477711	248	477712	249	477805

Serial Number: 08/459,507

Page 7

Art Unit: 2737

250	477955	251	478044	252	478107
253	478544	254	478633	255	478767
256	478794	257	478858	258	478864
259	478908	260	479042	261	479215
262	479216	263	479217	264	479374
265	479375	266	479414	267	479523
268	479524	269	479667	270	480059
271	480060	272	480383	273	480392
274	480740	275	481074	276	482573
277	482574	278	482857	279	483054
280	483169	281	483174	282	483269
283	483980	284	484275	285	484276
286	484858	287	484865	288	485282
289	485283	290	485507	291	485775
292	486258	293	486259	294	486265
295	486266	296	486297	297	487155
298	487397	299	487408	300	487410
301	487411	302	487428	303	487506
304	487516	305	487526	306	487536
307	487546	308	487556	309	487565
310	487649	311	487851	312	487895
313	487980	314	487981	315	487982

Art Unit: 2737

316	487984	317	488032	318	488058
319	488378	320	488383	321	488436
322	488438	323	488439	324	488619
325	488620	326	498002	327	511491
328	485773	329	113329		

5. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. The attached Appendix provides clear evidence that such conflicting claims exist between the 329 related co-pending applications identified above. However, an analysis of all claims in the 329 related co-pending applications would be an extreme burden on the Office requiring millions of claim comparisons.

In order to resolve the conflict between applications, applicant is required to either:

- (1) file terminal disclaimers in each of the related 329 applications terminally disclaiming each of the other 329 applications, or;
- (2) provide an affidavit attesting to the fact that all claims in the 329 applications have been reviewed by applicant and that no conflicting claims exists between the applications. Applicant should provide all relevant factual information including the specific steps taken to insure that no conflicting claims exist between the applications, or;
- (3) resolve all conflicts between claims in the above identified 329 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims

Art Unit: 2737

in the above identified 329 applications (note: the five examples in the attached Appendix are merely illustrative of the overall problem. Only correcting the five identified conflicts would not satisfy the requirement).

Failure to comply with the above requirement will result in abandonment of the application.

INFORMATION DISCLOSURE STATEMENTS

6. Receipt is acknowledged of applicant's Information Disclosure Statements filed 12/11/95, 12/22/95, 2/6/96/ 4/17/96, and 4/7/97. In view of the unusually large number of references cited in the instant application (approximately 2,200 originally and 645 in the subsequent IDS) and the failure of applicant to point out why such a large number of references is warranted, these references have been considered in accordance with 37 C.F.R. 1.97 and 1.98 to the best ability by the examiner with the time and resources available.

The foreign language references cited therein where there is no statement of relevance or no translation are not in compliance with 37 C.F.R. 1.98 and have not been considered. Numerous references listed in the IDS are subsequent to applicant's latest effective filing date of 9/11/87, therefore, the relevancy of these references is unclear. Also cited are numerous references that are apparently unrelated to the subject matter of the instant invention such as: US Patent # 33,189 directed toward a beehive, GB 1565319 directed toward a chemical compound, a cover sheet with only the word "ZING", a computer printout from a library search with the words "LST" on it and a page of business cards including that of co-inventor James Cuddihy, among others. The relevancy of these references cannot be ascertained. Furthermore, there are several

Art Unit: 2737

database search results listed in foreign languages (such as German) which list only the title and document information; no copy has been provided, therefore, these references have not been considered.

CLAIM REJECTIONS - 35 USC § 112

7. The disclosure is objected to because of the following informalities: 1) In claim 15, line 3, "with" should read --which--.

Appropriate correction is required.

8. Claims 2-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, line 10, the recited step of "storing at least some of said detected embedded data" is confusing when referenced back to lines 8 and 9 because it is not clear whether the recitation refers to the storing of at least some of the detected embedded data that was passed to the processor or to the storing of at least some of the detected data prior to its passing the processor.

Claim 2 is indefinite because the recitation "a second received broadcast or cablecast transmission" in lines 11 and 12 at least implies that the recited method includes a step for

Art Unit: 2737

receiving a second received broadcast or cablecast transmission yet the claim fails to positively recite such a receiving step as is required of a method claim.

In claim 2, lines 13 and 14, the statement "causing said processor to cease storing said embedded data" is confusing and is indefinite for the following reasons: 1) because a step in which said processor actually stored said embedded data was never positively recited as part of the method and therefor it is not clear how said method can include a step for causing said storing to be ceased; 2) because it is not clear if (and/or how) the ceasing of the storing of said detected embedded data that is recited in line 13 relates to the step of storing at least some of said detected embedded data that was recited in line 10.

The examiner notes that the cited confusion that exists with respect lines 10 of claim 2 is magnified by the cited confusion that exists with respect to lines 13 and 14 of claim 2. For example, line 10 includes the limitation "at least some" which indicates that the step of storing of line 10 only needs to store "at least some" of the embedded data. However, the "at least some" limitation has been deleted from the recitation of lines 13 and 14 which indicated that the processor actually operated to store all of the embedded data and not said "at least some". Such recitation are in clear conflict if line 10 and lines 13 and 14 do in fact refer to the same "storing" of embedded data. Clarification is required.

The examiner notes that a method claim must be formatted so that the body of the claim **positively recites** those steps which comprise the method that is actually being claimed. With respect to claim 3, the body of claim 3 clearly contains limitations which are properly formatted so as to positively recite steps. However, the body of claim 3 also contains recitations which only implicitly require *additional steps*; i.e. limitations which

Art Unit: 2737

implicitly require steps which have not been positively recited in the body of the claim. For example, lines 13-15 of claim 3 contain the following statement: "to cause said processor to cease storing said embedded data." This statement *implicitly* requires an additional step of "storing said embedded data in said processor" and an additional step of "causing said processor to cease said storing said embedded data". Yet claim 3, as presently drafted, fails to positively recite these implied steps and, therefor, claim 3 fails to conform to the format required a method claim. Clarification is require. Similar clarifications is also needed throughout the claims (e.g. in claim 2, 4, etc...).

In claim 8, lines 2 and 3, the statement "to serve as a basis for generating said first control signal" is confusing and indefinite because: 1) the statement implies, but fails to positively recite, an additional step (i.e. a step of "using said formula or information as a basis for said generation of said first control signal"); and 2) because it is unclear how/if the "generating" recited in claim 8 relates back to the "generating" recited in claim 7. Clarification is needed.

In claim 9, lines 4 and 5, the statement "which enables said processor to output at least some of said detected information" is confusing and indefinite because: 1) the statement implies, but fails to positively recite, additional steps (i.e. a step of "enabling said processor"; and step of "outputting at least some detected data").

In claim 11, line 2, the statement "enables said one or more receiver stations to execute one or more controlled functions" is confusing and indefinite because: 1) the statement implies, but fails to positively recite, an additional steps (i.e. a "step of enabling one or

Art Unit: 2737

more receiver stations"; and a step of "executing one or more controlled functions").

Similar clarification is needed for claim 16.

Claim 14 is confusing and indefinite because it is not clear: 1) how a single signal (i.e. "a signal") can contain both of the recited first and second transmissions of claim 4; and 2) with what said single signal is being multiplexed. Clarification is needed.

In claim 15, lines 3 and 4, the statement "[which] operates at said memory to store or output programming" is confusing and indefinite because: 1) the statement implies, but fails to positively recite, additional steps (i.e. the steps of "operating at said memory", "storing programming", "outputting programming").

In claim 17-22 are likewise confusing and indefinite because they contain statements that imply, but fails to positively recite, additional steps (i.e. fail to comply with the format required of a method claim).

With respect to claim 20, it is not understood how a device itself (i.e. the "selective communications device") can be outputted to another device (i.e. a "transmitter") [see lines 5-7 of claim 20].

In claim 31, lines 3 and 4, "said stored at least some of said detected embedded data" has multiple antecedent basis when referred back to the storing recited in lines 1 and 2 of claim 31 and the storing recited in line 10 of claim 2. Clarification is needed.

In claim 33, line 4, "a second receiver" is confusing because a first receiver has not been previously recited (i.e. one has been recited in claim 32, however, claim 33 does not depend from claim 32). Clarification is needed.

Art Unit: 2737

In claim 35, lines 2 and 3, "said broadcast or cablecast transmission" has multiple antecedent basis and is indefinite; i.e. does it refer to the first transmission or to the second transmission.

In claim 38, line 3, "said detected digital data" has multiple antecedent basis and is indefinite; i.e. does it refer to the detected data recited in line 2 of claim 38 or to the detected data recited in lines 8 and 9 of claim 2.

Claim 38 is indefinite because the recitation "until a synchronization control signal is detected" in line 3 at least implies that the recited method includes a step for detecting a synchronization control signal yet the claim fails to positively recite such a detection step is required of a method claim.

Applicant is asked to review all of the claims and to correct any section 112 problems that are similar to those exemplified above.

9. Claims 2-38 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

37 C.F.R. 1.75(d)(1) requires that:

Art Unit: 2737

"the terms and the phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description".

The following limitations were not supported by the specification as originally filed:

The examiner notes that line 10 of newly added claim 2 does NOT recite a step of "storing said detected embedded data" as would be appropriate if the originally disclosed invention had operated to store all of said detected data. Likewise, line 10 of newly added claim 2 does NOT recite a step of "storing some of said detected embedded data" as would be appropriate if the original disclosed invention had operated to store only some of said detected data. Instead, line 10 of newly added claim 2 was drafted so as to recite a step of "storing *at least some of* said detected data" which is explicitly inclusive of the storing of only some of the detected data and, alternatively, is explicitly inclusive of the storing of all of the detected data. Being such, in order to establish that his original disclosure provided the support for the expression "at least some of" in line 10 of newly added claim 2, it is maintained that applicant must show that his original disclosure explicitly set forth both: 1) a version of the recited method in which only some of the data was stored; and 2) a version of the recited method in which all of the data was stored.

With respect to claim 2, it is not clear where the original disclosure described a method of processing signals at a receiver station, wherein the receiver station comprised a processor for *processing* digital data detected in a broadcast or cablecast transmission, and wherein the method comprised: a step for demodulating a received first broadcast or cablecast transmission so as to detect an information transmission including embedded

Art Unit: 2737

digital data; a step for detecting said embedded digital data in said information transmission; a step for passing said detected data to said processor; a step for storing some (and alternatively all) of said detected embedded data; and a step for causing said processor to cease storing said detected embedded digital data in response to an inputted control signal which designates a second received broadcast or cablecast transmission.

Line 3 of claim 31 includes the alternative expression "delete or discard". Clarification is needed to show where the original disclosure defined the term "delete" and defined the term "discard" so as to have had different meanings (i.e. if the two terms actually have the same meaning when referenced back to the original disclosure then the use of the alternative expression in the claim adds nothing but confusion to said claim). Clarification is needed.

With respect to claim 31, it is not clear where the original disclosure describe a method which included said step for "causing said processor to cease storing said detected embedded digital data" in response to said inputted control signal which designates said second received broadcast or cablecast transmission (see claim 2), and which further included: the storing of only some (an alternatively all) of said detected embedded data at a processor interrupt detector; and a step of causing said processor interrupt detector to delete/discard said stored data. Clarification is needed.

With respect to claim 32, it is not clear where the original disclosure describe a method which included said step for "causing said processor to cease storing said detected embedded digital data" in response to said inputted control signal which designates said second received broadcast or cablecast transmission (see claim 2), and which further

Art Unit: 2737

included a step for tuning a first receiver to receive said second received transmission in response to said inputted control signal. Clarification is needed.

With respect to claim 33, it is not clear where the original disclosure describe a method which included said step for “causing said processor to cease storing said detected embedded digital data” in response to said inputted control signal which designates said second received broadcast or cablecast transmission (see claim 2), and which further included: a step for receiving only some (and alternatively all) of said second transmission at a second receiver wherein said control signal was embedded in said second transmission. Clarification is required.

Claim 34 includes the alternative expression “whenever a tuner is tuned or a receiver is actuated”. Clarification is needed to show where the original disclosure provided clear support for the phrases “receiver is actuated” and “tuner is tuned”. Clarification is also needed to show how the meaning of the two phrases differs when referenced back to the original disclosure in order to justify the use of the alternative expression (i.e. if the two phrases actually refer to the same receiver “actuation”, then the use of the alternative expression adds nothing but confusion to the claim.

With respect to claim 34, it is not clear where the original disclosure describe a method which included said step for “causing said processor to cease storing said detected embedded digital data” in response to said inputted control signal which designates said second received broadcast or cablecast transmission (see claim 2), and which further included: a step of programming the receiver station to interrupt said possessor whenever

Art Unit: 2737

a tuner is tuned (and alternatively, whenever a receiver is actuated). Clarification is needed.

With respect to claim 38, it is not clear where the original disclosure describe a method which included said step for "causing said processor to cease storing said detected embedded digital data" in response to said inputted control signal which designates said second received broadcast or cablecast transmission (see claim 2), and which further included: a step of detecting digital data in said second transmission; and a step for discarding said detected digital data until a sync control signal is detected.

With respect to claim 3, it is not clear where applicant's original disclosure described a method of communicating only one control signal (and, alternatively, more than one control signal) to only one receiver station (and, alternatively, to more than one receiver station) wherein said one receiver station (and, alternatively, said more than one receiver station) comprised a processor for processing embedded data that was detected in only one (and, alternatively, more than one) broadcast or cablecast transmission, and wherein said method comprised: 1) the step of receiving a first broadcast or cablecast transmission which includes embedded data; 2) the step of receiving a second control signal which operated at a transmitter station to communicate a first received control signal to a transmitter wherein said first control signal designated a second broadcast or cablecast transmission; and 2) a step of transmitting said first received broadcast, said embedded data, and said first control signal to said one receiver station (and, alternatively, said more than one receiver station) to cause said processor (or said processors) to cease the storing of said embedded data. Similar clarification is needed with respect to claim 4.

Art Unit: 2737

With respect to claim 5, it is not clear where the original disclosure described the method recited in claim 4 wherein said first control signal: was received at a memory; was generated before said specific time; and was communicated to said memory.

With respect to claim 6, it is not clear where the original disclosure described the method recited in claim 5 wherein: a schedule was received at a controller; and said first and second control signals were communicated in accordance with said schedule.

With respect to claim 7, it is not clear where the original disclosure described the method recited in claim 4 wherein: an intermediate generation set was received; and said first control signal was generated in accordance with said generation set.

When references back to the original disclosure, it is not clear where/how applicant's original disclosure defined the term "item of information" to have a different meaning than the term "formula" as would be required to support/justify the use of the alternative expression "formula or item of information" as used in line 2 of claim 8.

With respect to claim 8, it is not clear where the original disclosure described the method recited in claim 7 wherein: a formula (and, alternatively, item information) was stored before said specific time and served as a basis for generating said first control signal, wherein said first control signal designated said second broadcast or cablecast transmission.

With respect to claim 9, it is not clear where the original disclosure described the method recited in claim 4 wherein: said first control signal designated said second broadcast or cablecast transmission and operated to detect information contained in said second transmission; and a synchronizing control signal was communicated to said first

Art Unit: 2737

transmitter which enables said processor to output at least some of said detected information. With respect to claim 10, it is not clear where the original disclosure further described that said synchronizing control signal was embedded in said second broadcast or cablecast transmission that was communicated to said first transmitter. With respect to claim 11, it is not clear where the original disclosure further described using said synchronizing control signal to enable only one (and, alternatively, more than one) receiver station to execute only one (and, alternatively, more than one) controlled functions in response to "at least a portion" of the information contained in said second transmission wherein said at least a portion of information was transmitted after said specific time.

With respect to claim 11, a showing of clear support or antecedent basis in the original disclosure is needed for the use of the alternative terminology as is now explicitly recited, in combination, via the following recitation: "said synchronizing control signal enables said **one or more** receiver stations to execute **one or more** controlled functions in response to **at least a portion** of said information contained in said second **broadcast or cablecast** transmission." Similar clarification is needed for claim 16.

With respect to claim 15, it is not clear where the original disclosure described the method recited in claim 3 wherein: 1) said first control signal operated at the receiver station to designate a memory (i.e. in addition to designating said second transmission); and 2) a third control signal was transmitted which operated at said memory to store or output programming contained in said second broadcast (or, alternatively, cablecast) transmission.

Art Unit: 2737

With respect to claim 16, it is not clear where applicant's original disclosure described the method of claim 3 wherein the first control signal: 1) designated said second broadcast (or, alternatively, cablecast) transmission; 2) enabled the receiver stations to execute one (or, alternatively, more than one) controlled functions in response to information contained in said second broadcast (or, alternatively, cablecast) transmission; and 3) was used to transmit a series of instructions.

With respect to claim 17, it is not clear where applicant's original disclosure described the method of claim 3 wherein the first control signal: 1) designated said second broadcast (or, alternatively, cablecast) transmission; 2) enabled the receiver stations to execute one (or, alternatively, more than one) controlled functions in response to information contained in said second broadcast (or, alternatively, cablecast) transmission; and 3) was used to transmit a series of instructions wherein a first one (and, alternatively, more than one) of said series of instructions controlled only one (and alternatively, more than one) of a converter, mass medium programming receiver, and a portion receiver to receive said information contained in said second broadcast (or alternatively cablecast) transmission.

With respect to claim 18, it is not clear where applicant's original disclosure described the method of claim 3 wherein the first control signal: 1) designated said second broadcast (or, alternatively, cablecast) transmission; 2) enabled the receiver stations to execute one (or, alternatively, more than one) controlled functions in response to information contained in said second broadcast (or, alternatively, cablecast) transmission; and 3) was used to transmit a series of instructions wherein: a first one (and, alternatively, more than one) of said series of instructions controlled only one (and alternatively, more than one) of

Art Unit: 2737

a converter, mass medium programming receiver, and a portion receiver to receive said information contained in said second broadcast (or alternatively cablecast) transmission; and a second of said series of instructions operated to synchronize processing of said information contained in said second transmission.

A similar showing of support in the original disclosure is also needed for the limitations of claims 19-30.

CLAIM REJECTIONS - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2737

11. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishihara [JP 156270].

I. The showing of Nishihara:

As is shown on the cover page, Nishihara discloses a character broadcast receiver which comprises: a) an antenna for receiving a broadcast transmission; b) a tuner (1) and an IF detector (4) for demodulating the received transmission in order to allow embedded teletext data to be detected (i.e. @ sampling circuit 8); c) a teletext data processor (i.e. 9, 10, 14, ...), to which the detected teletext data is passed, for storing at least some of the detected teletext pages in a page memory (14) of said processor; d) means (2 and 3) for inputting a control signal designating the selection of a second/different broadcast channel/transmission; and e) means (20) for resetting the CPU of said processor in response to the inputted control signal.

II. Differences:

Claim 2 differs from the showing of Nishihara only in that claim 2 recites that the processor ceases the storing of the embedded data in response to the inputted control signal; i.e. Nishihara indicates that the CPU of the processor is "reset".

III. Obviousness:

The examiner maintains that it would at least have been obvious to one skilled in the art that the changing of the channel in Nishihara, and the resulting resetting of the CPU of

Art Unit: 2737

the processor in Nishihara, would have caused the acquisition and storage of teletext page data by the processor to have been ceased.

12. Claims 31, 32 and 34-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishihara [JP 156270] for the same reasons that were set forth in the preceding paragraph of this Office action.

A) With respect to claim 31, the examiner notes that element (8) in Nishihara: 1) passes teletext data to a buffer memory (9) for temporary storage; and 2) provides an interruption signal to a processor interruption signal discriminator (22). The examiner maintains that elements 8,9,and 22 correspond to applicant's recited "interrupt signal detector" in that the teletext data stored in buffer memory (9) would clearly have been deleted/discarded if it were not to have been displayed.

B) With respect to claim 32, it is noted that the inputting of the control signal in Nishihara results in the tuning of the receiver to the second/different broadcast transmission.

C) With respect to claim 34, it is noted that the receiver in Nishihara configured/"programmed" to interrupt the CPU of the processor whenever the interrupt signal discriminator/"receiver" (22) is actuated by an interrupt signal.

D) With respect to claims 35 and 36, it is noted that the receiver in Nishihara comprised a selective communications device (e.g. tuning circuitry 1 and 4) for communicating received broadcast transmission(s) to: 1) a TV display/"receiver" (@ the

Art Unit: 2737

output of 17); and/or 2) a teletext decoder/"receiver" (8-11 and 14-17). The tuner (1), by definition, is a frequency "converter".

E) With respect to claims 35 and 37, it is noted that the receiver in Nishihara comprised a selective communications device (e.g. the front end and video processing circuitry of the receiver 1, 4, and 5) for communicating received broadcast transmission(s) to: 1) a TV display/"receiver" (@ the output of 17); and/or 2) a teletext decoder/"receiver" (8-11 and 14-17). The examiner maintains that it would have been obvious to one skilled in the art for the video processing circuitry 5 of the communications device to have comprised a frame storage device for providing any one of notoriously well known video processing.

F) The examiner takes Official notice that transmitted teletext data inherently included a framing/start code which was used by the teletext decoder to synchronize its byte counter to the incoming serial data stream thereby allowing the serially received teletext data bits to be properly converted to parallel data bytes/codes. Until said framing/start code was correctly detected by the teletext decoder, all of the received teletext data was meaningless to the decoder and therefore was discarded. With respect to claim 38, the examiner maintains that it would at least have been obvious to one skilled in the art for the teletext data in Nishihara to have comprised such framing/start code for synchronizing the teletext decoder in the conventional manner.

Art Unit: 2737

13. Claims 2, 3, 4 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al. [US Patent #4,536,791].

I. The showing of Campbell et al.:

Campbell et al. discloses a cablecast broadcast system which comprised: a) signal combining circuitry (20), located on the transmitter side (figure 2), which received a first cablecast/broadcast transmission from a first channel processor (i.e. 16) wherein the first transmission comprised a "data loaded" video signals (e.g. 44) which comprised embedded complementary text data (note lines 8-12 on page); b) means (e.g. 52), located on the transmitter side (figure 2), for embedding both said complementary text data and "control data" into the video signal of said first transmission, wherein said "control data" includes an "emergency alert word" (240 of figure 11) which causes a plurality of home receiver stations to automatically tune to a designated "home channel" in order to receive a different/second emergency cablecast/broadcast transmission [see lines 42-50 of column 14]; c) a "programming control system" (50), located on the transmitter side (figure 2), which operated to generate said "emergency alert word" only when an emergency had occurred [see lines 42-50 of column 14]; d) means (i.e. 20 and 21 of figure 2) for transmitting said cablecast transmissions, said embedded data, and said "emergency alert word" to said plurality of home receiver stations; e) means (100, 106, 112), located at each receiver station (figure 6), for receiving and demodulating the first broadcast/cablecast transmission; f) extracting means (114), located at each receiver station (figure 6), for detecting the embedded complementary text data contained in the first information transmission and for passing at least some of the detected text data to a

Art Unit: 2737

processor (104); g) storage means (130), located at each receiver station, for storing at least some of said detected text data prior to display; and h) means (104, 114), located on the receiver side (figure 6), for tuning tuner (106) to the designated emergency cablecast/broadcast transmission in response to the receipt/input of said "emergency alert word". The following is noted:

a) the "second control signal" that is recited in claim 3 corresponds to any one of the following in Campbell et al.: the timing signals that are required to insert said "emergency alert word" into the vertical blanking interval of the video signal of the first cablecast/broadcast transmission; the signal that had to have been entered into the system in order to have identified the occurrence of an emergency and therefor to cause the transmission of the "emergency alert word"; etc,...

c) the "storing" of the first control signal that is recited in claim 4 corresponds to the buffering of said "emergency alert word" in a buffer memory which inherently occurred within the formatter (83) of figure 5 in Campbell et al. (e.g. to have provided the buffering that was required to convert the word into a serial data format for transmission; to have provided the buffering which was required to synchronize the insertion of the word into the video signal based on the horizontal and vertical timing signals of the video signal; etc,...).

II. Differences:

Claims 2, 3, 4 and 33 differ from the showing of Campbell et al. only in that Campbell et al. does not explicitly state that processor (104) ceases to store said embedded

Art Unit: 2737

complementary text data in memory (130) in response to the reception/input of said “emergency alert word”.

III. Obviousness:

The examiner notes that when the receiver station in Campbell et al. received the “emergency alert word” said receiver station was automatically tuned so that it ceased receiving said first cablecast/broadcast transmission and began receiving said second emergency cablecast/broadcast transmission [see lines 24-26 of column 10 and lines 44-48 of column 14]. When the receiver station ceased receiving the first cablecast/broadcast transmission it also, at least inherently, ceased receiving said complementary text data which was embedded in the first cablecast/broadcast transmission. Being such, said storing of said complementary text data in memory (130) via processor (104) was obviously ceased in view that a receiver cannot store what the receiver no longer receives.

14. Claims 5-19 and 24, 26, are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al. [US Patent #4,536,791] as was set forth in the preceding paragraph of this Office action.

1) With respect to claim 5, it is further noted that said “emergency alert word” must be generated before it could be buffered in a buffer memory and before it could be transmitted at a “specific time” (e.g. the “specific time” corresponding to the occurrence of the emergency).

Art Unit: 2737

2) With respect to claim 6, the examiner notes that the system disclosed by Campbell et al. transmitted many different types of “second” program related control signals in addition to the “emergency alert word” (note signal 200 of figure 11). For the described system to have operated properly, such program related second control signals had to be inserted into the video signal and channel of the cablecast/broadcast transmission with which they were specifically related. To provide such insertion, said program related control signals clearly had to be generated, formatted, and inserted into the transmissions based on known programming “schedules”.

3) With respect to claim 7, the examiner notes that the term “intermediate generation set” has not been clearly defined in the claim. Thus, it is maintained that the term is readable on the data that was provided to formatter 83 in figure 5 of Campbell et al.; i.e. on intermediate data that was used to produce the formatted control signals.

4) With respect to claim 8, again “item information” has not been clearly defined in the claim. Thus, it is maintained that the term is readable on the various types of information that were provided to formatter 83 in figure 5 of Campbell et al.

5) With respect to claims 9 and 10, it is noted that the second cablecast/broadcast transmission in Campbell et al. comprised a standard TV signal which, by definition, included video information embedded horizontal and vertical synchronizing signals.

6) With respect to claims 11-12, it is noted that the emergency cablecast/broadcast transmission in Campbell et al., including the video and sync portions of the transmission, was transmitted after the specific time that the “emergency alert word” was transmitted in view that the “emergency alert word” cause the receiver stations to tune to the “home

Art Unit: 2737

channel” in order to subsequently receive the emergency transmission. The recited “controlled function” reads on the forced display of the emergency transmission at the receiver stations in Campbell et al.

7) With respect to claim 13, it is noted that the first transmission in Campbell et al. had to have been transmitted before the specific time at which the “emergency alert word” was transmitted in order for it to have been received before the “emergency alert word” was received.

8) With respect to claim 14, the examiner notes that the transmissions in Campbell et al. were frequency multiplexed for transmission over cable 21.

9) With respect to claim 15, it is noted that the “emergency alert word” in Campbell et al. designated the second transmission by designating a memory location in which the “home channel” number was stored (see lines 24-26 of column 10).

10) Claims 16 -18 are met for the same reason that was addressed for claims 11-12 above. In addition, the recited “first control signal” now must be interpreted as being inclusive a plurality of the control signals shown in figure 11 of Campbell et al. thereby including a “first series of instructions”. Others of said plurality of control signals shown in figure 11 of Campbell et al. comprise the recited “second series of instructions”.

11) With respect to claim 19, the examiner maintains that it would have been obvious for the emergency transmission in Campbell et al. to have carried embedded text data which was used by the receivers to execute display functions (note that lines 47-50 of column 6 clearly indicate that all channels of the cable system carried text data).

Art Unit: 2737

12) With respect to claim 24, it is noted that the first transmission in Campbell et al. is transmitted in accordance with horizontal and vertical synchronizing signals.

13) With respect to claim 26, as note the discussion with respect to claim 5 in part 1 of this paragraph.

15. The applied prior art has been applied to the claims to the extent of the examiner's understanding in view of the section 112 problems noted above.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Andrew Faile whose telephone number is (703) 305-4380.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

DEH 1/26/97


ANDREW I. FAILE
SUPERVISORY PATENT EXAMINER
GROUP 2700

APPENDIX

(Examples of Claim Conflicts between Applications)

Comparison of claim 12 from Serial No. 08/469,626 to claim 24 from Serial No. 08/487,980.

Claim 12

A method of controlling a remote intermediate mass medium programming transmitter station to communicate mass medium program material to one or more receiver stations, with said remote transmitter station including a broadcast or cablecast transmitter for transmitting one or more units of mass medium programming, a plurality of selective transmission devices each operatively connected to said broadcast or cablecast transmitter for communicating a unit of mass medium programming, a mass medium programming receiver, a control signal detector, and a controller or computer capable of controlling one or more of said selective transmission devices, and with said remote transmitter station adapted to detect the presence of one or more control signals, to control the communication of specific units of mass medium programming in response to detected specific

Claim 24

A method of controlling a remote intermediate mass medium programming transmitter station to communicate mass medium program material to one or more receiver stations, with said remote transmitter station including a broadcast or cablecast transmitter for transmitting one or more units of mass medium programming, a plurality of selective transmission devices each operatively connected to said broadcast or cablecast transmitter for communicating a unit of mass medium programming, a mass medium programming receiver, a control signal detector, and a controller or computer capable of controlling one or more of said selective transmission devices, and with said remote transmitter station adapted to detect the presence of one or more control signals, to control the communication of specific units of mass medium programming in response to detected specific

control signals, and to deliver at its broadcast or cablecast transmitter one or more units of mass medium program, said method of communicating comprising the steps of:

(1) receiving a unit of mass medium programming to be transmitted by the remote intermediate mass medium programming transmitter station and delivering said unit of mass medium programming to a transmitter, said unit of mass medium programming having an instruct signal which is effective at the one or more receiver stations to *control a sequence of events*;

(2) receiving one or more control signals which at the remote intermediate mass medium programming transmitter station operate to control the communication of said unit of mass medium programming; and

(3) transmitting said one or more control signals to said

control signals, and to deliver at its broadcast or cablecast transmitter one or more units of mass medium program, said method of communicating comprising the steps of:

(1) receiving a unit of mass medium programming to be transmitted by the remote intermediate mass medium programming transmitter station and delivering said unit of mass medium programming to a transmitter, said unit of mass medium programming having an instruct signal which is effective at the one or more receiver stations to *decode a portion of a multichannel broadcast or cablecast transmission*;

(2) receiving one or more control signals which at the remote intermediate mass medium programming transmitter station operate to control the communication of said unit of mass medium programming; and

(3) transmitting said one or more control signals to said

transmitter before a specific time.

transmitter before a specific time.

Comparison of claim 24 from Serial No. 08/488,620 to claim 23 from Serial No. 08/477,660.

Claim 24

A method of controlling a computer to communicate a television signal in a television network, said network *having* a television transmitter station and a television receiver station, said receiver station having a computer for communicating of television signals, said method comprising the steps of:

programming *said receiver station* to search for data embedded in a television signal;

inputting an identifier code that designates a unit of computer software;

storing a television signal on a file storage medium at a storage device associated with said computer;

receiving from a remote source an information transmission that contains a control signal;

Claim 23

A method of controlling a computer to communicate a television signal in a television network, said network *comprised of* a television transmitter station and a television receiver station, said receiver station having a computer for communicating of television signals, said method comprising the steps of:

programming *a processor* to search for data embedded in a television signal;

inputting an identifier code that designates a unit of computer software;

storing a television signal on a file storage medium at a storage device associated with said computer;

receiving from a remote source an information transmission that contains a control signal;

selecting a storage location associated with said computer in response to said control signal;

transferring said unit of computer software to said storage device;

storing said unit of software on said file storage medium;

executing a technique for communicating a file stored on a disk associated with a computer; and

communicating said television signal in accordance with said technique.

selecting a storage location associated with said computer in response to said control signal;

transferring said unit of computer software to said storage device
and

storing said unit of software on said file storage medium,

thereby to enable said computer to execute a technique for communication a file stored on a disk associated with a computer and

communicate said television signal in accordance with said technique.

Comparison of claim 23 from Serial No. 08/488,032 to claim 58 from Serial No. 08/451,746.

Claim 23

A method of communicating subscriber station information from a subscriber station to one or more remote data collection stations, said method comprising the steps of:

(1) inputting a viewer's or participant's reaction at a subscriber station;

(2) receiving at said subscriber station information that designates an instruct signal to process or an output to deliver in consequence of subscriber input;

(3) determining the presence of said subscriber input at said subscriber station by processing said viewer's or participant's reaction;

(4) processing an instruct signal which is effective to *coordinate data processing with communication or presentation* of television programming at said

Claim 58

A method of communicating subscriber station information from a subscriber station to one or more remote data collection stations, said method comprising the steps of:

(1) inputting a viewer's or participant's reaction at a subscriber station;

(2) receiving at said subscriber station information that designates an instruct signal to process or an output to deliver in consequence of *said specific* subscriber input;

(3) determining the presence of said *specific* subscriber input at said subscriber station by processing said viewer's or participant's reaction;

(4) processing an instruct signal which is effective to *receive, generate, or present output to supplement* television

subscriber station in consequence of said step of determining; and

(5) transferring from said subscriber station to one or more remote data collection stations an indicia confirming delivery of said instruct signal from said step of processing or confirming delivery of said effect from said step of processing.

programming at said subscriber station in consequence of said step of determining; and

(5) transferring from said subscriber station to one or more remote data collection stations an indicia confirming delivery of said instruct signal from said step of processing or confirming delivery of said effect from said step of processing.

Comparison of claim 47 from Serial No. 08/469,106 to claim 46 from Serial No. 08/487,649.

Claim 47

A method of controlling at least one of a plurality of receiver stations each of which includes a broadcast or cablecast mass medium program receiver, at least one output device, a control signal detector, at least one processor capable of responding to an instruct signal, and with each said mass medium program receiver station adapted to detect and respond to one or more instruct signals, said method of communicating comprising the steps of:

(1) receiving at a broadcast or cablecast transmitter station an instruct signal which is effective at the receiver station to *implement a scheme for generating a control signal* and delivering the instruct signal to a transmitter;

(2) receiving at said transmitter station one or more

Claim 46

A method of controlling at least one of a plurality of receiver stations each of which includes a broadcast or cablecast mass medium program receiver, at least one output device, a control signal detector, at least one processor capable of responding to an instruct signal, and with each said mass medium program receiver station adapted to detect and respond to one or more instruct signals, said method of communicating comprising the steps of:

(1) receiving at a broadcast or cablecast transmitter station an instruct signal which is effective at the receiver station to *select a broadcast or cablecast signalling scheme and generate a signal in consequence of said selected broadcast or cablecast signalling scheme* and delivering the instruct signal to a transmitter;

(2) receiving at said

control signals which at the receiver station operate to communicate the instruct signal to a specific processor; and

(3) transferring said one or more control signals to the transmitter, said transmitter transmitting the instruct signal and the one or more control signals.

transmitter station one or more control signals which at the receiver station operate to communicate the instruct signal to a specific processor; and

(3) transferring said one or more control signals to the transmitter, said transmitter transmitting the instruct signal and the one or more control signals.

Comparison of claim 11 from Serial No. 08/477,805 to claim 25 from Serial No. 08/449,523.

Claim 11

A method of controlling a remote television transmitter station to communicate television program material to one or more receiver stations, with said remote television transmitter station including a broadcast or cablecast transmitter for transmitting one or more units of television programming, a plurality of selective transmission devices each operatively connected to said broadcast or cablecast transmitter for communicating a unit of television programming, a television receiver, a control signal detector, and a controller or computer capable of controlling one or more of said selective transmission devices, and with said remote transmitter station adapted to detect the presence of one or more control signals, to control the communication of specific units of television programming in response to detected specific control signals, and to deliver at

Claim 25

A method of controlling a remote television transmitter station to communicate television program material to one or more receiver stations, with said remote television transmitter station including a broadcast or cablecast transmitter for transmitting one or more units of television programming, a plurality of selective transmission devices each operatively connected to said broadcast or cablecast transmitter for communicating a unit of television programming, a television receiver, a control signal detector, and a controller or computer capable of controlling one or more of said selective transmission devices, and with said remote transmitter station adapted to detect the presence of one or more control signals, to control the communication of specific units of television programming in response to detected specific control signals, and to deliver at

its broadcast or cablecast transmitter one or more units of television programming, said method of communicating comprising the steps of:

(1) receiving a unit of television programming to be transmitted by the remote intermediate television transmitter station and delivering said unit of television programming to a transmitter;

(2) receiving one or more control signals which at the remote intermediate television transmitter station operate to control the communication of *a specific one or more of said plurality of units* of television programming; and

(3) transmitting said one or more control signals to said transmitter before a specific time.

its broadcast or cablecast transmitter one or more units of television programming, said method of communicating comprising the steps of:

(1) receiving a unit of television programming to be transmitted by the remote intermediate television transmitter station and delivering said unit of television programming to a transmitter, *said unit of television programming having an instruct signal which is effective at the one or more receiver stations to implement a television signalling scheme;*

(2) receiving one or more control signals which at the remote intermediate television transmitter station operate to control the communication of *said unit* of television programming; and

(3) transmitting said one or more control signals to said transmitter before a specific time.

TO SEPARATE, HOLD TOP AND BOTTOM EDGES, SNAP-APART AND DISCARD CARBON

FORM PTO-892 (REV. 2-92)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		SERIAL NO. 08/459507	GROUP/ART UNIT 2737	ATTACHMENT TO PAPER NUMBER 11			
NOTICE OF REFERENCES CITED				APPLICANT(S) Harvey et al.					
U.S. PATENT DOCUMENTS									
*		DOCUMENT NO.	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE		
	A								
	B								
	C								
	D								
	E								
	F								
	G								
	H								
	I								
	J								
	K								
FOREIGN PATENT DOCUMENTS									
*		DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUB- CLASS	PERTINENT SHTS. DWG.	PP. SPEC.
	L	0156279	9/83	Japan	Nishibara	358	142		
	M								
	N								
	O								
	P								
	Q								
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)									
	R								
	S								
	T								
	U								
EXAMINER DLC			DATE 1/26/98						
A copy of this reference is not being furnished with this office action. (See Manual of Patent Examining Procedure, section 707.05 (a).)									



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/459,507	06/02/95	HARVEY	J 5634.232

THOMAS J SCOTT JR
HOWREY & SIMON
1299 PENNSYLVANIA AVENUE NW
WASHINGTON DC 20004

LM11/1222

EXAMINER

ART UNIT	PAPER NUMBER
----------	--------------

2737

10

DATE MAILED: 12/22/97

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: John C. Harvey, et al

Art Unit: 2600

Examiner: Groody, J.

Atty. Docket: 05634.0232

Appl. No. 08/459,507

Filed: June 2, 1995

**SIGNAL PROCESSING
APPARATUS AND METHODS**



*9/Status Letter
mf
12-5-97*

Status Inquiry Letter

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Please advise the undersigned of the present status of the above-identified patent application.

Respectfully submitted,

Thomas J. Scott, Jr.

Thomas J. Scott, Jr.
Registration No. 27,836
Attorney for Applicants

Date: Nov. 19, 1997

HOWREY & SIMON
1299 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2402
(202) 783-0800

RECEIVED
NOV 21 1997
COMM-FED

Suppl IDS
PATENT
Docket No. 5634.232
4-22-97

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): John C. Harvey and James W. Cuddihy

Serial No.: 08/459,507

Filing Date: 2-Jun-95

For: SIGNAL PROCESSING APPARATUS
AND METHODS



Group Art Unit: 2602

Examiner: J. Groody

4-7-97

Assistant Commissioner for Patents
Washington D.C. 20231

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT
PURSUANT TO 37 CFR 1.97(c)

RECEIVED
APR 11 AM 9:45
CUBA 260

S I R:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56(a) and in conformance with the procedures of 37 C.F.R. §§ 1.97-98 and M.P.E.P. § 609, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached Form PTO-1449. A copy of the listed reference is provided herewith.

It is respectfully requested that the information above be expressly considered during the prosecution of this application, and that the reference be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

CERTIFICATION

I hereby certify that no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS.

Respectfully submitted,

Dated: April 7, 1997

Thomas J. Scott, Jr.
Thomas J. Scott, Jr. (Reg. No. 27,836)



SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT CITATION FORM	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey and James W. Cuddihy	
	Filing Date 2-Jun-95	Group Art Unit 2602

UNITED STATES PATENT DOCUMENTS

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	27,810	November 20, 1973	Buehrle	325/321	
	33,189	September 3, 1861	Dougal		
	2,418,127	April 1, 1947	Labin	178/44	
	2,563,448	August 7, 1951	Aram	178/5.1	
	2,731,197	January 17, 1956	Parker et al.	235/60	
	3,071,649	January 1, 1963	Goodall	179/1.5	
	3,107,274	October 15, 1963	Roschke	178/5.1	
	3,133,986	May 19, 1964	Morris et al.	178/5.1	
	3,251,051	May 10, 1966	Harries	340/345	
	3,470,309	September 30, 1969	Nyberg	178/5.1	
	3,478,166	November 11, 1969	Reiter et al.	178/5.1	
	3,526,843	September 1, 1970	Sanville	329/104	
	3,546,684	December 8, 1970	Maxwell et al.	340/172.5	
	3,639,686	February 1, 1972	Walker et al.	178/5.8R	
	3,649,749	March 14, 1972	Gibson	178/5.6	
	3,651,261	March 21, 1972	Guanella	178/22	
	3,666,888	May 30, 1972	Sekimoto	178/69.5 TV	
	3,723,637	March 27, 1973	Fujio et al.	178/5.2R	
	3,746,799	July 17, 1973	Gentges	178/22	
	3,755,624	August 28, 1973	Sekimoto	178/69.5 TV	
	3,769,579	October 30, 1973	Harney	325/31	
	3,773,979	November 20, 1973	Kirk, Jr. et al.	179/15 FD	
	3,777,053	December 4, 1973	Wittig et al.	178/5.1	
	3,789,131	January 29, 1974	Harney	178/5.1	
	3,794,922	February 26, 1974	Osborn et al.	325/53	
	3,795,763	March 5, 1974	Golding et al.	178/5.6	
	3,813,482	May 28, 1974	Blonder	178/5.1	
	3,826,663	July 30, 1974	Johnson	178/5.1	
	3,859,596	January 7, 1975	Jennery et al.	325/31	
	3,882,289	May 6, 1975	Walding et al.	200/11 D	
	3,885,089	May 20, 1975	Callais et al.	178/5.1	

	3,889,054	June 10, 1975	Nagel et al.	178/6.8	
	3,894,177	July 8, 1975	Howell et al.	178/5.6	
	3,896,262	July 22, 1975	Hudspeth et al.	178/5.1	
	3,896,266	July 22, 1975	Waterbury	179/1 SB	
	3,916,091	October 28, 1975	Kirk, Jr. et al.	178/5.1	
	3,924,059	December 2, 1975	Horowitz	178/5.1	
	3,950,618	April 13, 1976	Bloisi	179/2 AS	
	3,958,081	May 18, 1976	Ehrsam et al.	178/22	
	3,975,585	August 17, 1976	Kirk, Jr. et al.	178/5.1	
	3,990,012	November 2, 1976	Karnes	325/308	
	3,996,586	December 7, 1976	Dillon et al.	340/347 DD	
	4,004,085	January 18, 1977	Makino et al.	340/324	
	4,008,369	February 15, 1977	Theurer et al.	358/84	
	4,013,875	March 22, 1977	McGlynn	235/150.2	
	4,015,286	March 29, 1977	Russell	358/13	
	4,017,697	April 12, 1977	Larson	200/5 A	
	4,019,201	April 19, 1977	Hartung et al.	358/124	
	4,020,419	April 26, 1977	Caspari et al.	325/421	
	4,024,574	May 17, 1977	Nieson	358/117	
	4,024,575	May 7, 1977	Hamey et al.	358/118	
	4,027,267	May 31, 1977	Larsen	329/106	
	4,027,331	May 31, 1977	Nicol	358/135	
	4,042,958	August 16, 1977	Saylor et al.	358/141	
	4,044,376	August 23, 1977	Porter	358/84	
	4,045,814	August 30, 1977	Hartung et al.	358/124	
	4,054,911	October 18, 1977	Fletcher et al.	358/141	
	4,064,490	December 20, 1977	Nagel	364/2000	
	4,070,693	January 24, 1978	Shutterly	358/123	
	4,075,660	February 21, 1978	Horowitz	358/124	
	4,079,419	March 14, 1978	Seigle et al.	358/193	
	4,081,754	March 28, 1978	Jackson	325/396	
	4,081,832	March 28, 1978	Sherman		
	4,086,434	April 25, 1978	Bocchi	79/2 AM	
	4,088,958	May 9, 1978	Suzuki et al.	325/396	
	4,091,417	May 23, 1978	Nieson	358/117	
	4,095,258	June 13, 1978	Sperber	358/120	
	4,096,542	June 20, 1978	Pappas et al.	361/196	
	4,104,681	August 1, 1978	Saylor et al.	358/141	
	4,107,734	August 15, 1978	Percy et al.	358/84	
	4,107,735	August 15, 1978	Frobach	358/84	
	4,112,317	September 5, 1978	Everswick	307/308	
	4,112,383	September 5, 1978	Burgert	329/50	
	4,114,841	September 19, 1978	Muhlfelder et al.	244/166	
	4,120,003	October 10, 1978	Mitchell et al.	358/142	

4,124,887	November 7, 1978	Johnson et al.	364/107
4,126,762	November 21, 1978	Martin et al.	179/2A
4,135,213	January 16, 1979	Wintfeld et al.	358/142
4,142,156	February 27, 1979	Freund	325/309
4,145,717	March 20, 1979	Guif et al.	358/121
4,148,066	April 3, 1979	Saylor	358/127
4,156,253	May 22, 1979	Steudel	358/11
4,156,931	May 29, 1979	Adelman et al.	364/900
4,163,252	July 31, 1979	Mistry et al.	358/118
4,180,709	December 25, 1979	Cosgrove et al.	179/2 AM
4,199,656	April 22, 1980	Saylor	178/66.1
4,199,781	April 22, 1980	Doumit	358/83
4,199,809	April 22, 1980	Pasahow et al.	364/200
4,207,524	June 10, 1980	Purchase	375/22
4,214,273	July 22, 1980	Brown	358/188
4,215,366/ 31,735	November 13, 1984	Davidson	358/124
4,216,497	August 5, 1980	Ishman et al.	358/84
4,222,068	September 9, 1980	Thompson	358/120
4,225,884	September 30, 1980	Block et al.	358/122
4,245,246	January 13, 1981	Cheung	358/124
4,246,611	January 20, 1981	Davies	358/194
4,247,947	January 27, 1981	Miyamoto	455/38
4,250,521	February 10, 1981	Wright	358/8
4,258,386	March 24, 1981	Cheung	358/84
4,266,243	May 5, 1981	Shutterly	358/121
4,272,784	June 9, 1981	Saito et al.	358/127
4,273,962	June 16, 1981	Wolfe	179/7.1R
4,292,650	September 29, 1981	Hendrickson	358/123
4,295,155	October 13, 1981	Jarger et al.	358/12
4,301,542	November 17, 1981	Weintraub et al.	455/353
4,305,101	December 8, 1981	Yarbrough et al.	360/69
4,310,854	January 12, 1982	Baer et al.	358/143
4,316,217	February 16, 1982	Rifken	358/86
4,318,047	March 2, 1982	Dawson	328/112
4,323,921	April 6, 1982	Guillou	358/114
4,323,922	April 6, 1982	den Toonder et al.	358/117
4,329,711	May 11, 1982	Cheung	358/114
4,335,426	June 15, 1982	Maxwell et al.	364/200
4,340,906	July 20, 1982	den Tooder et al.	358/124
4,341,925	July 27, 1982	Frosch et al.	178/22.17
4,343,042	August 3, 1982	Schrock et al.	455/5
4,348,696	September 7, 1982	Bejer	358/188
4,351,028	September 21, 1982	Peddie et al.	364/483
4,354,201	October 12, 1982	Sechet et al.	358/122

4,355,415	October 19, 1982	George et al.	455/185	
4,358,672	November 9, 1982	Hyatt et al.	235/380	
4,360,881	November 23, 1982	Martinson	364/493	
4,361,848	November 30, 1982	Poignet et al.	358/1	
4,361,851	November 30, 1982	Asip et al.	358/84	
4,361,903	November 30, 1982	Ohta	455/2	
4,365,267	December 21, 1982	Tsuda	358/84	
4,378,470	March 29, 1983	Murto et al.	179/2 C	
4,382,256	May 5, 1983	Nagata	340/825.44	
4,385,384	May 24, 1983	Rosbury et al.	371/22	
4,386,436	May 31, 1983	Kocher et al.	455/151	
4,388,643	June 14, 1983	Aminetzah	358/123	
4,388,644	June 14, 1983	Ishman et al.	358/84	
4,390,898	June 28, 1983	Bond et al.	358/1199	
4,390,901	June 28, 1983	Keiser et al.	358/147	
4,392,135	July 5, 1983	Ohyagi	340/825.44	
4,393,277	July 12, 1983	Besen et al.	179/2 A	
4,408,345	October 4, 1983	Yashiro et al.	455/3	
4,411,017	October 18, 1983	Talbot	455/26	
4,414,621	November 8, 1983	Bown et al.	364/200	
4,415,771	November 15, 1983	Martinez	179/5R	
4,418,425	November 29, 1983	Fennel et al.	455/27	
4,424,533	January 3, 1984	Rzeszewski	358/167	
4,425,578	January 10, 1984	Haselwood et al.	358/84	
4,425,579	January 10, 1984	Merrell	358/86	
4,425,664	January 10, 1984	Sherman et al.	375/8	
4,427,968	January 24, 1984	York	340/310	
4,429,385	January 31, 1984	Cichelli et al.	370/92	
4,430,731	February 7, 1984	Gimple et al.	370/30	
4,434,438	February 28, 1984	Rzeszewski	358/167	
4,439,785	March 27, 1984	Leonard	358/120	
4,450,481	May 22, 1984	Dickinson	358/114	
4,450,531	May 22, 1984	Kenyon et al.	364/604	
4,454,538	June 12, 1984	Toriumi	358/86	
4,468,701	August 28, 1984	Burcher et al.	358/181	
4,471,352	September 11, 1984	Soulliard et al.	340/825.44	
4,473,068	September 25, 1984	Oh	128/92D	
4,475,123	October 2, 1984	Dumbauld et al.	358/114	
4,476,535	October 9, 1984	Loshing et al.	364/480	
4,484,218	November 20, 1984	Boland et al.	358/86	
4,484,328	November 20, 1984	Schlaflly	370/85	
4,488,179	December 11, 1984	Kruger et al.	358/181	
4,489,220	December 18, 1984	Oliver	179/2 AM	
4,489,316	December 18, 1984	MacQuivey	340/700	

4,494,142	January 15, 1985	Mistry	358/118
4,496,975	January 29, 1985	Noirel	358/147
4,504,831	March 12, 1985	Jahr et al.	340/870.03
4,506,387	March 9, 1985	Walter	455/612
4,510,623	April 9, 1985	Bonneau et al.	455/181
4,528,589	July 9, 1985	Block et al.	358/122
4,531,020	July 23, 1985	Wechselberger et al.	178/22.08
4,531,021	July 23, 1985	Bluestein et al.	178/22.08
4,540,849	September 10, 1985	Oliver	179/2 AM
4,543,616	September 24, 1985	Brooks	358/335
4,547,804	October 15, 1985	Greenberg	358/142
4,554,584	November 19, 1985	Elam et al.	358/165
4,558,464	December 10, 1985	O'Brien, Jr.	455/4
4,563,702	January 7, 1986	Heller et al.	358/119
4,566,030	January 21, 1986	Nickerson et al.	358/84
4,570,930	February 18, 1986	Matheson	273/1 E
4,578,536	March 25, 1986	Oliver et al.	179/2 AM
4,578,718	March 25, 1986	Parker et al.	360/10.3
4,592,546	June 3, 1986	Fascenda et al.	273/1 E
4,592,546	June 3, 1986	Fascenda et al.	273/1 E
4,594,609	July 10, 1986	Romao et al.	358/119
4,595,952	June 17, 1986	Filliman	358/47
4,600,918	July 15, 1986	Belisomi et al.	340/711
4,600,921	July 15, 1986	Thomas	340/825.31
4,605,964	August 12, 1986	Chard	358/147
4,611,227	September 9, 1986	Brockhurst et al.	358/147
4,613,901	September 23, 1986	Gilhausen et al.	358/122
4,621,259	November 4, 1986	Schepers et al.	340/707
4,621,285	November 4, 1986	Schilling et al.	358/120
4,623,920	November 18, 1986	Dufresne et al.	358/122
4,626,892	December 2, 1986	Nortrup et al.	358/21 R
4,633,297	December 30, 1986	Skerlos et al.	358/22
4,636,858	January 13, 1987	Hague et al.	358/147
4,638,357	January 20, 1987	Heimbach	358/121
4,639,779	January 27, 1987	Greenberg	358/142
4,646,145	February 24, 1987	Percy et al.	358/84
4,649,533	March 10, 1987	Chorley et al.	370/58
4,658,290	April 14, 1987	McKenna	358/84
4,677,685	June 30, 1987	Kurisu	455/4
4,694,490	September 15, 1987	Harvey et al.	380/20
4,704,725	November 3, 1987	Harvey et al.	380/48
4,706,121	November 10, 1987	Young	358/142
4,710,919	December 1, 1987	Oliver et al.	370/96
4,710,955	December 1, 1987	Kauffman	380/10

4,718,107	January 5, 1988	Hayes	455/4	
4,723,302	February 2, 1988	Fulmer et al.	455/2	
4,736,422	April 5, 1988	Mason	380/120	
4,744,080	May 10, 1988	Brennand et al.	280/21	
4,751,732	June 14, 1988	Kamitake	380/20	
4,754,326	June 28, 1988	Kram et al.	364/900	
4,768,144	August 30, 1988	Winter et al.	364/200	
4,768,229	August 30, 1988	Benjamin et al.	380/20	
4,782,401	November 1, 1988	Faerber et al.	358/335	
4,785,420	November 15, 1988	Little	364/513.5	
4,796,181	January 3, 1989	Wiedmer	364/406	
4,803,725	February 7, 1989	Horne et al.	380/44	
4,805,020	February 14, 1989	Greenberg	358/147	
4,807,031	February 21, 1989	Broughton et al.	358/142	
4,809,274	February 28, 1989	Walker et al.	371/37	
4,816,904	March 28, 1989	McKenna et al.	358/84	
4,837,799	June 6, 1989	Prohs et al.	379/224	
4,839,917	June 13, 1989	Oliver	379/45	
4,841,386	June 20, 1989	Schiering	360/69	
4,843,482	June 27, 1989	Hegendorfer	358/335	
4,849,817	July 18, 1989	Short	358/142	
4,855,842	August 8, 1989	Hayes et al.	358/342	
4,857,999	August 15, 1989	Welsh	358/84	
4,862,268	August 9, 1989	Campbell et al.	358/141	
4,864,615	September 5, 1989	Bennett et al.	380/21	
4,876,736	October 24, 1989	Kiewit	455/2	
4,879,611	November 7, 1989	Fukui et al.	360/69	
4,885,579	December 5, 1989	Sandbank	340/825.72	
4,885,632	December 5, 1989	Mabey et al.	358/84	
4,888,638	December 19, 1989	Bohn	358/84	
4,888,796	December 19, 1989	Olivo, Jr.	379/101	
4,890,320	December 26, 1989	Monslow et al.	380/10	
4,891,703	January 2, 1990	Noudan	358/142	
4,897,867	January 30, 1990	Foster et al.	379/94	
4,907,260	March 6, 1990	Prohs et al.	379/224	
4,907,273	March 6, 1990	Wiedemer	380/16	
4,908,707	March 13, 1990	Kinghorn	358/147	
4,908,713	March 13, 1990	Levine	358/335	
4,908,834	March 13, 1990	Wiedemer	380/5	
4,908,845	March 13, 1990	Little	379/51	
4,912,552	March 27, 1990	Allison, III et al	358/84	
4,914,517	April 3, 1990	Duffield	358/191.1	
4,930,158	May 29, 1990	Vogel	380/5	
4,931,871	June 5, 1990	Kramer	358/142	

4,931,877	June 5, 1990	Gebhardt et al.	358/335
4,935,870	June 19, 1990	Bork, Jr. et al.	364/200
4,939,773	July 3, 1990	Katz	379/204
4,943,963	July 24, 1990	Waechter et al.	370/94.1
4,945,412	July 31, 1990	Kramer	358/142
4,945,563	July 31, 1990	Horton et al.	380/5
4,947,302	August 7, 1990	Callahan	362/233
4,949,187	August 14, 1990	Cohen	358/335
4,954,899	September 4, 1990	Tanabe et al.	358/191.1
4,959,720	September 25, 1990	Duffield et al.	358/191.1
4,963,994	October 16, 1990	Levine	358/335
4,963,995	October 16, 1990	Lang	358/335
4,965,825	October 23, 1990	Harvey et al.	380/9
4,967,273	October 30, 1990	Greenberg	358/142
4,975,951	December 9, 1990	Bennett	380/20
4,977,455	December 11, 1990	Young	358/142
4,982,430	January 1, 1991	Frezza et al.	380/50
4,989,104	January 29, 1991	Schulein et al.	360/72.1
4,991,011	February 5, 1991	Johnson et al.	358/141
4,991,025	February 5, 1991	Eigeldinger	358/310
4,993,003	February 12, 1991	Fechner et al.	368/47
4,993,066	February 12, 1991	Jenkins	380/16
4,994,908	February 19, 1991	Kuban et al.	358/86
4,995,078	February 19, 1991	Monslow et al.	380/10
5,001,554	March 19, 1991	Johnson et al.	358/86
5,002,491	March 26, 1991	Abrahamson et al.	434/322
5,003,384	March 26, 1991	Durden et al.	358/84
5,003,591	March 26, 1991	Kauffman et al.	380/10
5,010,459	April 23, 1991	Taylor et al.	362/85
5,012,510	April 30, 1991	Schaubs et al.	379/92
5,013,038	May 7, 1991	Luxenberg et al.	273/439
5,014,125	May 7, 1991	Pocock et al.	358/86
5,016,272	May 14, 1991	Stubbs et al.	380/5
5,016,273	May 14, 1991	Hoff	380/10
5,027,400	June 25, 1991	Baji et al.	380/20
5,029,207	July 2, 1991	Gammie	380/10
5,038,211	August 6, 1991	Hallenbeck	358/142
5,045,816	September 3, 1991	Bramhall et al.	332/105
5,045,947	September 3, 1991	Beery	358/192.1
5,047,867	September 10, 1991	Strubbe et al.	358/335
5,047,928	September 10, 1991	Wiedemer	364/406
5,055,924	October 8, 1991	Skutta	358/84
5,057,932	October 15, 1991	Lang	358/335
5,058,160	October 15, 1991	Banker et al.	380/20

5,062,136	October 29, 1991	Gattis et al.	380/18
5,067,149	November 19, 1991	Schneid et al.	379/224
5,072,418	December 10, 1991	Boutaud et al.	364/715.06
5,075,771	December 24, 1991	Hashimoto	358/84
5,083,800	January 12, 1992	Lockton	273/439
5,093,718	March 3, 1992	Hoarty et al.	358/84
5,093,921	March 3, 1992	Bevins Jr.	455/4
5,101,267	March 31, 1992	Morales-Garza	358/84
5,108,115	April 28, 1992	Berman et al.	273/439
5,109,414	April 28, 1992	Fechner et al.	368/47
5,111,401	May 5, 1992	Everett, Jr. et al.	364/424.02
5,113,496	May 12, 1992	McCalley et al.	395/200
5,120,076	June 9, 1992	Luxemberg et al.	273/439
5,124,942	June 23, 1992	Nielsen et al.	395/100
5,132,992	July 21, 1992	Yurt et al.	375/122
5,133,079	July 21, 1992	Ballantyne et al.	455/4.1
5,140,419	August 18, 1992	Galumbeck et al.	358/142
5,142,677	August 25, 1992	Ehlig et al.	395/650
5,142,690	August 25, 1992	McMullan, Jr. et al.	455/6.1
5,144,664	September 1, 1992	Esseman et al.	380/20
5,148,482	September 15, 1992	Bocci et al.	380/48
5,151,789	September 29, 1992	Young	358/194.1
5,155,590	October 13, 1992	Beyers, II et al.	358/86
5,155,591	October 13, 1992	Wachob	358/86
5,155,812	October 13, 1992	Ehlig et al.	395/275
5,157,716	October 20, 1992	Naddor et al.	379/92
5,164,839	November 17, 1992	Lang	358/335
5,172,413	December 15, 1993	Bradley et al.	380/20
5,181,113	January 19, 1993	Chang	358/142
5,185,796	February 9, 1993	Wilson	380/21
5,187,797	February 16, 1993	Nielsen et al.	395/800
5,191,410	March 7, 1993	McCalley et al.	358/86
5,195,092	March 16, 1993	Wilson et al.	370/94.2
5,195,134	March 16, 1993	Inoue	380/20
5,202,916	April 13, 1993	Oliver	379/106
5,204,768	April 20, 1993	Tsakiris et al.	359/148
5,208,665	May 4, 1993	McCalley et al.	358/86
5,212,553	May 18, 1993	Maruoka	358/188
5,213,337	May 25, 1993	Sherman	273/439
5,216,504	June 1, 1993	Webb et al.	358/139
5,220,501	June 15, 1993	Lawlor et al.	364/408
5,222,137	June 22, 1993	Barrett et al.	380/21
5,223,924	June 29, 1993	Strubbe	358/86
5,225,902	July 6, 1993	McMullan, Jr.	358/86

5,226,177	July 6, 1993	Nickerson	455/2	
5,231,493	July 27, 1993	Apitz	358/146	
5,233,654	August 3, 1993	Harvey et al.	380/20	
5,235,415	August 10, 1993	Bonicel et al.	358/84	
5,235,619	August 10, 1993	Beyers, II et al.	375/38	
5,235,634	August 10, 1993	Oliver	379/106	
5,237,417	August 17, 1993	Hayashi et al.	358/183	
5,237,610	August 17, 1993	Gammie et al.	380/10	
5,239,575	August 24, 1993	White et al.	379/107	
5,247,364	September 21, 1993	Banker et al.	358/191.1	
5,247,575	September 21, 1993	Sprague et al.	380/9	
5,251,324	October 5, 1993	McMullan, Jr.	455/2	
5,251,909	October 12, 1993	Reed et al.	273/439	
5,252,077	October 12, 1993	Schott	434/335	
5,253,066	October 12, 1993	Vogel	358/188	
5,253,275	October 12, 1993	Yurt et al.	375/122	
5,254,977	October 19, 1993	MacDonald	345/150	
5,255,086	October 19, 1993	McMullan, Jr. et al.	358/86	
5,260,778	November 9, 1993	Kauffman et al.	358/86	
5,266,944	November 30, 1993	Carroll et al.	340/825.36	
5,267,305	November 30, 1993	Prohs et al.	379/233	
5,267,865	December 7, 1993	Lee et al.	434/350	
5,270,809	December 14, 1993	Gammie et al.	358/84	
5,276,678	January 4, 1994	Hendrickson et al.	370/62	
5,283,639	February 1, 1994	Esch et al.	348/6	
5,283,819	February 1, 1994	Glick et al.	379/90	
5,291,554	March 1, 1994	Morales	380/5	
5,293,357	March 8, 1994	Hallenbeck	348/734	
5,294,229	March 15, 1994	Hartzell et al.	434/336	
5,301,233	April 5, 1994	Coutrot et al.	380/23	
5,303,042	April 12, 1994	Lewis et al.	348/14	
5,307,173	April 26, 1994	Yuen et al.	358/335	
5,313,618	May 17, 1994	Pawloski	395/500	
5,313,648	May 17, 1994	Ehlig et al.	395/800	
5,319,789	June 7, 1994	Ehlig et al.	395/800	
5,319,792	June 7, 1994	Ehlig et al.	395/800	
5,321,750	June 14, 1994	Nadan	380/20	
5,327,421	July 5, 1994	Hiller et al.	370/60.1	
5,327,554	July 5, 1994	Palazzi III et al.	395/600	
5,335,276	August 2, 1994	Thompson et al.	380/21	
5,335,277	August 2, 1994	Harvey et al.	380/20	
5,343,239	August 30, 1994	Lappington et al.	348/12	
5,343,300	August 30, 1994	Henning	348/478	
5,345,445	September 6, 1994	Hiller et al.	370/60.1	

5,345,446	September 6, 1994	Hiller et al.	370/60.1	
5,345,501	September 6, 1994	Shelton	379/89	
5,349,687	September 20, 1994	Ehlig et al.	395/800	
5,351,130	September 27, 1994	Dugan et al.	358/725	
5,351,970	October 4, 1994	Fioretti	273/439	
5,353,121	October 21, 1994	Young et al.	348/563	
5,367,330	November 22, 1994	Haave et al.	348/7	
5,374,951	December 20, 1994	Welsh	348/4	
5,414,773	May 9, 1995	Handelman	380/49	
5,420,647	May 30, 1995	Levine	348/734	
5,420,923	May 30, 1995	Beyers, II et al.	380/20	
5,430,552	July 4, 1995	O'Callaghan	358/335	
5,432,558	July 11, 1995	Kim	348/460	
5,459,789	October 17, 1995	Tamer et al.	380/20	
5,465,385	November 7, 1995	Ohga et al	455/6.1	
5,475,754	December 12, 1995	Bridgewater et al.	380/20	
5,485,509	January 16, 1996	Oliver	379/106	
5,488,654	January 30, 1996	Oliver	379/106	
5,532,754	July 2, 1996	Young et al.	348/569	
5,534,883	July 9, 1996	Koh	345/31	
5,535,362	July 9, 1996	Ami et al.	395/474	
5,548,338	August 20, 1996	Ellis et al.	348/473	
5,552,833	September 3, 1996	Henmi et al	348/460	

* If Pertinent

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY	CLASS/ SUBCLASS	TRANSLATION	
					YES	NO
	0 020 242	December 10, 1980	European	G09G 1/16		X
	0 035 456	September 9, 1981	European	H05B 3/72		X
	0 046 108	February 17, 1982	European	H04N 5/76		X
	0 049 184	April 7, 1982	European	G09B 7/08		X
	0 055 167	June 30, 1982	European	G09G 1/16		X
	0 056 649	July 28, 1982	European	H04N 5/44	X	
	0 077 712	April 27, 1983	European	H04N 7/00		X
	0 078 185	May 4, 1983	European	H04N 7/00		X
	0 583 196 A1	February 16, 1994	European	H04N 7/173	X	
	1 565 319	April 16, 1980	Great Britain	C07D 231/12	X	
	1,189,612	June 25, 1985	Canada	Ho4n 7/08	X	
	1,216,977	June 8, 1983	Canada	H04M 11/00	X	
	1,396,981		United kingdom			
	1,523,307	August 31, 1978	Great Britain	H03K 5/08	X	
	1,543,502	April 14, 1979	United Kingdom	G08B9/00	X	
	1,582,563	January 14, 1981	United Kingdom	G08B9/00	X	
	1,584,111	February 4, 1981	United Kingdom	G08B9/00	X	
	2,051,527	January 14, 1981	Great Britain	G06F 3/153	X	
	2,067,379	July 22, 1981	Great Britain	H04L 1/24	X	
	2,090,504	July 7, 1982	Great Britain	H04N 3/16	X	
	2,103,455	February 16, 1983	Great Britain	H04N 1/00 7/12	X	
	2,496,376	June 18, 1982	France	H04N 7/00		X
	2,516,733	May 5, 1983	France	H04N 7/00		X
	2,823,175	November 29, 1979	German	G06F 3/12		X
	24 53 441	May 13, 1976	Germany	H04L 9/00		X
	DE 3039949	May 6, 1982	German	H04M 3/42		X
	DE 3112249	October 7, 1982	German	G09G 1/28		X
	80/02901	December 24, 1980	France	H04N 7/16		X
	857,862	January 4, 1961	United Kingdom	40 (1)	X	
	DE 3020787	December 12, 1981	Germany	H04N 7/08		X
	GB 2 081 948 A	February 24, 1982	United Kingdom	H04Q 9/00		
	WO80/00292	February 21, 1980	Japan	H04N9/16		X
	WO83/00789	March 3, 1983	Japan	H04N 7/08		X
	WO89/02682	March 23, 1989	Japan	H04K 7/00	X	

OTHER DOCUMENTS

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Hanas et al., "An Addressable Satellite Encryption System For Preventing Signal Piracy", November 1981, pp. 631-635.
	National Cable Television Association Executive Seminar Series, <u>Videotex Services</u> , October 1980, pp. 1-155.
	Kokado et al., "A Programmable TV Receiver", February 1976, pp. 69-82.
	J. Hedger et al., "Telesoftware-Value Added Teletext", August 1980, pp. 555-567.
	Marti, B., "The Concept Of A Universal "Teletext" June 1979, pp.1-11
	Article re: America's Talk-Back Television Experiment: Qube
	Article re: "Teletext-Applications in Electronic Publishing"
	Article re: A Description of the Broadcast Telidon System
	Article re: EPEOS--Automatic Program Recording System by G. Degoulet
	Article re: Teletext signals transmitted in UK...
	Article re: New services offered by a packet data broadcasting system
	Article re: Philips TV set indicates station tunign and color settings on screen
	Vincent, A. et al., "Telidon Teletest System Field Trials" (Abstract)
	Rzeszeewski, T., "A New Telletex Channel"
	Numaguchi, Y. et al., "Compatibility and Transmission Characteristics of Digital Signals Inserted in the Field-Blanking Interval of the Television Signal" (Abstract)
	Zimmerman, R. et al., Bildschirmtextesysteme (Abstract)
	Pilz, F., "Digital Codierte Uebertragungen von Text und Graphik in den Vertikal-anstastintervallen des Fernsehsignas" (Abstract)
	Pilz, F., "Uebertragung Insaitryliches Informationen, Insbesondere von Texten, In Ungenutryten Zeilen der Vertikal-Anstastlueke des Fernsehsignals" (Abstract)
	Numaguchi, Y., Wie man Stillstehende Bilder Uebertraegt. Ueberlick Ueber Teletext-, Fernseheinzelnbild-Und Faksimile-Uebertrragnungsverfahren (Abstract)
	Transcript, Videotex, Viewdata, and Teletext: Viewdata '801 Online Conference on Videotex, Viewdata and Teletext, London. March 26k-28, 1980 (Abstract)
	Graf, P.H., "Antiope-Uebertragung fuer Breitbandige Videotex-Verteildienste", 1981
	Poubread, J.J., "Cryptage' du Son Pour la Televiser A Peague" 1981 (Abstract)
	Graf, P.H., "Das Videotex-System Antiope" 1980 (Abstract)
	Vardo, J.C., "Les Emetteurs de Television et la Diffusion de Donnees" 1980 (Abstract)
	Noirel, Y., "Constructin D'un Reseau de Diffusion de Donnees Par Paquets" 1979 (Abstract)
	Vardo, J.C., " Effet de Distorsions en Diffusion de Donnes. II. Resultats Theoriques" 1979 (Abstract)
	Baerfuss, C., "Experiences de Diffusion de Donnees dans un Canal de Television" 1979 (Abstract)
	Blineau, J., "Liasons Telex a Support Video Sur Des Circuits de Television Internationaux" 1979 (Abstract)
	Dublet, G., "Methodes Utilisees et Principaux Resultats Obtenus Lors D'Une Campagne de esure 'Didon' Dans la Refion Centre-est" 1978 (Abstract)
	Guinet, Y., "Etude Comparative des Systems de Teletexte en Radio-Diffusion. Quelques Avantages de la Diffusion des Donnees Par Paques Applique an Teletexte" 1977 (Abstract)
	Goff, R., "A Review of Teletext" 1978 (Abstract)
	Haplinsky, C.H., "The D**(2)B A One Logical Wire Bus for Consumer Applications" 1981

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Cazals, A., "cts Techniques du Teletexte Diffuse" 1981 (Abstract)
	Sechet, C. et al., "Epees et la Viideomessagerie" 1981 (Abstract)
	Cayet, A. "La Peritelevision Face a Son Public" 1981 (Abstract)
	"La Telematique au Service Des Entreprises et des Particliers: Les Reseaux - Les Produits Nouveaux - Les Aplication" 1980 (Abstract)
	Sechet, C., "Antiope Teletext Captioning" 1980
	Lambert, O. et al., "Antiope and D.R.C.S." 1980
	Broggini, P., "Antiope: La Bonne Information Au Bon Moment" 1980 (Abstract)
	Strauch, D., "(Texte Sur Ecran An Nivenn International. Viewdata 80. Premeire Confirence Mendiale Sur Viewdata, Video text at Teletext, a Londres)" 1980
	Strauch, D., "(Las Media De Telecommunication Devant la Rapture. Les Nonvellas Methodes Presentees a L'Exposition International 1979 de Radio (Et Television)) 1979
	Eymery, G., "Le Teletexte Antiope System D'Information a La Demande" 1979-1980 (Abstract)
	Brasq, R., "Micro 8 Bits Dans Linite Gestion da Terminal de Videotex Antiope"
	Hughes, JW, "Videotex and Teletext Systems" 1979
	Marti, B., "Terminologie Des Services de Communication De Texte" 1979 (Abstract)
	Schreber, H., "Antiope et Tietae, La Tele-Informatique Sur L'ecran De Votre Televiscur" 1978 (Abstract)
	Kulpok, A., "Videotext, Teletext, Bilschirmzeitung" 1979 (Abstract)
	Cochard, J.P. et al., "Antiope Prototype da Teletexte De Demain" 1979 (Abstract)
	Messerschmid, U., "Videotext: Ein Nueur Informations dienst in Fernschrund funk" 1978 (Abstract)
	D'Argoevves, T. et al., "La Chaine Vieo: Magnetoscopes, Videodisqhes, Andiodisques" 1979 (Abstract)
	Klingler, R., "Les Systemes de Teletexte Unidirectionals" 1978 (Abstract)
	Guillemin, J., "Dix Annees D'Antomatisation Au Service De la Radiodiffusion" 1977 (Abstract)
	Brusq, R., "Le Terminal de Teletexte Antiope" 1977 (Abstract)
	Guinet, Y., "Les Systemes des Teletextes Antiope" 1977 (Abstract)
	Schwartz, C. et al., "Specification Preliminarie du Systeme Teletexte Antope" 1977 (Abstract)
	United States International Trade Commission notice of decision not to review Admin. law judges initial dismissal of complaint (case involves certain recombinantly Produced Human Growth Hormones)
	U.S. I.T.C.'s order granting Complainants Motion to Desqualify the Law Firm of Finnegan, Henderson et al. (Case involves Certain Cardiac Pacemakers and Components therof)
	Decision in Ford Motor Company v. Jerome H. Lemelson
	General Counsel's recommendation to U.S.I.T.C. to refuse a patent-based section 337 investigation based on a complaint filed not by the owner of the patents in issue, but by nonexclusive licensees
	Portion of ITC's Industry and Trade Summary serial publication
	Copy of ITC Admin. Judges Order #9: Initial Determination Terminating Investigation (Investigation #337-TA-373)
	"LSI Circuits for Teletext and Viewdata -- The Lucy Generation" published by Mullard Limited, Mullard House (1981)
	2 page article by Nicholas Negroponte in SID 80 Digest titled, "17.4/10:25 a.m.: Soft Fonts", pp. 184-185
	IEEE Consumer Electronics July 1979 issue from Spring Conference titled, "Consumer Text Display Systems", pp. 235-429
	Videotext '81 published by Online Conferences Ltd., for the May 20-22, 1981 Confernece, pp. 1-470
	"Teletext and Viewdata Costs as Applied to the U.S. Market" Published by Mullard House (1979), pp. 1-8

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	CCETT publication titled, "Didon Diffusion de donnees parpaquets"
	Dalton, C.J., "International Broadcasting Convention" (1968), Sponsors: E.E.A., I.E.E., I.E.E.E., I.E.R.E., etc.
	Shorter, D.E.L., "The Distribution of Television Sound by Pulse-Code Modulation Signals Incorporated in the Video Waveform"
	Chorky, J.M., Shorter, D.E.L., "International Broadcasting Convention" (1970), pp. 166-169
	"The Implementation of the Sound-in-Sync project for Eurovision (Feb. 1975), pp. 18-22
	Maegele, Manfred, "Digital Transmissions of Two Television Sound Channels in Horizontal Banking", pp. 68-70
	Weston, J.D., "Digital TV Transmission for the European Communications Satellite" (1974), pp. 318-325
	Golding, L., "A 15 to 25 Mhz Digital Television System for Transmission of Commercial Color Television" (1967), pp. 1-26
	Huth, Gaylord K., "Digital Television System Design Study: Final Report (11/28/76), prepared for NASA Lyndon B. Johnson Space Center
	Weston, J.D., "Transmission of Television by Pulse Code modulation", Electrical Communication (1967), pp. 165-172
	Golding, L., "F1-Ditec-A-Digital Television Communications System for Satellite Links," Telecommunications Numeriques Par Satellite
	Haberle, H. et al., "Digital TV Transmission via Satellite", Electrical Communications (1974)
	Dirks, H. et al., "TV-PCM6 Integrated Sound and Vision Transmission System, Electrical Communication (1977), pp. 61-67
	Talygin, N.V. et al., The "Orbita" Ground Station for Receiving Television Programs Relayed by Satellites, Elektrovinz, pp. 3-5
	1973 NAB Convention Program, Mar. 25-28, 1973
	Portions of Electronic Engineer's Reference Book (1989) - Multichannel sound systems, Teletext transmission, cable television, ISDN applications, etc.
	Yoshido, Junko, teletext back in focus: VBI service revived as alternative delivery system, Electronic Engineering Times (1994) (Abstract)
	Blankenhorn, Dana, "Int'l Teletext expands market (International Teletext Communication Inc.)," NewsBytes (1993) (Abstract)
	Collin, Simon, PC Text II (Hardware Review (Shortlist), PC User (1990)
	Alfonzetti, Salvatore, "Interworking between teletext and OSI systems," Computer Communications (1989)
	Gabriel, Michael R., Videotex and teletex: Waiting for the 21st century?, Education Technology (1988)
	Voorman, J.O. et al., A one-chip Automatic Equalizer for Echo Reduction in Teletext, IEEE Transactions on Consumer Electronics, pp. 512-529
	National Online Meeting: Proceedings - 1982 sponsored by: Online Review, pp. 547-551
	MacKenzie, G.A., A Model for the UK Teletext Level 2 Specification (Ref: GTV2 242 Annex 6" based on the ISO Layer model
	Chambers, J.P., A Domestic Television Program Delivery Services, British Broadcasting Corporation, pp. 1-5
	McKenzie, G.A., UK Teletext - The Engineering Choices, Independent Broadcasting Authority, pp. 1-8
	Adding a new dimension to British television, Electronic Engineering (1974)
	Jones, Keith, The Development of Teletext, pp. 1-6
	Marti, B. et al., Discrete, service de television cryptee, Revue de radiodiffusion - television (1975), pp. 24-30

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Ando, Heichero et al., Still-Picture Broadcasting - A new Informational and Instructional Broadcasting System, IEEE Transactions on Broadcasting (1973), pp. 68-76
	Sauter, Dietrich, "Intelligente Komponenten Fur Das Afra-Bus-Fernsteuersystem", Rundfunk technischen Mitteilungen, pp. 54-57
	Hogel, T. et al., "Afra-Bus-ein digitales Fersteuersystem fur Fernsehstudion Komplexe", Fernseh-Und Kino-Technik (1974), pp. 13-14
	Hogel, G., "Das Afra-Bus System: 2. Technische Struktur des AFRA-Bus-Systems", Fernseh-Und Kino-Technik (1975), pp. 395-400
	Krauss, G., "Das AFRA-Bus-System: 4. Wirtschaftlich Keits-betrachtungen und Rationalisierung seifekte beim Einsatz des AFRA-Bus-Systems", Fernseh-Und Kino-Technik (1976), pp. 40-49
	Wellhausen, H. "Das AFRA-Bus-System: 1. Grundsatzliche-Betrachtungen und Rationlisierung und Automatisierung in den Fernschbetrieben", Fernseh-Und Kino-Technik (1975), pp. 353-356
	Sauter, D., "Das AFRA-Bus-System: 3. Einsatz-moglich Keiten des Afra-Bus Systems in Fernsehbetrieben", Fernseh-Und Kino-Technik (1976), pp. 9-13
	B.B.C.I.B.A., Specification of Standards for information transmission by digitally coded signals in the field - blanking interval of 625-line systems (1974), pp. 5-40
	Centre Commun Des De Television et Telecommunications, Specification du Systeme Di Teletext, Antiope
	Heller, Arthur, "VPS - Ein Neues System Zuragsgesteurten Programmanfzeichnung, Rundfunk technische Mitteilungen, pp. 162-169
	Institut fur Rundfunktechnik, "ARD/SDF/ZXEI - Richlinie "Video Programm-System", pp. 1-30
	Buro der Technischen Kommission, "Niederschrift uber die Besprechung zwischen Rundfunkanstalten (Techik, Sendeleiter) und ZVEI zur Einfuhrung des Video-Programm-Systems", pp. 1-4
	Buro der Technischen Kommission, "Ergebnisse und Festlegungen anda "Blich einer Besprechung zwischen Rundfunanstalten..", pp. 1-4
	Koch, H. et al., "Bericht der ad hoc - Arbeitsgruppe 'Videotext programmiert Videorecorder' der TEKO", pp. 1-40
	European Broadcasting Union, "Specification of the Domestic Video Programme Delivery Control System", pp. 1-72
	ARD/ZDF/ZVEI-Richtlinie "Video Programme System"
	Reports on Developments in USA, Teletext, EIA Meeting
	Videotex '81: A Special Report
	Tarrant, D.R., "Teletext for the World"
	Clifford, Colin et al., "Microprocessor Based, Software Defined Television Controller", IEEE Transaction on Consumer Electronics (1978), pp. 436-441
	Hughes, William L. et al., "Some Design Considerations for Home Interactive Terminals", IEEE Transactions on Broadcasting (1971)
	Mothersdale, Peter L. , "Teletext and viewdata: new information systems using the domestic television receiver", Electronics Record (1979), pp. 1349-1354
	Betts, W.R., "Viewdata: the evolution of home and business terminals", PROC.IEE (1979), pp. 1362-1366
	Hutt, P.R., "Thical and practical ruggedness of UK teletext transmission", PROC.IEE (1979), pp. 1397-1403
	Rogers, B.J., "Methods of measurement on teletext receivers and decoders", PROC.IEE (1979), pp.1404-1407
	Green, N., "Subtitling using teletext service - technical and editorial aspects", PROC.IEE (1979), pp. 1408-1416

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Chambers, M.A., "Teletext - enhancing the basic system", PROC.IEE (1979), pp. 1425-1428
	Crowther, G.O., "Adaptation of UK Teletex System for 525/60 Operation", IEEE Transactions on Consumer Electronics (1980), pp. 587-596
	Marti, B. et al., "Discrete, service de television cryptee", Revue de radiodiffusion - television (1975), pp. 24-30
	Lopinto, John, "The Application of DRCS within the North American Broadcast Teletext Specification", IEEE Transactions on Consumer Electronics (1982), pp. 612-617
	BBC, BBC Microcomputer: BBC Microcomputer with Added Processor and Teletex Adaptor (Manual)
	Green, N.W., "Picture Oracle," On Independent Television Companies Association Limited Letterhead
	National Captioning Institute, Comments on the Matter of Amendment of Part 73, Subpart E. of the Federal Communications Rules Government Television Stations to Authorize Teletext (before F.C.C.)
	Balchin, C., "Videotext and the U.S.A.", I.C. Product Marketing Memo
	Koteen and Burt, "British Teletext/Videotex"
	EIA Teletext SubCommittee Meetings, Report on USA Visit
	Brighton's Experience with Software for Broadcast (Draft)
	The Institution of Electronic and Radio Engineers, Conference on Electronic Delivery of Data and Software
	AT&T, "Videotex Standard Presentation Level Protocol"
	Various Commissioner statements on Authorization of Teletext Transmissions by TV Stations, BC Docket No. 81-741
	Report and Order of FCC on the Matter of Amendment of Parts 2,73, and 76 of the Commission's Rules to Authorize the Transmission of Teletext by TV Stations, pp. 1-37
	IBA Technical Review of Digital Television, pp. 1-64
	National Cable Television Association report, "Videotex Services" given at Executive Seminar
	LEXIS Research results for Patent No. 4,145,717
	Web page - Company Overview of Norepack Corporation
	Coversheet titled, "Zing"
	Lemelson v. Apple Computer, Inc. patent case in The Bureau of National Affairs, 1996
	A computer printout from Library Search
	Electronic Industries Association - Teletext Subcommittee Task Group A - Systems Minutes of Meeting 3/30/81 at Zenith plus attachments
	Electronic Industries Association - Teletext Subcommittee Task Group A Systems Interim Report, 3/30/81 by Stuart Lipoff, Arthur D. Little Inc.
	Minutes of Electronic Industries Association Teletext Subcommittee Task Force B - Laboratory & Field Tests 3/30/81
	National Captioning Institute Report, "The 1980 Closed-Captioned Television Audience"
	Electronic Industries Assoc. - Teletext Subcommittee - Steering Committee Minutes of Meeting on 3/31/81
	8/6/90 letter from Herb Zucker to Walter Ciciora with attachment ~`
	Articles, information sheets under cover sheet "QVP - Pay Per View" 11/29/82
	National Cable Television Association report, "Videotex Services"
	Scala Info Channel Advertisement, "The Art of Conveying A Message"
	Zenith Corporation's Z-Tac Systems information includes Z-tac specifications, access list, etc.
	Report by Cablesystems Engineering Ltd. on, "Zenith Addressable System and Operating Procedures" and Advertising documents

Examiner: Initial	Author, Title, Date, Pertinent Pages, Etc.
	Memo from W. Thomas to G. Kelly on 1/21/82 Re: Modified ZTAC/Multi Channel
	Notations by Walt Ciciora dated 8/19/81 referring to Virex figures
	Stamped Zenith Confidential, "Preliminary Specification for Basic Text"
	Report titled "The Necams Business Plan," dated March 18, 1994
	The Personalized Mass Media Corp. reported titled, "Portfolio of Programming Examples" by Harvey, Keil, & Parker 1991
	Petition to FCC dated 3/26/81 titled, "Petition for Rulemaking of Unighted Kingdom Teletext Industry Goup," also 1 page of handwritten notes from Walter Ciciora
	"Enhanced Computer Controlled Teletext for 525 Line Systems (Usecc) SAA 5245 User Manual" report by J.R. Kinghorn
	"Questions and Answers about Pay TV" by Ira Kamen
	Oak Industries 1981 Annual Report
	Article, "50 Different Uses For At Home 2-Way Cable TV Systems" by Morton Dubin
	Derwent Info Ltd. search. Integrated broadcasting & Computer Processing system. Inventor J. Harvey/J. Cuddihy
	Telefax from Arjen Hooiveld to Jones, Day, Reavis & Pogue Re: European Patent Appl. No. 88908836.5 and abstract plus related correspondence and Derwent search
	Advertisement in royal TV Society Journal (1972) for PYE TVT
	Letter to Dean Russell listing "reference papers", pp. 1-4
	Letter from George McKenzie to Dean Russell RE: PMM Corp., v. TWC Inc.
	Reisebericht (German memo)
	Blanpunk (German memo)
	"Relevant papers for Weather Channel V PMMC"
	Letter to Peter Hatt Re: BVT: Advisory UK Industry Contact Group
	Incomplete report on Antiope
	Memo FCC: Next Moves.
	Memo - Re: British Teletext -- ABC
	Memo with FCC Report and Order Authorizing Teletext Transmission
	Manual
	Notes to Section 22.4: Simple Block Encipherment Algorithm
	Memos on Zenith and Teletext
	Memo to Bernie Kotten about National Cable TV Association meeting and effort to encourage Sony to integrate teletext chip sets into its TV
	Memo's from Koteen & Naftalin
	Description of patents from Official Gazette
	Explanation of Collateral Estoppel
	BNA's Intellectual Property Library on CD's summary of Jamesbury Corporation v. United States
	BNA's Intellectual Property printouts of Lemelson v. Apple Computer, Inc.
	ITC Judge Order denying Motion for Summary Judgment in the Matter of Certain Memory Devices with Increased Capacitance and Products Containing Same, Investigation #337-TA-371
	Decision in court case Corbett v. Chisolm and Schrenk involving patent #3,557,265
	Matthew Beaden Printouts regarding interference practice and the Board Interference
	BNA's Intellectual Property Library on CD printouts about Corbett v. Chisolm
	numerous Group W business cards including James Cuddihy

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	numerous Group W business cards including James Cuddihy
	The Broadcast Teletext Specification, published by the BBC, The IBA and the British Radio Equipment Manufacturers' Association (1976)
	Kahn, et al., "Advances in Packet Radio Technology,"..... Proceedings of the IEEE, Vol. 66, No. 11, Nov. (1978) pp. 1468-1495
	Clifford, C., "A Universal Controller for Text Display Systems," IEEE Transactions on Consumer Electronics, (1979) pp. 424-429
	Harden, B., "Teletext/Viewdata LSI," IEEE Transactions on Consumer Electronics, (1979), pp. 353-358
	Bown, H. et al., "Comparative Terminal Realizations with Alpha-Geometric Coding," IEEE Transaction on Consumer Electronics, (1980), pp. 605-614
	Crowther, "Dynamically Redefinable Character Sets--D.R.C.S.," IEEE Transaction on Consumer Electronics, (1980), pp. 707-716
	Chambers, John et al., "The Development of a Coding Hierarchy for Enhanced UK Teletext," IEEE Transaction on Consumer Electronics, (1981), pp. 536-540
	Reexamination of U.S. Patent No. 4,706,121
	U.S. Patent Application by T. Diepholz (Serial No. 266900)
	List of relevant or searched patents
	88908836.5 and Amendments to John C. Harvey,. European Patent Office
	88908836.5 International Application to John C. Harvey
	Kruger, H.E., "Memory Television, the ZPS Digital Identification System," pp. 1-9.

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).	

37-103 2600
#12 Amended
END 2-24-98

/PATENTS
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



Inventor Application of)
John C. Harvey and James W. Cuddihy)
Serial No. 08/459,507)
Filed: June 2, 1995)
For: SIGNAL PROCESSING APPARATUS)
AND METHODS)

Examiner: Groody, J.
Group Art Unit: 2600
Atty Dkt. 5634.232

Honorable Commissioner of Patents
and Trademarks
Washington, D.C. 20231

Sir:

I. AMENDMENT

This amendment is responsive to the Office Action mailed on September 18, 1996. The time for responding to this Action has been extended three (3) months to March 18, 1997. Applicants respectfully request that the following amendments be entered into the above-captioned application:

A. In The Claims

Please amend Claim 2 through ⁴6 as follows:

2. (Twice Amended) A method of processing signals at a receiver station, said receiver station [comprising] having a processor for processing digital data detected in a broadcast or cablecast transmission, said method comprising the steps of:
receiving a first broadcast or cablecast transmission;

97 MAR 28 AM 7:26
GROUP 2600

demodulating said first broadcast or cablecast transmission to detect an information transmission thereon, said information transmission [comprising] including embedded digital data;

detecting said embedded data [on] in said information transmission and passing said detected embedded data to said processor;

storing at least some of said detected embedded data;

inputting a control signal designating a second received broadcast or cablecast [broadcast] transmission;

causing said processor to cease storing said [stored at least some of said] detected embedded data in response to said inputted control signal.

3. (Amended) A method of communicating one or more control signals to [at least] one or more [of a plurality of] receiver stations each of which includes a processor for processing embedded data detected in at least one broadcast or cablecast transmission, comprising the steps of:

(1) receiving a first broadcast or cablecast transmission to be transmitted, said broadcast or cablecast transmission including said embedded data;

(2) receiving a first control signal which at said [at least] one or more [of a plurality of] receiver stations operates to designate a second broadcast or cablecast transmission;

(3) receiving a second control signal which operates at a transmitter station to communicate said first control signal to a first transmitter; and

(4) transmitting said first broadcast or cablecast transmission, said embedded data, and said first control signal, said first control signal operative at [to effect] said [at least] one or more [of a plurality of] receiver stations to cause said processor to cease

storing said embedded data[detected in said first broadcast or cablecast transmission in response to said control signal].

4. (Amended) A method of communicating one or more control signals to [at least] one or more [of a plurality of] receiver stations each of which includes a processor for processing embedded data detected in at least one broadcast or cablecast transmission, comprising the steps of:

(1) receiving a first broadcast or cablecast transmission to be transmitted and delivering said first broadcast or cablecast transmission to [a] one or more transmitters, said first broadcast or cablecast transmission containing said embedded data;

(2) receiving and storing a first control signal which at said [at least] one or more [of a plurality of] receiver stations operates to designate a second broadcast or cablecast transmission; and

(3) causing said first control signal to be communicated to [the] a first of said one or more transmitters at a specific time, thereby to transmit said first broadcast or cablecast transmission, [comprising] said embedded data, and said first control signal, said first control signal operative at said [to effect] one or more [of said plurality of] receiver stations to cause said processor to cease storing said embedded data [detected in said first broadcast or cablecast transmission in response to said control signal].

Please add the following new claims 5 through 38:

5. The method of claim 4, wherein said first control signal is received at a memory, said method further comprising the steps of:

generating said first control signal before said specific time; and
communicating said first control signal to said memory.

6. The method of claim 5, further comprising the steps of:
receiving a schedule at a controller; and
communicating one of said first control signal and a second control signal in
accordance with said schedule.

7. The method of claim 4, further comprising the steps of:
receiving an intermediate generation set; and
generating said first control signal in accordance with said intermediate
generation set.

C3
C5
D3
8. The method of claim 7, further comprising the step of storing, before said
specific time, formula or item information to serve as a basis for generating said first
control signal.

9. The method of claim 4, wherein said first control signal operates to control
said one or more receiver stations to detect information contained in said second
broadcast or cablecast transmission, said method further comprising the step of
communicating to said first transmitter a synchronizing control signal which enables
said processor to output at least some of said detected information.

10. The method of claim 9, wherein said synchronizing control signal is
embedded in said second broadcast or cablecast transmission, said method further
comprising the step of communicating said second broadcast or cablecast transmission
to said first transmitter.

11. The method of claim 10, wherein said synchronizing control signal enables said one or more receiver stations to execute one or more controlled functions in response to at least a portion of said information contained in said second broadcast or cablecast transmission, said method further comprising the step of transmitting said at least a portion of said information after said specific time.

12. The method of claim 9, further comprising the step of transmitting said synchronizing control signal following said specific time.

C3
com 4
13. The method of claim 4, further comprising the step of communicating said first broadcast or cablecast transmission to a second of said one or more transmitters prior to said specific time.

14. The method of claim 4, further comprising the step of multiplexing a signal containing said first and second broadcast or cablecast transmissions.

sub
ID
15. The method of claim 3, wherein said first control signal operates at said one or more receiver stations to designate a memory, said method further comprising the step of transmitting a third control signal with operates at said memory to store or output programming contained in said second broadcast or cablecast transmission.

16. The method of claim 3, wherein said first control signal enables said one or more receiver stations to execute one or more controlled functions in response to information contained in said second broadcast or cablecast transmission, said method further comprising the step of transmitting a series of instructions in said first control signal.

17. The method of claim 16, wherein a first one or more of said series of instructions controls one or more of a converter, a mass medium programming receiver, and a portion receiver to receive said information contained in said second broadcast or cablecast transmission.

18. The method of claim 17, wherein a second of said series of instructions operates at said one or more receiver stations to synchronize processing of said information contained in said second broadcast or cablecast transmission.

C3
don't

19. The method of claim 16, further comprising the step of transmitting operating instructions which program said one or more of said plurality of receiver stations to execute said controlled functions in response to said information contained in said second broadcast or cablecast transmission.

20. The method of claim 19, wherein a selective communications device is operatively connected to a receiver at said transmitter station and said operating instructions program said one or more receiver stations to execute said controlled functions in response to one or more receiver station execution instructions contained in said second broadcast or cablecast transmission, said method further comprising the step of outputting said selective communications device to said transmitter in response to said second control signal.

21. The method of claim 20, wherein said selective communications device comprises a memory which stores said one or more execution instructions in at least some of a message stream and said operating instructions program said one of said

plurality of receiver stations to process at least one message, said method further comprising the steps of:

detecting one or more transmitter station execution instructions in said message stream; and

programming at least one processor at said transmitter station to respond to said one or more transmitter station execution instructions.

22. The method of claim 21, wherein said operating instructions program said one or more receiver stations to detect at least a first synchronizing control signal, said method further comprising the steps of:

programming at least one processor at said transmitter station to detect said at least a first synchronizing instruction; and

generating one or more second synchronizing control signals which are effective to synchronize said one or more receiver stations.

23. The method of claim 22, wherein one or more of said first and second synchronizing control signals is an end of file signal.

24. The method of claim 3, further comprising the step of transmitting said first broadcast or cablecast transmission based on said second control signal.

25. The method of claim 24, wherein said second control signal is a schedule, said method further comprising the step of generating said first control signal in accordance with said schedule.

26. The method of claim 24, wherein one or more transmitter stations include a memory operatively connected to said first transmitter, said method further comprising the step of outputting said memory in response to said second control signal.

C3
only

27. The method of claim 26, wherein said first control signal is embedded in one of said first broadcast or cablecast transmission and said second broadcast or cablecast transmission, said method further comprising the step of storing at least some of said one of said first broadcast or cablecast transmission and said second broadcast or cablecast transmission at said memory.

28. The method of claim 3, wherein at least one transmitter station includes a second transmitter, said method further comprising the step of communicating one of said first broadcast or cablecast transmission and said second broadcast or cablecast transmission to said second transmitter in accordance with said second control signal.

29. The method of claim 28, wherein said at least one transmitter station transmits a plurality of channels of programming, said method further comprising the step of multiplexing signals containing said first and second broadcast or cablecast transmissions.

30. The method of claim 28, wherein said at least one transmitter station comprises an intermediate transmission station, said method further comprising the step of embedding said first control signal in said second broadcast or cablecast transmission.

Pub
D5
31. The method of claim 2, wherein at least some of said ~~detected~~ embedded data is stored at a processor interrupt signal detector, said method further comprising the step of causing said ~~processor~~ interrupt signal detector to delete or discard said stored at least some of said detected embedded data.

32. The method of claim 2, wherein said step of inputting a control signal designating a second received broadcast or cablecast transmission comprises tuning a first receiver to receive said second broadcast or cablecast transmission in response to said control signal.

C3
cont
33. The method of claim 2, wherein said control signal is embedded in said second received broadcast or cablecast transmission, said method further comprising the step of receiving at least some of said second broadcast or cablecast transmission at a second receiver.

34. The method of claim 2, further comprising the step of programming said receiver station to interrupt said processor whenever a tuner is tuned or a receiver is actuated.

Pub
D7
35. The method of claim 2, further comprising the step of controlling a selective communications device to communicate said broadcast or cablecast transmission to a receiver.

36. The method of claim 35, wherein said selective communications device is a converter.

C3
comp.
B8

37. The method of claim 35, wherein said selective communications device is a storage device.

38. The method of claim 2, further comprising the steps of:
detecting digital data in said second broadcast or cablecast transmission; and
discarding said detected digital data until a synchronizing control signal is detected.

II. REMARKS

A. Introduction

The Office Action dated September 18, 1996 has been carefully reviewed and the foregoing amendments made in response thereto. Claims 3 and 4 stand rejected under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the subject matter regarded as the invention. Claims 2 - 4 stand rejected under the judicially created doctrine of non-obviousness non-statutory double patenting. Claims 2 - 4 stand rejected under 35 U.S.C. § 103 as being unpatentable over Leventer et al. (U.S. Pat. No. 4,380,027) in view of the publication titled "Broadcast Teletext Specification" published by the BBC in September 1976.

Claims 2 - 4 have been amended and claims 5 - 38 have been added. Claims 2 - 38 are now pending in this application.

In accordance with the foregoing, the claims have been amended to improve clarity, and further, to respond to certain rejections made by the Examiner arising under 35 U.S.C. § 112. The Examiner's comments on the claims are acknowledged and

appreciated. No new matter is presented in the foregoing amendments. Approval and entry of same is respectfully requested.

Regarding paragraph 2 of the Office Action, Applicants respectfully point out that the Information Disclosure Statements filed for the subject application claim priority only back to the application filed September 11, 1987, and issued as U.S. Pat. No. 4,965,825 on October 23, 1990 (hereinafter "the '87 case"). The subject application does not seek an effective file date based on the application filed November 3, 1981, and issued September 15, 1987, as U.S. Pat. No. 4,694,490 (hereinafter "the '81 case"). The present application claims priority under 35 U.S.C. § 120 of the following applications:

<u>Serial No.</u>	<u>Filing Date</u>	<u>Patent No.</u>
08/113,329	August 30, 1993	Pending
08/056,501	May 3, 1993	5,335,277
07/849,226	March 10, 1992	5,233,654
07/588,126	September 25, 1990	5,109,414
07/096,096	September 11, 1987	4,965,825

Consequently, the Applicants will demonstrate disclosure only with respect to the "87 case", App. Ser. No. 07/096,096 and issued as U.S. Pat. No. 4,965,825. Applicants will address the art rejection of the Office Action in Sections B below. Applicants will address the double patenting rejection in Section C below.

As to the paragraph numbered 3, applicants acknowledge their duty to maintain a line of patentable demarcation between related applications. Assuming, arguendo, that substantially duplicate claims exist, the applicants intend to make a good faith effort to alert the PTO of any instances in which the PTO treats such claims inconsistently.

As to the paragraph numbered 4, applicants acknowledge and appreciate the Examiner's concern over the use of alternative claim language. Applicants assert that they believe that the disclosure supports every possible embodiment or permutation that can be created using said language. During the prosecution of this application, applicants intend to ensure that the disclosure supports each possible embodiment or claimed using alternative claims.

As to paragraph 5's rejection of claim 3 under 35 U.S.C. § 112, second paragraph, Applicants respectfully submit that this rejection is traversed by the amendment which clarifies the claims in response to the Examiner's specific objections. Applicants respectfully submit that amended claim 3 of the subject application particularly points out and claims the subject matter sufficiently for one of ordinary skill in the art to understand the bounds of the claimed invention. The test for definiteness of a claim is whether one skilled in the art would understand the bounds of the patent claim when read in light of the specification, and if the claims so read reasonably apprise those skilled in the art of the scope of the invention, no more is required. Credle v. Bond, 25 F.3d 1556, 30 U.S.P.Q.2d 1911 (Fed. Cir. 1994). The disclosure of the priority document, U.S. Patent No. 4,965,825 (hereinafter the '87 case), filed September 11, 1987, and issued on October 23, 1990, relates to a unified system of programming, including central transmission stations and receiver stations, whereby broadcast programming and other information is transmitted and received, where the transmissions can cause receive station computers to come under the control of transmitting stations. (Specification, Abstract). The unified system may also include intermediate transmission stations

which receive programming from many sources and direct that programming to downstream receiver stations. (Specification, p. 180 at line 35).¹ Transmissions may include control information or control signals or commands that can effect various control functions at a given level of the unified system, e.g. at transmitter stations, intermediate transmission stations and receiver stations. The '87 disclosure discusses the use of "control information" (See, e.g., Specification, p. 21 at line 58; p. 22 at lines 58-9; p. 24 at line 23) and "control signals" (See, e.g., Specification, p. 16 at line 18; p. 23 at line 24) in the specification of this unified system of communication and control. In response to the Examiner's specific query (Office Action, p. 3 at lines 11 - 13) of paragraph 5, the "first control signal" and the "second control signal" are distinct. The former is ultimately transmitted to a receiver station, while the latter operates at the transmitter station to send the first control signal to a first transmitter. The "one or more control signals" of the preamble thus encompasses the "first control signal" since it is transmitted to a receiver station, but not the "second control signal", which is not further transmitted. Applicants respectfully submit that one of ordinary skill in the art would comprehend the claim language addressing a second control signal operating at a transmitter station to communicate a first control signal to a transmitter for transmission to receiver stations. Applicants submit that one of ordinary skill would appreciate the bounds of the subject matter claimed and, therefore, the rejection should be withdrawn. Applicants reiterate the above discussion regarding the similar objection made to claim 4.

¹ The Examiner is advised that the citations are to the pages (columns) of the specification of the '87 case in the issued patent.

As to the double patenting rejections of paragraphs 6 through 14, Applicants' views are fully discussed in Applicants' reply brief to the rejections in application number 08/113,329, hereby incorporated by reference. Applicants will not repeat portions the response which are identical in this application.

The Office Action states that "determination of a possible non-statutory double patenting rejection obvious-type in each of the related 327 applications over each other will be deferred until a later time." Applicants submit that the Examiner and the PTO cannot defer further rejections to a later time. Every ground of rejection should be made in Examiner's first Office Action. 37 C.F.R. § 1.104(a) states that "[o]n taking up an application for examination . . . the examiner shall make a thorough study thereof and shall make a thorough investigation of the available prior art relating to the subject matter of the claimed invention. The examination shall be complete with respect to both compliance of the application . . . with the applicable statutes and rules and to the patentability of the invention as claimed, as well as with respect to matters of form, unless otherwise indicated." The MPEP states "[t]he examiner's action will be complete as to all matters, except that in appropriate circumstances, such as misjoinder of invention, fundamental defects in the application, and the like, the action of the examiner may be limited to such matters before action is made." MPEP § 707.07, citing 37 C.F.R. § 1.105. Finally, "[p]iecemeal examination should be avoided as much as possible. The examiner ordinarily should reject each claim on all valid grounds available" "Where a major technical rejection is proper, it should be stated with full development of reasons rather than by mere conclusion coupled with some

stereotyped expression.” MPEP § 707.07(g). Applicants submit that the Examiner has a duty to give each application a complete examination, to make rejections with specificity, and not to defer rejections. For these reasons, Applicants likewise traverse the rejection based on the “judicially created doctrine of double patenting over the claims of copending U.S. application 08/113,329 and the following [list of all applicants copending applications]”. (Office Action, p. 12 at par. 12). Applicants submit that this rejection, even if appropriately made with specificity, should be a provisional double patenting rejection. Applicants respectfully request that this rejection be withdrawn.

As to the paragraph 13’s discussion of the multiplicity rejection in parent file 07/096,096, Applicants submit that the PTO gave a multiplicity rejection in that case and limited Applicants to twenty five claims. Roughly one hundred claims had been originally filed. There was no substantive review of any of the other claims outside of the twenty five. We were not permitted to submit additional claims although a request was made. The disclosure of Applicants addresses too many subject areas to be adequately covered by such a small number of claims. Applicant submit that “nexus” analysis not required by Applicant.

B. Rejection of Claims 2-4 Under 35 U.S.C. § 103

The claims of the present application have been amended to further clarify the claimed invention. It is respectfully submitted that the claims in the present application should be allowed because these structures and methods are not disclosed, taught, suggested, or implied by the applied prior art. A *prima facie* case of obviousness is established when the teachings from the prior art would have appeared to have

suggested the claimed subject matter to a person of ordinary skill in the art. In re Rijckaert, 9 F.3d 1531, 28 U.S.P.Q.2d 1955 (Fed. Cir. 1993). The mere fact that the prior art may be modified in the manner suggested by the examiner does not make the modification obvious unless the prior art suggests the desirability of the modification. In re Fitch, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). There must be a reason or suggestion in the art for combining references, other than the knowledge obtained from Applicants' disclosure. In re Dow Chemical, 5 U.S.P.Q.2d 1529, 1532 (Fed. Cir. 1988). The examiner may not engage in improper hindsight to "engage in a hindsight reconstruction of the claimed invention, using applicant's structure as a template and selecting elements from the references to fill the gaps". In re Gorman, 933 F.2d 982, 18 U.S.P.Q.2d 1885 (Fed. Cir. 1991). Applicants respectfully submit that the cited prior art, however combined, fails to disclose, suggest or imply the subject matter of the rejected claims since the claims contain patentably distinct differences over the combined prior art that, therefore, preclude a *prima facie* case of obviousness as a matter of law.

1. Overview of the Prior Art References.

Leventer, *et. al.*, U.S. Pat. No. 4,380,027 (hereinafter Leventer) discloses a system and methods for encoding digital data from a multiplicity of input data channels of varying data rates into the fixed-rate scan lines or vertical blanking interval (VBI) of a conventional analog television signal. (Leventer, abstract). Digital data is inserted into a particular horizontal scan line whereby each of the input digital data streams is mapped to a particular "data channel" or "data group" within the entire "data packet". (Leventer, p. 5-6). The data packet includes the individual data groups, each

corresponding to one data input, as well as header information, synchronizing data, spare channels and "catchup channels". (Leventer, fig. 2-3). The disclosure describes means and methods not only for encoding the conventional analog television signal with the digital data stream, but also for decoding the composite signal to extract the constituent digital data inputs and output them in their original format, at their original signal levels, and at their original data rates. The means and methods for encoding the input digital data include a series of input interface modules 18 particularly configured to receive and format input data from input devices; a system bus 5 for transfer of data among the system elements; a data encoding processor to encode the data into data groups and store in RAM 44 pending transfer for insertion; and a video data inserter 16 for synchronization and line detection/counting in order to insert data groups, header information, etc. into the proper scan line of the analog television signal before output for transmission. (Leventer, figs. 1-6). The means and methods for decoding entail what is essentially the mirror image of the encoding process, i.e. a video data extractor 102 for detecting and extracting the data packet and constituent data groups; a system bus 5' for transfer of data amongst the elements; a data decoding processor 104 to decode and store data pending transfer for final output processing; and a series of output interface modules 106 for final reformatting for output at the same levels, format and digital data rate as each data source was inputted at the "front end" encoder. (Leventer, figs. 8-10). Input devices to the input data modules 12 of the encoder include, *inter alia*, devices/data such as teletypewriters, video terminals for video characters/graphics data, computer output terminals, and

digital telephone devices. To summarize, Leventer discloses means and methods for encoding the video portion of a standard analog television signal with digital data of varying formats from a multiplicity of data input devices, as well as appropriate means and methods for decoding and outputting the same.

The British Broadcasting Corporation, *et. al.*, Broadcast Teletext Specification 3 (1976) (hereinafter BBC Spec), provides the specifications for the "Teletex Broadcasting System" used in the United Kingdom for the transmission of magazines consisting of "pages" of text and graphical symbols digitally encoded and transmitted in the field interval (analogous to the VBI for NTSC format analog television transmissions) of conventional analog transmissions. A page consists of twenty-four (24) rows of "data lines", each consisting of forty-five (45) eight-bit bytes of synchronization data, address data, control information data and character data codes. (BBC Spec., p. 5). Of the approximately twenty-five (25) unused lines in the field interval, the specification provides for carriage of two teletext data lines, meaning that four (4) pages of teletext information can be carried each second. *Id.* Up to eight (8) magazines each comprising up to one hundred (100) pages can be transmitted by a program to the user, who can select any of these pages. A user can select a page using its "magazine number" and "page number", both of which are encoded and transmitted with each data line. (BBC Spec, p. 5). The first data line of each page is the "page header", including control bits to regulate the display of the page and its header. (BBC Spec, p. 8). The "erase page" control bit is used to distinguish a later page from an earlier page of the same magazine and page identifier. (BBC Spec, p. 6). This erase control bit will be followed by a "page

erasure interval" to "effect erasure of the receiver page store". Id. In summary, the BBC specification discloses a method for carriage of digital character, address and control data within the field interval of a standard analog television transmission for decoding at a television receiver site in order to render a series of display pages consisting of graphics and/or character information.

2. Claims 2, 3 and 4 are Nonobvious over Leventer in View of the BBC Broadcast Teletext Specification Because the Examiner has Failed to Fully Reconstruct the Invention including All Patentably Distinct Claim Limitations.

a. Claim 2 is Nonobvious Over the Cited Prior Art.

Application claim 2, as amended, is a method of processing signals at a receiver station equipped with a processor, and includes the steps of receiving a first broadcast or cablecast (hereinafter BC/CC) transmission; demodulating said first BC/CC transmission to detect an information transmission comprising embedded digital data; detecting and passing said embedded data to said processor; storing at least some of said detected embedded data; inputting a control signal designating a second received BC/CC transmission; and causing said processor to stop storing said detected embedded data of said first BB/CC transmission in response to the control signal.

Claim 2, therefore, is directed at a method of detecting, processing and storing data embedded on an information transmission carried by a first BC/CC transmission, whereupon the input of a control signal designating a second BC/CC transmission causes the processor to cease storage of embedded data of the first transmission.

Applicants respectfully submit that the Examiner has not established a *prima facie* case of obviousness under 35 U.S.C. § 103 since the combination of prior art references does not disclose, teach, suggest or imply the subject matter of claim 2, including all patentably distinct elements. Leventer, discussed *supra*, provides for the embedding of digital data from multiple data sources into a time division multiplexed data frame inserted in the vertical blanking interval of a standard analog television signal. The BBC specification, discussed *supra*, provides for the insertion of encoded data representing characters, graphics and control signals into the field interval of a standard (U.K.) analog television signal, including the use of an erase control bit to effect erasure of a magazine page of the same magazine and page number that has been previously stored at the user site. Claim 2 of the present application provides for storage of embedded data on an information transmission carried by a received first BC/CC transmission *whereupon input of a control signal designating a second broadcast or cablecast transmission causes the processor to cease storage of the embedded data of the first transmission.*

As the Examiner correctly points out (Office Action, p. 18 at lines 10-12), Leventer does provide for receiving and demodulating a transmission, and for detection and transferring embedded data to a processor, including storage. (Leventer, figs. 9-10). The Examiner further correctly points out that Leventer does not disclose, suggest or imply an input control signal that causes the processor to terminate storage of the embedded data. However, the Examiner's application of the disclosure of the BBC specification for purposes of combination with Leventer is incorrect in several respects and, consequently, fails to render claim 2 obvious in light of the combination.

The Examiner asserts that the "second control signal" is taught by the BBC specification. (Office Action, p. 18 at lines 12-13). As an initial matter, claim 2 does not include the element of a second control signal; the steps of claim 2 make a single reference to a control signal. More substantively, claim 2 provides for a "control signal designating a second received broadcast or cablecast transmission" to cause the processor to stop storing embedded data of the first transmission. Thus claim 2 contemplates a control signal that operates to (1) designate a second BC/CC transmission and (2) cause the processor to cease storage of embedded data of the first BC/CC transmission. Claim 2 thus is directed at a method of processing at a receiver station capable of tuning multiple broadcast or cablecast transmissions, any of which may contain embedded data, and the further capability to control the storage of embedded data of any received transmission using inputted control signals that are associated with particular transmissions.

The BBC specification, on the other hand, discloses a control bit that causes removal of any previous versions of that page residing in a memory device (e.g. the teletext decoder). The BBC control signal is not associated with a second or other broadcast transmission; in fact, its control function is completely internal to the television transmission that is currently tuned. Therefore, the BBC control signal does not (1) designate a second broadcast or cablecast transmission. Furthermore, the BBC control signal does not cause a processor to cease storing embedded data of a first transmission; in fact, the BBC control signal merely erases an old version of data while storage of embedded data of that transmission continues unabated, ergo the designation

“erase page control bit” (emphasis added). (BBC Spec, p. 6). Applicants respectfully traverse the Examiner’s assertion that the erase bit will “effectively cause the processor to cease storing embedded data of the first transmitted signal”. (Office Action, p. 18 at lines 17-18). The BBC control signal merely causes the erasure of any stored page of the same magazine/page number. Beyond that, the BBC control signal has no effect whatsoever on the continued extraction, processing and storage of data embedded on a television transmission that is tuned by the receiver. The BBC control signal does not function to cause a processor to cease all storage of embedded data, but merely tells the processor, in effect, “if you have magazine *x*, page *y*, stored, then remove it because the embedded data on this transmission contains an updated version of that page[s]”. Otherwise, the processor continues to process and store all magazine pages designated or selected by the user for that television transmission. Therefore, the BBC control signal does not (2) cause the processor to cease storage of embedded data of the first broadcast or cablecast transmission.

The method disclosed by claim 2, as amended, includes the patentably distinct elements of an inputted receiver control signal that (1) designates a second broadcast or cablecast transmission and which (2) causes a processor to cease storage of the embedded data of a first broadcast or cablecast transmission. As demonstrated *supra*, the BBC specification does not disclose, teach, imply or suggest these patentably distinct elements. Leventer, as the Examiner concedes, does not disclose, teach, imply or suggest these patentably distinct elements. Therefore, the combination of Leventer and the BBC specification fails to reconstruct the invention of claim 2, including all

patentably distinct elements. Both Leventer and the BBC specification disclose a method for the communication of digital data embedded in an otherwise standard analog television transmission. The BBC specification further provides for the embedded data to include erase page signals to cause removal of stored data at the receiver site. But neither the BBC specification nor Leventer disclose, teach, suggest or imply the application of a control signal designating a second broadcast or cablecast transmission that causes a processor to cease storing embedded data of a first transmission. The two references, alone or in combination, fail to disclose, teach, suggest or imply the entire subject matter of claim 2 of the application. Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness and, therefore, the claim should be allowed.

b. Claim 3 is Nonobvious Over the Cited Prior Art.

Application claim 3 recites a method of communicating one or more receiver control signals to at least one of multiple receiver stations including a processor, and includes the steps of receiving a first broadcast or cablecast transmission to be transmitted, said first including embedded data; receiving a first control signal which operates at a receiver station to designate a second broadcast or cablecast transmission; receiving a second control signal which operates at a transmitter station to communicate said first control signal to a transmitter; and transmitting said first transmission and said first control signal, where said first control signal causes a processor of at least one of the receiver stations to cease storing embedded data of said

first transmission in response. Claim 3, therefore, is directed at a method of communicating a first control signal to a receiver station through a transmitter station using a second control signal that causes the first control signal to be sent to a transmitter. Claim 3 provides a method to control a transmission station that, in turn, provides for control of receiver station processing, e.g. like that of claim 2, discussed *supra*.

Applicants respectfully submit that the Examiner has not established a *prima facie* case of obviousness under 35 U.S.C. § 103 since the combination of prior art references does not disclose, teach, suggest or imply the subject matter of claim 3, including all patentably distinct elements. Leventer, discussed *supra*, provides for the embedding of digital data from multiple data sources into a time division multiplexed data frame inserted in the vertical blanking interval of a standard analog television signal. The BBC specification, discussed *supra*, provides for the insertion of encoded data representing characters, graphics and control signals into the field interval of a standard (U.K.) analog television signal, including the use of an erase control bit to effect erasure of a magazine page of the same magazine and page number that has been previously stored at the user site. Claim 3 of the present application provides for a transmission from a transmission station to control a receiver station processor that is storing embedded data, including the receipt of a second control signal that causes a previously received first control signal to be sent to a transmitter to enable transmission to a receiver station to effect the control function.

As an initial matter, the Examiner states that “claim 3 differs from claim 2 by reciting a control signal [first control signal] and second control signal”. (Office Action, p. 19 at line 1-2). Applicants wish to clarify that claim 2 is directed at a *method of processing* at a receiver station, whereby an inputted second-transmission designating control signal causes a processor to cease storing embedded data of a first transmission. Claim 3 is directed a *method of communicating* such a control signal to a receiver station(s) from a transmitter station, including the use of a (second) control signal operative at the transmitter station to pass the first control signal (operative at the receiver station) to the transmitter. Claims 2 and 3 are related, but are directed to different aspects of a system for controlling the processing and storing of embedded data at a receiver station through digital communications. Therefore, Applicants respectfully submit that the difference between claims 3 and 2 is greater than the addition of the single element of the second control signal.

Next, Applicants respectfully point out that claim 3, as amended, has a distinctly different object and effect than the cited art. The cited art of Leventer and the BBC specification disclose methods for embedding digital data in a standard television transmission, including² an encoded “erase page” control signal to cause a receiver site to erase a page or file that has been subsequently updated. Conceptually, claim 3 is directed to the application of control signals to effect control functions at both a transmitter station and receiver station. The object and effect of the cited prior art is merely to transmit encoded character and graphics data to a receiver site, including any

² In the case of the BBC Specification.

ancillary control signals necessary for formatting. The object and effect of the invention of claim 3, in contrast, is directed at the control of devices at multiple levels of the communication chain, where a first control signal designed to effect a control function one level (i.e. the receiver station) is dependent on a second control signal designed to effect a control function at a different level (i.e. the transmission station). The distinctly different object and effect of claim 3 demonstrates that Applicants have improved upon the teachings of the prior art to solve a problem that is not only of much greater complexity, but is a problem of a different nature. Applicants respectfully submit that the disclosure of the cited prior art relating to transmission of embedded character data and formatting control signals does not render claim 3 an obvious solution to one of ordinary skill in the art seeking to resolve the different, and considerably more complex, data communications and control issues that are addressed here. On this ground alone, Applicants respectfully submit that the subject matter of claim 3, as a whole, is nonobvious over the cited art, alone or in combination, and therefore should be allowed.

Furthermore, the combination of the cited prior art fails to reach the entire subject matter of claim 3, including all patentably distinct elements. The Examiner states that the "[first] control signal reads on the erase bit of BBC". (Office Action, p. 19 at line 3). As discussed *supra* in section B(2)(a) regarding claim 2, the "erase control bit" of the BBC specification does not disclose, teach, suggest or imply the first control signal of amended claim 3. To reiterate, the erase control bit of the BBC specification causes erasure of a particular data page at the receiver site; it does not cause a processor to

cease the storage of embedded data associated with that transmission. The Examiner further states that the "second control signal reads on the header information of Leventer generated by video timing element 90". Applicants respectfully submit that the descriptive header information does not function as the second control signal element of claim 3. Leventer discloses the transmission of a data packet (time division multiplexed frame) in a selected VBI line of each television frame, said data packet including a number of data channels/groups (each corresponding to an input device) and header information. Header information is stored in ROM 94 of video data inserter 16. (Leventer, fig. 6). Header information is used to identify the source of the encoded information and is processed by the data decoding system 100 to properly route each demultiplexed data group or channel to the proper receiving terminal or output interface module 110 (Leventer, p. 6 at lines 22-31; p. 8 at lines 20-26). Therefore, as a conceptual matter, the header information disclosed by Leventer functions as is typical in the art, i.e. to describe the format or content of a data frame to enable receiving equipment to properly demultiplex or otherwise process ensuing data in the frame. The header information of Leventer does not in any manner function as the second control signal of claim 3, i.e. to cause the communication of a first control signal (destined for a further receiver station) to a transmitter pending transmission to a receiver station. The descriptive header information disclosed by Leventer merely informs a processor how to process and route data in a data frame; the second control signal of claim 3 operates at a transmission station to cause a different control signal (first control signal) to be sent to a transmitter pending transmission. Applicants respectfully submit that the

descriptive header information of Leventer does not disclose, teach, suggest or imply the second control signal of claim 3.

Returning to the *prima facie* case, Applicants respectfully submit that the combination of prior art does not disclose, teach, suggest or imply the subject matter of claim 3, including all patentably distinct elements. The combination of Leventer and the BBC specification does not disclose (1) the reception of a first BC/CC transmission to be transmitted, including embedded data. As discussed *supra*, the combination of cited prior art does not disclose, suggest or imply (2) the reception of a (first) control signal that designates a second BC/CC transmission and causes a receiver station processor to cease storage of embedded detected data of a first BC/CC transmission. As discussed *supra*, the combination of prior art does not disclose, suggest or imply (3) the reception of a second control signal which operates to communicate the first control signal to a transmitter. Finally, the combination of cited prior art does not disclose, suggest or imply (4) the transmission of the first BC/CC transmission and a first control signal to one of multiple receiver stations to cause a processor to cease the storage of embedded data of said first BC/CC transmission. Because the combination of prior art does not disclose, teach, suggest or imply the invention of claim 3, including all patentably distinct claim elements, the Examiner has not established a *prima facie* case of obviousness under 35 U.S.C. § 103 and, therefore, the claim must be allowed.

c. Claim 4 is Nonobvious Over the Cited Prior Art.

Claim 4 is similar to claim 3³, and is directed to a method of communicating one or more control signals to at least one of multiple receiver stations including a processor. Claim 4 recites substantially the same steps as claim 3, except the (2) first control signal is stored pending transmission, and (3) the first control signal is sent to the transmitter at a specific time, whereupon both the BC/CC transmission and control signal are transmitted. Unlike claim 3, claim 4 recites no step of the reception of a second control signal which causes the first control signal to be sent to the transmitter. Applicants respectfully submit that the analysis of claim 3 *supra* is applicable here to demonstrate that the Examiner has failed to demonstrate a *prima facie* case of obviousness. The cited references do not alone or in combination disclose, suggest or imply the following patentably distinct claim elements of claim 4: (1) receiving a first BC/CC transmission to be transmitted and delivering said transmission to a transmitter; (2) receiving and storing a first control signal; and (3) causing said first control signal to be communicated to a transmitter at a specific time, thereby to transmit said first transmission and said control signal to effect a processor at a receiver station to cease storage of embedded data of said first transmission. The cited prior art fails to disclose, suggest or imply the invention of claim 4, including all claim elements. Applicants respectfully submit that a *prima facie* case of obviousness is not established and, therefore, the claim should be allowed.

³ Applicants respectfully suggest that claim 4 is more closely related to claim 3 than to claim 2, and thus is best analyzed in reference to the former. (Office Action, p. 19 at line 7).

d. Newly Added Claims 5 through 38 are Novel and Nonobvious Over the Cited Art.

Applicants respectfully submit, in accordance with the reasoning articulated in section B *supra*, that newly added claims 5 - 38 are novel and nonobvious over the cited prior art. Said new claims do not add new matter and contain patentably distinct limitations that render them a novel and nonobvious advance over the prior art. Applicants submit that, as a statutory matter, they are entitled to a substantive examination of newly added claims 5 - 38 that, in addition, will demonstrate said claims meet all requirements of the patent statute, including novelty and nonobviousness. Applicants respectfully submit that newly added claims 5 - 38 are patentable over the prior art and, therefore, should be allowed.

D. Response To Rejection Based On MPEP Section 804 (II)(B)(2)

As to the Office Action's rejection of Applicants' claim under a non-statutory non-obvious type of double patenting, Applicants strongly traverse the Examiner's double patenting rejection on three separate grounds which are set forth in the reply brief for Serial No. 08/113,329 (Atty. Docket No. 05634.008), incorporated herein by reference. For the sake of brevity, these arguments will not be set forth herein; the Examiner is respectfully directed to the above-mentioned reply brief.

The claims in the present application are distinct from the claims in the Harvey patents. As previously mentioned, the Office Action states that the independent and distinct standard was the main factor in the Schneller court's determination that the double patenting rejection should be affirmed. The Office Action has misinterpreted

this phrase. This phrase means independent 'or' distinct. MPEP (6th ed.) § 802.01. The MPEP defines independent as meaning "that there is no disclosed relationship between the two or more subjects disclosed" and that they are not connected. The MPEP defines the term distinct as meaning that "two or more subjects disclosed are related . . . but are capable of separate manufacture, use, or sale as claimed" Two or more subjects cannot then be unrelated, independent, and also related, and thus distinct. Analyzing the PTO's cited representative claims referenced in the Office Action, the claims of the present application are clearly distinct from the claims in the patents and therefore the claims in the present application are patentable. Although not required, applicants will analyze the claims of the present application with respect to the designated representative claims of Harvey U.S. Patents 4,694,490 and 4,704,725.

i. First representative claims, U.S. patent 4,694,490, claim 7 covering present application claim 3

Patent 4,694,490, claim 7 claims a method of communicating television program material, said material including a video signal containing a television program and an instruct-to-overlay signal, to multiple receiver stations. The video signal is received and the instruct-to-overlay signal detected and processed by a computer. The computer generates and transmits its overlay video signals to a television receiver which presents a combined display of the television program and overlay video signals, said display specific to a specific user. Present application claim 3 relates to a method of communicating control signals wherein a broadcast or cablecast transmission containing embedded data is received; a first and second control signal is received; and the broadcast or cablecast transmission is transmitted with the embedded data and the first control signal. The first control signal is effective to cause a processor at a receiver

station to cease storing the embedded data. Patent claim 7 does not cover present application claim 3. The two claims are capable of separate manufacture, use, and sale as claimed. These two inventions are distinct.

U.S. patent 4,694,490, claim 7	Present application claim 3 (amended)
In a method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay video signals, to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay video signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, and wherein a video signal containing a television program signal and an instruct-to-overlay signal are transmitted to said receiver stations, the steps of: receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations detecting the presence of said instruct-to-overlay signal at said selected receiver stations at a time when the corresponding overlay is not being displayed, and coupling said instruct-to-overlay signal to the computers at said selected receiver stations, and causing the computers at said selected receiver stations to generate and transmit their overlay video signals to their	A method of communicating one or more control signals to [at least] one <u>or more</u> [a plurality of] receiver stations each of which includes a processor for processing embedded data detected in at <u>least one</u> broadcast or cablecast transmission, comprising the steps of: (1) receiving a first broadcast or cablecast transmission to be transmitted, said first broadcast or cablecast transmission including said embedded data; (2) receiving a <u>first</u> control signal which at said [at least] one <u>or more</u> [of a plurality of] receiver stations operates to designate a second broadcast or cablecast transmission; (3) receiving a second control signal which operates at a transmitter station to communicate said <u>first</u> control signal to a <u>first</u> transmitter; and (4) transmitting said first broadcast or cablecast transmission, <u>said embedded data</u>, and said <u>first</u> control signal, <u>said first control signal operative at</u> [to effect] said [at least] one <u>or more</u> [of a plurality of] receiver stations to cause said processor to cease storing <u>said embedded data</u> [detected in said first broadcast or cablecast transmission in response to said control signal].

associated television receivers in response to said instruct-to-overlay signal, thereby to present a combined display at the selected receiver stations consisting of the television program and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.

ii. **Second representative claims, U.S. patent 4,704,725, claim 3 covering present application claim 3**

Patent 4,704,725, claim 3 claims a method of communicating output signals comprising data and user specific signals at a multiplicity of receiver stations from computers to output devices. At least some of the computers can modify the user specific signals by processing modification control signals. The computers communicate the data and user specific signals in response to a received and detected instruct-to-transmit signal. Present application claim 3 relates to a method of communicating control signals wherein a broadcast or cablecast transmission containing embedded data is received along with first and second control signals and the broadcast or cablecast transmission is transmitted with the embedded data and the first control signal. The first control signal is effective to cause a processor at a receiver station to cease storing the embedded data. Patent claim 3 does not cover present application claim 3. The two claims are capable of separate manufacture, use, and sale as claimed. These two inventions are distinct.

U.S. patent 4,704,725, claim 3	Present application claim 3 (Amended)
A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices,	A method of communicating one or more control signals to [at least] one <u>or more</u> [a plurality of] receiver stations each of which includes a processor for processing embedded data detected in at

with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of:

transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device;

detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected stations, and

causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

least one broadcast or cablecast transmission, comprising the steps of:

(1) receiving a first broadcast or cablecast transmission to be transmitted, said first broadcast or cablecast transmission including said embedded data;

(2) receiving a first control signal which at said [at least] one or more [of a plurality of] receiver stations operates to designate a second broadcast or cablecast transmission;

(3) receiving a second control signal which operates at a transmitter station to communicate said first control signal to a first transmitter; and

(4) transmitting said first broadcast or cablecast transmission, said embedded data, and said first control signal, said first control signal operative at [to effect] said [at least] one or more [of a plurality of] receiver stations to cause said processor to cease storing said embedded data [detected in said first broadcast or cablecast transmission in response to said control signal].

iii. **Third representative claims, U.S. patent 4,965,825, claim 24 covering present application claim 3**

Patent 4,965,825, claim 24 claims a method of generating user specific output information at a multiplicity of receiver stations. Each receiver station is programmed with a special user application and has a computer adapted to generate user specific output information. Each receiver station has an output device to which its computer transmits a user specific signal. At a time when the user specific output information does not exist, an instruct-to-generate signal is transmitted to the receiver stations. In

response to the instruct-to-generate signal, the computers generate and transmit to the output devices the user specific output information in user specific signals which are different, "with each output signal specific to a specific user". Present application claim 3 relates to a method of communicating control signals wherein a broadcast or cablecast transmission containing embedded data is received along with first and second control signals and the broadcast or cablecast transmission is transmitted with the embedded data and the first control signal. The first control signal is effective to cause a processor at a receiver station to cease storing the embedded data. Patent claim 24 does not cover present application claim 3. The two claims are capable of separate manufacture, use, and sale as claimed. These two inventions are distinct.

U.S. patent 4,965,825, claim 24	Present application claim 3 (Amended)
In a method of generating computer output at a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific output information content and user specific signals to one or more associated output devices, with at least one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify said computers' method of processing data and generating output information content, each of said computers, being programmed to accommodate a special user application, the steps of: transmitting an instruct-to-generate signal to said computers at a time when corresponding user specific output information content does not exist, and causing said last named computers to generate their user specific output information content in response to said instruct-to-generate signal, thereby to transmit to each of their associated output	A method of communicating one or more control signals to [at least] one <u>or more</u> [a plurality of] receiver stations each of which includes a processor for processing embedded data detected in at <u>least one</u> broadcast or cablecast transmission, comprising the steps of: (1) receiving a first broadcast or cablecast transmission to be transmitted, said first broadcast or cablecast transmission including said embedded data; (2) receiving a <u>first</u> control signal which at said [at least] one <u>or more</u> [of a plurality of] receiver stations operates to designate a second broadcast or cablecast transmission; (3) receiving a second control signal which operates at a transmitter station to communicate said <u>first</u> control signal to a <u>first</u> transmitter; and (4) transmitting said first broadcast or cablecast transmission, <u>said embedded data</u>, and said <u>first</u> control signal, <u>said first</u>

devices an output information content and the user specific signal of its associated computer, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

control signal operative at [to effect] said [at least] one or more [of a plurality of] receiver stations to cause said processor to cease storing said embedded data [detected in said first broadcast or cablecast transmission in response to said control signal].

iv. **Fourth representative claims, U.S. patent 5,109,414, claim 15 covering present application claim 3**

Patent 5,109,414, claim 15 claims a signal processing system which receives data from a data source and outputs the data to a matrix switch and a detector, control signals are detected within the received data and stored for further processing, and a processor controls the directing functions of (1) the matrix switch which receives the data as input and can direct selected portions of the data to a data transmission means and (2) the device which stores and transfers the control signals to the processor. Present application claim 3 relates to a method of communicating control signals wherein a broadcast or cablecast transmission containing embedded data is received along with first and second control signals and the broadcast or cablecast transmission is transmitted with the embedded data and the first control signal. The first control signal is effective to cause a processor at a receiver station to cease storing the embedded data. Patent claim 15 does not cover present application claim 3. The two claims are capable of separate manufacture, use, and sale as claimed. These two inventions are distinct.

<u>U.S. patent 5,109,414, claim 15</u>	<u>Present application claim 3 (Amended)</u>
In a signal processing system, a receiver/distribution means for receiving data from a data source and for outputting said data to a matrix switch means and a control signal detector means,	A method of communicating one or more control signals to [at least] one <u>or more</u> [a plurality of] receiver stations each of which includes a processor for processing embedded data detected in at

a matrix switch means for receiving said data from said receiver/distributor means and for directing selected portions of said received data to a data transmission means,

a control signal detector means for detecting control signals respecting said data and transferring said control signals to a storage/transfer means, said control signal means being configured to detect said control signals at a predetermined location within said data,

a storage/transfer means for receiving and storing said control signals and for transferring at least a portion of said control signals to a processor means for further processing, and

a processor means for controlling the directing functions of said matrix switch means and the transfer functions of said storage/transfer means based on instructions contained in said control signals.

least one broadcast or cablecast transmission, comprising the steps of:

(1) receiving a first broadcast or cablecast transmission to be transmitted, said first broadcast or cablecast transmission including said embedded data;

(2) receiving a first control signal which at said [at least] one or more [of a plurality of] receiver stations operates to designate a second broadcast or cablecast transmission;

(3) receiving a second control signal which operates at a transmitter station to communicate said first control signal to a first transmitter; and

(4) transmitting said first broadcast or cablecast transmission, said embedded data, and said first control signal, said first control signal operative at [to effect] said [at least] one or more [of a plurality of] receiver stations to cause said processor to cease storing said embedded data [detected in said first broadcast or cablecast transmission in response to said control signal].

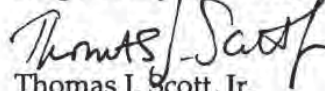
III. CONCLUSION

In accordance with the foregoing it is respectfully submitted that all outstanding objections are rejections have been overcome and/or rendered moot. Further, that all pending claims patentably distinguish over the prior art, taken in any proper combination. Thus, there being no further outstanding objections or rejections, the application is submitted as being in a condition for allowance, which action is earnestly solicited.

If the Examiner has any remaining informalities to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for telephone interview to discuss resolution of such informalities.

Date: March 13, 1997
HOWREY & SIMON
1299 Pennsylvania Avenue, NW
Washington, D.C. 20004
Tel: (202) 383-6614

Respectfully submitted,


Thomas J. Scott, Jr.
Reg. No. 27,836
Attorney for applicants

930-117

#11 ext. (3) 2600
Ems 2-24-98

PATENT

Docket No.: 05634.0232



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

re application of
Harvey et al.

Application No.: 08/459,507

Group Art Unit: 2600

Filing Date: June 2, 1995

Examiner: James Groody

For: SIGNAL PROCESSING APPARATUS
AND METHODS

**PETITION FOR EXTENSION
OF TIME UNDER 37 CFR 1.136(a)**

ATTENTION: BOX MISSING PART

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a response in the above-identified application.

The requested extension and appropriate non-small entity fee are as follows:

- ☐ One month \$110.00
- ☐ Two months \$390.00
- ☒ Three months \$930.00
- ☐ Four months \$1,470.00

☐ Applicant is a small entity under 37 CFR 1.9 and 1.27, therefore the fee amount shown above is reduced by one-half, and the resulting fee is \$. A verified statement of small entity status as a small entity under 37 CFR 1.27:

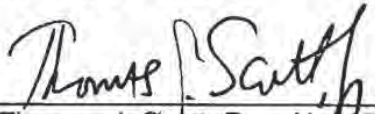
- ☐ is enclosed.
- ☐ has already been filed in this application.
- ☒ A check in the amount of the fee is enclosed.

97 MAR 20 AM 7:3
GROUP 2600

740 26 03/28/97 0945P07
1 117 930.00 US

☒ The Commissioner is hereby authorized to charge any fees under 37 CFR 1.16 and 1.17 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 08-3038. This paper is submitted in duplicate.

Respectfully submitted,
HOWREY & SIMON


Thomas J. Scott, Reg. No. 27,836

Date: March 13, 1997

HOWREY & SIMON
1299 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2402
Telephone: (202) 383-6977
Telecopier: (202) 383-7195



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
--------------------	-------------	-----------------------	---------------------

08/459,507 06/02/95 HARVE

EXAMINER

THOMAS J SCOTT JR
HOWREY & SIMON
1299 PENNSYLVANIA AVENUE NW
WASHINGTON DC 20004

ART UNIT

PAPER NUMBER

DATE MAILED: 9

09/18/96

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☒ Responsive to communication(s) filed on 3-7-96

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 2-4 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 2-4 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of Reference Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

- SEE OFFICE ACTION ON THE FOLLOWING PAGES -

Serial Number: 08/459,507
Art Unit: 2619

-2-

1. This action is in response to the amendment filed March 7, 1996.
2. This action will not attempt to determine the effective filing date of this application. The action will apply art against the claims using two possible effective filing dates, i.e. serial number 06/317,510, filed November 3, 1981, and serial number 07/096,096, filed September 11, 1987. Applicants can overcome the art rejections by establishing that the art applied does not meet the claimed limitations or that the art does not have an early enough filing date.

The action will make initial double patenting rejections presuming that all of the present claims were fully disclosed in both the '81 and '87 cases.

In any rejections made under 35 USC 112, first paragraph, applicants will be asked to clarify, where required by the examiner, how the present claims are fully disclosed in both the '81 and '87 cases.

3. Applicants are reminded of their duty to maintain a line of patentable demarcation between related applications. It has been noted by the PTO that many of the pending applications have similar claimed subject matter. In the related 327 applications (the serial numbers are included in a list below), it is estimated that there may be between 10,000 and 20,000 claims. Applicants should insure that substantially duplicate claims do not appear in different cases, and should bring to the PTO's

attention instances where similar claims have been treated inconsistently, i.e. rejected in one case but not in another.

4. Applicants are cautioned that their continual use of alternatives in the claims raises questions concerning the exact claim meaning. More importantly, it raises questions whether the disclosure supports every possible embodiment or permutation that can be created by the alternative language.

5. Claims 3 and 4 rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 3, lines 7 and 9, are these "control signals" the same as the ones claimed in line 1? A similar objection is made to claim 4.

6. The double patenting rejections in this action are based on the premise that all of the present claims were fully disclosed in U.S. Patents 4,694,490; 4,704,725; 4,965,825; and 5,109,414. Since there was a restriction made in 5,233,654, there will be no double patenting made on that patent or 5,335,277.

7. The PTO's copies of the parent files are in poor form since they have been copied many time by members of the public. The files also are missing some of the papers. The double patenting rejections below presumes that there were no requirements for restriction made in any of the parent files.

8. There are three types of double patenting rejections:

a) Statutory double patenting rejection under 35 USC 101,

- b) Nonstatutory obvious type double patenting,
- c) Nonstatutory non-obviousness type double patenting.

In this action, the rejections of the third type that are directed to the claims of the parent patented files will have two different versions. The first rejects the claims because they have not been established to be independent and distinct from the patented claims. The second version includes that premise, and further supports the rejection by establishing that representative claims from this application have common subject matter with representative ones of the patented claims.

9. Claims 2-4 (all of the claims in this application) are rejected under the judicially created doctrine of non-obviousness non-statutory double patenting over the patented claims in U.S. Patents 4,694,490; 4,704,725; 4,965,825; and 5,109,414 since the claims, if allowed, would improperly extend the "right to exclude" already granted in those patents.

The subject matter claimed in the instant application is fully disclosed in the patents and is covered by the patents since the patents and the application are claiming common subject matter, as follows: a signal processing apparatus and method including an interactive communications system apparatus and method. Furthermore, there is no apparent reason why applicants were prevented from presenting claims corresponding to those of the instant application during prosecution of the parent

Serial Number: 08/459,507
Art Unit: 2619

-5-

applications which matured into patents. In re Schneller, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

A review of the claims in each of the four parent patents (5,109,414; 4,964,825; 4,704,725; 4,694,490) was made. These patented claims do not appear "independent and distinct" from the claims in this application. The present claims are directed to a method and apparatus for controlling communications including television communications or programming. The claims in patent 5,109,414 were directed to a processing system and method for signal distribution including television. The claims in patent 4,965,825 were directed to a system and process for signal processing including carrier communications. The claims in patent 4,704,725 were directed to a method of communicating data to receiver stations. The claims in patent 4,694,490 were directed to a method for communicating and processing television programs.

Applicants' invention can be envisioned at in three parts. As with most cable TV systems, there is a head end station which generates the video programming. Applicants have included an intermediate station which receives transmissions, from the head end or subscriber stations, and distributes the programming to each subscriber. The subscriber station receives the programming, and can communicate to the intermediate station with requests or instructions. Even if the claims directed to each station were "independent and distinct" from the claims directed

to the other stations, there would be no reason to "restrict" between the three stations since their overall function is so interrelated that the stations have the same search area, i.e the PTO could not establish a burden if required to search for all three stations.

It is believed that CCPA in Schneller used the "independent and distinct" standard as the main factor in its determination that the double patenting rejection should be affirmed. The CCPA stated that the fundamental reason supporting the principle of non-statutory double patenting rejections is to prevent unjustified timewise extension of the right to exclude granted by a patent no matter how the extension is brought about. Further the CCPA stated at 158 USPQ 210 (214):

"... To conform to this reason and to prevail here, appellant has the burden of establishing that the invention in his patent is "independent and distinct" from the invention of the appealed claims. The public policy considerations underlying 35 U.S.C. 121 permit separate patents on "independent and distinct" inventions which are initially "claimed in one application." The statute places initial responsibility for this determination on the Commissioner of Patents. Where, as here, no such determination has been made, it is necessary to scrutinize carefully an applicant's voluntary alleged determination of this issue for it can lead to the improper proliferation of patents on the same invention with the inherent result of extending timewise a patentee's right to exclude others from the invention disclosed in the original application and on which his patent has issued."

The CCPA further stated at page 215 the length of time between an earlier patent and a later filed application should be considered. The filing date of this application was over seven years after the first patent issued (serial number 06/317,510,

Serial Number: 08/459,507
Art Unit: 2619

-7-

filed November 3, 1981, patented as 4,694,490 on September 15, 1987) and over four years after the first CIP issued as a patent (serial number 07/096,096, filed September 11, 1987, patented as 4,965,825 on October 23, 1990).

To the extent that one would view Schneller and In re Kaplan, 789 F.2d 1574, 229 USPQ 678 (Fed. Cir. 1986) to be in conflict, it is clear that Schneller is the controlling precedent to the factual situation here. In Schneller, the Court specifically distinguished a situation of the same applicant from one where the application and patent had different inventive entities. In Kaplan, the inventive entities between the patent and application were different, as was required at the time of the Kaplan invention, since Kaplan's filing date was before the Patent Law Amendments Act of 1984. In this present case, as with Schneller, the inventive entities of the application and patent are the same. Clearly, Kaplan was required, or entitled, to file separate applications, whereas applicants and Schneller did not have reason to do so. Finally, decisions of a three-judge panel of the Federal Circuit cannot overturn prior precedential decisions of the CCPA. See UMC Elec. Co. v. United States 2 USPQ2d 1465.

10. Claims 2-4 (all of the claims in this application) are rejected under the judicially created doctrine of non-obviousness non-statutory double patenting over the patented claims in U.S. Patents 4,694,490; 4,704,725; 4,965,825; and 5,109,414 since the

claims, if allowed, would improperly extend the "right to exclude" already granted in those patents.

This rejection incorporates the rejection above. That double patenting rejection is further supported by Schneller because the great majority of the patented claims are "comprising" type claims.¹ While it is recognized that the specific claim limitations in the application may not have been claimed in the patents, that alone does not establish grounds for overcoming this rejection. The patent claims were directed to parts of applicants' total disclosed system or process. Therefore the recitation of "comprising" enables those patented claims to "cover" claim features now recited by applicants' present application claims.

Since the head end, intermediate, and subscriber stations are part of the overall system, claims to one part "cover" the other part(s) under the Schneller decision (page 215), since the preferred embodiment would include all three parts of the main system, i.e. head, intermediate, and subscriber stations. For example, claims to the subscriber station still cover the intermediate station because the subscriber station would be processing information that had to come from the intermediate station. A second example would be that claims to one aspect or

¹The claims that recite neither "comprising" nor "consisting" are considered to recite open claim language, i.e. equivalent to "comprising". See, for example, claim 1 of Patent 5,109,414.

function of the intermediate station would cover the invention of another aspect or function of the intermediate station since both functions could be performed with the other. Applicants' disclosed system includes similar features in the head, intermediate, and subscriber stations. For example, the stations can transmit and receive, and have computer, processor and controller capabilities. For that reason, the disclosure will permit broadly drafted claims to read on either the head, intermediate, or subscriber station. Patent claims that recite receiving and transmitting can cover both intermediate and subscriber stations. The fact that patent claims and application claims are directed to different elements does not prohibit this rejection if there is common or interrelated subject matter recited. The Court in Schneller stated at page 215:

"... They "cover" the preferred form ABCXY, common to the patent and this application, in the same sense. The fact that X and Y are distinct elements, performing, independent functions, so that either can be employed without the other, does not change this fact. Neither does appellant's omission of reference to the lip Y from his patent claims."

Application claim 3 is a representative claim. It is directed to a method of communicating control signals to receiver stations by receiving a first transmission including embedded data, receiving a control signal which designates a second transmission, receiving a second control signal which operates to communicate the control signal to a transmitter, and transmitting the transmission and control signals to the receivers to cause a

processor to cease storing the embedded data detected in the transmission.

A review of representative ones of the patented claims will demonstrate that the patented claims cover the invention claimed in this application:

a) In patent 4,694,490, claim 7 is representative of the claimed method for communicating TV program information to a receiver station. The receiver station receives the video data, displays it, detects the presence of overlay information using an instruct signal, and has computers generate and transmit this overlay info to the display.

b) In patent 4,704,725, claim 3 is representative, and, as summarized below, recites a method of communicating data comprising:

- a) multiple receivers, each with a computer,
- b) transmitting instruct to transmit signals to the computers,
- c) detecting the signals and coupling them to the selected computers,
- d) having the computers control their own selected output device.

c) In patent 4,965,825, claim 24 is representative, and, as summarized below, recites generating a computer output having the steps of:

- a) having multiple receivers, each with a computer,
- b) transmitting an instruct to generate signal to the computers,
- c) causing the computers to generate individual user output information.

d) In patent 5,109,414, claim 15 is representative, and, as summarized below, recites a signal processing system (including):

- a) receiver/distribution means,
- b) switch means,
- c) control signal detector means for transferring data to storage means,
- d) storage means for storing and transferring data to processor means,
- e) processor means for controlling.

While claim 15 is an apparatus claim, a method claim and apparatus claim do not in themselves establish groups that are "independent and distinct".

The patented claims are also primarily directed to methods or structure to control element(s) either directly at that station or at another remote station. This control is generally completed with the reception or recognition of an instruct signal. The same common concept exists in application claim 3. All of the claims, both patented and pending in this application, when considered together, effectively recite parts of the preferred embodiment, i.e. a head, intermediate, and subscriber station. The patented claims "cover" the claims of the application because the patented limitations do not exclude the limitations of this application.

In the arguments above, the examiner, when discussing several of the patents, stated that the patented claims were broad enough to read on multiple stations. While it is believed this analysis is correct, it is not critical to this rejection.

Since the patented claims recite limitations that are interrelated with other similar features claimed in this application, it is the examiner's position that those patented claims "cover" the application claims because all of these claimed features (both in the patent and application) describe what is effectively the preferred embodiment.

The claims in this application, if allowed without a terminal disclaimer, would continue patent protection of the preferred embodiment, i.e. the complete system of the head, intermediate, and subscriber stations, beyond the expiration of applicants' parent patents.

11. A determination of a possible non-statutory double patenting rejection obvious-type in each of the related 327 applications over each other will be deferred until a later time. This action is taken in view of the possibility that many of these applications may be abandoned or merged.

12. Claims 2-4 are rejected under the judicially created doctrine of double patenting over the claims of copending U.S. application 08/113,329 and the following related U.S. applications (all of the application are series 08):

Serial Number: 08/459,507
Art Unit: 2619

-13-

#	Ser. No.	#	Ser. No.	#	Ser. No.
1	397371	2	397582	3	397636
4	435757	5	435758	6	437044
7	437045	8	437629	9	437635
10	437791	11	437819	12	437864
13	437887	14	437937	15	438011
16	438206	17	438216	18	438659
19	439668	20	439670	21	440657
22	440837	23	441027	24	441033
25	441575	26	441577	27	441701
28	441749	29	441821	30	441880
31	441942	32	441996	33	442165
34	442327	35	442335	36	442369
37	442383	38	442505	39	442507
40	444643	41	444756	42	444757
43	444758	44	444781	45	444786
46	444787	47	444788	48	444887
49	445045	50	445054	51	445290
52	445294	53	445296	54	445328
55	446123	56	446124	57	446429
58	446430	59	446431	60	446432
61	446494	62	446553	63	446579
64	447380	65	447414	66	447415
67	447416	68	447446	69	447447
70	447448	71	447449	72	447496
73	447502	74	447529	75	447611
76	447621	77	447679	78	447711
79	447712	80	447724	81	447726
82	447826	83	447908	84	447938
85	447974	86	447977	87	448099
88	448116	89	448141	90	448143
91	448175	92	448251	93	448309
94	448326	95	448643	96	448644
97	448662	98	448667	99	448794
100	448810	101	448833	102	448915
103	448916	104	448917	105	448976
106	448977	107	448978	108	448979
109	449097	110	449110	111	449248
112	449263	113	449281	114	449291

Serial Number: 08/459,507
Art Unit: 2619

-14-

#	Ser. No.	#	Ser. No.	#	Ser. No.
115	449302	116	449351	117	449369
118	449411	119	449413	120	449523
121	449530	122	449531	123	449532
124	449652	125	449697	126	449702
127	449717	128	449718	129	449798
130	449800	131	449829	132	449867
133	449901	134	450608	135	451203
136	451377	137	451496	138	451746
139	452395	140	458566	141	458699
142	458760	143	459216	144	459217
145	458218	146	459506	147	*****
148	459521	149	459522	150	459788
151	460043	152	460081	153	460085
154	460120	155	460187	156	460240
157	460256	158	460274	159	460387
160	460394	161	460401	162	460556
163	460557	164	460591	165	460592
166	460634	167	460642	168	460668
169	460677	170	460711	171	460713
172	460743	173	460765	174	460766
175	460770	176	460793	177	460817
178	466887	179	466888	180	466890
181	466894	182	467045	183	467904
184	468044	185	468323	186	468324
187	468641	188	468736	189	468994
190	469056	191	469059	192	469078
193	469103	194	469106	195	469107
196	469108	197	469109	198	469355
199	469496	200	469517	201	469612
202	469623	203	469624	204	469626
205	470051	206	470052	207	470053
208	470054	209	470236	210	470447
211	470448	212	470476	213	470570
214	470571	215	471024	216	471191
217	471238	218	471239	219	471240
220	472066	221	472399	222	472462
223	472980	224	473213	225	473224
226	473484	227	473927	228	473996

Serial Number: 08/459,507
Art Unit: 2619

-15-

#	Ser. No.	#	Ser. No.	#	Ser. No.
229	473997	230	473998	231	473999
232	474119	233	474139	234	474145
235	474146	236	474147	237	474496
238	474674	239	474963	240	474964
241	475341	242	475342	243	477547
244	477564	245	477570	246	477660
247	477711	248	477712	249	477805
250	477955	251	478044	252	478107
253	478544	254	478633	255	478767
256	478794	257	478858	258	478864
259	478908	260	479042	261	479215
262	479216	263	479217	264	479374
265	479375	266	479414	267	479523
268	479524	269	479667	270	480059
271	480060	272	480383	273	480392
274	480740	275	481074	276	482573
277	482574	278	482857	279	483054
280	483169	281	483174	282	483269
283	483980	284	484275	285	484276
286	484858	287	484865	288	485282
289	485283	290	485507	291	485775
292	486258	293	486259	294	486265
295	486266	296	486297	297	487155
298	487397	299	487408	300	487410
301	487411	302	487428	303	487506
304	487516	305	487526	306	487536
307	487546	308	487556	309	487565
310	487649	311	487851	312	487895
313	487980	314	487981	315	487982
316	487984	317	488032	318	488058
319	488378	320	488383	321	488436
322	488438	323	488439	324	488619
325	488620	326	498002	327	511491

The subject matter claimed in the instant application is fully disclosed in the referenced copending applications and would be covered by any patent granted on that copending applications since the referenced copending applications and the instant application are claiming common subject matter, as follows: a signal processing apparatus and method including an interactive communications system apparatus and method.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending applications. In re Schneller, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

A review of the claims in the related copending applications was made. These claims do not appear independent and distinct from the claims in this application. It is believed that CCPA in Schneller used the "independent and distinct" standard as the main factor in its determination that the double patenting rejection should be affirmed. The relevant arguments in the preceding paragraphs in support of this position are incorporated herein.

13. It is acknowledged that a multiplicity rejection was mailed on July 27, 1989 in parent file 07/096,096. In this rejection, the examiner had limited the applicants to 25 claims.

Schneller did not equate a multiplicity rejection with a restriction requirement as a permissible exception to being

Serial Number: 08/459,507
Art Unit: 2619

-17-

subject to the non-obvious non--statutory double patenting rejection. For that reason, this action will not overturn the legal reasoning in Schneller which supports the non-statutory non-obviousness double patenting rejection above.

It is believed, however, that applicants arguments on this multiplicity issue can be better supported if a nexus is established between the claims of this application and those that were cancelled in 07/096,096 in response to the multiplicity requirement.

Notwithstanding the comment above, at the time the examiner made the multiplicity rejection, there was a body of case law that had overturned similar rejections. Note In re Flint 162 USPQ 228 (CCPA 1969) and In re Wakefield, 164 USPQ 636 (CCPA 1970).

14. The non-statutory double patenting rejection, whether of the obvious-type or non-obvious-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); In re Van Ornam, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and In re Goodman, 29 USPQ2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321 (b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78 (d).

Effective January 1, 1994, a registered attorney or agent of record may sign a Terminal Disclaimer. A Terminal Disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 2-4 are rejected under 35 U.S.C. § 103 as being unpatentable over Leventer et al (4,380,027) in view of the publication titled "Broadcast Teletext Specification" published by the BBC in September 1976.

Leventer et al (Leventer) teaches receiving messages with different formats, figure 2, and receiving a control signal from interface adapter 50 controlling microprocessor 40. The messages are transmitted by figures 5 and 6. The messages are received and decoded, figure 7.

In applying Leventer against claim 2, figure 9 is the processor. Figure 10 shows the receiver, demodulator, and detector. RAM 108 stores the detected data. The second control signal is taught by the BBC article. This article explains the fundamental content of a teletext signal. Figure 6 of the BBC article shows an erase control bit. This corresponds to the claimed second control signal of claim 2. It is the examiner's position that BBC's page 6 states that the erase bit and the page erasure interval will effectively cause the processor to cease storing embedded data of the first transmitted signal.

Note that Leventer referred to the British teletext signal in col. 1, line 29. Leventer was concerned with transmitting low speed data, he clearly teaches that British teletext signals were known to be transmitted as embedded data. In view of this acknowledgement, it would have been obvious to include the erase bit of BBC with the embedded data of Leventer.

Claim 3 differs from claim 2 by reciting a control signal and a second control signal. In considering the references, the control signal reads on the erase bit of BBC. The second control signal reads on the header information in the messages of Leventer which are generated by video timing element 90 in figure 6.

Claim 4 is similar to claim 2.

16. A series of interviews were held before prosecution began on this application. Unless identified specifically below in this part of the action, these interviews did not address the merits of any single application, but rather issues that are appropriate to all of the related "Harvey" applications.

The first interview was held on August 13, 1995. It was a personal interview. Attending were one of the applicants, Mr. Harvey, and his attorneys, Messrs. Scott and Woolston. Representing the PTO were Messrs. Godici, Yusko, Orsino, and Groody. Mr. Harvey and his attorneys were informed that because of the large number of related applications, the examination would be performed by a team of examiners. As of the August 1995 interview there existed a problem with some of the applications being charged large entity fees when applicants believed that small entity status was deserved. The PTO has referred this matter to the Office of Assistant Commissioner of Patents, specifically Hiram Bernstein, a petitions attorney. Mr. Harvey's representatives will attempt to resolve this issue through Mr.

Bernstein. At this time all of the related cases had not been received in the Group. No examination was planned until at least late October because the team members were managers, and needed to complete other end of fiscal year assignments and all employee performance ratings. The PTO requested that any amendments to the specification, other than to correct continuing status, be delayed. Mr. Harvey's representatives stated that no other amendments to the specification were actually planned. The PTO's goal will be to attempt to reduce the amount of paper passed between applicant and PTO since the cases are related and very difficult to move from cite to cite because of their size. Copies of the prior art only need to be filed once. The PTO will only send newly cited art once. Preliminary amendments are being prepared. The PTO however cautioned that the prosecution of the applications will not be delayed until applicants have filed these amendments. The PTO requested a chart establishing any relationships between cases and what parts of applicants' disclosure related blocks of cases were directed to. It was not, at this time, determined whether this chart would become part of the official file. The PTO planned to research this. It was the PTO's intent to examine related cases simultaneously. The PTO welcomed any claim amendments to include resubmissions of all claims, whether amended or not. Mr. Harvey's representatives were informed that the issue of double patenting was expected to be a major issue.

On November 2, 1995, a telephonic interview was held between Mr. Woolston and Mr. Groody. Mr. Woolston indicated that two prior art statements were being completed, one for cases with a 1987 effective date, the other for cases with a 1981 effective date.

On November 30, 1995, a personal interview was held. Representing applicants were Messrs. Scott, Woolston, and Grabarek. Representing the PTO were Messrs. Yusko, Orsino, and Groody. The content of a simultaneously filed prior art statement was discussed. The PTO's copies of the parent files are missing the non-U.S. patents cited therein. The PTO requested copies of those prior art documents. Applicants gave the PTO a document showing which cases have already been amended. Since this document merely shows the status of any amended application, it has not been made part of the file record since that paper has no bearing on the merits of any issue before the PTO.

A second interview was held on later on November 30, 1995 between Mr. Scott and Mr. Groody. The sole topic discussed was double patenting. The discussion led to no conclusions on whether a double patenting rejections would be made in these applications.

An interview was held on December 6, 1995 between Mr. Scott and Mr. Groody. The discussion was directed to In re Schneller, 158 USPQ 210 (CCPA) and whether that decision will necessitate a

double patenting rejection in any of these cases. Mr Scott was asked whether a terminal disclaimer could be filed in all of the 327 related cases to obviate a possible double patenting rejection in each of these cases over each other. Mr. Scott agreed to consider this.

An interview was held on December 13, 1995 between Mr. Scott and Mr. Groody regarding the terminal disclaimer question above. Mr. Scott proposed filing a terminal disclaimer in about 250 of the 327 cases over each other if the PTO would have each of the about 250 issue within 4 or 6 months of each other. Mr. Groody felt that the PTO would be unwilling to suspend prosecution in some cases just to have other related cases issue close to each other. No agreement was reached.

Two interviews were held between Mr. Scott and Mr. Groody on April 2, 1996. Mr. Scott pointed out that, in parent file 5,233,654, there had been a restriction requirement. After reviewing the file, Mr Groody indicated that there would not be a Schneller double patenting rejection made in any case based on parent patent 5,233,654 and 5,335,277. The action recently sent out in 08/113,329 would be changed to reflect this point. Mr. Scott inquired whether a terminal disclaimer, in these applications, would have to be filed for all of the four Harvey patents (4,694,490; 4,704,725; 4,965,825; 5,109,414). Mr. Groody felt that all four should be disclaimed, if applicants elect to take that approach toward overcoming the double patenting

Serial Number: 08/459,507
Art Unit: 2619

-23-

rejections, because of the requirement in terminal disclaimers concerning common ownership. Mr. Scott indicated that in parent patent 4,965,825, there had been a multiplicity rejection. Mr. Groody will order the file, but felt that rejection would not overcome the Schneller double patenting rejections since the CCPA did not list this situation as an acceptable reason to file continuing cases. The Court limited its exception to "independent and distinct" claims. Mr. Groody acknowledged that the Board of Appeals may accept the multiplicity argument, but, in the absence of case law on this issue, he would still apply the Schneller rejections.

On June 10, 1996, Mr. Scott spoke with Mr. Groody on several topics. Related case 08/397,582 has been withdrawn from issue in Group 2200, and a new action will be mailed containing a double patenting rejection under In re Schneller. This application will now be examiner in Group 2600. Mr. Scott questioned whether applicants can withdraw the terminal disclaimer made in 397,582. Mr. Groody was unsure of the answer, but later checked with Mr. Orsino, who informed him that MPEP 1490 controlled.

Mr. Groody still believes that 08/113,329 can be expedited at the Board. Mr. Scott can refer to the appeal brief to be filed in that case in responding to any application having a Schneller double patenting rejection.

A telephone interview was held on June 12, 1996 between Mr. Thomas Woolston and Marc E. Bookbinder representing the PTO. For

Serial Number: 08/459,507
Art Unit: 2619

-24-

S.N. 08/448,116, Mr. Woolston indicated that the supplemental preliminary amendment of Nov. 13, 1995 was incomplete and that a complete version of such would be filed shortly to perfect the submission as originally intended. Mr. Woolston also indicated that he intended to file a second supplemental preliminary amendment in this case bringing the total number of claims to 37.

Mr. Bookbinder indicated that the Group would like to have a complete grouping of applications in a manner that was submitted earlier for only a portion of the total filings. Mr. Woolston stated that such a grouping was available and that he would forward it to the Group as soon as possible.

Mr. Bookbinder requested that each future amendment filed be accompanied by an electronically readable version thereof. Mr. Woolston stated that he could provide a disk to include one or more amendments made to applications as they were filed.

Mr. Woolston stated that he has reviewed actions that have been mailed and that he takes issue particularly with the double patenting rejections and the way In re Schneller has been applied. Mr. Bookbinder suggested that Mr. Woolston contact Mr. Groody of Group 2600 to discuss the particulars of the double patenting rejections since he was the author of those rejections.

17. The art cited in the information disclosure statements submitted by applicants has been considered. The examiner initialed 1449 forms will be sent in a later action.

Serial Number: 08/459,507
Art Unit: 2619

-25-

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Groody whose telephone number is (703) 308-5461.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.


James J. Groody
Supervisory Patent Examiner
Art Unit 262
Sp 2600

Notice of References Cited			Application No. 08/459,507		Applicant(s) Harvey et al	
			Examiner James Groody		Group Art Unit 2619	Page 1 of 3

U.S. PATENT DOCUMENTS						
*	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	
X	A	4,064,490	NAGEL	395	200.09	
X	B	4,054,911	FLETCHER ET AL	348	463	
X	C	4,148,066	SAYLOR	348	468	
X	D	4,381,522	LAMBERT	348	7	
X	E	4,439,761	FLEMING ET AL	348	468	
X	F	4,862,268	CAMPBELL ET AL	348	467	
X	G	4,868,866	WILLIAMS	348	6	
X	H	4,230,990	LERT ET AL	348	4	
X	I	3,936,595	YANAGIMACHI ET AL	348	24	
X	J	3,975,583	MEADOWS	348	460	
X	K	4,052,737	ROBERTSON ET AL	348	6	
X	L	4,305,101	YARBROUGH ET AL	358	908	
X	M	4,367,488	LEVENTER ET AL	348	467	

FOREIGN PATENT DOCUMENTS						
*	DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUBCLASS
X	N	WO8002093	WIPO	VIKENE	348	460
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS		
*	DOCUMENT (Including Author, Title, Source, and Pertinent Pages)	DATE
X	U "AUTOMATIC COMMERCIAL INSERTION EQUIPEMNT FOR UNATTENDED INSERTION OF LOCAL ADVERTISING", KILLION, "CABLEMATIC INC.", NCTA1984, PAGES 15-22.	1984
X	V "AN AUTOMATIC PROGRAMMING CONTROL SYSTEM FOR CABLE TV", BECK ET AL, PAGES PMC 005188-005193.	--
X	W "TELEVISION NETWORK AUTOMATED BY MINI COMPUTER-CONTROLLED CHANNELS", "COMPUTER DESIGN", VOL. 15, NO. 11, PAGES 58,59,62,66,70.	11-76
X	X "VIMACS - A VERTICAL INTERVAL MACHINE CONTROL SYSTEM", GREENBERG ET AL, PAGES KC011395-KC011401.	--

* A copy of this reference is not being furnished with this Office action.
(See Manual of Patent Examining Procedure, Section 707.05(a).)

Notice of References Cited				Application No. 08/459,507		Applicant(s) Harvey et al	
				Examiner James Groody		Group Art Unit 2619	

U.S. PATENT DOCUMENTS						
*	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	
x	A	4,860,379	SCHOENEGER ET AL	348	12	
x	B	3,848,082	SUMMERS	348	460	
x	C	4,245,245	MATSUMOTO ET AL	348	7	
x	D	4,430,669	CHEUNG	358	122	
x	E	4,538,176	NAKAJIMA ET AL	358	86	
x	F	4,599,644	FISCHER	348	10	
x	G	4,518,989	YABIKI ET AL	348	12	
x	H	4,317,215	TABATA ET AL	348	6	
x	I	4,450,477	LOVETT	348	7	
x	J	4,684,980	RAST ET AL	455	3.2	
x	K	4,782,387	SABRI ET AL	348	424	
x	L	4,135,156	SANDERS ET AL	370	57	
x	M	4,402,009	RATHJENS	348	169	

FOREIGN PATENT DOCUMENTS						
*	DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUBCLASS
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS		
*	DOCUMENT (Including Author, Title, Source, and Pertinent Pages)	DATE
x	U "AUTOMATED VIDEOTAPE DELAY OF SATELLITE TRANSMISSIONS", CHIDDIX, "SATELLITE COMMUNICATIONS MAGAZINE", 2 PAGES.	5-78
x	V "FROM SATELLITE TO EARTH STATION TO STUDIO TO S-T-L TO MDS TRANSMITTER TO HOME; PAY TELEVISION COMES TO ANCHORAGE ALASKA", VERGA, "TELECOMMUNICATIONS SYSTEMS, INC.", BALTIMORE, MD. PAGES 76-80.	
	W "BROADCAST TELETEXT SPECIFICATION", BRITISH BROADCASTING CORPORATION	9-76
	X	

* A copy of this reference is not being furnished with this Office action.
(See Manual of Patent Examining Procedure, Section 707.05(a).)

Notice of References Cited				Application No. 08/459,507		Applicant(s) Harvey et al	
				Examiner James Groody		Group Art Unit 2619	

U.S. PATENT DOCUMENTS						
*	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	
X	A	4,368,483	1-83	LIU	348	617
X	B	4,250,521	2-81	WIRGHT	348	617
X	C	RE 32,326	1-87	NAGEL ET AL	348	466
X	D	4,380,027	4-83	LEVENTER ET AL	348	467
X	E	3,531,583	9-70	WALKER	348	3
X	F	3,244,806	4-66	MORRIS	348	1
	G					
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS						
*	DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUBCLASS
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS		
*	DOCUMENT (Including Author, Title, Source, and Pertinent Pages)	DATE
	U	
	V	
	W	
	X	

* A copy of this reference is not being furnished with this Office action.
(See Manual of Patent Examining Procedure, Section 707.05(a).)

08/459507

NOTICE OF DRAFTSPERSON'S PATENT DRAWING REVIEW

PTO Draftpersons review all originally filed drawings regardless of whether they are designated as formal or informal. Additionally, patent Examiners will review the drawings for compliance with the regulations. Direct telephone inquiries concerning this review to the Drawing Review Branch, 703-305-8404.

The drawings filed (insert date) 6/2/95 are
 A. ☒ not objected to by the Draftsperson under 37 CFR 1.84 or 1.152.
 B. ☐ objected to by the Draftsperson under 37 CFR 1.84 or 1.152 as indicated below. The Examiner will require submission of new, corrected drawings when necessary. Corrected drawings must be submitted according to the instructions on the back of this Notice.

1. DRAWINGS. 37 CFR 1.84(a): Acceptable categories of drawings:

- Black ink. Color.
- Not black solid lines. Fig(s) _____
- Color drawings are not acceptable until petition is granted. Fig(s) _____

2. PHOTOGRAPHS. 37 CFR 1.84(b)

- Photographs are not acceptable until petition is granted. Fig(s) _____
- Photographs not properly mounted (must use bristol board or photographic double-weight paper). Fig(s) _____
- Poor quality (half-tone). Fig(s) _____

3. GRAPHIC FORMS. 37 CFR 1.84(d)

- Chemical or mathematical formula not labeled as separate figure. Fig(s) _____
- Group of waveforms not presented as a single figure, using common vertical axis with time extending along horizontal axis. Fig(s) _____
- Individual waveform not identified with a separate letter designation adjacent to the vertical axis. Fig(s) _____

4. TYPE OF PAPER. 37 CFR 1.84(c)

- Paper not flexible, strong, white, smooth, nonshiny, and durable. Sheet(s) _____

5. SIZE OF PAPER. 37 CFR 1.84(f): Acceptable sizes:

- 21.6 cm. by 35.6 cm. (8 1/2 by 14 inches)
- 21.6 cm. by 33.1 cm. (8 1/2 by 13 inches)
- 21.6 cm. by 27.9 cm. (8 1/2 by 11 inches)
- 21.0 cm. by 29.7 cm. (DIN size A4)

- All drawing sheets not the same size. Sheet(s) _____
- Drawing sheet not an acceptable size. Sheet(s) _____

6. MARGINS. 37 CFR 1.84(g): Acceptable margins:

Paper size

21.6 cm. X 35.6 cm. (8 1/2 X 14 inches)	21.6 cm. X 33.1 cm. (8 1/2 X 13 inches)	21.6 cm. X 27.9 cm. (8 1/2 X 11 inches)	21.0 cm. X 29.7 cm. (DIN Size A4)
T 5.1 cm. (2")	2.5 cm. (1")	2.5 cm. (1")	2.5 cm.
L .64 cm. (1/4")	.64 cm. (1/4")	.64 cm. (1/4")	1.5 cm.
R .64 cm. (1/4")	.64 cm. (1/4")	.64 cm. (1/4")	1.0 cm.

Margins do not conform to chart above.

Sheet(s)

Top (T) Left (L) Right (R) Bottom (B)

7. VIEWS. 37 CFR 1.84(h)

REMINDER: Specification may require revision to correspond to drawing changes.

- All views not grouped together. Fig(s) _____
- Views connected by projection lines or lead lines. Fig(s) _____
- Partial views. 37 CFR 1.84(h) 2

- View and enlarged view not labeled separately or properly. Fig(s) _____

8. ARRANGEMENT OF VIEWS. 37 CFR 1.84(i)

- Sectional views. 37 CFR 1.84(h) 3
- Half, hatching not indicated for sectional portions of an object. Fig(s) _____
- Cross section not drawn same as view with parts in cross section with regularly spaced parallel oblique strokes. Fig(s) _____

9. SCALE. 37 CFR 1.84(k)

- Words do not appear on a horizontal, left-to-right fashion when page is either upright or turned so that the top becomes the right side, except for graphs. Fig(s) _____
- Scale not large enough to show mechanism with crowding when drawing is reduced in size to two-thirds in reproduction. Fig(s) _____
- Indication such as "actual size" or scale 1/2" not permitted. Fig(s) _____

10. CHARACTER OF LINES, NUMBERS, & LETTERS. 37 CFR 1.84(l)

- Lines, numbers & letters not uniformly thick and well defined, clean, durable, and black (except for color drawings). Fig(s) _____

11. SHADING. 37 CFR 1.84(m)

- Solid black shading areas not permitted. Fig(s) _____

12. NUMBERS, LETTERS, & REFERENCE CHARACTERS. 37 CFR 1.84(p)

- Numbers and reference characters not plain and legible. 37 CFR 1.84(p)(1) Fig(s) _____
- Numbers and reference characters not oriented in same direction as the view. 37 CFR 1.84(p)(1) Fig(s) _____
- English alphabet not used. 37 CFR 1.84(p)(2) Fig(s) _____
- Numbers, letters, and reference characters do not measure at least .32 cm. (1/8 inch) in height. 37 CFR(p)(3) Fig(s) 20, 3

13. LEAD LINES. 37 CFR 1.84(q)

- Lead lines cross each other. Fig(s) _____
- Lead lines missing. Fig(s) _____

14. NUMBERING OF SHEETS OF DRAWINGS. 37 CFR 1.84(r)

- Sheets not numbered consecutively, and in Arabic numerals, beginning with number 1. Sheet(s) _____

15. NUMBER OF VIEWS. 37 CFR 1.84(u)

- Views not numbered consecutively, and in Arabic numerals, beginning with number 1. Fig(s) _____
- View numbers not preceded by the abbreviation Fig. Fig(s) _____

16. CORRECTIONS. 37 CFR 1.84(w)

- Corrections not made from prior PTO-948. Fig(s) _____

17. DESIGN DRAWING. 37 CFR 1.152

- Surface shading shown not appropriate. Fig(s) _____
- Solid black shading not used for color contrast. Fig(s) _____

COMMENTS:

ATTACHMENT TO PAPER NO.

PTO Copy

REVIEWER

Cane

DATE

8/8/95

PATENT
Docket No. 5634.232

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors: John C. Harvey and James W.
Cuddihy

Serial No.: 08/459,507

Filing Date: June 2, 1995

For: Signal Processing Apparatus and
Methods

Group Art Unit: 2602

Examiner:

Assistant Commissioner for Patents
Washington D.C. 20231

RECEIVED
96 APR 17 AM 8:22
GROUP 260

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56(a) and in conformance with the procedures of 37 C.F.R. §§ 1.97-98 and M.P.E.P. § 609, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached Form PTO-1449.

The above-referenced application claims priority under 35 U.S.C. § 120 of the following applications:

<u>Serial No.</u>	<u>Filing Date</u>	<u>Patent No.</u>
08/113,329	August 30, 1993	Pending
08/056,501	May 3, 1993	5,335,277
07/849,226	March 10, 1992	5,233,654
07/588,126	September 25, 1990	5,109,414
07/096,096	September 11, 1987	4,965,825

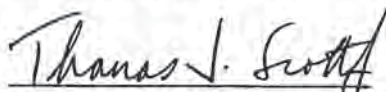
Applicants believe that all references cited on the attached Form PTO-1449 were submitted to the PTO in co-pending U.S. Patent Application Serial No. 08/448,143, filed 23 May 1995. Therefore, no copies of the listed references are provided herewith.

It is respectfully requested that the information above be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

CERTIFICATION AND/OR FEE

Since this IDS is being filed pursuant to 37 C.F.R. § 1.97(b) before the later of three months after the filing date of the above-referenced application or the date of receipt of the first Office Action on the merits, no certification or fee is required.

Respectfully submitted,



Thomas J. Scott, Jr. (Reg. No. 27,836)

Dated: April 4, 1996

HOWREY & SIMON
1299 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2402
(202) 783-0800 (telephone)
(202) 383-6610 (telecopier)

Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Method	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey and James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

95 FEB - 3
GROUP 260
F11 3:16

U. S. Patent Documents

Examiner Initial	Patent Number	Patent Date	Name	Class / Subclass	Filing Date *
	2,875,270	2/24/59	Wendt et al.	178/5.1	
	3,440,427	4/22/69	Kammer	250/210	
	3,485,946	12/23/69	Jackson et al.	178/6	
	3,500,327	3/10/70	Belcher et al.	340/154	
	3,560,936	2/2/71	Busch	340/172.5	
	3,564,509	2/16/71	Perkins et al.	340/172.5	
	3,696,297	10/3/72	Otero	325/55	
	3,712,956	1/23/73	Lemelson	178/6.6A	
	3,836,888	9/17/74	Boenke et al.	340/172.5	
	3,848,082	11/12/74	Summers	178/5.6	
	3,889,054	6/10/75	Nagel et al.	178/6.8	
	3,936,868	2/3/76	Thorpe	358/22	
	3,982,065	9/21/76	Barnaby et al.	178/5.8	
	3,984,637	10/5/76	Caudill et al.	179/2	
	3,996,583	12/7/76	Hutt et al.	340/324	
	4,016,361	4/5/77	Pandey	358/83	
	4,026,555	5/31/77	Kirschner et al.	273/85	

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Method	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

U. S. Patent Documents

Examiner Initial	Patent Number	Patent Date	Name	Class / Subclass	Filing Date *
	4,032,972	6/28/77	Saylor	358/142	
	4,042,958	8/16/77	Saylor et al.	358/141	
	4,052,719	10/4/77	Hutt et al.	340/324	
	4,055,848	10/25/77	Fearnside	358/8	
	4,064,490	12/20/77	Nagel	364/200	
	4,074,315	2/14/78	Kawamura et al.	358/142	
	4,096,524	6/20/78	Scott	358/85	
	4,099,258	7/4/78	Parsons	364/900	
	4,120,003	10/10/78	Mitchell et al.	358/142	
	4,134,127	1/9/79	Campioni	358/16	
	4,135,213	1/16/79	Wintfeld et al.	358/142	
	4,139,860	2/13/79	Micic et al.	358/22	
	4,161,728	7/17/79	Insam	340/750	
	4,162,513	7/24/79	Beyers, Jr. et al.	358/191	
	4,178,613	12/11/79	Takahashi et al.	358/183	
	4,203,130	5/13/80	Doumit et al.	358/1	
	4,228,543	10/14/80	Jackson	455/181	
	4,231,031	10/28/80	Crowther et al.	340/695	

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Method	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

U. S. Patent Documents

Examiner Initial	Patent Number	Patent Date	Name	Class / Subclass	Filing Date *
	4,233,628	11/11/80	Ciciora	358/147	
	4,243,984	1/6/81	Ackley et al.	340/703	
	4,245,252	1/13/81	Nagumo	358/213	
	4,249,211	2/3/81	Baba et al.	358/183	
	4,261,006	4/7/81	Weintraub et al.	358/3	
	4,270,145	5/26/81	Farina	358/188	
	4,278,973	7/14/81	Hughes et al.	340/721	
	4,278,993	7/14/81	Suzuki	358/22	
	4,308,558	12/29/81	Hernandez et al.	358/142	
	4,315,282	2/9/82	Schumacher	358/107	
	4,337,485	6/29/82	Chambers	358/147	
	4,344,090	8/10/82	Belisomi et al.	358/183	
	4,361,848	11/30/82	Poignet et al.	358/1	
	4,374,395	2/15/83	Herrmann et al.	358/22	
	4,405,946	9/20/83	Knight	358/192.1	
	4,412,244	10/25/83	Shanley, II	358/22	
	4,413,281	11/1/83	Thonnart	358/147	
	4,420,769	12/13/83	Novak	358/139	

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Method	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

U. S. Patent Documents

Examiner Initial	Patent Number	Patent Date	Name	Class / Subclass	Filing Date *
	4,430,669	2/7/84	Cheung	358/122	
	4,449,249	5/15/84	Price	455/45	
	4,450,442	5/22/84	Tanaka	340/814	
	4,456,925	6/26/84	Skerlos et al.	358/85	
	4,477,830	10/16/84	Lindman et al.	358/1	
	4,495,654	1/22/85	Deiss	455/151	
	4,496,171	1/29/85	Cherry	283/61	
	4,496,976	1/29/85	Swanson et al.	358/147	
	4,498,098	2/5/85	Stell	358/22	
	4,550,407	10/29/85	Couasnon et al.	371/29	
	4,566,034	1/21/86	Harger et al.	358/194.1	
	4,595,951	6/17/86	Filliman	358/147	
	4,614,972	9/30/86	Motsch et al.	358/147	
	4,616,262	10/7/86	Toriumi et al.	358/183	
	4,620,227	10/28/86	Levin et al.	358/147	
	4,620,229	10/28/86	Amano et al.	358/194.1	
	4,626,909	12/2/86	Oniki et al.	358/114	
	4,639,890	1/27/87	Heilveil et al.	364/900	

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Method	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

U. S. Patent Documents

Examiner Initial	Patent Number	Patent Date	Name	Class / Subclass	Filing Date *
	4,663,735	5/5/87	Novak et al.	364/900	
	4,688,197	8/18/87	Novak et al.	365/230	
	4,691,351	9/1/87	Hayashi et al.	380/10	
	4,710,800	12/1/87	Fearing et al.	358/22	9/16/85
	4,720,819	1/19/88	Pinkham et al.	365/219	12/30/83
	4,745,549	5/17/88	Hashimoto	364/402	6/6/86
	4,747,081	5/24/88	Heilveil et al.	365/219	12/30/83
	4,768,144	8/30/88	Winter et al.	364/200	10/20/86
	4,768,228	8/30/88	Clupper et al.	380/20	9/11/87***
	4,829,569	5/9/89	Seth-Smith et al.	380/10	7/8/86
	4,885,775	12/5/89	Lucas	380/10	9/21/84
	5,163,024	11/10/92	Heilveil et al.	365/219	5/9/90***
	Re. 31,977	8/27/85	Ott	364/200	
	Re. 32,187	6/17/86	Barda et al.	340/706	

* - If pertinent

*** - Claims priority from patent application filed prior to Sept. 11, 1987

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Method	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Foreign Patent Documents

Examiner Initial	Document Number	Publication Date	Country	Class / Subclass	Translation	
					Yes	No
	60-61935	4/9/85	Japan	G11B15/02	abs.	
	61-50470	3/12/86	Japan	H04N 5/44	abs.	
	0 133 985	3/13/85	European Patent Office	H 04 N 7/087	abs.	
	1,066,931	4/26/67	Great Britain	G 07c		No

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Gecsei, Jan. <u>The Architecture of Videotex Systems</u> (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1983), pp. 174-177, 233-238.
	Sigel, Efrem et al. <u>The Future of Videotext: Worldwide Prospects for Home/Office Electronic Information Services</u> (White Plains, N.Y.: Knowledge Industry Publications, Inc., 1983), pp. 28, 119-126.
	Raggett, Michael. "Broadcast Telesoftware," <u>Computer Graphics World</u> , Vol. 6, No. 9, September 1983, table of contents, pp. 49, 50, 52 and letters.
	Tydemann, John et al. <u>Teletex and Videotex in the United States: Market Potential, Technology, Public Policy Issues</u> , Institute for the Future (New York: McGraw-Hill Publications, 1982), pp. 4, 89-99, 122-169.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Method	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	"Telesoftware and Education Project: Summary of Report," A Joint BBC/ITV & Brighton Research Project, Summer 1982, 111 p. and appendix.
	Damouny, N.G. "Teletext Decoders - Keeping Up with the Latest Technology Advances," <u>Consumer Electronics</u> , Vol. CE-30, No. 3, August 1984, pp. 429-436.
	Nishimoto, Naomichi et al. "VHS VCR with Index and Address Search Systems," <u>Consumer Electronics</u> , Vol. CE-33, No. 3 August 1987, pp. 220-225.
	Weissman, Steven B. "Teletext in transactional videotex," <u>Electronic Publishing Review</u> , Vol. 2, No. 4, 1982, pp. 301-304.
	Crowther, G.O. "Teletext Enhancements - Levels 1, 2 and 3," <u>IBA Technical Review</u> , May 1983, pp. 11-16.
	McIntyre, Colin, "Broadcast teletext - who says it isn't interactive?" pp. 1-12 in: Anon. <u>Videotex-key to the information revolution</u> (Online Publications Ltd., 1982).
	Veith, Richard H., "Television's Teletext," Elsevier Science Publishing, Inc., New York, 1983, pp. 9, 12, 17, 19, 32, 46-47, 136-137, 139.
	Alber, Antone F., "Videotex/Teletext, Principles and Practices," McGraw-Hill Book Company, pp. 37, 138-139, 142-147, 188-191.
	Russell, R.T. "Teletext remote control," part 1, <u>Wireless World</u> , April 1979, 4 pages.
	Russell, R.T. "Teletext remote control", part 2, <u>Wireless World</u> , May 1979, pp. 83-86.
	Pandey, K. "Second generation teletext and viewdata decoders," <u>Proceedings IEE</u> , Vol. 126, December 1979, pp. 1367-1373.
	Hedger, J. et al. "Telesoftware: adding intelligence to teletext," <u>Proceedings IEE</u> , Vol. 126, December 1979, pp. 1412-1416

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Method	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey and James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Sigel, Efrem et al. <u>Videotext: The Coming Revolution in Home/Office Information Retrieval</u> , (White Plains, NY: Knowledge Industry Publications, Inc., 1980), pp. 6, 7, 13, 28, 33, 34, 36, 37.
	Roizen, Joseph. "Teletext in the USA," <u>SMPTE Journal</u> , Vol. 90, July 1981, pp. 602-610.
	Money, Steve A. <u>Teletext and Viewdata</u> (London: Butterworth & Co., Ltd., 1981), preface, pp. 1-145, glossary and index.
	Risher, Carol A. "Electronic Media and the Publishers, Part 1: Teletext," <u>Videodisc Videotex</u> , Vol. 1, No. 3, Summer 1981, pp. 162-167.
	Chew, J.R. "CEEFAQ: evolution and potential," BBC Research Department Report No. BBC RD 1977/26, August 1977, table of contents, pp. 1-14 and appendix.
	Hedger, John. "Telesoftware: Home computing via teletext," <u>Wireless World</u> , November 1978, pp. 61-64.
	Anon. <u>VIDEOTEX '81</u> , International Conference & Exhibition, May 20-22, 1981, Toronto, Canada (Northwood Hills, UK: Online Conferences, Ltd; 1981), pp. 78-84.
	Winsbury, Rex, ed. <u>Viewdata in Action: A Comparative Study of Prestel</u> (London: McGraw-Hill, Ltd., 1981), pp. 10-12, 31, 35, 36, 57-61, 102, 103, 109, 202-204, 211-219.
	"Colloquium on Broadcast and Wired Teletext Systems - Ceefax, Oracle, Viewdata," Tuesday, 13 January 1976, IEE Electronics Division, Professional Group E14 (Television and Sound), Digest No. 1976/3.
	Anon. "Updating databases by off-peak TV," <u>New Scientist</u> , 21 October 1976, p. 162.
	Marti, Bernard. "New Ancillary Services Using a Television Channel," <u>SMPTE Journal</u> , Vol. 86, November 1977, pp. 815, 817, 818.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Method	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Biggs, A.J. et al. "Broadcast data in television," <u>GEC Journal of Science and Technology</u> , Vol. 41, No. 4, 1974, pp. 117-124.
	Heuer, D.A. "A Microprocessor Controlled Memory Tuning System," <u>Consumer Electronics</u> , Vol. CE-25, No. 4, August 1979, pp. 677-683.
	Marti, Bernard et al. "ANTIOPE, service de télétexte," journal unk., pp. 17-22.
	Lipoff, Stuart J. "Mass Market Potential for Home Terminals," <u>Consumer Electronics</u> , vol. unk., pp. 169-184.
	Crowther, G.O., "Adaptation of U.K. Teletext System for 525/60 Operation," <u>IEEE Transactions on Consumer Electronics</u> , Vol. CE-26, Aug. 1980, pp. 587-599.
	Gosch, John, "Code accompanying TV program turns on video cassette recorder in proposed scheme," <u>Electronics</u> , Feb. 10, 1981, pp. 80-82.
	Somers, Eric, "Appropriate Technology for Text Broadcasting," <u>Viewdata and Videotext, 1980-81: A Worldwide Report</u> , Transcript of viewdata '80, first world conference on viewdata, videotex, and teletext, Knowledge Industry Publications, Inc., White Plains, New York, Copyright 1980 by Online Conferences, Ltd., pp. 499-514.
	Dages, Charles L., "Playcable: A Technological Alternative for Information Services," <u>IEEE Transactions on Consumer Electronics</u> , Vol. CE-26, Aug. 1980, pp. 482-486.
	Norris, Bryan L. et al., "Teletext Data Decoding," <u>IEEE Transactions on Consumer Electronics</u> , Aug. 1976, pp. 248-253.
	Kokado, N. et al., "A Programmable TV Receiver," <u>IEEE Transactions on Consumer Electronics</u> , Vol. 22, No. 1, Feb. 1976, pp. 69-83.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	



PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

John C. Harvey and James W. Cuddihy

Examiner: James Groody

Serial No. 08/459,507

Group Unit: 2602

Filed June 2, 1995

Atty Dkt: 5634.232

For **SIGNAL PROCESSING APPARATUS AND METHODS**

SUPPLEMENTAL PRELIMINARY AMENDMENT

Assistant Commissioner of Patents
Washington, D.C. 20231

Sir:

Prior to initiating the Examination of the above-described continuation application, Applicants herewith submit the following Preliminary Amendment and Remarks.

IN THE CLAIMS

Please amend claim 2 and add the following claim(s):

- Sub
C1
- 1 2. (Amended) A method of processing signals at a receiver station, said
- 2 receiver station comprising a processor for processing digital data detected in a
- 3 broadcast or cablecast transmission, said method comprising the steps of:
- 4 receiving a first broadcast or cablecast transmission;
- 5 demodulating said broadcast or cablecast transmission to detect an information
- 6 transmission thereon, said information transmission comprising embedded data;
- BK

1 detecting said embedded data on said information transmission and passing said
2 detected embedded data to said processor;
3 storing at least some of said detected embedded data,
4 inputting a control signal designating a second received broadcast or cablecast
5 broadcast transmission;
6 causing said processor to cease [the] storing [of] said stored at least some of said
7 detected embedded data [detected in said first broadcast or cablecast transmission] in
8 response to said inputted control signal.

9 Please add the following claims:

Sub C21
10 3. A method of communicating one or more control signals to at least one of
11 a plurality of receiver stations each of which includes a processor for processing
12 embedded data detected in a broadcast or cablecast transmission, comprising the steps
13 of:
14 (1) receiving a first broadcast or cablecast transmission to be transmitted, said
15 broadcast or cablecast transmission including said embedded data;
16 (2) receiving a control signal ^{same} which at said at least one of a plurality of
17 receiver stations operates to designate a second broadcast or cablecast transmission;
18 (3) receiving a second control signal ^{part of "cond. sig"} which operates at a transmitter station to
19 communicate said control signal to a transmitter; and
20 (4) transmitting said first broadcast or cablecast transmission and said control
21 signal to effect said at least one of a plurality of receiver stations to cause said processor

1 to cease storing data detected in said first broadcast or cablecast transmission in
2 response to said control signal.

3 4. A method of communicating one or more control signals to at least one of
4 a plurality of receiver stations each of which includes a processor for processing
5 embedded data detected in a broadcast or cablecast transmission, comprising the steps
6 of:

7 (1) receiving a first broadcast or cablecast transmission to be transmitted and
8 delivering said first broadcast or cablecast transmission to a transmitter;

9 (2) receiving and storing a control signal which at said at least one of a
10 plurality of receiver stations operates to designate a second broadcast or cablecast
11 transmission; and

12 (3) causing said control signal to be communicated to the transmitter at a
13 specific time, thereby to transmit said first broadcast or cablecast transmission
14 comprising said embedded data and said control signal to effect one of said plurality of
15 receiver stations to cause said processor to cease storing data detected in said first
16 broadcast or cablecast transmission in response to said control signal.

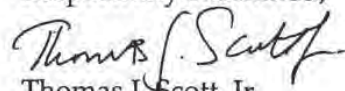
REMARKS

Applicants respectfully request consideration of the instant Supplemental Preliminary Amendment with respect to the above-described application.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment of fees in connection with this communication to Deposit Account No. 08-3038.

Date: March 4, 1996
HOWREY & SIMON
1299 Pennsylvania Avenue, NW
Washington, D.C. 20004
Tel: (202) 383-6614

Respectfully submitted,


Thomas J. Scott, Jr.
Reg. No. 27,836
Attorney for Applicants

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re Application of

John C. Harvey and James W. Cuddihy

Serial No. 08/459,507

Filed June 2, 1995

For **SIGNAL PROCESSING APPARATUS
AND METHODS**

RECEIVED

96 MAR 12 AM 10:56

GROUP 260

Group Art Unit 2602

Examiner

Atty Dkt: 5634.232

TRANSMITTAL

Assistant Commissioner of Patents
Washington, D.C. 20231

- [X] Supplemental Preliminary Amendment
[X] Small Entity Status under 37 CFR 1.9 and 1.27 has been established
[X] The fee has been calculated as shown below:

	(Col 1) Claims Remaining After Amendment		(Col 2) Highest No. Previously Paid for	(Col 3) Present Extra	Rate	Additional Fee
Total	* 3	Minus	** 20	= 0	x \$ 11	\$.00
Indep.	* 3	Minus	*** 3	= 0	x \$ 39	\$.00
First Presentation of Mult. Dep. Claim					x \$ 125	\$.00
Total Additional Filing Fee						\$.00
Total Fee Enclosed						\$.00

- * If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3.
** If the "Highest Number Previously Paid For" in this space is less than 20, write "20" in this space.
*** If the "Highest Number Previously Paid For" in this space is less than 3, write "3" in this space. "The Highest Number Previously Paid For" (Total or Independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment or the number of claims originally filed.

- [X] The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 08-3038. This sheet is submitted in triplicate.
[x] Any filing fees under 37 CFR 1.16 for the presentation of extra claims.
[x] Any patent application processing fees under 37 CFR 1.17.

Respectfully submitted,

Thomas J. Scott, Jr.
Thomas J. Scott, Jr.
Registration No. 27,836
Attorney for Applicants

Date: March 6, 1996
HOWREY & SIMON
1299 Pennsylvania Avenue, NW
Washington, D.C. 20004
Tel: (202) 783-0800



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of

Joseph C. Harvey and James W. Cuddihy

Serial No.: 08/459,507

Filed: June 2, 1995

For: SIGNAL PROCESSING APPARATUS
AND METHODS

Group Art Unit: 2600

Examiner: James Groody

Atty Dkt: 5634.0232

TRANSMITTAL LETTER

BOX AMENDMENT - FEE

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

The following are enclosed for consideration in the above-identified application.

	FEE
☐ Response to Notice to File Missing Parts	\$ 7.50
☐ Response to Notice of Incomplete Application	\$ 36
☐ Declaration: ☐ Original; ☐ Supplemental	\$ 6
☐ Submission of Formal Drawings	\$
☐ Formal Drawings: _____ Sheets _____ Figures	\$
☐ Information Disclosure Statement and Form 1449 and _____ References	\$
☒ Amendment: ☐ Preliminary; ☐ \$116; ☐ \$312; ☒ Other	\$
☒ Request for Extension of Time for 3 month(s)	\$ 930.00
☐ Issue Fee: ☐ Part B - Issue Fee Transmittal ☐ Part C - Charge to Deposit Account	\$
☐ Notice of Appeal	\$
☐ Appeal Brief	\$
☐ Request for Oral Hearing	\$
☐ Reply Brief	\$
☐ Other:	\$
☐ No additional claim fee is required	\$
☒ An additional claims fee is required, and is calculated as shown below	\$ 374.00
TOTAL FEES BEING SUBMITTED	\$ 1,304.00

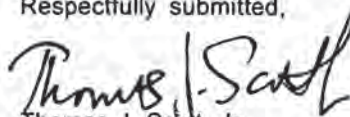
	Claims Remaining	Claims Paid For	Extra	Rate	Fee
Total Claims	37	- 20	17	x \$ 22.00	\$ 374.00
Independent Claims	3	- 5	0	x \$ 80.00	\$ 0
Multiple Dependent Claims (if applicable)				\$ 260.00	\$ 0
TOTAL EXCESS CLAIMS FEE					\$ 374.00
SMALL ENTITY TOTAL (if applicable)					

Howrey & Simon check number 137298 enclosed in payment of the government fees.

HS/USPTO-H
Rev-1.0
Date

The Commissioner is hereby authorized to charge payment of any additional filing fees required under 37 CFR §1.136(A) associated with this communication or credit any overpayment to the deposit account of Howrey & Simon, Deposit Account Number 08-3038. A duplicate copy of this sheet is enclosed.

Respectfully submitted,



Thomas J. Scott, Jr.
Registration No. 27,836
Attorney for Applicant

Date: March 13, 1997
HOWREY & SIMON
1299 Pennsylvania Ave., N.W.
(202) 383-7155

HS/USPTO-H
Rev-1.0
Date

PATENT

Docket No. 5634.232

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors: John C. Harvey and James W.
Cuddihy

Serial No.: 08/459,507

Filing Date: June 2, 1995

For: Signal Processing Apparatus and
Methods

Group Art Unit: 2602

Examiner:

Assistant Commissioner of Patents
Washington D.C. 20231

RECEIVED - 5 PM 2:54
GROUP 2602

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56(a) and in conformance with the procedures of 37 C.F.R. §§ 1.97-98 and M.P.E.P. § 609, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached Form PTO-1449.

The above-referenced application claims priority under 35 U.S.C. § 120 of the following applications:

<u>Serial No.</u>	<u>Filing Date</u>	<u>Patent No.</u>
08/113,329	August 30, 1993	Pending
08/056,501	May 3, 1993	5,335,277
07/849,226	March 10, 1992	5,233,654
07/588,126	September 25, 1990	5,109,414
07/096,096	September 11, 1987	4,965,825

Applicants believe that all references cited on the attached Form PTO-1449 were submitted to the PTO in U.S. Patent Application Serial No. 08/448,143, filed 23 May 1995. Therefore, no copies of the listed references are provided herewith.

Japanese Published Patent Application No. 60-61935 discloses a video recording procedure by which programs selected for recording from a table of programs on a recording card are stored to a memory which actuates a built-in recording timer. An English abstract of the patent is provided with the listed reference.

Japanese Published Patent Application No. 61-50470 discloses a program reserving device of a television receiver encompassing a control circuit displaying content of reservation and a means for supplying plural background pictures to a display pattern of reserved content and changing the background picture to the 1st and 2nd states depending on the state of the reserved input. An English abstract of the patent is provided with the listed reference.

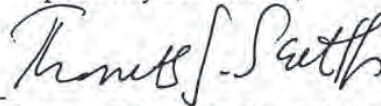
European Patent 0 133 985 discloses an automatic on-off switching device for a video recorder which responds to a label preceding the TV program to be recorded. An English abstract of the patent is provided with the listed reference.

It is respectfully requested that the information above be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

CERTIFICATION AND/OR FEE

Since this IDS is being filed pursuant to 37 C.F.R. § 1.97(b) before the later of three months after the filing date of the above-referenced application or the date of receipt of the first Office Action on the merits, no certification or fee is required.

Respectfully submitted,



Thomas J. Scott, Jr. (Reg. No. 27,836)

Dated: February 5, 1996

HOWREY & SIMON
1299 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2402
(202) 783-0800 (telephone)
(202) 383-6610 (telecopier)

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

U. S. Patent Documents

Examiner Initial	Patent Number	Patent Date	Name	Class / Subclass	Filing Date *
	2,510,046	5/30/50	Ellett, et al.	178/5.6	
	2,619,530	11/25/52	Roschke	178/5.1	
	2,892,882	6/30/59	Hughes	178/5.1	
	2,972,008	2/14/61	Ridenour, et al.	178/5.1	
	3,304,416	2/14/67	Wolf	235/92	
	3,336,437	8/15/67	Brouard, et al.	178/5.4	
	3,478,164	11/11/69	Southworth	178/6.6	
	3,576,391	4/27/71	Houghton	178/5.6	
	3,683,111	8/8/72	Southworth	178/6	
	3,726,992	4/10/73	Eguchi, et al.	178/5.6	
	3,728,480	4/17/73	Baer	178/6.8	
	3,743,767	7/3/73	Bitzer, et al.	178/5.6	
	3,875,329	4/1/75	Nagel	178/6.8	
	3,927,250	12/16/75	Rainger	178/5.6	
	3,950,607	4/13/76	Southworth, et al.	178/6	

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

U. S. Patent Documents

Examiner Initial	Patent Number	Patent Date	Name	Class / Subclass	Filing Date *
	3,961,137	6/1/76	Hutt, et al.	178/68	
	3,982,064	9/21/76	Barnaby	348/467	
	4,057,829	11/8/77	Moorehead	358/86	
	4,104,681	8/1/78	Saylor, et al.	358/141	
	4,148,066	4/3/79	Saylor	358/127	
	4,175,267	11/20/79	Tachi	358/4	
	4,199,656	4/22/80	Saylor	178/66.1	
	4,290,062	9/15/81	Marti, et al.	340/721	
	4,303,940	12/1/81	Ciciora	358/142	
	4,303,941	12/1/81	Marti, et al.	358/147	
	4,333,109	6/1/82	Ciciora	358/147	
	4,335,402	6/15/82	Holmes	358/147	
	4,347,618	8/31/82	Kavouras, et al.	375/37	
	4,352,011	9/28/82	Guillou	235/375	
	4,367,488	1/4/83	Leventer, et al.	358/147	

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

U. S. Patent Documents

Examiner Initial	Patent Number	Patent Date	Name	Class / Subclass	Filing Date *
	4,388,639	6/14/83	Cox, et al.	358/27	
	4,393,376	7/12/83	Thomas	340/717	
	4,393,404	7/12/83	Cox, et al.	358/147	
	4,400,717	8/23/83	Southworth, et al.	358/13	
	4,439,761	3/27/84	Fleming, et al.	345/189	
	4,449,145	5/15/84	Ciciora	358/147	
	4,458,268	7/3/84	Ciciora	358/120	
	4,520,392	5/28/85	Cox et al.	358/147	
	4,734,907	3/29/88	Turner	370/60	9/6/85

*- If pertinent

***- Claims priority from parent application filed prior to Sep. 11, 1987.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Foreign Patent Documents

Examiner Initial	Document Number	Publication Date	Country	Class / Subclass	Translation	
					Yes	No
	WO 85/03604	8/15/85	PCT Application	H03K 3/84		X
	0 132 007	1/23/85	European Patent Office	H04N 7/16		X
	2 033 699	5/21/80	Great Britain	H04L 1/10, 1/40		X
	2 058 681	6/15/72	Germany	H04N 7/08	X	
	2 141 897	5/9/84	Great Britain	H04N 7/16		X

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Powell, C., "Prestel: The Opportunity For Advertising," <u>Viewdata & Videotext, 1980-81 A Worldwide Report/Transcript of Viewdata '80 First World Conference On Viewdata, Videotex, and Teletext</u> , March 26-28, 1980, pp. 233-246.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Reuters, "TRANSMISSION PROTOCOL FOR REUTERS NEWS-VIEW," Aug. 1978, 2 pages.
	Bright, R., "The Telematique Programme in France," <u>Viewdata & Videotext, 1980-81 A Worldwide Report/Transcript of Viewdata '80 First World Conference On Viewdata, Videotext, and Teletext</u> , March 26-28, 1980, pp. 19-24.
	Barlund, O., et al., "TELSET, the Finnish Viewdata System," <u>Viewdata & Videotext, 1980-81 A Worldwide Report/Transcript of Viewdata '80 First World Conference On Viewdata, Videotext, and Teletext</u> , March 26-28, 1980, pp. 139-148.
	Hutt, P., "ORACLE-A Fourth Dimension in Broadcasting," <u>IBM Technical Review</u> , September 1976/9 Digital Television Developments, pp. 3-9.
	Hutt, P., "A System of Data Transmission in the Field Blanking Period of the Television Signal," <u>IBA Technical Review</u> , June 1973, Digital Television, pp. 37-44.
	Allora-Abbondi, G., "Transmission System Evaluation for Two-Way Cable," <u>IEEE Transactions on Cable Television</u> , Vol. CATV-4, No. 3, July 1979, pp. 111-118.
	Chorafas, D., "Interactive Videotex - The Domesticated Computer," 1981, pp. 171-183 & preface.
	Baer, R., "Innovative Add-On TV Products," <u>IEEE Transactions on Consumer Electronics</u> , Vol. CE-25, November 1979, pp. 765-771.
	Henderson, Jr., D., et al., "Issues in Message Technology," Proceedings, Fifth Data Communications Symposium, September 27-29, 1977, pp. 6-1 - 6-9.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Schmodel, S., "TV Systems Enabling Viewers to Call Up Printed Data Catch Eye of Media Firms," newspaper article, <u>The Wall Street Journal</u> , Tuesday, July 24, 1979, p. 46.
	Braden, R., "A Server Host System on the ARPANET," Proceedings, Fifth Data Communications Symposium, September 27-29, 1977, p. 4-1 - 4-9.
	Proceedings, Fifth Data Communications Symposium, September 27-29, 1977, Table of Contents.
	Greenberg, B., et al., "VIMACS - A Vertical Interval Machine Control System," pp. 146-152.
	Dynamic Technology Limited, Vimacs, Machine Control and Data Transmission Systems, product description, 6 pages.
	Online Conference On Videotex, Viewdata, and Teletext, Conference Transcription, Table of Contents, 1980.
	Viewdata 81, the second World Conference on viewdata, videotex and teletext, Table of Contents for written papers presented at the Conference, October, 1981.
	Anderson, T., "The Vertical Interval: A General-Purpose Transmission Path," <u>IEEE Transactions On Broadcasting</u> , Vol. BC-17, No. 3, September 1971, pp. 77-82.
	"LSI circuits for teletext and viewdata, THE LUCY GENERATION," Mullard, Technical Publication M81-0001, June 1981.
	Hedger, J., et al., "Telesoftware - Value Added Teletext," <u>IEEE Transactions on Consumer Electronics</u> , Vol. CE-26, August 1980, pp. 555-566.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey and James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Hedger, J., "Telesoftware: Using Teletext to Support a Home Computer," September 1978, pp. 273-276.
	Zenith, "VIRTEXT SYSTEM, V1.6, Hardware and Software Reference Manual," Zenith Radio Corporation, April 1981.
	Hedger, J., "Broadcast Telesoftware: Experience with ORACLE," 1980, pp. 413-429.
	Aston, M.H., "Viewdata-Implications for Education," 1980, pp. 467-476.
	de Weger, M., "VIRDATA DECODER V-2," circuit diagram, Jul. 1, 1981, 1 page.
	"VIRTEXT," circuit diagram, 1980, 1 page.
	"UK TELETEXT AND VIDEOTEX - The world's first established electronic information services available to the public," ORACLE - Ceefax, 12 pages.
	Lucas, K., "The Numerical Basis for ORACLE Transmission," <u>IBA Technical Review</u> , Vol. 9, September 1976, Digital Television Developments, pp. 10-16.
	Green, N., et al, "ORACLE on Independent Television," <u>IBA Technical Review</u> , Vol. 9, September 1976, Digital Television Developments, pp. 18-31.
	Green, N.W., "Computer Aided Programme Presentation," <u>IBA Technical Review</u> , Vol. 1, September 1972, pp. 55-64.
	Chambers, J. P., "Enhanced UK Teletext Moves Towards Still Pictures," <u>IEEE Transactions on Consumer Electronics</u> , Vol. CE-26, August 1980, pp. 527-554.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Crowther, G.O., "Dynamically Redefinable Character Sets - D.R.C.S.," <u>IEEE Transactions on Consumer Electronics</u> , Vol. CE-26, November 1980, pp. 707-716.
	Kaplinsky, C. H., "The D ² B a One Logical Wire Bus for Consumer Applications," <u>IEEE Transactions on Consumer Electronics</u> , Vol. CE-27, February 1981, pp. 102-109.
	Vivian, R. H., et al., "Telesoftware Makes Broadcast Teletext Interactive," pp. 277-280.
	Numaguchi, Y., et al., "Experimental Studies of Transmission Bit-Rate for Teletext Signal in the 525-Lane Television System," <u>IEEE Transactions on Broadcasting</u> , Vol. BC-25, December 1979, pp. 137-142.
	Arnold, W. F., "Britons Mull 'Magazine' Via TV," <u>Electronics</u> , February 5, 1976, pp. 68-69.
	"Telesoftware," <u>Systems International</u> , June 1980, p. 43.
	Baldwin, J. L. E., et al., "A Standards Converter Using Digital Techniques," <u>IBA Technical Review</u> , Vol. 3, June 1973, Digital Television, pp. 15-35.
	Hawker, P., "An Introduction to Integrated Circuits and Digital Electronics," <u>IBA Technical Review</u> , Vol. 3, June 1973, Digital Television, pp. 5-13.
	Baldwin, J. L. E., "The Digital Future of Television Studio Centres," <u>IBA Technical Review</u> , Vol. 3, June 1973, Digital Television, pp. 45-51.
	Bown, H. G., et al., "Comparative Terminal Realizations with Alpha-Geometric Coding," <u>IEEE Transactions on Consumer Electronics</u> , Vol. CE-26, August 1980, pp. 605-614.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Hanas, O. J., et al., "An Addressable Satellite Encryption System for Preventing Signal Piracy," <u>IEEE Transactions on Consumer Electronics</u> , Vol. CE-27, November 1981, pp. 631-635.
	Breeze, E. G., "Television Line 21 Encoded Information and Its Impact on Receiver Design," August 20, 1972, pp. 234-237.
	Lentz, J., et al., "Television Captioning for the Deaf Signal and Display Specifications," Report No.: E-7709-C, PBS Engineering and Technical Operations, May 1980.
	"Pulses on a Television Signal Control Stations in Network," <u>Electronics</u> , February 6, 1967, pp. 101-102.
	"Demonstration of the Principle of Data Transmission in the Vertical Interval of the Television Video Waveform," October 22, 1968, 4 pages.
	King, P. T., "A Novel TV Add-On Data Communication System," 5 pages.
	Pierce, W. D., et al., "A Low Cost Terminal for the 1980's: Project Green Thumb," <u>IEEE Transactions on Consumer Electronics</u> , Vol. CE-26, August 1980, pp. 487-495.
	"CBS/CCETT North American Broadcast Teletext Specification," (Extended Antiope), May 20, 1981.
	Baer, W. S., "Interactive Television: Prospects for Two-Way Services on Cable," Rand Corporation, November 1971, pp. 1-88.
	Noirel, Y, et al., "Architecture of the French LSI Set for Antiope Teletext Decoders," pp. 134-144.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey and James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Beakhust, D. J., et al., "Teletext and Viewdata - A Comprehensive Component Solution," <u>Proceedings</u> , IEEE, Vol. 126, December 1979, pp. 1374-1396.
	Money, S. A., et al., "Teletext Decoder Update - Part 1," <u>Television</u> , June 1979, pp. 407-409.
	Money, S. A., et al., "Teletext Decoder Update - Part 2," <u>Television</u> , June 1979, pp. 479-481.
	Money, S.A., et al., "Teletext Decoder Update - Part 3," <u>Television</u> , August 1979, pp. 538-541.
	Peters, H., "Teletext the Philips Way," <u>Television</u> , April 1980, pp. 298-301.
	Crowther, G. O., "Teletext and Viewdata Systems and Their Possible Extension to the USA," <u>Proceedings</u> , IEE, Vol. 126, No. 12, December 1979, pp. 1417-1424.
	Shortland, D., "Teletext with Infra-Red Remote Control," <u>Practical Electronics</u> , August 1980, pp. 39-44.
	Mokhoff, N., "Consumer Electronics," <u>Technology '80</u> , pp. 64-68.
	Government of Canada, Department of Communications, "Broadcast Specification: Television Broadcast Videotex," June 19, 1981.
	Insam, E., et al., "An Integrated Teletext and Viewdata Receiver," <u>The SERT Journal</u> , Vol. 11, October 1977, pp. 210-213.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.		
	Thomas, H. B., et al., "Methods of Designing and Evaluating Videotex," <u>Online: A Transcript of the Online Conference on Videotex, Videodata and Teletext</u> , 1980, pp. 203-216.		
	Wright, J. B., et al., "An Evolutionary Approach to the Development of Two-Way Cable Technology Communication," <u>IEEE Transactions on Cable Television</u> , Vol. CATV-2, No. 1, January 1977, pp. 52-61.		
	Fedida, S., et al., "Viewdata - The Post Office's Textual Information and Communications System," <u>Wireless World</u> , February 1977, pp. 32-35.		
	Fedida, S., et al., <u>Videodata Revolution</u> , Halsted Press, New York, 1979, pp. 1-31 and 170-183.		
	Clarke, K. E., "The Application of Picture Coding Techniques to Viewdata," <u>IEEE Transactions on Consumer Electronics</u> , Vol. CE-26, August 1980, pp. 568-577.		
	Blatt, J. et al., "The Promise of Teletext for Hearing Impaired Audiences," <u>IEEE Transactions on Consumer Electronics</u> , Vol. CE-26, November 1980, pp. 717-722.		
	Rupp, C. R., "A Stand-Alone CAI System Based on Procedural Grammars," <u>EASCON '76 Record</u> , September 1976, pp. 1153-A through 1153-Z.		
	Veza, A., et al., "An Electronic Message System: Where Does It Fit?," <u>Trends and Applications 1976: Computer Networks</u> , November 17, 1976, pp. 89-97.		
	Myer, T. H., et al., "Message Technology in the Arpanet," <u>NTC '77</u> , 21: 2-1 through 2-8.		
	Kuo, F. F., "Message Services in Computer Networks," <u>Interlinking of Computer Networks</u> , Reidel Publishing Co., 1978, pp. 387-395.		
<table border="1" style="width: 100%;"> <tr> <td style="width: 70%;">Examiner</td> <td style="width: 30%;">Date Considered</td> </tr> </table>		Examiner	Date Considered
Examiner	Date Considered		
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Hagan, R., "Interworking Between Different Text Communication Services and Between Different Text Communication Networks," <u>NTC 1980 - Conference Record</u> , November 1980, pp. 28.5.1-28.5.6.
	Rinde, J., "Packet Network Access in Electronic Mail System," <u>NTC 1980 - Conference Record</u> , November 1980, pp. 60.4.1-60.4.4.
	Wendlinger, F., et al., "Systems for Corporate Text Communication," <u>NTC 1980 - Conference Record</u> , November 1980, pp. 65.5.1-65.5.4.
	Naffah, N., "Communication Protocols for Integrated Office Systems," <u>Computer Networks</u> , Vol. 5, No. 6, 1981, pp. 445-454.
	Treves, S.R., et al., "Text, Image, and Data Integration In a Distributed Control Digital Voice Switching System," <u>ISS '81</u> , September 1981.
	Wiest, G., et al., "An Integrated Service Broadband Network for Voice, Text, Data and Video," <u>ISS '81</u> , September 1981.
	Dickson, E.M. et al., <u>The Video Telephone</u> , Praeger Publishers, 1973, pp. v. and 9-78.
	Rayner, B., "The Application of Switcher-Intelligent Interfaces to Video Tape Editing," <u>SMPTE Journal</u> , Vol. 88, October 1979, pp. 715-717.
	Everton, J.K., "A Hierarchical Basis for Encryption Key Management in a Computer Communications Network," <u>Conference Record - 1978 International Conference on Communications</u> , Vol. 3, pp. 46.4.1 through 46.4.7.
	Davies, D.W., et al., <u>Computer Networks and Their Protocols</u> , John Wiley & Sons, 1979, pp. v-xiii and 390-417.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey and James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Popek, G.J., et al., "Encryption and Secure Computer Networks, <u>Computing Surveys</u> , Vol. 11, No. 4, December 1979, pp. 331-356.
	Everton, J.K., "Adaptation of the Basic Hierarchy for Encryption Key Management to Serve Applications with Conflicting Requirements," <u>Proceedings</u> , Computer Networking Symposium, December 1979, pp. 186-191.
	Nelson, J., "Implementations of Encryption in an 'Open Systems' Architecture," <u>Proceedings</u> , Computer Networking Symposium, December 1979, pp. 198-205.
	Lyons, R.E., "A Total AUTODIN System Architecture," <u>IEEE Transactions on Communications</u> , Vol. Com-28, No. 9, September 1980, pp. 1467-1471.
	Powers, S., et al., "Memo: An Application of Secret Key Cryptography and Public Key Distribution," <u>CompSoc '80</u> , October 1980, pp. 821-827.
	Allgaier, G.R., et al., "Navy Command and Control (c ²) Using Local Networks," <u>NTC 1980 - CONFERENCE RECORD</u> , November 1980, Vol. 1, pp. 41.3.1 through 41.3.5.
	Kowalchuk, J., et al., "Communications Privacy: Integration of Public and Secret Key Cryptography," <u>NTC 1980 - CONFERENCE RECORD</u> , November 1980, pp. 49.1.1 through 49.1.5.
	Denning, D.E., et al., "Timestamps In Key Distribution Protocols," <u>Communications of the ACM</u> , Vol. 24, No. 8, August 1981, pp. 533-536.
	Chambers, J.P., et al., "The Development of a Coding Hierarchy for Enhanced UK Telex." <u>IEEE Transactions on Consumer Electronics</u> , Vol. CE-27, No. 3, August 1981, pp. 536-540.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Takizawa, M., et al., "Resource Integration and Data Sharing on Heterogeneous Resource Sharing System," <u>Evolutions In Computer Communications</u> , 1978, pp. 253-258.
	Smith, R.G., et al., "Considerations for Microprocessor-based Terminal Design," <u>Conference Record - 12th Asilomar Conference on Circuits, Systems and Computers</u> , November 1978, pp. 437-441.
	Mowafi, O.A., et al., "Integrated Voice/Data Packet Switching Techniques for Future Military Networks," <u>Proceedings, Computer Networking Symposium</u> , 1979, pp. 216-223.
	Day, J.D., "Terminal Protocols," <u>IEEE Transactions on Communications</u> , Vol. COM-28, No. 4, April 1980, pp. 585-593.
	Rosen, E.C., "The Updating Protocol of ARPANET's New Routing Algorithm," <u>Computer Networks</u> , Vol. 4, 1980, pp. 11-19.
	Hasuike, K., et al., "Text and Facsimile Integrated Terminal," <u>NTC 1980-Conference Record</u> , 1980, p. 60.5.1 through 60.5.5.
	Cerf, V.G., et al., "An Experimental Service for Adaptable Data Reconfiguration," <u>IEEE Transactions on Communications</u> , Vol. COM-20, No. 3, June 1972, pp. 557-564.
	Croll, R.H., et al., "A Distributed Data Acquisition and Processing System for Multiple Aerospace Test Facilities," <u>Proceedings of the 26th Int'l Instrumentation Symposium</u> , May 1980, pp. 287-295.
	Tsay, D.P., et al., "Design of a Robust Network Front-End for the Distributed Double-Loop Computer Network," <u>Distributed Data Acquisition, Computing, and Control Symposium</u> , December 1980, pp. 141-155.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Glorieux, A.M., et al., "Distributing a Line System into a Distributed Data Base Management System: Sirius-Delta Experience," <u>Proceedings - Computer Networking Symposium</u> , December 1980, pp. 19-25.
	Chambers, J.P., "Potential of Extended Teletext," <u>Television: Journal of the Royal Television Society</u> , September/October 1980, pp. 43-45.
	Chambers, J.P., "Teletext - The Potential of an Extended System," pp. 114-117.
	Pandey, K., "Advanced Teletext Systems," pp. 262-265.
	Hartung, R.L., et al., "Virtual I/O - An Experiment," <u>Sigmicro Newsletter</u> , Vol. 10, No. 4, December 1979, pp. 109-113.
	Daniels, J.F., "Wireless World Teletext Decoder," <u>Wireless World</u> , December 1975, pp. 563-566.
	"Microprocessor Smartens Teletext," <u>Electronics</u> , September 28, 1978, pp. 74.
	Sowter, B., "Vision of the Future," <u>International Broadcast Engineer</u> , December 1977/January 1978, pp. 13-19.
	VIMACS - Machine Control and Data Transmission System, Advertisement, 3 pages.
	O'Connor, R.A., "Current Usage of Vertical Interval Test Signals in Television Broadcasting," <u>IEEE Transactions on Consumer Electronics</u> , August 1976, pp. 220-229.
	Solomon, B., "New World of T.V. Reception," <u>Popular Electronics</u> , May 1979.
	Setos, A., "WASEC'S Network Operations Center," <u>Cable: '81</u> , May 1981, pp. 52-54.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Beakley, G.W., et al., "Cable and Earth Stations - A Business Connection," <u>Cable</u> : '81, May 1981, pp. 108-113.
	"Petition for Rulemaking of United Kingdom Teletext Industry Group," Before the Federal Communications Commission, March 26, 1981, 139 pages.
	Conte, J.J., et al., "A NOAA/National Weather Service Teletext Type Weather Experiment," November 1979.
	Vivian, R.H., "Level 4 Enhanced UK Teletext Transmits Graphics Through Efficient Alpha-Geometric Coding," <u>IBA</u> , pp. 1-6.
	Bugg, R.E.F., "Microprocessor Peripheral for Viewdata," <u>Electronic Components & Applications</u> , Vol. 3, No. 2, February 1981, pp. 2-11.
	Chambers, J.P., "Enhanced UK Teletext Moves Towards Still Pictures," BBC Research Report-BBC RD 1980/4, June 1980, pp. 1-28.
	VG Electronics - Short Form Catalogue, 4 pages.
	<u>Multitext - Technical Information 050</u> , Signetics, pp. 3-51.
	<u>Presentation Level Protocol - Videotex Standard</u> , Bell System, May 1981, pp. 1-105.
	Crozier-Cole, P.A., "Regional Operations Centres-The next Generation," pp. 7-9.
	Crozier-Cole, P.A., "Regional Operations Centres for the IBA UK Transmitter Network," pp. 197-204.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Lloyd, H.F., et al., "A Television-Network Switching Equipment to 625-Line Colour Standards." pp. 199-201
	Griffiths, E., "Eurovision's Technical Facilities," pp. 215-220.
	Parker, F.G., "The Impact of Digital Techniques on Studio Equipment," pp. 267-272.
	"Family Functional Specification," Norpak Limited, August 7, 1981, 14 pages.
	"Software Specification for Monitoring the Use of Teletext," Norpak Limited, November 1980, 4 pages.
	Wegner, R., "The 1980's - A New Era for the Data Display System," pp. 62-64.
	"Vidata - 2105/Interface," 9 pages.
	"Vidata - 352/BNC Connectors," Wegener Communications, Inc., 8 pages.
	Taylor, E.L., "Teletext v. Videotext: Pros and Cons and What's Really Going On," For TVC Magazine, 6 pages.
	Service Bulletin, To All CableText Customers with Zenith Virtex Decoders, November 14, 1980, 8 pages.
	Thomas, W., "Zenith Videotex/Teletext Review," 3 pages.
	Sullivan, W., "Cabletext: Into Second Year and Developing," Satellite Communications Corp., 4 pages.
	Vidata Interface Cable (Vidata 2105).

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Gallagher, E.F., "Digital Time Division Switching for Military Communications," <u>IEEE Transactions on Communications</u> , Vol. COM-27, No. 7, July 1979, pp. 1138-1143.
	Roth, M., "Security Alert a Two-Way Digital Communications System," <u>Official Transcript - 20th Annual NCTA Convention</u> , July 1971, pp. 500-506.
	Zenith Text Products, Advertisement, 4 pages.
	Gardner, T., "Viewers Given Equal Time to Talk Back to TV Sets," August 1977.
	Campbell, S., "Step Ahead of Future TV Market," <u>The Register</u> , October 26, 1978.
	Bown, H.G., et al., "Picture Description Instructions PDI for the Telidon Videotex System," Department of Communications, Canada, November 1979, pp. 1-71.
	"An Example of Aggressive Subcarrier Loading," Table, United Video Inc.
	Livaditis, E., et al., "Optimizing Subcarriers for Satellite Transmission," <u>National Cable Television's 30th Annual Convention and Exposition</u> , May 1981, 6 pages.
	Gunn, H., et al., "A Public Broadcaster's View of Teletext in the United States."
	Fraser, J., "From 'Pots' to 'Pans' - Videotex Development in Canada," <u>OnLine Conference on Viewdata Services</u> , March 1980, pp. 1-10.
	Parkhill, D.F., "An Overview of the Canadian Scene," <u>Viewdata '80</u> , March 1980, pp. 1-12.
	Maguire, W.T., "Videotex and the Newspaper Business," American Newspaper Publishers Association.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Wilson, L.G., "Vista: Leading to the Successful Implementation of Videotex in Canada," <u>OnLine Conference On Viewdata Services</u> , March 1980.
	Guillermin, J., "Development & Applications of the Antiope-Didon Technology," <u>Viewdata '80</u> , March 1980, pp. 29-38.
	Haimes, A.R., "IVS-3 as a Private Viewdata System," <u>Viewdata '80</u> , March 1980, pp. 323-336.
	Haslam, G., "Information Provider Activities in Canada," <u>Viewdata '80</u> , March 1980, pp. 1-6.
	Heys, E.A., et al., "STC's Approach to In-House Viewdata Systems," <u>Viewdata '80</u> , March 1980, pp. 313-322.
	Inoue, R., "The Index System of the CAPTAIN System Experimental Service," <u>Viewdata '80</u> , March 1980, pp. 113-122.
	Kumamoto, T., et al., "CAPTAIN System Features - Presentation Capability and Transmission Method," <u>Viewdata '80</u> , March 1980, pp. 93-105.
	Kurushima, N., "The Cooperative Association of CAPTAIN Information Providers and Present State of Information Supply for the Experimental Service," <u>Viewdata '80</u> , March 1980, pp. 123-132.
	Marti, B., "Broadcast Text Information in France," <u>Viewdata '80</u> , March 1980, pp. 359-370.
	Maury, J.P., "Plans and Projection for the Electronic Directory Service," <u>Viewdata '80</u> , March 1980, pp. 39-50.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Messerschmid, U., "Teletext in the Federal Republic of Germany," <u>Viewdata '80</u> , March 1980, pp. 431-445.
	Montague, P.M., "The Electronic Newspaper," <u>Viewdata '80</u> , March 1980, pp. 63-71.
	Morgan, G., "Britains Teletext Services are a Commercial Success," <u>Viewdata '80</u> , March 1980, pp. 341-357.
	Park, R.F., "The Role of Viewdata in Electronic Funds Transfer," <u>Viewdata '80</u> , March 1980, pp. 185-201.
	Ruiten, P.J.G.M., "Viewdata in the Netherlands," <u>Viewdata '80</u> , March 1980, pp. 133-138.
	Sedman, E.C., "The Use of MicroCobol for Telesoftware," <u>Viewdata '80</u> , March 1980, pp. 399-411.
	Shrimpton, W., "International Business Applications of Viewdata," <u>Viewdata '80</u> , March 1980, pp. 147-158.
	Smirle, J.C., et al., "International Videotex Standardization: A Canadian View of Progress Towards the Wired World," <u>Viewdata '80</u> , March 1980, pp. 271-280.
	Smith, M.G., "Prestel - The Private System or Both?," <u>Viewdata '80</u> , March 1980, pp. 337-339.
	Tantawi, A.N., et al., "Workstations in the Electronic Office," <u>Viewdata '80</u> , March 1980, pp. 159-171.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Termens, M., "Teletel - The Planned French Videotex Service," <u>Viewdata '80</u> , March 1980, pp. 25-28.
	Troughton, P., "Prestel Operational Strategy," <u>Viewdata '80</u> , March 1980, pp. 51-62.
	Watson, K., "Prestel User Market Research," <u>Viewdata '80</u> , March 1980, pp. 281-284.
	Winsbury, R., "Prestel as a publishing medium: the elements of success or failure," <u>Viewdata '80</u> , March 1980, pp. 285-293.
	Woolfe, R., "The emerging markets for videotex," <u>Viewdata '80</u> , March 1980, pp. 217-231.
	Yasuda, K., "Conception of CAPTAIN System - Background, Experiment and Future Plans," <u>Viewdata '80</u> , March 1980, pp. 107-111.
	Zimmerman, R., "Future Utilization of Interactive and Broadcast Videotex in Germany and its Effects on Standardization," <u>Viewdata '80</u> , March 1980, pp. 263-269.
	Adams, D.M., "The Place of Viewdata in Relation to Other Communications Techniques in the Travel Industry: A Personal View," <u>Viewdata & Videotext, 1980-81: A Worldwide Report</u> , 1980, pp. 379-397.
	Barren, J., "Electronic Publishing and the Government," <u>Viewdata & Videotext, 1980-81: A Worldwide Report</u> , 1980, pp. 295-300.
	Berkman, S., "A Videotex Trial," <u>Viewdata & Videotext, 1980-81: A Worldwide Report</u> , 1980, pp. 447-460.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Bochmann, G.V., et al., "Towards Videotex Standards," <u>Viewdata & Videotext, 1980-81: A Worldwide Report</u> , 1980, pp. 253-262.
	Botten, B., "Providing Business Information to Prestel," <u>Viewdata & Videotext, 1980-81: A Worldwide Report</u> , 1980, pp. 73-81.
	Bown, H.G., et al., "Telidon Technology Development in Canada," <u>Viewdata & Videotext, 1980-81: A Worldwide Report</u> , 1980, pp. 547-558.
	Ciciora, W.S., "The Role of the Television Receiver Manufacturer in the United States," <u>Viewdata & Videotext, 1980-81: A Worldwide Report</u> , 1980 pp. 533-546.
	Bowers, P.G., et al., "Telidon and Education in Canada," <u>Viewdata & Videotext, 1980-81: A Worldwide Report</u> , 1980, pp. 7-17.
	Camrass, R., "Viewdata: A Practical Medium for Electronic Mail," <u>Viewdata & Videotext, 1980-81: A Worldwide Report</u> , 1980, pp. 173-184.
	Castell, S., "Prestel and the Law," <u>Viewdata & Videotext, 1980-81: A Worldwide Report</u> , 1980, pp. 301-312.
	Clarke, K.E., "What Kind of Pictures for Videotex?," <u>Viewdata & Videotext, 1980-81: A Worldwide Report</u> , 1980, pp. 83-92.
	Courtney, J.F., "Videotel," <u>Viewdata & Videotext, 1980-81: A Worldwide Report</u> , 1980, pp. 371-377.
	Davis, M., "Prestel and the Travel Industry," <u>Viewdata & Videotext, 1980-81: A Worldwide Report</u> , 1980, pp. 595-602.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Korda, A., "Private Viewdata Systems," <u>Viewdata & Videotext, 1980-81: A Worldwide Report</u> , 1980, pp. 515-521.
	Maslin, J.M., "An evaluation of viewdata for training in industry," <u>Viewdata & Videotext, 1980-81: A Worldwide Report</u> , 1980, pp. 523-531.
	Morioka, F.K., "An Experiment with Computer-Based Educational Services in a General Public Environment," <u>Viewdata & Videotext, 1980-81: A Worldwide Report</u> , 1980, pp. 613-623.
	Ciciora, W.S., "Twenty-Four Rows of Videotex in 525 Scan Lines," <u>IEEE Transactions on Consumer Electronics</u> , Vol. CE-27, No. 4, November 1981, pp. 575-587.
	Ciciora, W.S., "Virtext & Virdata - A Present U.S. Teletext Application," <u>Videotex '81</u> , May 1981, pp. 77-84.
	Johnson, G.A., et al., "The Networking of Oracle," pp. 27-36.
	Mullard Application Laboratory, "Integrated Circuits for Receivers," pp. 43-56.
	Lambourne, A.D., "NEWFOR - An Advanced Subtitle Preparation System," pp. 57-63.
	<u>Keyfax - National Teletext Magazine</u> , Advertisement, 4 pages.
	<u>Keyfax - National Teletext Magazine</u> , Technical Bulletin, 1 page.
	<u>Keyfax</u> , Keyfax by Satellite, Advertisement, 2 pages.
	ORACLE, Advertisement Rate Card No. 1, September 1, 1981, 8 pages.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	"Multi-Level Teletext and Interactive Videotex," Operational Systems Worldwide, Information Sheets.
	"Brighton's Experience with Educational Software for Broadcast," 10 pages.
	CCITT, "Recommendation S.100 - International Information Exchange for Interactive Videotex," Geneva, 1980, pp. 165-205.
	KSL-TV-Salt Lake City, Utah, Press Release About Teletext Signal, pp. 1-7d.
	CBS/CCETT, "North America Broadcast Teletext Specification," June 22, 1981, pp. 1-240.
	Crudele, J., "TI Tests Home Information System," <u>Electronic News</u> , November 6, 1978, pp. 24-25.
	"Systems -NABTS-NAPLPS," VSA - Videographic, Advertisement, 5 pages.
	"Now," World System Teletext, Advertisement, 6 pages.
	"Context" A Complete Teletext Origination System Developed By Logica and the BBC, Advertisement," 8 pages.
	Dages, C.L., "Videotex Services via CATV - Hybrid Systems Approach," pp. 14-25.
	Rogers, B.J., "The Broadcasting Options for Data Transmission Methods in Public Service Broadcasting," pp. 1-3.
	Williams, D., "Oak, Micro TV in Talks for Teletext," <u>Electronic News</u> , Nov. 13, 1978, pp. 25 & 88.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	"U.S. TV Station to Write Viewdata Software Link," newspaper article, Jan. 22, 1979, p. 81.
	Barbetta, F., "CBS Joins EIA in Test of Foreign TV Data System," newspaper article, 1979, p. 23.
	Hershberger, S., "Form Mktg. Unit for Antiope System," newspaper article, Apr. 2, 1979, p. 27.
	Hershberger, S., "Say French in Talks on Teletext," newspaper article, May 14, 1979, p. 48.
	Kinghorn, J.R., "New Features in World System Teletext," <u>IEEE Transactions on Consumer Electronics</u> , 8/1984, Vol. CE-30, No. 3, pp. 437-440.
	"Audio Service Packages May Shed Stepchild Status," <u>CableAge</u> , 11/16/81, pp. 17, 18 & 23.
	Technical Publications Department, Mullard Limited, "525 Line NTSC Teletext Decoder Module," <u>Advanced Development Sample Information</u> , 1/1983, 8 pages.
	Crowther, G.O., "Subscription T.V., A Concept For A Multi Satellite, Multi Programme Source Environment," 4/27/87, 2 pages.
	Sillman, David, "Television Captioning for the Deaf," <u>IEEE Transactions on Consumer Electronics</u> , 5/1984, Vol. CE-30, No. 2, pp. 62-65.
	Institution of Electronic and Radio Engineers, "Programme and Registration Form, International Conference on 'Telesoftware,' Cavendish Conference Centre, London: 27th and 28th September 1984," 4 pages.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Supplemental Information Disclosure Statement by Applicant Title: Signal Processing Apparatus and Methods	Attorney Docket No. 5634.232	Serial No. 08/459,507
	Applicant(s) John C. Harvey <i>and</i> James W. Cuddihy	
	Filing Date June 2, 1995	Group 2602

Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Kruesi, William R., et al., "Residential Control Considerations," <u>IEEE Transactions on Consumer Electronics</u> , 11/1982, Vol. CE-28 No. 4, pp. 563-570.
	McKenzie, G.A., "Teletext - The First Ten Years," <u>Developments in Teletext, Independent Broadcasting Authority</u> , 5/1983, pp. 4-10.
	Vivian, R.H., "Level 4 — Teletext Graphics using Alpha-geometric Coding," <u>Developments in Teletext, Independent Broadcasting Authority</u> , 5/1983, pp. 21-26.
	Johnson, G.A., et al., "The Networking of ORACLE," <u>Developments in Teletext, Independent Broadcasting Authority</u> , 5/1983, pp. 27-36.
	Staff at the Mullard Application Laboratory, "Integrated Circuits for Receivers," <u>Developments in Teletext, Independent Broadcasting Authority</u> , 5/1983, pp. 43-56.
	Lambourne, A.D., "NEWFOR — An Advanced Subtitle Preparation System," <u>Developments in Teletext, Independent Broadcasting Authority</u> , 5/1983, pp. 57-63.
	Harris, Dr. Thomas G., et al., "Development of the MILNET," <u>Conference Record, Eascon 82</u> , 1982, pp. 77-80.
	Veith, Richard H., "Teletext (Broadcast Videotex) Begins in the United States," <u>National ONLINE Meeting Proceedings - 1982</u> , pp. 547-551.
	Beville, Hugh M. Jr., "The Audience Potential of the New Technologies: 1985-1990," <u>Journal of Advertising Research</u> , April/May 1985, pp. RC-3 - RC-10.
	"Draft, North American Broadcast Teletext Specification (NABTS)," <u>EIA/CVCC</u> , 9/20/83, 85 pages.

Examiner	Date Considered
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	