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08/449,413	05/24/1995	JOHN C. HARVEY	5634.174	1756

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

EXAMINER	
GROODY, JAMES J	

ART UNIT	PAPER NUMBER
2600	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

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

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

AAlpha-Kpetewama@goodwinprocter.com
patentdc@goodwinprocter.com

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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.

Mark R. Powell

Mark Powell
Director
TC 2600

/David L. Ometz/
SPE
Art Unit 2622

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: John C. Harvey *et al.*	
Application No.: 08/449,413	Confirmation No.: 1756
Filed: May 24, 1995	Art Unit: 2600
For: SIGNAL PROCESSING APPARATUS AND METHODS	Examiner: Groody, James J.

SUPPLEMENTAL AMENDMENT

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

Dear Sir:

This application had been suspended since 2005 and held in abeyance from examination by the Office pending final action in a corresponding so-called "A" application, U.S. Patent Application, Serial No. 08/449,263. This suspension was based on an agreement made between Applicants and the Office to consolidate or group the claims of Applicants' then pending applications which had been filed prior to June 8, 1995, into a smaller number of applications. This so-called consolidation agreement resulted from a series of interviews conducted from November 1998 through June 1999 between Applicants' representatives and the Office. In those interviews, senior Office management suggested that further examination of this application and Applicants' other related applications could be expedited by reducing the number of pending applications. Accordingly, Applicants agreed to consolidate their claims into 56 subject matter groups and to reduce the number of pending applications accordingly. Applicants' agreement

was based on the Office's view that it would be helpful to the Office to examine the claims of the subject matter groups together.

For each subject matter group, the applications were separated based on whether priority was claimed to Applicants' initial 1981 Application (U.S. Serial No. 06/317,510) or their initial 1987 Continuation-in-Part Application (U.S. Serial No. 07/096,096). The claims from all applications in a group having the same priority claim were added to a single application designated an "A" application. The remaining applications were abandoned with the exception of one so-called "B" application corresponding to each "A" application.

Under this agreement, the PTO suspended prosecution in the "B" applications pending final action in the corresponding "A" applications. Further, the parties agreed to conduct interviews in the "A" applications so that the prosecution of those applications could be efficiently advanced. Under the agreement, subject matter not found to be allowable during prosecution of an "A" application may be further prosecuted in the "B" application while the "A" application would be allowed to issue. In good faith reliance on this consolidation agreement, Applicants abandoned 169 of their 329 pending applications and filed numerous amendments adding to the designated "A" applications various claims that had been pending in the abandoned applications and the designated "B" applications.[1]

On May 9, 2000, Applicants amended the DECR 81 group "A" application, U.S. Patent Application Serial No. 08/449,263, in accordance with the aforementioned agreement. Claims from related DECR 81 applications were added to the DECR 81 group "A" application.

[1] As a result of the consolidation, Applicants paid excess claim fees for many of the claims that were added to the designated "A" applications, even though Applicants previously paid excess claim fees for those claims when they had been added to the abandoned applications and the designated "B" applications.

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Applicants amended some of the "A" Claims on March 8, 2002. In late 2002 and early 2003, reexamination requests were filed and granted as to Applicants' seven previously issued patents. Subsequent to the initiation of these reexamination proceedings, the Director of Technology Center 2600 decided to suspend prosecution of this application and the related "A" application pending resolution of the reexamination proceedings for the issued patents and the prosecution to appeal to the Board of Patent Appeals and Interferences ("Board") of two of Applicants' pending applications, (1) the INTE application (U.S. Patent Application, Serial No. 08/470,571) and (2) the MULT application (U.S. Patent Application, Serial No. 08/487,526). As a result of this decision, the DECR 81 group "A" application (U.S. Patent Application, Serial No. 08/449,263) was suspended through a number of six month Suspension Notices until January 2009. Consequently, no formal response was made regarding the "A" Claims.

In 2009, as the reexamination proceedings for Applicants' issued patents had been substantially completed and decisions had been issued by the Board in the INTE and MULT applications, Applicants requested that the suspension of their various applications be terminated.

This request was granted in the spring of 2009 and, as a result, applicants met with Examiner Minh Dieu T. Nguyen for a number of personal interviews in January 2010. An agreement was made to cancel or amend numerous of the "A" Claims so that the DECR 81 group "A" application (U.S. Patent Application Serial No.08/449,263) could issue.

In the instant application, DECR 81 group "B" (U.S. Patent Application Serial No. 08/449,413), Applicants filed a Supplemental Amendment Under 37 C.F.R. §1.115 on May 9,

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2000. Applicants canceled all claims except for claim 2, which they amended. The Examiner then suspended the application according to the above mentioned consolidation agreement.

Consistent with the consolidation agreement between the Applicants and the Office, Applicants now wish to pursue the subject matter within the scope of the "A" Claims of the DECR 81 group "A" application (U.S. Patent Application Serial No. 08/449,263) by claiming such subject matter that was not patented in the "A" application in the instant "B" application. Claims 22-55 correspond to various claims of the "A" application with additional amendments that Applicants believe place the claims in condition for allowance. In order to aid the Examiner in understanding the amendments to the claim, Applicants have attached a marked up copy of the claims (Appendix A) indicating the differences between the "A" Claims and the amended form submitted herein as claims 22-55.

Applicants believe that claims 22-55 overcome the prior art, and should place the above-identified patent application in condition for allowance. Applicants respectfully request favorable consideration of the above-identified patent application in view of the following remarks.

Claim 2 which is currently pending in this application will be cancelled.

Amendments to the claims begin on page 5.

Remarks begin on page 14.

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AMENDMENT TO THE CLAIMS

Applicants request entering the below amendments to the claims. New claims 22-55 are added. Claim 2 is cancelled. Claims 22-55 are the only pending claims.

1 – 21. (Cancelled)

22. (New) A method for controlling the decryption of encrypted programming at a subscriber station, said method comprising the steps of:

receiving encrypted programming, said encrypted programming having an encrypted control signal;

detecting said control signal;

passing said control signal to a decryptor at said subscriber station;

decrypting said control signal;

decrypting said encrypted programming to form decrypted programming based on said control signal; and

presenting said decrypted programming to a viewer or listener.

23. (New) A method for controlling the decryption of programming at a subscriber station, said method comprising the steps of:

receiving programming, said programming having a first encrypted digital control signal portion and an encrypted digital information portion;

detecting said first encrypted digital control signal portion of said programming;

passing said first encrypted digital control signal portion of said programming to a first decryptor at said subscriber station;

decrypting said first encrypted digital control signal portion of said programming using said first decryptor at said subscriber station;

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passing said encrypted digital information portion of said programming and the decrypted control signal portion to a second decryptor at said subscriber station;

decrypting said encrypted digital information portion of said programming using said second decryptor at said subscriber station based on the decrypted control signal portion; and

presenting said programming.

24. (New) A method of controlling a remote transmitter station to communicate program material to a subscriber station and controlling said subscriber station to process or output a unit of programming, said method comprising the steps of:

receiving a control signal which operates at the remote transmitter station to control the communication of a unit of programming and one or more first instruct signals and communicating said control signal to said remote transmitter station;

receiving a code or datum identifying a unit of programming to be transmitted by the remote transmitter station, said remote transmitter station transferring said unit of programming to a transmitter;

receiving at said remote transmitter station one or more second instruct signals which operate at the subscriber station to identify or decrypt said unit of programming or said one or more first instruct signals, said remote transmitter station transferring said one or more second instruct signals to said transmitter; and

transmitting from said remote transmitter station an information transmission comprising said unit of programming, said one or more first instruct signals, and said one or more second instruct signals, said one or more first instruct signals being transmitted in accordance with said control signal.

25. (New) The method of claim 23, wherein said programming further includes encrypted video.

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26. (New) The method of claim 23, wherein said subscriber station stores information that evidences processing said programming.

27. (New) The method of claim 23, wherein said programming is received at said subscriber station in one channel of a multichannel signal and a second control signal portion used to decrypt said programming is included in said multichannel signal outside said one channel.

28. (New) The method of claim 23, wherein said subscriber station detects, in a transmission channel including said programming, a second control signal portion used to decrypt the first control signal portion.

29. (New) The method of claim 23, wherein the subscriber station detects, in a transmission channel for transmitting the programming, a second control signal portion used to decrypt the first control signal portion, and wherein the second control signal portion is encrypted, and wherein the second control signal portion is decrypted in order to enable decryption of the first control signal portion.

30. (New) The method of claim 23, wherein said programming includes computer data.

31. (New) A method of controlling at least one of a plurality of receiver stations, said method comprising the steps of:

receiving downloadable code which is effective at said at least one of said plurality of receiver stations to implement a new technique of decrypting and delivering the downloadable code to at least one transmitter;

receiving said at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code; and

causing said at least one control signal to be communicated to said at least one transmitter at a specific time,

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thereby to transmit at least one information transmission including the downloadable code and said at least one control signal.

32. (New) The method of claim 31, wherein a television program is displayed at a receiver station and said downloadable code and said at least one control signal program said receiver station to decrypt said television program in accordance with said new technique.

33. (New) A method of communicating television program material to one or more receiver stations, said method comprising the steps of:

receiving a television program at a transmitter station and delivering said television program to a transmitter;

receiving and storing one or more instruct signals at said transmitter station, said one or more instruct signals at said one or more receiver stations operative to implement a new technique of decrypting;

transferring said one or more instruct signals to said transmitter; and

transmitting said television program and said one or more instruct signals from said transmitter station to said one or more receiver stations.

34. (New) A method of processing signals at a receiver station comprising the steps of:

receiving at least one information transmission;

detecting a plurality of signals on said at least one information transmission;

changing a decryption technique in response to at least a first of said plurality of signals;

decrypting a second of said plurality of signals on the basis of said changed decryption technique;

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passing said decrypted second of said plurality of signals to a controllable device; and

controlling said controllable device on the basis of said passed decrypted second of said plurality of signals.

35. (New) The method of claim 33, wherein said step of transferring is performed based on comparison.

36. (New) The method of claim 33, wherein said step of transferring is performed in accordance with a schedule.

37. (New)..The method of claim 36, wherein said schedule specifies a transmission time and a transmission channel, said method further comprising the steps of receiving and storing said schedule at said transmitter station.

38. (New) The method of claim 33, wherein said one or more instruct signals operate at said one or more receiver stations based on an identifier, said method further comprising the step of transmitting said identifier.

39. (New) The method of claim 38, wherein an information transmission including said television program is received at said one or more receiver stations, wherein said television program is outputted at said one or more receiver stations, and wherein said identifier identifies at least one of (i) said television program and (ii) a channel including said television program.

40. (New) A method of processing signals at a receiver station comprising the steps of:

receiving at least one information transmission;

detecting a plurality of signals in said at least one information transmission, a first signal of said plurality of signals including downloadable code;

passing said downloadable code to a processor;

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controlling a decryptor to decrypt in a specific fashion on the basis of said downloadable code;

decrypting at least one second signal of said plurality of signals in said specific fashion; and

passing said at least one second signal to one of said processor and an output device.

41. (New) A method of controlling a receiver station to detect digital data and control a decryptor based on a varying pattern of timing or location, said method of controlling comprising the steps of:

receiving programming and delivering said programming to a transmitter;

receiving digital data comprising at least an instruct signal and communicating said digital data to a signal embedder, said instruct signal operative at said receiver station to control said decryptor;

controlling said signal embedder to embed said digital data in an information transmission in a varying pattern of timing or location;

communicating said information transmission to said transmitter; and

transmitting said programming and said information transmission including said digital data.

42. (New) A method of processing signals at a receiver station comprising the steps of:

receiving at least one information transmission;

detecting a plurality of signals on said at least one information transmission;

decrypting at least one of said plurality of signals, said at least one decrypted signal including at least one instruct signal which is effective to instruct;

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passing the at least one decrypted instruct signal to a controllable device; and

controlling said controllable device on the basis of decrypted information included in said at least one decrypted instruct signal.

43. (New) A method for decryptor activation in a network comprising:

receiving a transmission comprising encrypted materials;

decrypting under first processor control a first portion of said encrypted materials in said transmission;

inputting said first portion of said encrypted materials to a decryptor;

decrypting under second processor control a second portion of said encrypted materials based on said step of decrypting said first portion of said encrypted materials.

44. (New) The method of claim 43 wherein said transmission in said step of receiving a transmission is a multichannel signal separated in the frequency domain.

45. (New) The method of claim 44 wherein said transmission is a cable system broadcast.

46. (New) The method of claim 43 wherein said transmission in said step of receiving a transmission is a multichannel signal separated in the time domain.

47. (New) The method of claim 43 wherein said transmission in said step of receiving a transmission is generated at a local data source.

48. (New) The method of claim 47 wherein said local data source comprises a VCR.

49. (New) The method of claim 47 wherein said local data source comprises a laser disk.

50. (New) The method of claim 43 wherein said encrypted materials comprise a portion of a television program.

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51. (New) The method of claim 43, wherein said transmission in said step of receiving a transmission and a signal necessary for decryption are received from different sources.

52. (New) The method of claim 51, further comprising the step of contacting a remote transmitter station to receive one of said transmission and said signal necessary for decryption.

53. (New) The method of claim 51, wherein a signal necessary for decryption is communicated by telephone.

54. (New) A method of providing an enabling signal to a receiver station from a remote data source, said enabling signal for use in decrypting at the receiver station a programming signal, said receiver station being programmed to get information necessary for enabling a programming signal, said method comprising the steps of:

storing at the remote data source one or more control signals for enabling a decryptor to decrypt a video;

receiving at the remote data source from the receiver station a communication to get specific enabling information;

communicating, from the remote data source to the receiver station in response to said communication from the receiver station, a control signal,

whereby the receiver station inputs said control signal to a decryptor, and wherein said decryptor decrypts said programming signal.

55. (New) A method of processing signals at a receiver station comprising the steps of:

receiving one or more information transmissions at said receiver station;

detecting a plurality of signals on said one or more information transmissions, at least a first of one of said plurality of signals including a control signal;

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controlling a decryptor in response to said control signal;

decrypting or enabling communication of at least a second of said plurality of signals on the basis of said step of controlling said decryptor;

passing said decrypted or enabled at least said second of said plurality of signals to a controllable device; and

controlling said controllable device on the basis of said passed decrypted or enabled at least said second of said plurality of signals.

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REMARKS

I. Status of claims

New claims 22-55 have been added. They correspond to claims 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 19, 21, 40, 41, 42, 43, 44, 89, 93, 109, 111, 112, 113, 114, 115, 116, 117, 118, 123, 125, 127, 131, and 134 of the DECR 81 group "A" application (U.S. Patent Application Serial No. 08/449,263.) The newly presented claims are fully supported by the specification and do not introduce new matter.

Each of the claims is patentable in light of the prior art. Prior patents Hartung (U.S. Patent No. 4,019,201), Tang (U.S. Patent No. 4,253,114), and Bond (U.S. Patent No. 4,390,898) were cited as having subject matter similar to some of the claims now introduced in claims 22-55. All three patents disclose the use of encoded control signals or other data to control the unscrambling of an analog video signal.

The claims of this amendment, however, claim material relating to the encryption and decryption of signals. Claim 22 is "[a] method for controlling the decryption of encrypted programming" and contains a step of "decrypting said encrypted programming." Claim 23 is "[a] method for controlling the decryption of programming" and contains a step of "decrypting said encrypted digital information portion of said programming." Claim 24 contains a step of receiving an instruct signal that can operate to "decrypt said unit of programming or said first instruct signal." Claim 31 contains a step of receiving downloadable code that is effective to "implement a new technique of decrypting." Claim 33 contains a step of receiving instruct signals that are operative to "implement a new technique of decrypting." Claim 34 contains a step of "decrypting a second of said plurality of signals." Claim 40 contains a step of "controlling a decryptor to decrypt in a specific fashion" and a step of "decrypting at least one second signal of said plurality of signals." Claim 41 is a method to "detect digital data and

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control a decryptor" and contains a step of "receiving digital data." Claim 42 contains a step of "decrypting at least one of said plurality of signals." Claim 43 is "[a] method for decryptor activation" and contains a step of "decrypting under first processor control a first portion of said encrypted materials." Claim 54 contains a step wherein a "decryptor decrypts said programming signal." Claim 55 contains a step of "controlling a decryptor" and a step of "decrypting or enabling communication of at least a second of said plurality of signals."

The Board of Patent Appeals and Interferences decided in *Ex parte* Personalized Media Communications, LLC (Appeal 2008-4228, *Ex parte* Reexamination Control 90/006,536) at pages 53-54, that encryption requires a digital signal. Each of the claims of this amendment involves the use of digital signals either through reference to "digital" signals or through reference to "decryption" and "encryption." "Encryption and decryption," the Board goes on to say, "are not broad enough to read on scrambling and unscrambling." Therefore, because Hartung, Tang, and Bond are directed to unscrambling of analog signals, none teach or suggest a method of controlling the decryption of digital information as is presented in the claims of this amendment.

Upon entry of this paper, claims 22-55 will be pending and under consideration. Reconsideration is respectfully requested based on the above amendments.

II. Conclusion

Applicants respectfully submit that all claims are in condition for examination and prompt examination on the merits is earnestly requested. In the event Applicants have overlooked the need for an extension of time, payment of fee, or additional payment of fee, Applicants hereby petition therefore and authorize that any charges be made to Deposit Account No. 50-4494.

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Should the Examiner have any questions regarding any of the above, the Examiner is respectfully requested to telephone the undersigned at 202-346-4000.

Dated: April 05, 2011

Respectfully submitted,

By /Thomas J. Scott, Jr/
Thomas J. Scott, Jr.
Registration No.: 27,836
GOODWIN PROCTER LLP
901 New York Avenue, NW
Washington, DC 20001
(202) 346-4000
Attorney for Applicants

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Appendix A

Marked up Copy of Claims 22-55 Indicating the Differences Between Them and Claims 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 19, 21, 40, 41, 42, 43, 44, 89, 93, 109, 111, 112, 113, 114, 115, 116, 117, 118, 123, 125, 127, 131, and 134 of the DECR 81 Group "A" Application

(U.S. Patent Application Serial No. 08/449,263)

22. A method for controlling the decryption of encrypted programming at a subscriber station, said method comprising the steps of:

receiving encrypted programming, encrypted programming having an encrypted control signal;

detecting said control signal;

passing said control signal to ~~said at least one decryptor~~ a decryptor at said subscriber station;

decrypting said control signal;

decrypting said encrypted programming to form decrypted programming based on said control signal; and

presenting said decrypted programming to a viewer or listener.

23. A method for controlling the decryption of programming at a subscriber station, said method comprising the steps of:

receiving programming, said programming having a first encrypted digital control signal portion and an encrypted digital information portion;

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detecting said first encrypted digital control signal portion of said programming;

passing said first encrypted digital control signal portion of said programming to a first decryptor at said subscriber station;

decrypting said first encrypted digital control signal portion of said programming using said first decryptor at said subscriber station;

passing said encrypted digital information portion of said programming ~~to said~~ and the decrypted control signal portion to a second decryptor at said subscriber station;

decrypting said encrypted digital information portion of said programming using said second decryptor at said subscriber station based on the decrypted control signal portion; and

presenting said programming.

24. A method of controlling a remote transmitter station to communicate program material to a subscriber station and controlling said subscriber station to process or output digital programming, said method comprising the steps of:

receiving ~~at said remote transmitter station~~ a first control signal which operates at the remote transmitter station to control communication of said digital programming and one or more first instruct signals~~, wherein said one or more first instruct signals operate at the subscriber station to decrypt one or more digital second instruct signals~~ and communicating said control signal to said remote transmitter station;

receiving an identifier designating said digital programming to be transmitted by the remote transmitter station, said remote transmitter station transferring said digital programming to a transmitter;

receiving at said remote transmitter station said one or more digital second instruct signals which operate at the subscriber station ~~to decrypt said digital programming~~ to identify or decrypt said digital programming or said one or more first instruct signals, said

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remote transmitter station transferring said one or more second instruct signals to said transmitter; and

transmitting from said remote transmitter station to said subscriber station an information transmission comprising said unit of programming, said one or more first instruct signals, and said one or more second instruct signals, said one or more first instruct signals being transmitted in accordance with said ~~first~~ control signal.

25. The method ~~as in claims 3, or 4,~~ of claim 23, wherein said programming further includes encrypted video.

26. The method ~~as in claims 3, or 4,~~ of claim 23, wherein said subscriber station stores information that evidences processing said programming.

27. The method of claim ~~3~~ 23, wherein said programming is received at said subscriber station in one channel of a multichannel signal and a second control signal portion used to decrypt said programming is included in said multichannel signal outside said one channel.

28. The method of claim ~~3~~ 23, wherein said subscriber station detects, in a transmission channel including said programming, a second control signal portion used to decrypt the first control signal portion.

29. The method of claim ~~4~~ 23, wherein the subscriber station detects, in a transmission channel for transmitting the programming, a second control signal portion used to decrypt the first control signal portion, and wherein the second control signal portion is encrypted, and wherein the second control signal portion is decrypted in order to enable decryption of the first control signal portion.

30. The method ~~as in claims 3, or 4,~~ of claim 23, wherein said programming includes computer data.

31. A method of controlling at least one of a plurality of receiver stations, said method comprising the steps of:

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receiving downloadable code which is effective at said at least one of said plurality of receiver stations to implement a new technique of decrypting and delivering the downloadable code to at least one transmitter;

receiving at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code ~~at said processor~~; and

causing said at least one control signal to be communicated to said at least one transmitter at a specific time,

thereby to transmit at least one information transmission including the downloadable code and said at least one control signal.

32. The method of claim ~~11~~ 31, wherein a television program is displayed at a receiver station and said downloadable code and said at least one control signal programs said receiver station to decrypt said television program in accordance with said new technique.

33. A method of communicating television program material to one or more receiver stations, said method comprising the steps of:

receiving a television program at a transmitter station and delivering said television program to a transmitter;

receiving and storing one or more instruct signals at said transmitter station, said one or more instruct signals at said one or more receiver stations operative to implement a new technique of decrypting;

transferring said one or more instruct signals to said transmitter; and

transmitting said television program and said one or more instruct signals from said transmitter station to said one or more receiver stations.

34. A method of processing signals at a receiver station comprising the steps of:

receiving at least one information transmission;

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detecting a plurality of signals on said at least one information transmission;

changing a decryption technique in response to at least a first of said plurality of signals;

decrypting a second of said plurality of signals on the basis of said changed decryption technique;

passing said decrypted second of said plurality of signals to a controllable device; and

controlling said controllable device on the basis of said passed decrypted second of said plurality of signals.

35. The method of claim ~~19~~ 33, wherein said step of transferring is performed based on comparison.

36. The method of claim ~~19~~ 33, wherein said step of transferring is performed in accordance with a schedule.

37. The method of claim ~~41~~ 36, wherein said schedule specifies a transmission time and a transmission channel, said method further comprising the steps of receiving and storing said schedule at said transmitter station.

38. The method of claim ~~19~~ 33, wherein said one or more instruct signals operate at said one or more receiver stations based on an identifier, said method further comprising the step of transmitting said identifier.

39. The method of claim ~~43~~ 38, wherein an information transmission including said television program is received at said one or more receiver stations, wherein said television program is outputted at said one or more receiver stations, and wherein said identifier identifies at least one of (i) said television program and (ii) a channel including said television program.

40. A method of processing signals at a receiver station comprising the steps of:

~~(a)~~ receiving at least one information transmission;

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~~(b)~~ detecting a plurality of signals in said at least one information transmission, a first signal of said plurality of signals including downloadable code;

~~(c)~~ passing said downloadable code to a processor;

~~(d)~~ controlling a decryptor to decrypt in a specific fashion on the basis of said downloadable code;

~~(e)~~ decrypting at least one second signal of said plurality of signals in said specific fashion; and

~~(f)~~ passing said at least one second signal to one of said processor and an output device.

41. A method of controlling a receiver station to detect digital data and control a decryptor based on a varying pattern of timing or location, said method of controlling comprising the steps of:

~~(1)~~ receiving programming and delivering said programming to a transmitter;

~~(2)~~ receiving digital data comprising at least an instruct signal and communicating said digital data to a signal embedder, said instruct signal operative at said receiver station to control said decryptor;

~~(3)~~ controlling said signal embedder to embed said digital data in an information transmission in a varying pattern of timing or location;

~~(4)~~ communicating said information transmission to said transmitter; and

~~(5)~~ transmitting said programming and said information transmission including said digital data.

42. A method of processing signals at a receiver station comprising the steps of:

~~(a)~~ receiving at least one information transmission;

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~~(b)~~ detecting a plurality of signals on said at least one information transmission;

~~(c)~~ decrypting at least one of said plurality of signals, said at least one decrypted signal including at least one instruct signal which is effective to instruct;

~~(d)~~ passing the at least one decrypted instruct signal to a controllable device; and

~~(e)~~ controlling said controllable device on the basis of decrypted information included in said at least one decrypted instruct signal.

43. A method for decryptor activation in a network comprising:

receiving a transmission comprising encrypted materials;

decrypting under first processor control a first portion of said encrypted materials in said transmission;

inputting said first portion of said encrypted materials to a decryptor;

decrypting under second processor control a second portion of said encrypted materials based on said step of decrypting said first portion of said encrypted materials.

44. The method of claim ~~3~~ 43 wherein said transmission in said step of receiving ~~programming is received in~~ a transmission is ~~of~~ a multichannel signal separated in the frequency domain.

45. The method of claim ~~112~~ 44 wherein said transmission is a cable system broadcast.

46. The method of claim ~~3~~ 43 wherein said transmission in said step of receiving ~~programming is received in~~ a transmission is ~~of~~ a multichannel signal separated in the time domain.

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47. The method of claim ~~3~~ 43 wherein said transmission in said step of receiving a transmission ~~of said programming~~ is generated at a local data source.

48. The method of claim ~~115~~ 47 wherein said local data source comprises a VCR.

49. The method of claim ~~115~~ 47 wherein said local data source comprises a laser disk.

50. The method of claim ~~3~~ 43 wherein said encrypted materials comprise ~~programming includes~~ a portion of a television program.

51. The method of claim ~~3~~ 43, wherein said transmission in said step of receiving a transmission ~~programming~~ and a signal necessary for decryption are received from ~~difference~~ different sources.

52. The method of claim ~~123~~ 51, further comprising the step of contacting a remote transmitter station to receive one of said transmission and said signal necessary for decryption.

53. The method of claim ~~123~~ 51, wherein a signal necessary for decryption is communicated by telephone.

54. A method of providing an enabling signal to a receiver station from a remote data source, said enabling signal for use in decrypting at the receiver station a programming signal, said receiver station being programmed to get information necessary for enabling a programming signal, said method comprising the steps of:

storing at the remote data source one or more control signals for enabling a decryptor to decrypt a video;

receiving at the remote data source from the receiver station a communication to get specific enabling information;

communicating, from the remote data source to the receiver station in response to said communication from the receiver station, a control signal,

whereby the receiver station inputs said control signal to a decryptor, and wherein said decryptor decrypts said programming signal.

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55. A method of processing signals at a receiver station comprising the steps of:

receiving one or more information transmissions at said receiver station;

detecting a plurality of signals on said one or more information transmissions, at least a first of one of said plurality of signals including a control signal;

controlling a decryptor in response to said control signal;

decrypting or enabling communication of at least a second of said plurality of signals on the basis of said step of controlling said decryptor;

passing said decrypted or enabled at least said second of said plurality of signals to a controllable device; and

controlling said controllable device on the basis of said passed decrypted or enabled at least said second of said plurality of signals.

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

EXAMINER	
MOORE JR, MICHAEL J	

ART UNIT	PAPER NUMBER
2467	

NOTIFICATION DATE	DELIVERY MODE
07/06/2011	ELECTRONIC

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

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

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

AAlpha-Kpetewama@goodwinprocter.com
patentdc@goodwinprocter.com
fmckeon@goodwinprocter.com

PTOL-90A (Rev. 04/07)

Office Action Summary	Application No.	Applicant(s)	
	08/449,413	HARVEY ET AL.	
	Examiner	Art Unit	
	MICHAEL J. MOORE, JR.	2467	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 April 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

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

Disposition of Claims

4)☒ Claim(s) *22-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *23,25-30 and 43-53* is/are allowed.

6)☒ Claim(s) *22,24,31-36,38-42,54 and 55* is/are rejected.

7)☒ Claim(s) *37* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

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

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

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DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements (IDS) submitted on 4/7/97, 4/5/96, 2/1/96, and 12/24/95 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Claim Objections

2. Claim **34** is objected to because of the following informalities: On line 4, the word "on" should be replaced with "in". Appropriate correction is required.

Double Patenting

3. The nonstatutory double patenting rejection 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 and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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).

4. Claims **22, 34, 54 and 55** are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims **1, 22, and 23** of *U.S. Patent No. 7,801,304*. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following correspondences.

Regarding claim **22**, "a method for controlling the decryption of encrypted programming at a subscriber station" corresponds to "a method for controlling the decryption of programming at a subscriber station" in claim **1** of the above U.S. Patent.

"Receiving encrypted programming, said encrypted programming having an encrypted control signal" corresponds to "receiving programming, said programming having a first encrypted digital control signal portion" in claim **1** of the above U.S. Patent.

"Detecting said control signal" corresponds to "detecting said first encrypted digital control signal portion of said programming" in claim **1** of the above U.S. Patent.

"Passing said control signal to a decryptor at said subscriber station" corresponds to "passing said first encrypted digital control signal portion of said programming to a decryptor at said subscriber station" in claim **1** of the above U.S. Patent.

"Decrypting said control signal" corresponds to "decrypting said first encrypted digital control signal portion" in claim **1** of the above U.S. Patent.

"Decrypting said encrypted programming to form decrypted programming based on said control signal" corresponds to "decrypting said encrypted digital information portion of said programming ... based on the decrypted control signal portion" in claim **1** of the above U.S. Patent.

Lastly, "presenting said decrypted programming to a viewer or listener" corresponds to "presenting said programming" in claim **1** of the above U.S. Patent.

Claim **22** of the instant application does not explicitly claim "passing said encrypted digital information portion of said programming to said decryptor". Therefore, claim **22** merely broadens the scope of claim **1** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Regarding claim **34**, "a method of processing signals at a receiver station" corresponds to the same in claim **23** of the above U.S. Patent.

"Receiving at least one information transmission" and "detecting a plurality of signals on said at least one information transmission" corresponds to "receiving a plurality of signals including digital programming and inputting at least some of said plurality of signals to said digital detector" as well as "detecting said encrypted digital data in said at least some of said plurality of signals" in claim **23** of the above U.S. Patent.

"Changing a decryption technique in response to at least a first of said plurality of signals" corresponds to "controlling said decryptor to alter its decryption pattern or technique on the basis of information included in said detected encrypted digital data" in claim **23** of the above U.S. Patent.

Lastly, "decrypting a second of said plurality of signals on the basis of said changed decryption technique; passing said decrypted second of said plurality of signals to a controllable device; and controlling said controllable device on the basis of said passed decrypted second of said plurality of signals" corresponds to "decrypting at least a portion of said digital programming using a selected decryption pattern or technique based on said step of detecting in order to provide a decrypted output of programming to a viewer or listener" in claim **23** of the above U.S. Patent.

Claim **34** of the instant application does not explicitly claim "said receiver station having a receiver, a digital detector operatively connected to said receiver for detecting encrypted digital data, a decryptor operatively connected to said digital detector for decrypting said encrypted digital data, and a controller operatively connected to said

digital detector or said decryptor for controlling said decryptor". Therefore, claim **34** merely broadens the scope of claim **23** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Regarding claim **54**, "a method of providing an enabling signal to a receiver station from a remote data source, said enabling signal for use in decrypting at the receiver station a programming signal, said receiver station being programmed to get information necessary for enabling a programming signal" corresponds to "a method of providing digital enabling information to a receiver station from a first remote source, said digital enabling information for use at the receiver station in decrypting a mass medium program presentation" in claim **22** of the above U.S. Patent.

"Storing at the remote data source one or more control signals for enabling a decryptor to decrypt a video" corresponds to "storing digital enabling information at said first remote source" in claim **22** of the above U.S. Patent.

"Receiving at the remote data source from the receiver station a communication to get specific enabling information" corresponds to "receiving at said first remote source a query from said receiver station" in claim **22** of the above U.S. Patent.

"Communicating, from the remote data source to the receiver station in response to said communication from the receiver station, a control signal" corresponds to

"transmitting said digital enabling information which is effective to enable decryption from said first remote source to said receiver station in response to said step of receiving said query, said receiver station storing at least some of said transmitted enabling information" in claim **22** of the above U.S. Patent.

Lastly, "whereby the receiver station inputs said control signal to a decryptor, and wherein said decryptor decrypts said programming signal" corresponds to "to said receiver station an encrypted digital mass medium presentation signal which is decrypted on the basis of said stored at least some of said digital enabling information" in claim **22** of the above U.S. Patent.

Claim **54** of the instant application does not claim "transmitting from a second remote source" as well as "to present said mass medium programming presentation". Therefore, claim **54** merely broadens the scope of claim **22** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Regarding claim **55**, "a method of processing signals at a receiver station" corresponds to the same in claim **23** of the above U.S. Patent.

"Receiving one or more information transmissions at said receiver station; detecting a plurality of signals on said one or more information transmissions, at least a first of one of said plurality of signals including a control signal" corresponds to

"receiving a plurality of signals including digital programming and inputting at least some of said plurality of signals to said digital detector" as well as "detecting said encrypted digital data in said at least some of said plurality of signals" in claim **23** of the above U.S. Patent.

"Controlling a decryptor in response to said control signal" corresponds to "controlling said decryptor to alter its decryption pattern or technique on the basis of information included in said detected encrypted digital data" in claim **23** of the above U.S. Patent.

"Decrypting or enabling communication of at least a second of said plurality of signals on the basis of said step of controlling said decryptor" corresponds to "decrypting at least a portion of said digital programming using a selected decryption pattern or technique based on said step of detecting" in claim **23** of the above U.S. Patent.

Lastly, "passing said decrypted or enabled at least said second of said plurality of signals to a controllable device; and controlling said controllable device on the basis of said passed decrypted or enabled at least said second of said plurality of signals" corresponds to "to provide a decrypted output of programming to a viewer or listener" in claim **23** of the above U.S. Patent.

Claim **55** of the instant application does not claim "detecting ... in accordance with a varying pattern of timing or location". Therefore, claim **55** merely broadens the scope of claim **23** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

5. Claim **22** is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim **26** of *U.S. Patent No. 7,805,749*. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following correspondences.

Regarding claim **22**, "a method for controlling the decryption of encrypted programming at a subscriber station" as well as "receiving encrypted programming, said encrypted programming having an encrypted control signal" corresponds to "receiving a television program in a first programming signal" as well as "an encryption code received in said first programming signal" in claim **26** of the above U.S. Patent.

"Detecting said control signal; passing said control signal to a decryptor at said subscriber station" corresponds to "passing an encryption code received in said first programming signal to a processor in response to said step of processing said user input" in claim **26** of the above U.S. Patent.

"Decrypting said control signal; decrypting said encrypted programming to form decrypted programming based on said control signal" corresponds to "decrypting said encrypted information with said encryption code" in claim **26** of the above U.S. Patent.

Lastly, "presenting said decrypted programming to a viewer or listener" corresponds to "delivering said at least one of a product and a service to said user" in claim **26** of the above U.S. Patent.

Claim **22** of the instant application does not claim the "displaying", "offering", and "receiving said user input" steps that are claimed in claim **26** of the above U.S. Patent. Therefore, claim **22** merely broadens the scope of claim **26** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

6. Claim **24** is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim **14** of *U.S. Patent No. 7,801,304* in view of Yanagimachi et al. (U.S. 3,936,595) (hereinafter "Yanagimachi").

Regarding claim **24**, "a method of controlling a remote transmitter station to communicate program material to a subscriber station and controlling said subscriber station to process or output a unit of programming" corresponds to "a method of controlling a remote transmitter station to communicate program material to a subscriber station and controlling said subscriber station to process or output digital programming" in claim **14** of the above U.S. Patent.

"Receiving a control signal which operates at the remote transmitter station to control the communication of a unit of programming and one or more first instruct signals and communicating said control signal to said remote transmitter station" corresponds to "receiving at said remote transmitter station a first control signal which operates at the remote transmitter station to control communication of said digital programming and one or more first instruct signals" in claim **14** of the above U.S. Patent.

"Receiving at said remote transmitter station one or more second instruct signals which operate at the subscriber station to identify or decrypt said unit of programming or said one or more first instruct signals, said remote transmitter station transferring said one or more second instruct signals to said transmitter" corresponds to "receiving at said remote transmitter station said one or more digital second instruct signals which operate at the subscriber station to decrypt said digital programming" in claim **14** of the above U.S. Patent.

"Transmitting from said remote transmitter station an information transmission comprising said unit of programming, said one or more first instruct signals, and said one or more second instruct signals, said one or more first instruct signals being transmitted in accordance with said control signal" corresponds to "transmitting from said remote transmitter station to said subscriber station an information transmission comprising said digital programming, said one or more first instruct signals and said one or more digital second instruct signals, said one or more first instruct signals being

transmitted in accordance with said first control signal" in claim **14** of the above U.S. Patent.

Claim **24** of the instant application further claims "receiving a code or datum identifying a unit of programming to be transmitted by the remote transmitter station, said remote transmitter station transferring said unit of programming to a transmitter" which is not claimed in claim **14** of the above U.S. Patent.

However, *Yanagimachi* teaches a similar method of controlling transmission and output of programming at a receiver station, where program control codes identifying particular programming included in the transmission are utilized by a transmitter station 102 and receiver station 103 for transmission/reception and programming output as spoken of on column 15, lines 2-32 as well as column 16, lines 22-40.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, to apply the control code transmission of *Yanagimachi* to the method of claim **14** of the above U.S. Patent in order to provide selective output of programming in accordance with selection input provided from a subscriber as spoken of on column 16, lines 25-40 of *Yanagimachi*.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims **31 and 32** 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.

9. Claim **31** recites the limitation "said at least one control signal" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim **32** is also rejected as being dependent on claim **31** and containing the same deficiency.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims **22, 40-42, and 55** are rejected under 35 U.S.C. 102(e) as being anticipated by Davidson (Re. 31,735). *Davidson* teaches all of the limitations of the specified claims with the reasoning that follows.

Regarding claim **22**, "a method for controlling the decryption of encrypted programming at a subscriber station" is anticipated by the decryption method spoken of on column 24, lines 30-50.

"Receiving encrypted programming, said encrypted programming having an encrypted control signal" is anticipated by the conveying of a composite television signal to a subscriber including a video portion, an aural portion, and an encryption codes

signal (control signal) comprising a sequence of encryption codes as spoken of on column 24, lines 30-35.

"Detecting said control signal; passing said control signal to a decryptor at said subscriber station; decrypting said control signal" is anticipated by the encryption codes signal detector means for separating the encryption codes signal (decrypting the control signal) from the television signal as spoken of on column 24, lines 39-41.

"Decrypting said encrypted programming to form decrypted programming based on said control signal" is anticipated by the inverse encryption means that uses the separated encryption codes signal to return the detected audio signal to the pre-encryption digitized condition (decrypted programming) as spoken of on column 24, lines 44-46.

Lastly, "presenting said decrypted programming to a viewer or listener" is anticipated by returning of the audio signal to original analog format whereby program audio may be processed and presented in a conventional manner as spoken of on column 24, lines 47-50.

Regarding claim **40**, "a method of processing signals at a receiver station" is anticipated by the decryption method spoken of on column 24, lines 30-50.

"Receiving at least one information transmission" and "detecting a plurality of signals in said at least one information transmission, a first signal of said plurality of signals including downloadable code" is anticipated by the conveying of a composite television signal to a subscriber including a video portion, an aural portion, and an

encryption codes signal (first signal) comprising a sequence of encryption codes as spoken of on column 24, lines 30-35.

"Passing said downloadable code to a processor; controlling a decryptor to decrypt in a specific fashion on the basis of said downloadable code; decrypting at least one second signal of said plurality of signals in said specific fashion" is anticipated by the inverse encryption means (decryptor processor) that uses the separated encryption codes signal to return the detected audio signal (second signal) to the pre-encryption digitized condition (decrypted programming) as spoken of on column 24, lines 44-46.

Lastly, "passing said at least one second signal to one of said processor and an output device" is anticipated by returning of the audio signal to original analog format whereby program audio may be processed and presented (to an output device) in a conventional manner as spoken of on column 24, lines 47-50.

Regarding claim **41**, "a method of controlling a receiver station to detect digital data and control a decryptor based on a varying pattern of timing or location" is anticipated by the encryption/decryption method spoken of on column 25 line 45 – column 26, line 9.

"Receiving programming and delivering said programming to a transmitter" is anticipated by the subscription television transmitter that generates television signals (programming) having video and audio portions as spoken of on column 25, lines 45-50.

"Receiving digital data comprising at least an instruct signal and communicating said digital data to a signal embedder, said instruct signal operative at said receiver station to control said decryptor; controlling said signal embedder to embed said digital

data in an information transmission in a varying pattern of timing or location; communicating said information transmission to said transmitter; and transmitting said programming and said information transmission including said digital data" is anticipated by the encryption code signal generating means that generates a continuous sequence of encryption codes (digital data instruct signal) as well as the means for combining (signal embedder) that combines the encryption codes signal, the digitized and encrypted audio program signal, and a video program signal with carrier signals for transmission to a receiver as spoken of on column 25, lines 50-53 as well as column 26, lines 1-9.

Regarding claim **42**, "a method of processing signals at a receiver station" is anticipated by the decryption method spoken of on column 24, lines 30-50.

"Receiving at least one information transmission; detecting a plurality of signals on said at least one information transmission" is anticipated by the conveying of a composite television signal (information transmission) to a subscriber including a video portion, an aural portion, and an encryption codes signal comprising a sequence of encryption codes as spoken of on column 24, lines 30-35.

"Decrypting at least one of said plurality of signals, said at least one decrypted signal including at least one instruct signal which is effective to instruct" is anticipated by the inverse encryption means (decryptor processor) that uses the separated encryption codes signal to return the detected audio signal to the pre-encryption digitized condition (decrypted signal) as spoken of on column 24, lines 44-46.

Lastly, "passing the at least one decrypted instruct signal to a controllable device; and controlling said controllable device on the basis of decrypted information included in said at least one decrypted instruct signal" is anticipated by returning of the audio signal to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50.

Regarding claim **55**, "a method of processing signals at a receiver station" is anticipated by the decryption method spoken of on column 24, lines 30-50.

"Receiving one or more information transmissions at said receiver station; detecting a plurality of signals on said one or more information transmissions, at least a first of one of said plurality of signals including a control signal" is anticipated by the conveying of a composite television signal (information transmission) to a subscriber including a video portion, an aural portion, and an encryption codes signal (control signal) comprising a sequence of encryption codes as spoken of on column 24, lines 30-35.

"Controlling a decryptor in response to said control signal; decrypting or enabling communication of at least a second of said plurality of signals on the basis of said step of controlling said decryptor" is anticipated by the inverse encryption means (decryptor) that uses the separated encryption codes signal (control signal) to return the detected audio signal to the pre-encryption digitized condition (decrypted signal) as spoken of on column 24, lines 44-46.

Lastly, "passing said decrypted or enabled at least said second of said plurality of signals to a controllable device; and controlling said controllable device on the basis of

said passed decrypted or enabled at least said second of said plurality of signals" is anticipated by returning of the audio signal to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50.

12. Claim **24** is rejected under 35 U.S.C. 102(b) as being anticipated by Yanagimachi et al. (U.S. 3,936,595) (hereinafter "Yanagimachi"). *Yanagimachi* teaches all of the limitations of the specified claims with the reasoning that follows.

Regarding claim **24**, "a method of controlling a remote transmitter station to communicate program material to a subscriber station and controlling said subscriber station to process or output a unit of programming" is anticipated by the programming transmission method performed by the transmitter 102 of Figure 14 as spoken of on column 14, line 51 – column 15, line 36.

"Receiving a control signal which operates at the remote transmitter station to control the communication of a unit of programming and one or more first instruct signals and communicating said control signal to said remote transmitter station" is anticipated by the signal code allocation control device 104 of Figure 14 that receives data (control signal) supplied from the signal generating device 101 that is used to determine signal transmission timings as spoken of on column 14, lines 51-68.

"Receiving a code or datum identifying a unit of programming to be transmitted by the remote transmitter station, said remote transmitter station transferring said unit of programming to a transmitter" is anticipated by the signal code allocation control device

104 that produces and supplies program material control codes identifying particular programming to an output terminal 114 (transmitter) as shown in Figure 14 and spoken of on column 15, lines 11-32.

"Receiving at said remote transmitter station one or more second instruct signals which operate at the subscriber station to identify or decrypt said unit of programming or said one or more first instruct signals, said remote transmitter station transferring said one or more second instruct signals to said transmitter" is anticipated by the signal code allocation control device 104 that produces and supplies item control codes (instruct signals) identifying particular programming to an output terminal 114 (transmitter) as shown in Figure 14 and spoken of on column 15, lines 11-32.

Lastly, "transmitting from said remote transmitter station an information transmission comprising said unit of programming, said one or more first instruct signals, and said one or more second instruct signals, said one or more first instruct signals being transmitted in accordance with said control signal" is anticipated by the transmission of the combined signal from output terminal 114 (transmitter) to a transmission path 115, where the combined signal includes video and audio programming as well as various control codes (instruct signals) as spoken of on column 15, lines 25-32.

13. Claims **31 and 54** are rejected under 35 U.S.C. 102(e) as being anticipated by Ostermann et al. (U.S. 4,484,025) (hereinafter "Ostermann"). *Ostermann* teaches all of the limitations of the specified claims with the reasoning that follows.

Regarding claim **31**, "a method of controlling at least one of a plurality of receiver stations" is anticipated by the enciphering/deciphering method performed by the terminals 1 and 2 of Figure 1.

"Receiving downloadable code which is effective at said at least one of said plurality of receiver stations to implement a new technique of decrypting and delivering the downloadable code to at least one transmitter" is anticipated by the transmission of a cipher algorithm (downloadable code) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 (transmitter) that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

"Receiving said at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code; and causing said at least one control signal to be communicated to said at least one transmitter at a specific time, thereby to transmit at least one information transmission including the downloadable code and said at least one control signal" is anticipated by the transmission of a bit sequence (control signal) from cipher equipment 16 to cipher computer 12 (transmitter) indicating a particular stored cipher program (downloadable code) to be used as spoken of on column 3, lines 10-19.

Regarding claim **54**, "a method of providing an enabling signal to a receiver station from a remote data source, said enabling signal for use in decrypting at the receiver station a programming signal, said receiver station being programmed to get information necessary for enabling a programming signal" is anticipated by the

enciphering/deciphering method performed by the terminals 1 and 2 (receiver station and remote data source) of Figure 1.

"Storing at the remote data source one or more control signals for enabling a decryptor to decrypt a video" is anticipated by the cipher equipment 16 (remote data source) that contains cipher program storage 18 for storing a cipher algorithm as spoken of on column 2, lines 38-41.

"Receiving at the remote data source from the receiver station a communication to get specific enabling information" is anticipated by the cipher algorithm request (communication) transmitted from the terminal 1 to the terminal 2 (remote data source) requesting a cipher algorithm (enabling information) as spoken of on column 3, lines 4-9.

"Communicating, from the remote data source to the receiver station in response to said communication from the receiver station, a control signal" is anticipated by the transmission of a cipher algorithm (control signal) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

"Whereby the receiver station inputs said control signal to a decryptor, and wherein said decryptor decrypts said programming signal" is anticipated by a receiver terminal that contains means for deciphering (decryptor) received ciphered data text in accordance with a cipher algorithm and a cipher key as spoken of on column 4, lines 52-54, as well as column 2, lines 16-24, which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Claim Rejections - 35 USC § 103

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

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

15. 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(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

16. Claims **32-36, 38, and 39** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ostermann et al. (U.S. 4,484,025) (hereinafter "Ostermann") in view of Davidson (Re. 31,735).

Regarding claim **32**, *Ostermann* teaches the method of claim **31** as described above. *Ostermann* does not explicitly teach decryption of television programming.

However, *Davidson* teaches the application of encryption/decryption techniques to television signals as spoken of on column 24, lines 30-50.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of

Ostermann to television program signals in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of *Davidson*.

Regarding claim **33**, *Ostermann* teaches the transmission of a cipher algorithm (instruct signal) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 (transmitter) that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

Ostermann also teaches a receiver terminal that contains means for deciphering received ciphered data text in accordance with a cipher algorithm and a cipher key as spoken of on column 4, lines 52-54, as well as column 2, lines 16-24, which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Ostermann does not explicitly teach decryption of television programming.

However, *Davidson* teaches the application of encryption/decryption techniques to television signals as spoken of on column 24, lines 30-50.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of *Ostermann* to television program signals in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of *Davidson*.

Regarding claim **34**, *Ostermann* teaches the transmission of a cipher algorithm (signal) from cipher program storage 18 to program memory 22 of a programmable

cipher computer 12 that indicates a particular enciphering/deciphering (encryption/decryption) technique as spoken of on column 2, lines 38-41.

Ostermann also teaches the transmission of a bit sequence (signal) from cipher equipment 16 to cipher computer 12 indicating a particular stored cipher program to be used (change in encryption/decryption technique) as spoken of on column 3, lines 10-19.

Ostermann also teaches a receiver terminal that contains means for deciphering received ciphered data text (signal) in accordance with a cipher algorithm and a cipher key as spoken of on column 4, lines 52-54, as well as column 2, lines 16-24, which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Ostermann does not explicitly teach passing a decrypted signal to a controllable device and controlling the controllable device on the basis of the passed decrypted signal.

However, *Davidson* teaches returning of an audio signal (decrypted signal) to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the post-decryption processing and presentation as taught in *Davidson* to the system of *Ostermann* in order to allow the receiving station to make appropriate use of the recovered decrypted signal.

Regarding claim **35**, *Ostermann* further teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit sequence as spoken of on column 3, lines 10-20.

Regarding claim **36**, *Ostermann* further teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit sequence that indicates which cipher program is to be used at a particular time (schedule) as spoken of on column 3, lines 10-20.

Regarding claim **38**, *Ostermann* further teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit sequence (identifier) as spoken of on column 3, lines 10-20.

Regarding claim **39**, *Ostermann* further teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit sequence (identifier) as spoken of on column 3, lines 10-20, as well as column 3, lines 49-61, which states that the bit sequence contains identification codes of the transmitter and addressed receiver (indicates transmission channel).

Allowable Subject Matter

17. Claims **23, 25-30, and 43-53** are allowable over the prior art of record.

18. Claim **37** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

19. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim **23**, the prior art of record does not teach or suggest the claimed method of receiving programming having a first encrypted digital control signal portion and an encrypted digital information portion, where the first encrypted digital control signal portion is detected and passed to a first decryptor at the subscriber station for decryption processing, and then passing the encrypted digital information portion and the decrypted control signal portion to a second decryptor at the subscriber station, where the encrypted digital information portion is decrypted based on the decrypted control signal portion at the second decryptor, and the resulting programming is then presented.

Regarding claims **25-30**, these claims are further limiting to claim **23** and are thus also allowable over the prior art of record.

Regarding claim **37**, *Ostermann* in view of *Davidson* teaches the method of claim **36** as described above. *Ostermann*, *Davidson*, as well as the other prior art of record do not teach "wherein said schedule specifies a transmission time and a transmission channel, said method further comprising the steps of receiving and storing said schedule at said transmitter station" in combination with the other limitations of claim **36**.

Regarding claim **43**, the prior art of record does not teach or suggest the claimed method of receiving a transmission comprising encrypted materials, decrypting a first portion of the encrypted materials under first processor control, inputting the first portion of the encrypted materials to a decryptor, and decrypting a second portion of the encrypted materials under second processor control based on the step of decrypting the first portion of the encrypted materials.

Regarding claims **44-53**, these claims are further limiting to claim **43** and are thus also allowable over the prior art of record.

Response to Arguments

20. Applicant's arguments with respect to *new* claims **22, 24, 31-36, 38-42, 54, and 55** have been considered but are moot in view of the new ground(s) of rejection provided above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL J. MOORE, JR., whose telephone number is (571)272-3168. The examiner can normally be reached on Monday-Friday (7:30am - 4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached at (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J. Moore, Jr./
Primary Examiner, Art Unit 2467

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: John C. Harvey *et al.*	
Application No.: 08/449,413	Confirmation No.: 1756
Filed: May 24, 1995	Art Unit: 2467
For: SIGNAL PROCESSING APPARATUS AND METHODS	Examiner: Moore, Jr., Michael J

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

PETITION UNDER 37 CFR § 1.182

Pursuant to 37 C.F.R. § 1.182, the assignee of this application, Personalized Media Communications, LLC ("PMC" or "Applicant"), hereby petitions the United States Patent and Trademark Office ("PTO" or "Patent Office") for relief not otherwise provided for under the PTO rules. Specifically, Applicant hereby petitions the Director, under 37 C.F.R. § 1.182, to withdraw the recorded terminal disclaimer before the above-referenced patent application issues as a patent.

I. Standard for Requesting Withdrawal of a Terminal Disclaimer

The Manual of Patent Examining Procedure ("MPEP") § 1490 provides that "if timely requested, a recorded terminal disclaimer may be withdrawn before the application in which it is filed issues as a patent." The MPEP further notes that because a terminal disclaimer does not take effect until after a patent is granted and the public has not thus relied upon the terminal disclaimer, relief from the entry of a terminal disclaimer, which is no longer appropriate or proper, is properly available through a petition.

The filing and recordation of an unnecessary terminal disclaimer has been characterized as an "unhappy circumstance" in *In re Jentoft*, 392 F.2d 633, 157 USPQ 363 (CCPA 1968).

Further, MPEP § 1490 states that "there is no statutory prohibition against nullifying or otherwise canceling the effect of a recorded terminal disclaimer which was erroneously filed before the patent issues." The PTO has held that the proper time—and indeed the only time—a terminal disclaimer may be withdrawn is prior to the issuance of a patent. *Decision Denying Petition, In re Reissue Application of Lee et al, Reissue Application No.* 09/933,918, March 21, 2005 ("*Lee Decision*").[1] As demonstrated below, the Terminal Disclaimer filed in this application is no longer appropriate and should be withdrawn.

II. Factual Background

The Terminal Disclaimer in the above-referenced application was filed March 19, 2001 as part of a Petition under 37 C.F.R. § 1.181 requesting that the Commission of Patents withdraw the January 18, 2001 holding of abandonment.

By way of background, the Office issued an Initial Notice of Non-Responsiveness on June 8, 2000 (June '00 Communication) in the instant application. The Examiner alleged that Applicants' September 4, 1998 response ("September '98 response") to the March 4, 1998 Non-Final Office Action (March '98 Action) was not fully responsive, specifically, by contending that Applicants deliberately omitted identification of support for the Section 112 rejections. Applicants filed a Request for reconsideration on June 29, 2000 in response, demonstrating that the Office's June '00 Communication was untimely as the PTO had already considered the September '98 Response in full. In addition, Applicants demonstrated that the September '98 Response was a complete response to the March '98 Action and was a bona fide attempt to advance the application to a positive final action. The Office, nonetheless, issued a Notice of abandonment on January 18, 2001.

In response to the January 18, 2001 Notice of Abandonment, Applicants filed a petition under 37 C.F.R. § 1.181 on March 19, 2001 requesting that the Commission of Patents withdraw the holding of abandonment of the instant application including for the reasons previously stated in the June 29, 2000 response. Applicants petitioned the Commission of Patents under 37 C.F.R.

[1] The *Lee Decision* is a Final Decision from the Commissioner for Patents denying a petition to withdraw a terminal disclaimer via reissue because "petitioner knew, or should have known, [the withdrawal] had to be requested prior to issuance of the original patent". The *Lee Decision* further stated that "what is here controlling is that petitioner seeks to correct an issued patent", not a pending application as here.

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§ 1.137, in the alternative, for revival of an abandoned application. At the same time, Applicant also submitted the Terminal Disclaimer ("March '01 Terminal Disclaimer") pursuant to 37 C.F.R. § 1.321(c) and disclaimed, in essential terms, the terminal part of the statutory term of any patent granted on the above-referenced application equivalent to the alleged period of abandonment. Applicant noted that in the event that the March '01 Petition was granted, this application would be considered never to have been abandoned and accordingly, the terminal part of the term of this patent disclaimed would be no period at all.

On April 18, 2002, the PTO mailed a Petition Decision (April '02 Petition Decision) vacating the Notice of Abandonment and withdrawing the holding of abandonment. On the same date, PTO mailed a Suspension of Action Notice. As a result, the prosecution of the application was held in abeyance beginning on April 18, 2002 pending action in "DECR" group "A" application (U.S. Patent Application Serial No. 08/449,263).

On July 6, 2011, the PTO mailed a final Office action in which claims certain pending claims of the present application were rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims of U.S. Patent No. 7,801, 304; U.S. Patent No. 7,805,749; and U.S. Patent No. 7,801,304 in view of Yanagimachi. The Office has given no effect to the March '01 Terminal Disclaimer. The Examiner in the Office action states that a timely filed terminal disclaimer may be used to overcome the double patenting rejection.

III. Basis for Request for Withdrawal

As discussed above, the March '01 Terminal Disclaimer was filed to disclaim part of the term of the patent that issues from this application equivalent to the period of its abandonment. Because, the April '02 Petition Decision vacated the Notice of Abandonment and withdrew the holding of abandonment, there was no period of abandonment for the March '01 Terminal Disclaimer to disclaim as a result. For this reason alone, the March '01 Terminal Disclaimer should simply not be given effect.

As noted above, the M.P.E.P. § 1490 acknowledges that under appropriate circumstance, consistent with the orderly administration of the examination process, the nullification of recorded terminal disclaimer is appropriate. This is such a circumstance. The withdrawal of this terminal disclaimer is consistent with the orderly administration of this prosecution. This is not a circumstance in which the propriety of a prior double patenting rejection is being reopened.

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As discussed above, the March '01 Terminal Disclaimer was not filed in response to a double patenting rejection. Rather, the Examiner in the recent final Office Action has made a new double patent rejection in response to claims newly added to this application. The Examiner has given no effect to the March '01 Terminal Disclaimer. The most orderly manner in which to proceed is to nullify the March '01 Terminal Disclaimer. Applicant should have the opportunity to amend the claims as proposed to avoid this new double patenting rejection.

In addition to this reason, Applicants earnestly requests that the terminal disclaimer be withdrawn because it has been ten years since its initial filing and the claims as they existed when the terminal disclaimer was filed are substantially different from the claims of the instant application today. In the course of prosecuting this application and its co-pending applications, the Applicants and the Examiner agreed that subject matter not found to be allowable during prosecution of so called "DECR" group "A" application (U.S. Patent Application Serial No. 08/449,263) may be further prosecuted in the instant application. As a result, Applicants have added claims to the instant application, via a Supplemental Amendment, corresponding to subject matter previously pursued in the so called "DECR" group "A" application (U.S. Patent Application Serial No. 08/449,263). Applicants have also cancelled the lone claim contained in the instant application when the terminal disclaimer was filed. In Applicant's view, a simple comparison of the claims as they existed at the time of the Terminal Disclaimer and the claims as they exist now after the incorporation of the so called "DECR" group "A" application (U.S. Patent Application Serial No. 08/449,263) claims will demonstrate the merits of its current request.

For all these reasons, Applicant respectfully requests withdrawal of the March '01 Terminal Disclaimer.

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Please charge any shortage in fees due in connection with the filing of this communication to Deposit Account No. 50-4494, and please credit any excess fees to such deposit account.

Dated: September 12, 2011

Respectfully submitted,

By /Thomas J. Scott, Jr./
Thomas J. Scott, Jr.
Registration No.: 27,836
GOODWIN PROCTER LLP
901 New York Avenue, NW
Washington, DC 20001
(202) 346-4000
Attorney for Applicants

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UNITED STATES PATENT AND TRADEMARK OFFICE

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Alexandria, VA 22313-1450
www.uspto.gov

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

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OFFICE OF PETITIONS

In re Application of
HARVEY et al.
Application No. 08/449,413
Filed: 05/24/1995
Attorney Docket No. 5634.174

DECISION ON PETITION

This is a decision on the petition under 37 CFR 1.182 filed September 12, 2011.

Applicants request that the Office withdraw the previously filed terminal disclaimer submitted on March 19, 2001.

As the examiner has concurred, the requested relief can be favorably considered. Accordingly, the petition is **granted**.

The Office acknowledges the $400.00 petition fee.

This matter is being referred to Technology Center Art Unit 2400 for correction of PALM and file records consistent with this decision.

Telephone inquiries regarding this decision should be directed to the undersigned at (571) 272-3211.

C. T. Donnell

Christina Tartera Donnell
Senior Petitions Attorney
Office of Petitions

Docket No.: PMC-003-C247
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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

Application No.: 08/449,413 Confirmation No.: 1756

Filed: May 24, 1995 Art Unit: 2400

For: SIGNAL PROCESSING APPARATUS AND METHODS Examiner: William Korzuch

INFORMATION DISCLOSURE STATEMENT (IDS)

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

Dear Sir:

Prosecution of this application has recently been continued after being suspended since 2005. This application was held in abeyance from examination by the Office pending final action in a corresponding so-called "A" application, U.S. Patent Application Serial No. 08/449,263 (issued as U.S. Patent 7,801,304 on September 21, 2010) as explained in the Supplemental Amendment filed April 5, 2011 in this application and in the Comments on Statement of Reasons for Allowance filed March 10, 2010, in the 08/449,263 application. During the suspension applicant filed no additional Information Disclosure Statements in this application. However, additional Information Disclosure Statement were filed in Application Serial No. 08/449,263 and Applicants other copending "A" applications. This Information Disclosure Statement cites the references of record in Application Serial No. 08/449,263 and Applicants other "A" application, but are not yet of record in this application.

This application is a continuation of Application Serial No. 08/113,329 (issued as U.S. Patent 7,856,650 on December 21, 2010), which is a continuation of Application Serial No.

08/056,501 (which issued as U.S. Patent 5,335,277 on August 2, 1994), which is a continuation of Application Serial No. 07/849,226 (which issued as U.S. Patent 5,233,654 on August 3, 1993) with is a continuation of Application Serial No. 07/096,096 (which issued as U.S. Patent 4,965,825 on October 23, 1990), which is a continuation-in-part of Application Serial No. 06/829,531 (which issued as U.S. Patent 7,704,725 on November 3, 1987), which in turn is a continuation of Application Serial No. 06/317,510 (which issued as U.S. Patent 4,694,490 on September 15, 1987). Numerous of Applicants' copending applications having the above priority claim (including this application) share a specification with application 07/096,096 and each of its descendent applications. Of these copending applications, Application Serial No. 08/480,060 issued as U.S. Patent 5,887,243 on March 23, 1999. On or subsequent to June 8, 2010, 53 of these co-pending patents have issued, including applications 08/113,329 and 08/449,263 discussed above. Another three applications have been allowed and the issue fee has been paid. Of note applications 008/470,571 (issued as U.S. Patent 7,734,251 on June 8, 2010) and 08/487,526 (issued as U.S. Patent 7,747,217 on June 29, 2010) each issued as patent after appeal to the Board of Patent Appeals and Interferences ("Board"). The decision in the '251 Application was issued on March 23, 2009, in Appeal 2007-1837 and a decision on rehearing was issued on June 24, 2009. The decision in the '526 Application was issued January 13, 2009, in Appeal 2007-2115.

Each of the seven patents issued prior to June 8, 2010 have been subject to one or more reexamination proceedings. These reexamination proceedings are summarized below and in the chart attached as Appendix A. U.S. Patent 4,694,490 underwent reexamination in Reexamination Control No. 90/006,800. The Examiner's rejections were appealed to the Board in Appeal 2008-0334. The Board issued a decision on June 30, 2008. A decision on rehearing was issued on December 18, 2008. Reexamination Certificate No. 4,694,490 C1 issued by the Board on June 23, 2009.

U.S. Patent 4,704,725 underwent reexamination in a merged proceeding of Reexamination Control Nos. 90/006,697 and 90/006,841. The Examiner's rejections were appealed to the Board in Appeal 2007-4044. The Board issued a decision on June 30, 2008. A decision on

rehearing was issued by the Board on December 18, 2008. Reexamination Certificate No. 4,704,725 C1 issued on June 16, 2009.

U.S. Patent 4,965,825 underwent reexamination in Reexamination Control No. 90/006,536. The Examiner's rejections were appealed to the Board in Appeal 2008-4228. The Board issued a decision on December 19, 2008. A decision on rehearing was issued by the Board on May 22, 2009. Reexamination Certificate No. 4,965,825 C1 issued on November 10, 2009. Reexamination Certificate No. 4,965825 C2 issued on October 26, 2010 as result of a second reexamination in Reexamination Control No. 90/010,709. A third reexamination proceeding, Reexamination Control No. 90/011,274 remains pending regarding the '825 Patent.

U.S. Patent 5,109,414 underwent reexamination in Reexamination Control No. 90/006,838. The Examiner's rejections were appealed to the Board in Appeal 2008-4864. The Board issued a decision on January 7, 2009. Reexamination Certificate 5,109,414 C1 issued on August 4, 2009. Reexamination Certificate 5,109,414 C2 issued on June 7, 2010, as a result of a second reexamination in Reexamination Control No. 90/011,016. A third reexamination request for reexamination assigned Reexamination Control No. 90/011,744 was granted on September 2, 2011 and is currently pending.

U.S. Patent 5,233,654 underwent reexamination in a merged proceeding of Reexamination Control Nos. 90/006,606, 90/006,703 and 90/006,839. Reexamination Certificate 5,233,654 C1 issued February 17, 2009, as result of this proceeding.

U.S. Patent 5,335,277 is undergoing reexamination in a merged proceeding of Reexamination Control Nos. 90/006,563 and 90/006,698. The Examiner's rejections were appealed to the Board in Appeal 2009-6825. The Board issued a decision on January 19, 2010. A decision on rehearing was issued on September 27, 2010. An appeal of the Board's decision is pending before the U.S. Court of Appeals for the Federal Circuit ("Federal Circuit").

U.S. Patent 5,887,243 underwent reexamination in Reexamination Control No. 90/006,688. The Examiner's rejections were appealed to the Board in Appeal 2008-4816. The

Board issue da decision on March 5, 2009. A decision on rehearing was issued on June 1, 2009. Reexamination Certificate 5,887,243 C1 issued on October 13, 2009.

Applicants' issued patent have been asserted in several proceedings. U.S. Patents 4,965,825, 5,109,414 and 5,335,277 were asserted in the U.S. District Court, Eastern District of Virginia in *Personalized Mass Media Corp. v. The Weather Channel, Inc. et al.*, Doc. No. 2:95cv242 ("Virginia Action"). The case was settled prior to any substantive decision by the Court although one procedural decision was published at 899 F.Supp. 239 (E.D. Va. 1995). The procedural decision can be found in the Related Proceedings Appendices filed in each of the appeals to the Board listed above, for example, with the Appeal Brief filed February 22, 2007, in Reexamination Control No. 90/006,838.

U.S. Patent 5,335,277 was involved in the matter of *Certain Digital Satellite System (DDS) Receivers and Components Thereof* before the United States International Trade Commission ("Commission"), Investigation No. 337-TA-392 ("ITC Investigation"). The Administrative Law Judge ("ALJ") issued an "Initial Determination Granting Motion for Summary Determination of Invalidity of Claim 35 of the '277 Patent" on May 16, 1997. This determination was appealed to the Federal Circuit, which affirmed the Commission decision in a decision decided January 7, 1999. The ALJ issued "Initial and Recommended Determinations" on October 31, 1997, The Commission adopted certain of the ALJ's findings and took no position on certain other issues in a "Notice of Final Commission Determination Of No Violation Of Section 337 Of The Tariff Act Of 1930," dated December 4, 1997. The determination was appealed to the Federal Circuit, which affirmed-in-part, reversed-in-part, vacated-in-part, and remanded in a decision decided November 24, 1998, and published at 161 F.3d 696, 48 U.S.P.Q.2d 1180. On remand, the complainant moved to terminate the investigation. The Commission issued a "Notice of Commission Decision To Terminate The Investigation And To Vacate Portions Of The Initial Determination" on May 13, 1999.). The ITC and Federal Circuit decisions can be found in the Related Proceedings Appendices filed in each of the appeals to the Board listed above, for example, with the Appeal Brief filed February 22, 2007, in Reexamination Control No. 90/006,838.

U.S. Patents 4,965,825, 5,109,414 and 5,335,277 were asserted in the U.S. District Court, Northern District of California in *Personalized Media Communications, LLC v. Thomson Consumer Electronics et al.*, Doc No. C-96 20957 SW (EAI). The case was stayed during the Commission proceeding and was thereafter voluntarily dismissed by the plaintiffs. The Court issued no substantive decisions.

U.S. Patents 4,694,490, 4,965,825, 5,109,414, 5233,654, 5335,277 and 5,887,243 are asserted in the U.S. District Court, District of Delaware in *Pegasus Development Corp. v. DIRECTV Inc.*, Doc. No. CA 00-1020 ("Delaware Action"). Special Master Robert L. Harmon issued a "Report And Recommendation Of Special Master Regarding Claim Construction." On March 29, 2003, Special Master Harmon issued a letter clarifying his report. The Court has taken no further action in this case as it has been stayed pending resolution of the reexamination proceedings. The Harmon Report can be found in the Related Proceedings Appendices filed in each of the appeals to the Board listed above, for example, with the Appeal Brief filed February 22, 2007, in Reexamination Control No. 90/006,838. Materials that are not prior art, but reflect the parties arguments related to the patents, can be found in the Information Disclosure Statement filed in the reexamination proceedings on October 28, 2005.

Each of the patents issued prior to June 8, 2010 were asserted in the U.S. District Court, Northern District of Georgia in the case styled *Personalized Media Communications, LLC v. Scientific-Atlanta, Inc. et al.*, Doc. No. 1:02-CV-824 (CAP) ("Atlanta Action"). The Court issued an order construing the claims at issue that adopts with minor modifications the Special Master's Report and Recommendation construing the claim terms disputed in that litigation. The court has dismissed this case. The defendants have appealed the dismissal. A third-party has appealed a licensing issued unrelated to patentability or infringement The Markman Decisions can be found in the Related Proceedings Appendices filed in each of the appeals to the Board listed above, for example, with the Appeal Brief filed February 22, 2007, in Reexamination Control No. 90/006,838. Materials that are not prior art, but reflect the parties arguments related to the patents, can be found in the Information Disclosure Statement filed in the reexamination proceedings on October 28, 2005.

U.S. Patents 4,694,490, 4,965,825, 5,109,414, 5233,654, 5335,277 and 5,887,243 are also asserted in the U.S. District Court, Eastern District of Texas, in *Personalized Media Communications, L.L.C. v. Motorola, Inc. et al.*, Doc. No. 2:08-CV-00070 ("Texas Action"). The Court has not yet issued any substantive ruling is this litigation.

Prior art cited in the above proceeding prior to the suspension of this application have previously been included in previously filed Information Disclosure Statements. This Information Disclosure Statement includes the materials cited in the copending applications and reexamination proceedings after the suspension of this application. In addition, materials recently cited in the Texas Action are including in this Information Disclosure Statement.

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. The U.S. materials listed from pages 1-21 (ending with RE 34,034), the foreign materials listed from pages 22-29 (ending with JP 61-267474) and the other documents listed from pages 25-62 (ending with the memo to Bernie Kotten)are cited in applicants' related patents, either during the original prosecution or during the reexamination proceedings. The U.S. materials listed on page 21 (starting with U.S. Patent No. 3,982,062), the foreign materials listed on pages 24-25 (starting with JP 50-091215) and the other documents listed on pages 62-70 (starting with "A Proposal to Construct a Broadband Cable Communications System for Saint Paul) have been recently cited in the Texas Action. It is respectfully requested that the information 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. This Information Disclosure Statement is filed before the mailing date of a Final Office Action or Notice of Allowance.

In accordance with 37 CFR 1.98(a)(2)(ii), Applicant has not submitted copies of U.S. patents and U.S. patent applications. Applicant submits herewith copies of foreign patents and non-patent literature in accordance with 37 CFR 1.98(a)(2). A concise explanation of relevance of the items listed on form PTO/SB/08 is given for foreign language references based the assertions made in prior prosecution and litigation. Applicant has not fully reviewed all the statements made by

third parties when asserting art against related patents and, thus, provides these summaries for the convenience of the Examiner's searches. Applicant will fully address the content of any reference should it be applied in a rejection.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

Please charge our Credit Card in the amount of $180.00 covering the fee set forth in 37 CFR 1.17(p). The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-4494, under Order No. PMC-003C247.

Dated: September 26, 2011

Respectfully submitted,

By /Thomas J. Scott, Jr./
Thomas J. Scott, Jr.
Registration No.: 27,836
GOODWIN PROCTER LLP
901 New York Avenue, NW
Washington, DC 20001
(202) 346-4000
Attorney for Applicant

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: John C. Harvey *et al.*	
Application No.: 08/449,413	Confirmation No.: 1756
Filed: May 24, 1995	Art Unit: 2467
For: SIGNAL PROCESSING APPARATUS AND METHODS	Examiner: Moore Jr., Michael J.

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

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

Dear Sir:

In response to the non-final Office Action mailed July 6, 2011, ("Non-Final Office Action" or "the Action") from the Patent and Trademark Office ("the Office") allowing claims 23, 25-30, and 43-53; rejecting claims 22, 24, 31-36, 38-42, 54 and 55; and objecting to claim 37, please amend the above-identified U.S. patent application as follows:

Amendment to the Claims are reflected in the listing of the claims that begins on page 2 of this paper.

Remarks begin on page 11.

AMENDMENT TO THE CLAIMS

1 - 21. (Cancelled)

22. (Previously Presented) A method for controlling the decryption of encrypted programming at a subscriber station, said method comprising the steps of:

receiving encrypted programming, said encrypted programming having an encrypted control signal;

detecting said control signal;

passing said control signal to a decryptor at said subscriber station;

decrypting said control signal;

decrypting said encrypted programming to form decrypted programming based on said control signal; and

presenting said decrypted programming to a viewer or listener.

23. (Previously Presented) A method for controlling the decryption of programming at a subscriber station, said method comprising the steps of:

receiving programming, said programming having a first encrypted digital control signal portion and an encrypted digital information portion;

detecting said first encrypted digital control signal portion of said programming;

passing said first encrypted digital control signal portion of said programming to a first decryptor at said subscriber station;

decrypting said first encrypted digital control signal portion of said programming using said first decryptor at said subscriber station;

passing said encrypted digital information portion of said programming and the decrypted control signal portion to a second decryptor at said subscriber station;

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decrypting said encrypted digital information portion of said programming using said second decryptor at said subscriber station based on the decrypted control signal portion; and

presenting said programming.

24. (Previously Presented) A method of controlling a remote transmitter station to communicate program material to a subscriber station and controlling said subscriber station to process or output a unit of programming, said method comprising the steps of:

receiving a control signal which operates at the remote transmitter station to control the communication of a unit of programming and one or more first instruct signals and communicating said control signal to said remote transmitter station;

receiving a code or datum identifying a unit of programming to be transmitted by the remote transmitter station, said remote transmitter station transferring said unit of programming to a transmitter;

receiving at said remote transmitter station one or more second instruct signals which operate at the subscriber station to identify or decrypt said unit of programming or said one or more first instruct signals, said remote transmitter station transferring said one or more second instruct signals to said transmitter; and

transmitting from said remote transmitter station an information transmission comprising said unit of programming, said one or more first instruct signals, and said one or more second instruct signals, said one or more first instruct signals being transmitted in accordance with said control signal.

25. (Previously Presented) The method of claim 23, wherein said programming further includes encrypted video.

26. (Previously Presented) The method of claim 23, wherein said subscriber station stores information that evidences processing said programming.

27. (Previously Presented) The method of claim 23, wherein said programming is received at said subscriber station in one channel of a multichannel signal and a second control

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signal portion used to decrypt said programming is included in said multichannel signal outside said one channel.

28. (Previously Presented) The method of claim 23, wherein said subscriber station detects, in a transmission channel including said programming, a second control signal portion used to decrypt the first control signal portion.

29. (Previously Presented) The method of claim 23, wherein the subscriber station detects, in a transmission channel for transmitting the programming, a second control signal portion used to decrypt the first control signal portion, and wherein the second control signal portion is encrypted, and wherein the second control signal portion is decrypted in order to enable decryption of the first control signal portion.

30. (Previously Presented) The method of claim 23, wherein said programming includes computer data.

31. (**Currently Amended**) A method of controlling at least one of a plurality of receiver stations, said method comprising the steps of:

receiving downloadable code which is effective at said at least one of said plurality of receiver stations to implement a new technique of decrypting and delivering the downloadable code to at least one transmitter;

receiving ~~said~~ at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code; and

causing said at least one control signal to be communicated to said at least one transmitter at a specific time,

thereby to transmit at least one information transmission including the downloadable code and said at least one control signal.

32. (Previously Presented) The method of claim 31, wherein a television program is displayed at a receiver station and said downloadable code and said at least one control signal

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program said receiver station to decrypt said television program in accordance with said new technique.

33. (Previously Presented) A method of communicating television program material to one or more receiver stations, said method comprising the steps of:

receiving a television program at a transmitter station and delivering said television program to a transmitter;

receiving and storing one or more instruct signals at said transmitter station, said one or more instruct signals at said one or more receiver stations operative to implement a new technique of decrypting;

transferring said one or more instruct signals to said transmitter; and

transmitting said television program and said one or more instruct signals from said transmitter station to said one or more receiver stations.

34. (**Currently Amended**) A method of processing signals at a receiver station comprising the steps of:

receiving at least one information transmission;

detecting a plurality of signals ~~on~~ in said at least one information transmission;

changing a decryption technique in response to at least a first of said plurality of signals;

decrypting a second of said plurality of signals on the basis of said changed decryption technique;

passing said decrypted second of said plurality of signals to a controllable device; and

controlling said controllable device on the basis of said passed decrypted second of said plurality of signals.

35. (Previously Presented) The method of claim 33, wherein said step of transferring is performed based on comparison.

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36. (Previously Presented) The method of claim 33, wherein said step of transferring is performed in accordance with a schedule.

37. (Previously Presented) The method of claim 36, wherein said schedule specifies a transmission time and a transmission channel, said method further comprising the steps of receiving and storing said schedule at said transmitter station.

38. (Previously Presented) The method of claim 33, wherein said one or more instruct signals operate at said one or more receiver stations based on an identifier, said method further comprising the step of transmitting said identifier.

39. (Previously Presented) The method of claim 38, wherein an information transmission including said television program is received at said one or more receiver stations, wherein said television program is outputted at said one or more receiver stations, and wherein said identifier identifies at least one of (i) said television program and (ii) a channel including said television program.

40. (**Currently Amended**) A method of processing signals at a receiver station comprising the steps of:

receiving at least one information transmission;

locating ~~detecting a plurality of signals in said at least one information transmission,~~ a ~~first~~ signal ~~of said plurality of signals~~ including ~~downloadable~~ code;

passing said ~~downloadable~~ code to a processor;

controlling a decryptor to decrypt in a specific fashion on the basis of said ~~downloadable~~ code;

decrypting a portion of said at least one information transmission ~~at least one second signal of said plurality of signals~~ in said specific fashion; and

passing said decrypted portion of said at least one information transmission ~~at least one second signal~~ to one of said processor and an output device.

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41. (Previously Presented) A method of controlling a receiver station to detect digital data and control a decryptor based on a varying pattern of timing or location, said method of controlling comprising the steps of:

receiving programming and delivering said programming to a transmitter;

receiving digital data comprising at least an instruct signal and communicating said digital data to a signal embedder, said instruct signal operative at said receiver station to control said decryptor;

controlling said signal embedder to embed said digital data in an information transmission in a varying pattern of timing or location;

communicating said information transmission to said transmitter; and

transmitting said programming and said information transmission including said digital data.

42. (Previously Presented) A method of processing signals at a receiver station comprising the steps of:

receiving at least one information transmission;

detecting a plurality of signals on said at least one information transmission;

decrypting at least one of said plurality of signals, said at least one decrypted signal including at least one instruct signal which is effective to instruct;

passing the at least one decrypted instruct signal to a controllable device; and

controlling said controllable device on the basis of decrypted information included in said at least one decrypted instruct signal.

43. (Previously Presented) A method for decryptor activation in a network comprising:

receiving a transmission comprising encrypted materials;

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decrypting under first processor control a first portion of said encrypted materials in said transmission;

inputting said first portion of said encrypted materials to a decryptor;

decrypting under second processor control a second portion of said encrypted materials based on said step of decrypting said first portion of said encrypted materials.

44. (Previously Presented) The method of claim 43 wherein said transmission in said step of receiving a transmission is a multichannel signal separated in the frequency domain.

45. (Previously Presented) The method of claim 44 wherein said transmission is a cable system broadcast.

46. (Previously Presented) The method of claim 43 wherein said transmission in said step of receiving a transmission is a multichannel signal separated in the time domain.

47. (Previously Presented) The method of claim 43 wherein said transmission in said step of receiving a transmission is generated at a local data source.

48. (Previously Presented) The method of claim 47 wherein said local data source comprises a VCR.

49. (Previously Presented) The method of claim 47 wherein said local data source comprises a laser disk.

50. (Previously Presented) The method of claim 43 wherein said encrypted materials comprise a portion of a television program.

51. (Previously Presented) The method of claim 43, wherein said transmission in said step of receiving a transmission and a signal necessary for decryption are received from different sources.

52. (Previously Presented) The method of claim 51, further comprising the step of contacting a remote transmitter station to receive one of said transmission and said signal necessary for decryption.

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53. (Previously Presented) The method of claim 51, wherein a signal necessary for decryption is communicated by telephone.

54. (Previously Presented) A method of providing an enabling signal to a receiver station from a remote data source, said enabling signal for use in decrypting at the receiver station a programming signal, said receiver station being programmed to get information necessary for enabling a programming signal, said method comprising the steps of:

storing at the remote data source one or more control signals for enabling a decryptor to decrypt a video;

receiving at the remote data source from the receiver station a communication to get specific enabling information;

communicating, from the remote data source to the receiver station in response to said communication from the receiver station, a control signal,

whereby the receiver station inputs said control signal to a decryptor, and wherein said decryptor decrypts said programming signal.

55. (Previously Presented) A method of processing signals at a receiver station comprising the steps of:

receiving one or more information transmissions at said receiver station;

detecting a plurality of signals on said one or more information transmissions, at least a first of one of said plurality of signals including a control signal;

controlling a decryptor in response to said control signal;

decrypting or enabling communication of at least a second of said plurality of signals on the basis of said step of controlling said decryptor;

passing said decrypted or enabled at least said second of said plurality of signals to a controllable device; and

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controlling said controllable device on the basis of said passed decrypted or enabled at least said second of said plurality of signals.

56. (**New**) A method of processing signals at a receiver station comprising the steps of:

receiving at least one information transmission;

identifying a plurality of signals in said at least one information transmission;

selecting a first signal of said plurality of signals including downloadable code;

passing said downloadable code to a processor;

controlling a decryptor to decrypt in a specific fashion on the basis of said downloadable code;

decrypting at least one second signal of said plurality of signals in said specific fashion; and

passing said at least one second signal to one of said processor and an output device.

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REMARKS

I. Status of claims

Applicants add new claim 56. Claims 22-56 are pending in this application. The Office identified claims 23, 25-30, and 43-53 as allowable over the prior art. The Office rejected claims 22, 24, 31-36, 38-42, 54 and 55 and objected to claim 37. Applicants respectfully request reconsideration of the rejected claims and objected to claim in view of the following remarks.

Applicants amend claims 31, 34, and 40. The amendments are made in response to the Non-Final Office Action. Applicants submit that this Amendment and Request for Reconsideration Under 37 C.F.R. §1.111 places this application in condition for allowance by amending the claims in manners that are believed to render all pending claims allowable over the cited art. Applicants earnestly solicit a favorable reconsideration and prompt allowance of the claims.

II. Claim Objection

The Non-Final Office Action objected to claim 34 for incorrectly using "on" in line 4 of the claim. Applicants amend the claim, in accordance with the Examiner's suggestion, such that "on" is replaced with "in." The claim is corrected and suitable for allowance.

III. Double Patenting

A nonstatutory obviousness double patenting rejection requires that the rejected claim would have been obvious over the cited claim in the commonly owned issued patent. MPEP § 804 B.2.

A. Claims 22, 34, 54, and 55

Claims 22, 34, 54, and 55 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as allegedly being unpatentable over claims 1, 22, and 23 of U.S. Patent No. 7,801,304. This is the patent that issued from Applicants' DECR 81 group "A"

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application, U.S. Patent Application Serial No. 08/449,263. If the Office maintains the rejection, Applicants acknowledge that a timely filed terminal disclaimer in compliance with 37 C.F.R. 1.321(c) or 1.321(d) may be necessary to overcome the nonstatutory double patenting rejection. However, Applicants request that the requirement for filing the terminal disclaimer be held in abeyance, pending an indication of allowable subject matter from the Office in the present application. If filed, the terminal disclaimer will disclaim, in essential terms, the terminal part of the statutory term of any patent granted on the above-referenced application, extending beyond the earliest expiration date of the DECR 81 group "A" patent, U.S. Patent No. 7,801,304.

B. Claim 22

Claim 22 is rejected on the ground of nonstatutory obviousness-type double patenting as allegedly being unpatentable over claim 26 of U.S. Patent No. 7,805,749. This is the patent that issued from the VIEW 81 group "A" application, U.S. Patent Application Serial No. 08/485,283. Applicants respectfully traverse the rejection for the following reasons.

Claim 22 claims "a method for controlling the decryption of encrypted programming at a subscriber station." It discloses "receiving encrypted programming, said encrypted programming having an encrypted control signal; detecting said control signal; passing said control signal to a decryptor at said subscriber station; decrypting said control signal; decrypting said encrypted programming to form decrypted programming based on said control signal; and presenting said decrypted programming to a viewer or listener."

Claim 26 of the VIEW 81 group "A" patent claims "a method for promoting and delivering at least one of a product and a service for use with an interactive television viewing apparatus." It discloses, in part: "receiving a television program in a first programming signal...; receiving said user input at said input device...; processing said user input; passing an encryption code received in said first programming signal to a processor in response to said step of

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processing said user input; receiving encrypted information of said at least one of a product and a service in a second programming signal; decrypting said encrypted information with said encryption code; and delivering said at least one of a product and a service to said user."

Claim 22 of the instant application covers receiving encrypted programming with an encrypted control signal. The control signal is decrypted and then used to decrypt the programming. These limitations are not contemplated by claim 26 of the VIEW 81 group "A" patent.

Claim 26 only covers receiving a television program and an encryption code in a first programming signal. It is not claimed that the television program or encryption code is encrypted. Moreover, encrypted information is received only in a second programming signal, by itself. The encryption code is used to decrypt the encrypted information, but the encryption code does not have to be decrypted first. These limitations do not teach or suggest the limitations of the instant application's claim 22. A completely different, non-obvious invention is contemplated by claim 22.

For at least these reasons, it is submitted that 22 is not rendered unpatentable on the ground of nonstatutory obviousness-type double patenting over claim 26 of the VIEW 81 group "A" patent. Applicants therefore respectfully request that the Examiner reconsider and withdraw this rejection.

C. Claim 24

Claim 24 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 14 of U.S. Patent No. 7,801,304, the DECR 81 group "A" patent, in view of Yanagimachi et al. (U.S. Patent No. 3,936,595) ("Yanagimachi"). Applicants respectfully traverse the rejection for the following reasons.

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Claim 24 of the instant application covers controlling the communication of a unit of programming. It discloses "receiving at said remote transmitter station one or more second instruct signals which operate at the subscriber station to identify or decrypt said unit of programming or said one or more first instruct signals" These limitations are not contemplated by claim 14 of the DECR 81 group "A" patent.

The Non-Final Office Action points to "receiving at said remote transmitter station said one or more digital second instruct signals which operate at the subscriber station to decrypt said digital programming" in claim 14 of the DECR 81 group "A" patent as teaching the aforementioned limitations of claim 24. But, claim 14 fails to address second instructs signals which operate at the subscriber station to decrypt as well as identify the unit of programming. Claim 14 is also silent as to identifying or decrypting first instruct signals. Claim 14 fails to teach or suggest the aforementioned limitations of the instant application's claim 24.

Claim 24 further claims "receiving a code or datum identifying a unit of programming to be transmitted by the remote transmitter station..." This limitations is not contemplated by Yanagimachi.

Yanagimachi is directed to "a programmed information transmission system wherein a number of different program materials and control signals for controlling the progress and combinations of the transmitted program materials are simultaneously transmitted and in which programmed information is constructed from a series of the transmitted program materials at a receiver end on the basis of the transmitted control signals." Col. 1, ll. 8-16. An allocation control device produces control codes that are added to video and audio signals at the transmitter station. Col. 14, l. 62 – Col. 15, l. 28. But the control codes are not used to identify a unit of programming to be transmitted, rather the control codes are used at a receiver station "to control

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a manner of sequentially connecting program materials to construct at least one significant program..." Col. 7, ll. 24-26; *See* Col. 16, ll. 22-43. Yanagimachi fails to teach this limitation of claim 24.

For at least these reasons, it is submitted that 24 is not rendered unpatentable on the ground of nonstatutory obviousness-type double patenting over claim 14 of the DECR 81 group "A" patent in view of Yanagimachi. A completely different, non-obvious invention is contemplated by claim 24. Applicants therefore respectfully request that the Examiner reconsider and withdraw this rejection.

IV. The Claims Particularly Point Out and Distinctly Claim the Subject Matter Which Applicants Regard as the Invention, Pursuant to 35 U.S.C. §112, Second Paragraph

The Non-Final Office Action rejected claims 31and 32 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. The Examiner identified the limitation "said at least one control signal" on line 6 of claim 31 as having an insufficient antecedent basis. The Action rejected claim 31 for containing the insufficiency and claim 32 for containing the same insufficiency as depending on claim 31. Applicants amend claim 31 so that it now recites "at least one control signal." No new matter has been added. With this correction, Applicants believe the application is allowable. All the claims now particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

V. The Prior Art Does not Anticipate Claims 22, 24, 31, 40-42, and 54-56

The Office action rejected claims 22, 40-42, and 55 under 35 U.S.C. 102(e) as allegedly being anticipated by Davidson (Re. 31,735); claim 24 under 35 U.S.C. 102(b) as allegedly being anticipated by Yanagimachi; and claims 31 and 54 under 35 U.S.C. 102(e) as allegedly being

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anticipated by Ostermann et al. (U.S. Patent No. 4,484,025) ("Ostermann"). Applicants respectfully traverse the rejections for the following reasons.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Applicants respectfully submit that cited art does not teach all the limitations of claims 22, 24, 31, 40-42, 54-56.

A. Description of Prior Art

1. Davidson

Davidson is directed to a "method and system for encoding and decoding of standard television signals..." Col. 3, ll. 26-28. "[V]ideo scrambling is effected by inversion of the video signals of some horizontal scan lines on a pseudo-random bias to produce a picture having some video signals inverted and others not inverted which is unpleasant to view and virtually unintelligible." Col. 3, ll. 29-34. Davidson discloses converting analog audio signals to coded digital audio signals. Col. 3, ll. 34-36. "A plurality of unique pulse-coded control signals consisting of 32- bit binary pulse trains are transmitted separately to... provide the information needed to unscramble the scrambled audio and video signals." Col. 3, ll. 36-41.

Claim 65 claims a receiver in a subscription television system having means for conveying television signals include a video portion, an aural portion, and an "encryption codes signal" comprising a sequence of "encryption codes." Col. 24, ll. 30-35. The aural portion is a digitized audio signal "encrypted" in accordance with the "encryption codes signal." Col. 24, ll. 35-39. The receiver has means to detect and separate the "encryption codes" signal from the

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television signals; to separate the digitized and "encrypted" audio signal from television signals; to return the detected audio signal to the "pre-encryption" digitized condition; and to return the audio signal to the original analog format. Col. 24, ll. 40-50. However, there is no mention of "encryption" anywhere in the description of the patent. Only scrambling and unscrambling is disclosed.

Claim 72 claims a "television transmitter for generating television signals having a program video portion and program aural portion..." Col. 25, ll. 46-48. The transmitter has means to generate a continuous sequence of "encryption codes"; to convey the program video and program aural portions and the "encryption codes signal" from the transmitter to authorized subscribers; to sample and digitize the program audio signal; to digitally "encrypt" each digitized program audio sample in response to the "encryption codes signal"; and to combine the "encryption codes" signal, the digitized and "encrypted" audio program signal, and a video program signal, with the carrier signals. Col. 25, l. 52 – col. 26, l. 9. As mentioned above, there is no mention of "encryption" anywhere in the description of the patent. Only scrambling and unscrambling is disclosed.

2. Yanagimachi

Yanagimachi is directed to "a programmed information transmission system wherein a number of different program materials and control signals for controlling the progress and combinations of the transmitted program materials are simultaneously transmitted and in which programmed information is constructed from a series of the transmitted program materials at a receiver end on the basis of the transmitted control signals." Col. 1, ll. 8-16.

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A transmitter station receives video and audio signals from a video and audio signal generating device. Col. 14, l. 51 – Col. 15, l. 5. An allocation control device at the transmitter station produces control codes for effecting the channel allocation and transmission of the video and audio signals. Col. 14, l. 62 – Col. 15, l. 2. The audio and video signals are processed and the time division multiplexed. Col. 15, ll. 6-10. Program material control codes and video identification numbers supplied by the allocation control device are added to the video signals. Col. 15, ll. 11-16. Audio start and end signals are added to the audio signals. Col. 15, ll. 16-18. An item control code is inserted in the code frames of a transmission signal that is then combined with the video and audio signals. Col. 15, ll. 19-28. The combined information transmission signal is stored in memory and then transmitted to a receiver station. Col. 15, ll. 28-32.

The receiver station receives the information transmission containing video signals, audio signals, and a control code. Col. 16, ll. 23-25. A user makes a selection at an input terminal that is compared to the control code. Col. 16, ll. 25-30. The video and audio signals are separately processed based on the comparison. Col. 16, ll. 30-36; Col. 16, ll. 37-43. The desired video signal is fed to a frame video buffer memory and stored therein before being read out to a video output terminal. Col. 16, ll. 31-36. The desired audio signal is converted into an analog audio signal and supplied to an audio output terminal. Col. 16, ll. 37-43.

3. Ostermann

Ostermann is directed to a "system for enciphering and deciphering data for transmission between a transmitter and a receiver, where the terms encipher and decipher are synonymous with encrypt and decrypt respectively." Col. 1, ll. 7-10. Ostermann discloses a receiver station transmitting a cipher algorithm "from the cipher program storage 18 over a data transmission

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channel 20 to the program memory 22 of the programmable cipher computer 12" at the transmitter station. Col. 2, ll. 38-41. "The cipher algorithm transmitted from the cipher program storage 18 of cipher equipment 16 via channel 20 is stored in program memory 22 and used to encipher the clear input data provided by input device 24 to transmitter 10."

Ostermann also discloses another embodiment of the invention where "the programmable cipher computer 12 is provided with long term memory 28 for storage of a plurality of different cipher programs which can be called up for storage in the program memory 22 as required." Col. 2, ll 59-62. The cipher equipment 12 at the transmitter station receives a bit sequence from cipher computer 16 at the receiver station that enables the cipher program to be transferred from long-term memory 28 to program memory 22. Col. 3, ll. 10-19.

B. Claims 22, 40-42, 55, and 56 are not anticipated by Davidson

Claims 22, 40-42, and 55 claim material relating to the encryption and decryption of signals. As mentioned in Applicants' Supplemental Amendment filed April 5, 2011, the Board of Patent Appeals and Interferences decided in Ex parte Personalized Media Communications, LLC (Appeal 2008-4228, Ex parte Reexamination Control 90/006,536) at pages 53-54, that encryption requires a digital signal. Here, each of the claims involves the use of digital signals either through reference to "digital" signals or through reference to "decryption" and "encryption."

The Board also said that "Encryption and decryption are not broad enough to read on scrambling and unscrambling." Although Davidson's claims 65 and 72 claim means for "encrypting" and "decrypting" a digitized audio signal, the patent's description merely describes scrambling and unscrambling analog video signals and digitizing analog audio signals. The

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scope of the limitations set forth in Davidson is limited to scrambling and unscrambling. Therefore, claims 22, 40-42, and 55 of the instant application do not read on claims 65 and 72 of the instant application.

Regardless, claims 22, 40-42, and 55 are not anticipated by Davidson for at least the following reasons:

1. Claim 22

Claim 22, recites in part:

> receiving encrypted programming, said encrypted programming having an encrypted control signal;
>
> detecting said control signal;
>
> passing said control signal to a decryptor at said subscriber station;
>
> decrypting said control signal;

These limitations are not taught by Davidson.

The Non-Final Office Action points to Davidson's claim 65, column 24, lines 30-50, to show that the invention discloses all the limitations of claim 22. But, claim 22 claims receiving encrypted programming having an encrypted control signal. Davidson only teaches conveying a composite television signal including a video portion, an aural portion, and an encryption codes signal. The encryption codes signal is not encrypted itself. Moreover, claim 65's means to detect and separate the encryption codes signal from the television signals does not teach the detecting of the encrypted control signal, passing it to a decryptor, and the decrypting of the control signal. Davidson fails to teach all the limitations of claim 22.

2. Claim 40

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Claim 40, as amended, recites in part "locating a signal including code." This limitation is not taught by Davidson.

Claim 40 has been amended so that it now recites "locating" instead of "detecting." The Non-Final Office Action points to Davidson's claim 65, column 24, lines 40-43, to show "detecting." Claim 65 discloses an encryption codes signal detector means for detecting and separating the encryption codes signal and an aural detector means for detecting and separating the aural portion. But Davidson fails to teach "locating."

Davidson's receiver receives sets of signals at receiving antenna 36. Col. 8, ll. 57-68. The sets of signals are then split by RF splitter 114 so that the video, aural, and control signals can be separately processed. Col. 9, ll. 1-11. The receiver does not perform any "locating" of the signals in the transmission. The RF splitter is able to split the signals because the received transmission is composed of the uniform set of signals. Therefore, Davidson fails to teach this limitation of claim 40.

3. Claim 41

Claim 41, recites in part:

> receiving programming and delivering said programming to a transmitter;
>
> receiving digital data comprising at least an instruct signal and communicating said digital data to a signal embedder, said instruct signal operative at said receiver station to control said decryptor;
>
> controlling said signal embedder to embed said digital data in an information transmission in a varying pattern of timing or location;

These limitations are not taught by Davidson.

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The Non-Final Office Action points to Davidson's claim 72, column 25, line 45 – column 26, line 9, to show that the invention discloses all the limitations of claim 41. Davidson's claim only sets forth means for generating television signals and encryption codes. The audio signal is then digitized at the transmitter station. Davidson's claim is silent regarding delivering programming and communicating information to a transmitter. Moreover, claim 72 fails to teach embedding digital data in an information transmission in a varying pattern of timing or location. It only claims means for "combining the encryption codes signal, the digitized and encrypted audio program signal, a video program signal, with the carrier signals whereby... [they each] can be individually separated at a receiver." Col. 26, ll. 4-9. Claim 72 is silent as to how digital data is embedded in an information transmission. Davidson fails to teach all the limitations of claim 41.

4. Claim 42

Claim 42, recites in part:

> decrypting at least one of said plurality of signals, said at least one decrypted signal including at least one instruct signal which is effective to instruct;
>
> passing the at least one decrypted instruct signal to a controllable device; and
>
> controlling said controllable device on the basis of decrypted information included in said at least one decrypted instruct signal.

These limitations are not taught by Davidson.

The Non-Final Office Action points to Davidson's claim 65, column 24, lines 30-50, to show that the invention discloses all the limitations of claim 42. Claim 65 teaches means for decrypting a digitized audio signal but fails to teach decrypting a signal that includes at least one

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instruct signal which is effective to instruct. Moreover, claim 65 is silent as to passing a decrypted instruct signal to a controllable device and controlling the controllable device on the basis of the of information included in the decrypted instruct signal. Davidson fails to teach all the limitations of claim 42.

5. Claim 55

Claim 55 recites, in part: "controlling said controllable device on the basis of said passed decrypted or enabled at least said second of said plurality of signals." This limitation is not by Davidson.

The Non-Final Office Action points to Davidson's claim 65, column 24, lines 30-50, to show that the invention discloses all the limitations of claim 55. Claim 65 teaches means for the decryption and analog conversion of an encrypted digital audio signal, but fails to teach controlling a controllable device on the basis of that decrypted analog audio signal. The "analog conversion means connected to the inverse encryption means to return the audio signal to the original analog format whereby program audio may be processed and presented in a conventional manner." Col. 24, ll. 47-50. In Davidson, the program audio is an element to be processed, it is not operable in the controlling of a controllable device. Davidson fails to teach all the limitations of claim 55.

6. Claim 56

New claim 56 is modeled on claim 40 in its pre-amended form. As such, Applicants offer analysis as to why it is not anticipated by Davidson.

Claim 56 recites, in part:

> receiving at least one information transmission;
>
> identifying a plurality of signals in said at least one information transmission;
>
> selecting a first signal of said plurality of signals including downloadable code;

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These limitations are not taught by Davidson.

Davidson's receiver receives sets of signals at receiving antenna 36. Col. 8, ll. 57-68. The sets of signals are then split by RF splitter 114 so that the video, aural, and control signals can be separately processed. Col. 9, ll. 1-11. The receiver does not perform any "selecting" of a first signal in a transmission that includes downloadable code. Davidson's receiver continuously splits the received sets of signals and processes each according to its type. No "selecting" occurs because all signals are received and then processed. Davidson fails to teach "selecting" as set forth in claim 56.

C. Claim 24 is not Anticipated by Yanagimachi

Claim 24, as amended, recites, in part:

> receiving at said remote transmitter station one or more second instruct signals which operate at the subscriber station to identify or decrypt said unit of programming or said one or more first instruct signals, said remote transmitter station transferring said one or more second instruct signals to said transmitter; and

These limitations are not taught by Yanagimachi.

The Non-Final Office Action points to the allocation control device, as described in column 15, lines 11-32, as teaching this limitation. The cited section discloses the allocation control device adding program material control codes and video identification numbers to the video signals, and audio start and end signals to the audio signals, but the cited section is silent as to instruct signals which operate to decrypt a unit of programming at a subscriber station. In fact, Yanagimachi fails to address encryption or decryption. Therefore, Yanagimachi fails to describe each and every limitation as set forth in claim 24.

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D. Claims 31 and 54 are not Anticipated by Ostermann

1. Claim 31

Claim 31, as amended, recites, in part:

> receiving at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code; and
>
> causing said at least one control signal to be communicated to said at least one transmitter at a specific time,
>
> thereby to transmit at least one information transmission including the downloadable code and said at least one control signal.

These limitations are not taught by Ostermann.

Ostermann discloses the cipher equipment 12 at the transmitter station receiving a bit sequence from the cipher computer 16 at the receiver station, but the bit sequence does not operate to execute the cipher algorithm at the receiver station. Moreover, Ostermann fails to teach the communication of the bit sequence, or any control signal, to a transmitter at the transmitter station at a specific time. When the transmitter station transmits, it only transmits the cipher algorithm. No control signal is transmitted with downloadable code. Ostermann fails to describe each and every limitation as set forth in claim 31.

2. Claim 54

Claim 31, recites, in part: "storing at the remote data source one or more control signals for enabling a decryptor to decrypt a video." Ostermann does not address the decryption of video.

The Non-Final Office Action points to cipher equipment 16 that contains cipher program storage 18 for storing a cipher algorithm, as described in column 2, lines 38-41, as teaching this

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limitation. However, Ostermann does not specifically address the decryption of video. It is directed to the transmission of a cipher program to allow encryption or encryption of "data." Therefore, Ostermann fails to describe this limitation as set forth in claim 54.

VI. Claims 32-36, 38, and 39 Are Not Obvious

The Office action rejected claims 32-36, 38, and 39 under 35 U.S.C. 103(a) as allegedly being unpatentable over the combination of Ostermann in view of Davidson. Applicants respectfully traverse the rejections and argue that Ostermann and Davidson, alone and in combination, fail to teach each of the claim's limitations.

The test that must be met for a reference or a combination of references to establish obviousness has not been satisfied in the instant matter. The MPEP states the proper test for obviousness includes making the following factual inquiries: (A) Determining the scope and contents of the prior art; (B) Ascertaining the differences between the prior art and the claims in issue; (C) Resolving the level of ordinary skill in the pertinent art; and (D) Evaluating evidence of secondary considerations. MPEP § 2141. The Office has erred substantively as to the factual findings. For the reasons stated below, Applicants respectfully request that the Examiner reconsider and withdraw the rejections.

A. Claim 32

Claim 32 claims the method of claim 31, "wherein a television program is displayed at a receiver station and said downloadable code and said at least one control signal program said receiver station to decrypt said television program in accordance with said new technique." Claim 32 is not is not rendered unpatentable by Ostermann for the same reasons as argued above in regard to claim 31.

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The Non-Final Office Action points to Davidson's claim 65 as teaching the application of encryption/decryption techniques to television signals. Assuming, *arguendo*, that Davidson teaches more than just scrambling/unscrambling, it does not cure Ostermann's deficiencies. The combination of Davidson and Ostermann fails to teach receiving a control signal which operates to execute downloadable code, causing the control signal to be communicated to a transmitter at a specific time to transmit an information transmission including the downloadable code and the control signal. Applicants respectfully submit that even if the teachings of Ostermann were modified with the teachings of Davidson as suggested in the Non-Final Office Action, the modified composition still fails to satisfy every element recited in claim 32.

B. Claim 33

Claim 33 recites, in part: "receiving a television program at a transmitter station and delivering said television program to a transmitter." This limitation is not taught by Ostermann or Davidson.

Ostermann teaches the transfer of a cipher algorithm from a receiver station to a transmitter station, where the cipher algorithm is used to implement decrypting at the receiver station. The Non-Final Office Action points to Davidson's claim 65, column 24, lines 30-50 to apply Ostermann's teachings to television signals. Claim 65 teaches conveying composite televisions signals, but the claim only discloses means for generating television signals and encryption codes. There is no teaching of receiving a television program at a transmitter station and delivering it to a transmitter. Even if someone of ordinary skill in the art were to apply the teachings of Ostermann and Davidson, the inventions fail to teach or suggest every limitation of claim 33.

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C. Claim 34

Claim 34 recites, in part:

> passing said decrypted second of said plurality of signals to a controllable device; and
>
> controlling said controllable device on the basis of said passed decrypted second of said plurality of signals."

These limitations are not taught by Ostermann or Davidson.

The Non-Final Office Action points to Davidson's claim 65, column 24, lines 30-50, to show that the invention discloses the passing and controlling limitations of claim 34. Claim 65 teaches means for the decryption and analog conversion of an encrypted digital audio signal, but fails to teach passing the decrypted analog audio signal to a controllable device and controlling the controllable device on the basis of that decrypted analog audio signal. The "analog conversion means connected to the inverse encryption means connected to the inverse encryption means to return the audio signal to the original analog format whereby program audio may be processed and presented in a conventional manner." Col. 24, ll. 47-50. In Davidson, the program audio is an element to be processed, it is not operable in the controlling of a controllable device. Davidson and Ostermann fail to teach all the limitations of claim 34.

D. Claim 35

Claim 35 depends from independent claim 33. Claim 35 claims the method of claim 33, "wherein said step of transferring is performed based on comparison." Claim 35 further limits claim 33 and is not rendered unpatentable by Ostermann and Davidson for the same reasons as argued above in regard to claim 33.

E. Claim 36

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Claim 36 depends from independent claim 33. Claim 36 claims the method of claim 33, "wherein said step of transferring in accordance with a schedule." Claim 36 further limits claim 33 and is not rendered unpatentable by Ostermann and Davidson for the same reasons as argued above in regard to claim 33.

Moreover, the Non-Final Office Action points to Ostermann as teaching "which cipher program is to be used at a particular time (schedule) as spoken of on column 3, lines 10-20." However, the cited section describes the transfer of a cipher program from long-term memory to program memory at the transmitter station upon the reception of a bit sequence from the receiver station. Col. 3, ll. 10-20. There is no teaching or suggestion in Ostermann of performing this step in accordance with a schedule. Ostermann and Davidson, alone and in combination, fail to teach each of the claim 36's limitations.

F. Claim 38

Claim 38 depends from independent claim 33. Claim 38 claims the method of claim 33, "wherein said one or more instruct signals operate at said one or more receiver stations based on an identifier, said method further comprising the step of transmitting said identifier." Claim 38 further limits claim 33 and is not rendered unpatentable by Ostermann and Davidson for the same reasons as argued above in regard to claim 33.

G. Claim 39

Claim 39 depends from independent claim 33. Claim 39 claims the method of claim 38, "wherein an information transmission including said television program is received at said one or more receiver stations, wherein said television program is outputted at said one or more receiver stations, and wherein said identifier identifies at least one of (i) said television program and (ii) a

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channel including said television program." Claim 39 further limits claim 33 and is not rendered unpatentable by Ostermann and Davidson for the same reasons as argued above in regard to claim 33.

Moreover, the Non-Final Office Action points to Ostermann, column 3, lines 49-61, as teaching "said identifier identifies at least one of (i) said television program and (ii) a channel including said television program. However, the cited section discloses a bit sequence "containing identification codes of both the transmitter 10 and the addressed receiver 14." Col. 3, ll. 59-61. It does not teach the identification of a television program, or anything transmitted to the receiver station. This limitation as set forth by claim 39 is not taught by Ostermann or Davidson.

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VII. Conclusion

Applicants respectfully submit that all claims are allowable over the cited art for the reasons set forth above. Applicants request reconsideration of this application in view of the amendment and arguments set forth above. In the event Applicants have overlooked the need for an extension of time, payment of fee, or additional payment of fee, Applicants hereby petition therefore and authorize that any charges be made to Deposit Account No. 50-4494.

Should the Examiner have any questions regarding any of the above, the Examiner is respectfully requested to telephone the undersigned at 202-346-4000.

Dated: October 6, 2011

Respectfully submitted,

By: /Thomas J. Scott, Jr./
Thomas J. Scott, Jr.
Registration No.: 27,836
GOODWIN PROCTER LLP
901 New York Avenue, NW
Washington, DC 20001
(202) 346-4000
Attorney for Applicants

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

EXAMINER	
MOORE JR, MICHAEL J	

ART UNIT	PAPER NUMBER
2467	

NOTIFICATION DATE	DELIVERY MODE
12/30/2011	ELECTRONIC

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

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

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

AAlpha-Kpetewama@goodwinprocter.com
patentdc@goodwinprocter.com
fmckeon@goodwinprocter.com

PTOL-90A (Rev. 04/07)

Office Action Summary	Application No.	Applicant(s)	
	08/449,413	HARVEY ET AL.	
	Examiner	Art Unit	
	MICHAEL J. MOORE, JR.	2467	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 October 2011*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

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

Disposition of Claims

5)☒ Claim(s) *22-56* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☒ Claim(s) *23,25-30 and 43-53* is/are allowed.

7)☒ Claim(s) *22,24,31-36,38-42 and 54-56* is/are rejected.

8)☒ Claim(s) *37* is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

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

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements (IDS) submitted on 11/10/11 and 9/26/11 were filed after the mailing date of the Non-Final Office Action on 7/6/11. The submissions are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner. It is noted that for each foreign patent document and NPL document listed on the respective PTO-1449 forms filed in the instant application without publication date information, that a "no date" annotation has been assigned by the Examiner as the date information for these documents was not readily attainable.

Claim Objections

The current amendment made by Applicant to claim **34** to obviate the claim objection presented in the previous Office Action is proper and has been entered. This objection has been withdrawn.

Double Patenting

2. The nonstatutory double patenting rejection 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 and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated

by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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).

3. Claims **22, 34, 54, and 55** are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims **1, 22, and 23** of *U.S. Patent No. 7,801,304*. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following correspondences.

Regarding claim **22**, "a method for controlling the decryption of encrypted programming at a subscriber station" corresponds to "a method for controlling the decryption of programming at a subscriber station" in claim **1** of the above U.S. Patent.

"Receiving encrypted programming, said encrypted programming having an encrypted control signal" corresponds to "receiving programming, said programming having a first encrypted digital control signal portion" in claim **1** of the above U.S. Patent.

"Detecting said control signal" corresponds to "detecting said first encrypted digital control signal portion of said programming" in claim **1** of the above U.S. Patent.

"Passing said control signal to a decryptor at said subscriber station" corresponds to "passing said first encrypted digital control signal portion of said programming to a decryptor at said subscriber station" in claim **1** of the above U.S. Patent.

"Decrypting said control signal" corresponds to "decrypting said first encrypted digital control signal portion" in claim **1** of the above U.S. Patent.

"Decrypting said encrypted programming to form decrypted programming based on said control signal" corresponds to "decrypting said encrypted digital information portion of said programming ... based on the decrypted control signal portion" in claim **1** of the above U.S. Patent.

Lastly, "presenting said decrypted programming to a viewer or listener" corresponds to "presenting said programming" in claim **1** of the above U.S. Patent.

Claim **22** of the instant application does not explicitly claim "passing said encrypted digital information portion of said programming to said decryptor". Therefore, claim **22** merely broadens the scope of claim **1** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Regarding claim **34**, "a method of processing signals at a receiver station" corresponds to the same in claim **23** of the above U.S. Patent.

"Receiving at least one information transmission" and "detecting a plurality of signals on said at least one information transmission" corresponds to "receiving a plurality of signals including digital programming and inputting at least some of said plurality of signals to said digital detector" as well as "detecting said encrypted digital data in said at least some of said plurality of signals" in claim **23** of the above U.S. Patent.

"Changing a decryption technique in response to at least a first of said plurality of signals" corresponds to "controlling said decryptor to alter its decryption pattern or technique on the basis of information included in said detected encrypted digital data" in claim **23** of the above U.S. Patent.

Lastly, "decrypting a second of said plurality of signals on the basis of said changed decryption technique; passing said decrypted second of said plurality of signals to a controllable device; and controlling said controllable device on the basis of said passed decrypted second of said plurality of signals" corresponds to "decrypting at least a portion of said digital programming using a selected decryption pattern or

technique based on said step of detecting in order to provide a decrypted output of programming to a viewer or listener" in claim **23** of the above U.S. Patent.

Claim **34** of the instant application does not explicitly claim "said receiver station having a receiver, a digital detector operatively connected to said receiver for detecting encrypted digital data, a decryptor operatively connected to said digital detector for decrypting said encrypted digital data, and a controller operatively connected to said digital detector or said decryptor for controlling said decryptor". Therefore, claim **34** merely broadens the scope of claim **23** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Regarding claim **54**, "a method of providing an enabling signal to a receiver station from a remote data source, said enabling signal for use in decrypting at the receiver station a programming signal, said receiver station being programmed to get information necessary for enabling a programming signal" corresponds to "a method of providing digital enabling information to a receiver station from a first remote source, said digital enabling information for use at the receiver station in decrypting a mass medium program presentation" in claim **22** of the above U.S. Patent.

"Storing at the remote data source one or more control signals for enabling a decryptor to decrypt a video" corresponds to "storing digital enabling information at said first remote source" in claim **22** of the above U.S. Patent.

"Receiving at the remote data source from the receiver station a communication to get specific enabling information" corresponds to "receiving at said first remote source a query from said receiver station" in claim **22** of the above U.S. Patent.

"Communicating, from the remote data source to the receiver station in response to said communication from the receiver station, a control signal" corresponds to "transmitting said digital enabling information which is effective to enable decryption from said first remote source to said receiver station in response to said step of receiving said query, said receiver station storing at least some of said transmitted enabling information" in claim **22** of the above U.S. Patent.

Lastly, "whereby the receiver station inputs said control signal to a decryptor, and wherein said decryptor decrypts said programming signal" corresponds to "to said receiver station an encrypted digital mass medium presentation signal which is decrypted on the basis of said stored at least some of said digital enabling information" in claim **22** of the above U.S. Patent.

Claim **54** of the instant application does not claim "transmitting from a second remote source" as well as "to present said mass medium programming presentation". Therefore, claim **54** merely broadens the scope of claim **22** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re

Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Regarding claim **55**, "a method of processing signals at a receiver station" corresponds to the same in claim **23** of the above U.S. Patent.

"Receiving one or more information transmissions at said receiver station; detecting a plurality of signals on said one or more information transmissions, at least a first of one of said plurality of signals including a control signal" corresponds to "receiving a plurality of signals including digital programming and inputting at least some of said plurality of signals to said digital detector" as well as "detecting said encrypted digital data in said at least some of said plurality of signals" in claim **23** of the above U.S. Patent.

"Controlling a decryptor in response to said control signal" corresponds to "controlling said decryptor to alter its decryption pattern or technique on the basis of information included in said detected encrypted digital data" in claim **23** of the above U.S. Patent.

"Decrypting or enabling communication of at least a second of said plurality of signals on the basis of said step of controlling said decryptor" corresponds to "decrypting at least a portion of said digital programming using a selected decryption pattern or technique based on said step of detecting" in claim **23** of the above U.S. Patent.

Lastly, "passing said decrypted or enabled at least said second of said plurality of signals to a controllable device; and controlling said controllable device on the basis of said passed decrypted or enabled at least said second of said plurality of signals" corresponds to "to provide a decrypted output of programming to a viewer or listener" in claim **23** of the above U.S. Patent.

Claim **55** of the instant application does not claim "detecting ... in accordance with a varying pattern of timing or location". Therefore, claim **55** merely broadens the scope of claim **23** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

4. Claim **24** is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim **14** of U.S. Patent No. 7,801,304 in view of Yanagimachi et al. (U.S. 3,936,595) (hereinafter "Yanagimachi").

Regarding claim **24**, "a method of controlling a remote transmitter station to communicate program material to a subscriber station and controlling said subscriber station to process or output a unit of programming" corresponds to "a method of controlling a remote transmitter station to communicate program material to a

subscriber station and controlling said subscriber station to process or output digital programming" in claim **14** of the above U.S. Patent.

"Receiving a control signal which operates at the remote transmitter station to control the communication of a unit of programming and one or more first instruct signals and communicating said control signal to said remote transmitter station" corresponds to "receiving at said remote transmitter station a first control signal which operates at the remote transmitter station to control communication of said digital programming and one or more first instruct signals" in claim **14** of the above U.S. Patent.

"Receiving at said remote transmitter station one or more second instruct signals which operate at the subscriber station to identify or decrypt said unit of programming or said one or more first instruct signals, said remote transmitter station transferring said one or more second instruct signals to said transmitter" corresponds to "receiving at said remote transmitter station said one or more digital second instruct signals which operate at the subscriber station to decrypt said digital programming" in claim **14** of the above U.S. Patent.

"Transmitting from said remote transmitter station an information transmission comprising said unit of programming, said one or more first instruct signals, and said one or more second instruct signals, said one or more first instruct signals being transmitted in accordance with said control signal" corresponds to "transmitting from said remote transmitter station to said subscriber station an information transmission comprising said digital programming, said one or more first instruct signals and said one

or more digital second instruct signals, said one or more first instruct signals being transmitted in accordance with said first control signal" in claim **14** of the above U.S. Patent.

Claim **24** of the instant application further claims "receiving a code or datum identifying a unit of programming to be transmitted by the remote transmitter station, said remote transmitter station transferring said unit of programming to a transmitter" which is not claimed in claim **14** of the above U.S. Patent.

However, *Yanagimachi* teaches a similar method of controlling transmission and output of programming at a receiver station, where program control codes identifying particular programming included in the transmission are utilized by a transmitter station 102 and receiver station 103 for transmission/reception and programming output as spoken of on column 15, lines 2-32 as well as column 16, lines 22-40.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, to apply the control code transmission of *Yanagimachi* to the method of claim **14** of the above U.S. Patent in order to provide selective output of programming in accordance with selection input provided from a subscriber as spoken of on column 16, lines 25-40 of *Yanagimachi*.

Claim Rejections - 35 USC § 112

Current amendments made to claims **31 and 32** to obviate the claim rejections under 35 U.S.C. § 112, 2nd paragraph presented in the previous Office Action are proper and have been entered. These particular rejections have been withdrawn.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims **22, 40-42, 55, and 56** are rejected under 35 U.S.C. 102(e) as being anticipated by Davidson (Re. 31,735). *Davidson* teaches all of the limitations of the specified claims with the reasoning that follows.

Regarding claim **22**, "a method for controlling the decryption of encrypted programming at a subscriber station" is anticipated by the decryption method spoken of on column 24, lines 30-50.

"Receiving encrypted programming, said encrypted programming having an encrypted control signal" is anticipated by the conveying of a composite television signal to a subscriber including a video portion, an aural portion, and an encryption codes signal (control signal) comprising a sequence of encryption codes as spoken of on column 24, lines 30-35.

"Detecting said control signal; passing said control signal to a decryptor at said subscriber station; decrypting said control signal" is anticipated by the encryption codes signal detector means for separating the encryption codes signal (decrypting the control signal) from the television signal as spoken of on column 24, lines 39-41.

"Decrypting said encrypted programming to form decrypted programming based on said control signal" is anticipated by the inverse encryption means that uses the separated encryption codes signal to return the detected audio signal to the pre-encryption digitized condition (decrypted programming) as spoken of on column 24, lines 44-46.

Lastly, "presenting said decrypted programming to a viewer or listener" is anticipated by returning of the audio signal to original analog format whereby program audio may be processed and presented in a conventional manner as spoken of on column 24, lines 47-50.

Regarding claim **40**, "a method of processing signals at a receiver station" is anticipated by the decryption method spoken of on column 24, lines 30-50.

"Receiving at least one information transmission" and "locating a signal including code" is anticipated by the conveying of a composite television signal (information transmission) to a subscriber including a video portion, an aural portion, and an encryption codes signal (signal including code) comprising a sequence of encryption codes as spoken of on column 24, lines 30-35, as well as an encryption codes signal detector that detects (locates) and separates the encryption codes signal (signal including code) from the television signals as spoken of on column 24, lines 40-41.

"Passing said code to a processor; controlling a decryptor to decrypt in a specific fashion on the basis of said code; decrypting a portion of said at least one information transmission in said specific fashion" is anticipated by the inverse encryption means (decryptor processor) that uses the separated encryption codes signal to return the

detected audio signal (portion of information transmission) to the pre-encryption digitized condition (decrypted portion) as spoken of on column 24, lines 44-46.

Lastly, "passing said decrypted portion of said at least one information transmission to one of said processor and an output device" is anticipated by returning of the audio signal to original analog format whereby program audio may be processed and presented (to an output device) in a conventional manner as spoken of on column 24, lines 47-50.

Regarding claim **41**, "a method of controlling a receiver station to detect digital data and control a decryptor based on a varying pattern of timing or location" is anticipated by the encryption/decryption method spoken of on column 25 line 45 – column 26, line 9.

"Receiving programming and delivering said programming to a transmitter" is anticipated by the subscription television transmitter that generates television signals (programming) having video and audio portions as spoken of on column 25, lines 45-50.

"Receiving digital data comprising at least an instruct signal and communicating said digital data to a signal embedder, said instruct signal operative at said receiver station to control said decryptor; controlling said signal embedder to embed said digital data in an information transmission in a varying pattern of timing or location; communicating said information transmission to said transmitter; and transmitting said programming and said information transmission including said digital data" is anticipated by the encryption code signal generating means that generates a continuous sequence of encryption codes (digital data instruct signal) as well as the means for combining

(signal embedder) that combines the encryption codes signal, the digitized and encrypted audio program signal, and a video program signal with carrier signals for transmission to a receiver as spoken of on column 25, lines 50-53 as well as column 26, lines 1-9.

Regarding claim **42**, "a method of processing signals at a receiver station" is anticipated by the decryption method spoken of on column 24, lines 30-50.

"Receiving at least one information transmission; detecting a plurality of signals on said at least one information transmission" is anticipated by the conveying of a composite television signal (information transmission) to a subscriber including a video portion, an aural portion, and an encryption codes signal comprising a sequence of encryption codes as spoken of on column 24, lines 30-35.

"Decrypting at least one of said plurality of signals, said at least one decrypted signal including at least one instruct signal which is effective to instruct" is anticipated by the inverse encryption means (decryptor processor) that uses the separated encryption codes signal to return the detected audio signal to the pre-encryption digitized condition (decrypted signal) as spoken of on column 24, lines 44-46.

Lastly, "passing the at least one decrypted instruct signal to a controllable device; and controlling said controllable device on the basis of decrypted information included in said at least one decrypted instruct signal" is anticipated by returning of the audio signal to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50.

Regarding claim **55**, "a method of processing signals at a receiver station" is anticipated by the decryption method spoken of on column 24, lines 30-50.

"Receiving one or more information transmissions at said receiver station; detecting a plurality of signals on said one or more information transmissions, at least a first of one of said plurality of signals including a control signal" is anticipated by the conveying of a composite television signal (information transmission) to a subscriber including a video portion, an aural portion, and an encryption codes signal (control signal) comprising a sequence of encryption codes as spoken of on column 24, lines 30-35.

"Controlling a decryptor in response to said control signal; decrypting or enabling communication of at least a second of said plurality of signals on the basis of said step of controlling said decryptor" is anticipated by the inverse encryption means (decryptor) that uses the separated encryption codes signal (control signal) to return the detected audio signal to the pre-encryption digitized condition (decrypted signal) as spoken of on column 24, lines 44-46.

Lastly, "passing said decrypted or enabled at least said second of said plurality of signals to a controllable device; and controlling said controllable device on the basis of said passed decrypted or enabled at least said second of said plurality of signals" is anticipated by returning of the audio signal to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50.

Regarding claim **56**, "a method of processing signals at a receiver station" is anticipated by the decryption method spoken of on column 24, lines 30-50.

"Receiving at least one information transmission; identifying a plurality of signals in said at least one information transmission; selecting a first signal of said plurality of signals including downloadable code" is anticipated by the conveying of a composite television signal (information transmission) to a subscriber including a video portion, an aural portion, and an encryption codes signal (signal including code) comprising a sequence of encryption codes as spoken of on column 24, lines 30-35, as well as an encryption codes signal detector that detects and separates (identification of and selection of) the encryption codes signal (signal including code) from the television signals as spoken of on column 24, lines 40-41.

"Passing said downloadable code to a processor; controlling a decryptor to decrypt in a specific fashion on the basis of said downloadable code; decrypting at least one second signal of said plurality of signals in said specific fashion" is anticipated by the inverse encryption means (decryptor processor) that uses the separated encryption codes signal to return the detected audio signal (second signal) to the pre-encryption digitized condition (decrypted programming) as spoken of on column 24, lines 44-46.

Lastly, "passing said at least one second signal to one of said processor and an output device" is anticipated by returning of the audio signal to original analog format whereby program audio may be processed and presented (to an output device) in a conventional manner as spoken of on column 24, lines 47-50.

7. Claim **24** is rejected under 35 U.S.C. 102(b) as being anticipated by Yanagimachi et al. (U.S. 3,936,595) (hereinafter "Yanagimachi"). *Yanagimachi* teaches all of the limitations of the specified claims with the reasoning that follows.

Regarding claim **24**, "a method of controlling a remote transmitter station to communicate program material to a subscriber station and controlling said subscriber station to process or output a unit of programming" is anticipated by the programming transmission method performed by the transmitter 102 of Figure 14 as spoken of on column 14, line 51 – column 15, line 36.

"Receiving a control signal which operates at the remote transmitter station to control the communication of a unit of programming and one or more first instruct signals and communicating said control signal to said remote transmitter station" is anticipated by the signal code allocation control device 104 of Figure 14 that receives data (control signal) supplied from the signal generating device 101 that is used to determine signal transmission timings as spoken of on column 14, lines 51-68.

"Receiving a code or datum identifying a unit of programming to be transmitted by the remote transmitter station, said remote transmitter station transferring said unit of programming to a transmitter" is anticipated by the signal code allocation control device 104 that produces and supplies program material control codes identifying particular programming to an output terminal 114 (transmitter) as shown in Figure 14 and spoken of on column 15, lines 11-32.

"Receiving at said remote transmitter station one **or** more second instruct signals which operate at the subscriber station to identify **or** decrypt said unit of programming **or** said one **or** more first instruct signals, said remote transmitter station transferring said one **or** more second instruct signals to said transmitter" is anticipated by the signal code allocation control device 104 that produces and supplies item control codes (instruct signals) identifying particular programming to an output terminal 114 (transmitter) as shown in Figure 14 and spoken of on column 15, lines 11-32.

Lastly, "transmitting from said remote transmitter station an information transmission comprising said unit of programming, said one or more first instruct signals, and said one or more second instruct signals, said one or more first instruct signals being transmitted in accordance with said control signal" is anticipated by the transmission of the combined signal from output terminal 114 (transmitter) to a transmission path 115, where the combined signal includes video and audio programming as well as various control codes (instruct signals) as spoken of on column 15, lines 25-32.

8. Claims **31 and 54** are rejected under 35 U.S.C. 102(e) as being anticipated by Ostermann et al. (U.S. 4,484,025) (hereinafter "Ostermann"). *Ostermann* teaches all of the limitations of the specified claims with the reasoning that follows.

Regarding claim **31**, "a method of controlling at least one of a plurality of receiver stations" is anticipated by the enciphering/deciphering method performed by the terminals 1 and 2 of Figure 1.

"Receiving downloadable code which is effective at said at least one of said plurality of receiver stations to implement a new technique of decrypting and delivering the downloadable code to at least one transmitter" is anticipated by the transmission of a cipher algorithm (downloadable code) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 (transmitter) that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

"Receiving at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code; and causing said at least one control signal to be communicated to said at least one transmitter at a specific time, thereby to transmit at least one information transmission including the downloadable code and said at least one control signal" is anticipated by the transmission of a bit sequence (control signal) from cipher equipment 16 to cipher computer 12 (transmitter) indicating a particular stored cipher program (downloadable code) to be used as spoken of on column 3, lines 10-19.

Regarding claim **54**, "a method of providing an enabling signal to a receiver station from a remote data source, said enabling signal for use in decrypting at the receiver station a programming signal, said receiver station being programmed to get information necessary for enabling a programming signal" is anticipated by the enciphering/deciphering method performed by the terminals 1 and 2 (receiver station and remote data source) of Figure 1.

"Storing at the remote data source one or more control signals for enabling a decryptor to decrypt a video" is anticipated by the cipher equipment 16 (remote data

source) that contains cipher program storage 18 for storing a cipher algorithm as spoken of on column 2, lines 38-41.

"Receiving at the remote data source from the receiver station a communication to get specific enabling information" is anticipated by the cipher algorithm request (communication) transmitted from the terminal 1 to the terminal 2 (remote data source) requesting a cipher algorithm (enabling information) as spoken of on column 3, lines 4-9.

"Communicating, from the remote data source to the receiver station in response to said communication from the receiver station, a control signal" is anticipated by the transmission of a cipher algorithm (control signal) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

"Whereby the receiver station inputs said control signal to a decryptor, and wherein said decryptor decrypts said programming signal" is anticipated by a receiver terminal that contains means for deciphering (decryptor) received ciphered data text in accordance with a cipher algorithm and a cipher key as spoken of on column 4, lines 52-54, as well as column 2, lines 16-24, which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Claim Rejections - 35 USC § 103

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

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

> invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. 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(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims **32-36, 38, and 39** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ostermann et al. (U.S. 4,484,025) (hereinafter "Ostermann") in view of Davidson (Re. 31,735).

Regarding claim **32**, *Ostermann* teaches the method of claim **31** as described above. *Ostermann* does not explicitly teach decryption of television programming.

However, *Davidson* teaches the application of encryption/decryption techniques to television signals as spoken of on column 24, lines 30-50.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of *Ostermann* to television program signals in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of *Davidson*.

Regarding claim **33**, *Ostermann* teaches the transmission of a cipher algorithm (instruct signal) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 (transmitter) that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

Ostermann also teaches a receiver terminal that contains means for deciphering received ciphered data text in accordance with a cipher algorithm and a cipher key as spoken of on column 4, lines 52-54, as well as column 2, lines 16-24, which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Ostermann does not explicitly teach decryption of television programming.

However, *Davidson* teaches the application of encryption/decryption techniques to television signals as spoken of on column 24, lines 30-50.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of *Ostermann* to television program signals in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of *Davidson*.

Regarding claim **34**, *Ostermann* teaches the transmission of a cipher algorithm (signal) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 that indicates a particular enciphering/deciphering (encryption/decryption) technique as spoken of on column 2, lines 38-41.

Ostermann also teaches the transmission of a bit sequence (signal) from cipher equipment 16 to cipher computer 12 indicating a particular stored cipher program to be

used (change in encryption/decryption technique) as spoken of on column 3, lines 10-19.

Ostermann also teaches a receiver terminal that contains means for deciphering received ciphered data text (signal) in accordance with a cipher algorithm and a cipher key as spoken of on column 4, lines 52-54, as well as column 2, lines 16-24, which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Ostermann does not explicitly teach passing a decrypted signal to a controllable device and controlling the controllable device on the basis of the passed decrypted signal.

However, *Davidson* teaches returning of an audio signal (decrypted signal) to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the post-decryption processing and presentation as taught in *Davidson* to the system of *Ostermann* in order to allow the receiving station to make appropriate use of the recovered decrypted signal.

Regarding claim **35**, *Ostermann* further teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit sequence as spoken of on column 3, lines 10-20.

Regarding claim **36**, *Ostermann* further teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit

sequence that indicates which cipher program is to be used at a particular time (schedule) as spoken of on column 3, lines 10-20.

Regarding claim **38**, *Ostermann* further teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit sequence (identifier) as spoken of on column 3, lines 10-20.

Regarding claim **39**, *Ostermann* further teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit sequence (identifier) as spoken of on column 3, lines 10-20, as well as column 3, lines 49-61, which states that the bit sequence contains identification codes of the transmitter and addressed receiver (indicates transmission channel).

Allowable Subject Matter

12. Claims **23, 25-30, and 43-53** are allowable over the prior art of record.

13. Claim **37** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims **23, 25-30, 37, and 43-53**, these claims are allowable for the reasons indicated in the previous Office Action.

Response to Arguments

15. Applicant's arguments with respect to the obviousness-type double patenting rejection of claim **22** in view of claim **26** of *U.S. 7,805,749* have been fully considered and are persuasive. This particular rejection has been withdrawn.

16. Applicant's other arguments filed 10/6/11 have been fully considered but they are not persuasive.

Regarding claim **24**, Applicant argues that claim **14** of U.S. Patent 7,801,304 does not teach "receiving at said remote transmitter station one **or** more second instruct signals which operate at the subscriber station to identify **or** decrypt said unit of programming **or** said one or more first instruct signals".

Claim **14** of the above U.S. Patent 7,801,304 recites "receiving at said remote transmitter station said one or more digital second instruct signals which operate at the subscriber station to decrypt said digital programming".

Due to the above alternative language claimed in claim **24**, and since the above recited limitation of claim **14** teaches one of the claimed alternatives, namely "decrypt said digital programming", it is maintained that claim **14** teaches the above recited limitation of claim **24**.

Regarding claim **24**, Applicant further argues that *Yanagimachi* does not teach "receiving a code or datum identifying a unit of programming to be transmitted by the remote transmitter station". Applicant further argues that the control codes of *Yanagimachi* are not used to identify a unit of programming to be transmitted, but rather are used at a receiver station "to control a manner of sequentially connecting program materials to construct at least one significant program...".

However, as provided in the previous Office Action, *Yanagimachi* teaches where program control codes identifying particular programming included in the transmission are utilized by a transmitter station 102 and receiver station 103 for transmission/reception and programming output as spoken of on column 15, lines 2-32 as well as column 16, lines 22-40. Specifically, on column 16, lines 22-40, it is stated that "the control code transmitted with the video and audio signals is decoded by a transmission control code decoder 119 and the decoded control code is collated with a code set by the student through a selection input and answer input terminal 126. When these codes coincide with each other, the desired video signal of one television frame period is gated out by a video frame gate 122".

According to the above teachings of *Yanagimachi*, the received control codes do identify units of programming that are transmitted by the transmitter 102, as the control codes are used at the receiver to identify particular units of programming to be extracted for output to a user.

Therefore, the obviousness-type double patenting rejection of claim **24** in view of claim **14** of the above U.S. Patent and *Yanagimachi* is maintained.

Regarding claims **22, 40-42, and 55,** Applicant asserts that these claims are related to the encryption and decryption of signals. Applicant also asserts that the Board of Patent Appeals and Interferences decided in Ex parte Personalized Media Communications, LLC (Appeal 2008-4228, Ex parte Reexamination Control 90/006,536) at pages 53-54, that encryption requires a digital signal and that encryption and decryption are not broad enough to read on scrambling and unscrambling. Applicant

argues that although claims **65 and 72** of *Davidson* claim means for encrypting and decrypting a digitized audio signal, the description of *Davidson* merely describes scrambling and unscrambling analog video signals and digitizing analog audio signals.

However, claim **65** recites "the aural portion comprising a periodically sampled and digitized audio signal encrypted in accordance with the encryption codes signal". Further, claim **72** recites "means responsive to the encryption code signal for digitally encrypting each digitized program audio sample from the digitizing means".

Further, Figure 8b of the description of *Davidson* shows a digitized aural signal consisting of 11 bits. Further, Figures 5, 9, and 10 show digital logic circuitry of the disclosed system of *Davidson* used for digital signal processing. It is maintained that *Davidson* teaches the encryption and decryption of digital signals.

Further, this particular argument regarding the terms "encryption" and "decryption" and how these terms are to be construed in light of Applicant's specification was raised in the memorandum opinion and order in the United States District Court for the Eastern District of Texas Marshall Division (submitted to the record by Applicant via IDS). On pages 53-54 of the memorandum opinion and order, the court rejects Applicant's attempt to limit the encrypt/decrypt terms to digital data. It is recited in the memorandum opinion and order that:

"PMC's proposal fails to cite intrinsic evidence that mandates a narrow reading of "encrypt" and "decrypt" to exclude scrambling and descrambling of analog transmissions. In its proposal, PMC purports to rely on intrinsic evidence that merely

recites examples of decryption or encryption of digital signals. These citations do not limit the scope of the encrypt/decrypt terms to digital signals. Furthermore, as shown above, PMC's position is belied by the fact that the patents-in-suit also disclose decrypting analog signals. "25 Patent at 173:41-47 ("...the decryptors, 107, 224, and 231, may be conventional descramblers, well known in the art, that descramble analog television transmissions and are actuated by receiving digital key information.") As such, the court agrees with Defendants that nothing in the intrinsic record reflects a clear intent on the part of the patentee to limit the scope of the encrypt/decrypt terms to digital signals".

Based upon the above memorandum opinion and order, the terms "encrypt" and "decrypt" should be construed to include "scrambling" and "descrambling", so even if the claimed "encryption" and "decryption" of *Davidson* is interpreted as including "scrambling" and "descrambling", it is maintained that *Davidson* is applicable to Applicant's claims **22, 40-42, and 55**.

Regarding claim **22**, Applicant argues that *Davidson* does not teach "receiving encrypted programming, said encrypted programming having en encrypted control signal; detecting said control signal; passing said control signal to a decryptor at said subscriber station; decrypting said control signal".

However, as provided in the previous Office Action, *Davidson* teaches the conveying of a composite television signal to a subscriber including a video portion, an

aural portion, and an encryption codes signal (control signal) comprising a sequence of encryption codes as spoken of on column 24, lines 30-35.

Davidson also teaches the encryption codes signal detector means for separating the encryption codes signal (decrypting the control signal) from the television signal as spoken of on column 24, lines 39-41. It is maintained that the separation of the encryption codes signal from the encrypted programming signal may be considered a decryption of a control signal.

Regarding *amended* claim **40**, Applicant argues that *Davidson* does not teach "locating a signal including code".

However, as provided in the previous Office Action and clarified above, *Davidson* teaches the conveying of a composite television signal (information transmission) to a subscriber including a video portion, an aural portion, and an encryption codes signal (signal including code) comprising a sequence of encryption codes as spoken of on column 24, lines 30-35, as well as an encryption codes signal detector that detects (locates) and separates the encryption codes signal (signal including code) from the television signals as spoken of on column 24, lines 40-41.

Further, the terms detecting, finding, or locating are considered synonymous in meaning (referring to Roget's College Thesaurus in Dictionary Form, Copyright (c) 1985).

Regarding claim **41**, Applicant argues that *Davidson* is silent regarding delivering programming and communicating information to a transmitter.

However, as provided in the previous Office Action, *Davidson* teaches the subscription television transmitter that generates television signals (programming) having video and audio portions for subsequent transmission as spoken of on column 25, lines 45-50.

Applicant also argues that *Davidson* fails to teach embedding digital data in an information transmission in a varying pattern of timing or location.

However, as provided in the previous Office Action, *Davidson* teaches the encryption code signal generating means that generates a continuous sequence of encryption codes (digital data instruct signal) as well as the means for combining (signal embedder) that combines the encryption codes signal, the digitized and encrypted audio program signal, and a video program signal with carrier signals for transmission to a receiver as spoken of on column 25, lines 50-53 as well as column 26, lines 1-9.

Since the above claim language does not indicate what specific type of varying timing pattern or varying location pattern is being claimed, it is maintained that the combination of the above encryption codes signal, the digitized and encrypted audio program signal, and a video program signal with carrier signals for transmission would include an embedding of the encryption codes signal within the programming in some varying pattern or fashion.

Regarding claim **42**, Applicant argues that *Davidson* does not teach decrypting a signal that includes at least one instruct signal which is effective to instruct.

However, as provided in the previous Office Action, *Davidson* teaches the inverse encryption means (decryptor processor) that uses the separated encryption

codes signal to return the detected audio signal to the pre-encryption digitized condition (decrypted signal) as spoken of on column 24, lines 44-46.

Applicant further argues that *Davidson* is silent regarding passing a decrypted instruct signal to a controllable device and controlling the controllable device on the basis of the information included in the decrypted instruct signal.

However, as provided in the previous Office Action, *Davidson* teaches returning of the audio signal to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50. The controllable device being a device suitable for output/presentation of an audio signal.

Regarding claim **55**, Applicant argues that *Davidson* does not teach "controlling said controllable device on the basis of said passed decrypted or enabled at least said second of said plurality of signals".

However, as provided in the previous Office Action, *Davidson* teaches returning of the audio signal to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50. The controllable device being a device suitable for output/presentation of an audio signal. The audio signal is operable in the controlling of this type of device by causing output of the respective audio signal.

Regarding *new* claim **56**, Applicant argues that *Davidson* does not teach any selecting of a first signal in a transmission that includes downloadable code.

However, as provided above, *Davidson* teaches an encryption codes signal detector that detects and separates (identification of and selection of) the encryption codes signal (signal including code) from the television signals as spoken of on column 24, lines 40-41.

It is maintained that the separation of the encryption codes signal from the television signals (plurality of signals) may be considered a selection of a signal.

Regarding *amended* claim **24**, Applicant argues that *Yanagimachi* fails to teach "receiving at said remote transmitter station one **or** more second instruct signals which operate at the subscriber station to identify **or** decrypt said unit of programming **or** said one **or** more first instruct signals, said remote transmitter station transferring said one **or** more second instruct signals to said transmitter".

However, as provided in the previous Office Action, *Yanagimachi* teaches the signal code allocation control device 104 that produces and supplies item control codes (instruct signals) identifying particular programming to an output terminal 114 (transmitter) as shown in Figure 14 and spoken of on column 15, lines 11-32.

Due to the above alternative language, and since *Yanagimachi* teaches one of the claimed alternatives, namely identifying a unit of programming, it is maintained that *Yanagimachi* teaches the above limitation in question.

Regarding *amended* claims **31 and 32**, Applicant argues that *Ostermann* fails to teach "receiving at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code: and causing said at least one control signal to be communicated to said at least one transmitter at a specific time,

thereby to transmit at least one information transmission including the downloadable code and said at least one control signal".

However, as provided in the previous Office Action, *Ostermann* teaches the transmission of a bit sequence (control signal) from cipher equipment 16 to cipher computer 12 (transmitter) indicating a particular stored cipher program (downloadable code) to be used as spoken of on column 3, lines 10-19. The specific time of the bit sequence transmission is the time at which the particular cipher algorithm is selected. Furthermore, the type of encryption is selected via transmission of the bit sequence which causes the corresponding cipher program (downloadable code) to be transferred (downloaded).

Regarding claim **54**, Applicant argues that *Ostermann* does not address the decryption of video.

However, the language "for enabling a decryptor to decrypt a video" is an intended use clause that does not necessarily limit the scope of a claim. See MPEP 2106, II, C.

Furthermore, *Ostermann* is directed to the transmission of a cipher program to allow encryption or decryption of "data", where this data in a general sense could include audio, video, or other known types of data.

Regarding claim **33**, Applicant argues that neither *Davidson* nor *Ostermann* teach "receiving a television program at a transmitter station and delivering said television program to a transmitter".

However, as provided in the previous Office Action, *Ostermann* teaches the transmission of a cipher algorithm (instruct signal) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 (transmitter) that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

Ostermann also teaches a receiver terminal that contains means for deciphering received ciphered data text in accordance with a cipher algorithm and a cipher key as spoken of on column 4, lines 52-54, as well as column 2, lines 16-24, which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Ostermann does not explicitly teach decryption of television programming.

However, *Davidson* teaches the application of encryption/decryption techniques to television signals (that are transmitted and received) as spoken of on column 24, lines 30-50.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of *Ostermann* to television program signals in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of *Davidson*.

Regarding claim **34**, Applicant argues that neither *Davidson* nor *Ostermann* teach "passing said decrypted second of said plurality of signals to a controllable device; and controlling said controllable device on the basis of said passed decrypted second of said plurality of signals".

However, as provided in the previous Office Action, *Davidson* teaches returning of the audio signal to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50. The controllable device being a device suitable for output/presentation of an audio signal. The audio signal is operable in the controlling of this type of device by causing output of the respective audio signal.

Regarding claim **36**, Applicant argues that *Ostermann* does not teach "wherein said step of transferring is performed in accordance with a schedule".

However, as provided in the previous Office Action, *Ostermann* teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit sequence that indicates which cipher program is to be used at a particular time (schedule) as spoken of on column 3, lines 10-20. In other words, the transferring of a particular cipher algorithm is performed in accordance with a particular order or schedule depending on a received bit sequence indicating which cipher program is to be used at a particular time.

Regarding claim **39**, Applicant argues that *Ostermann* does not teach "said identifier identifies **at least one of** (i) said television program and (ii) a channel including said television program. Applicant further argues that *Ostermann* does not teach the identification of a television program, or anything transmitted to the receiver station.

However, as provided in the previous Office Action, *Ostermann* teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit sequence (identifier) as spoken of on column 3, lines 10-20, as well as

column 3, lines 49-61, which states that the bit sequence contains identification codes of the transmitter and addressed receiver (indicates transmission channel). It is maintained that the above identification codes would indicate a particular channel that a transmission is utilizing between a transmitter and an addressed receiver.

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL J. MOORE, JR., whose telephone number is (571)272-3168. The examiner can normally be reached on Monday-Friday (7:30am - 4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J. Moore, Jr./
Primary Examiner, Art Unit 2467

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: John C. Harvey *et al.*	
Application No.: 08/449,413	Confirmation No.: 1756
Filed: May 24, 1995	Art Unit: 2467
For: SIGNAL PROCESSING APPARATUS AND METHODS	Examiner: Moore Jr., Michael J.

AMENDMENT AFTER FINAL REJECTION AND REQUEST FOR RECONSIDERATION

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

Dear Sir:

In response to the Final Office Action dated December 30, 2011, please amend the above-identified application as follows.

Amendments to the claims begin on page 2.

Remarks begin on page 11.

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AMENDMENT TO THE CLAIMS

Claims 22-56 are the only pending claims.

1 - 21. (Cancelled)

22. (**Currently Amended**) A method for controlling the decryption of encrypted programming at a subscriber station, said method comprising the steps of:

receiving encrypted digital programming, said encrypted digital programming having an encrypted digital control signal;

detecting said control signal;

passing said control signal to a decryptor that decrypts encrypted digital data at said subscriber station;

decrypting said control signal;

decrypting said encrypted digital programming to form decrypted programming based on said control signal; and

presenting said decrypted programming to a viewer or listener.

23. (Previously Presented) A method for controlling the decryption of programming at a subscriber station, said method comprising the steps of:

receiving programming, said programming having a first encrypted digital control signal portion and an encrypted digital information portion;

detecting said first encrypted digital control signal portion of said programming;

passing said first encrypted digital control signal portion of said programming to a first decryptor at said subscriber station;

decrypting said first encrypted digital control signal portion of said programming using said first decryptor at said subscriber station;

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passing said encrypted digital information portion of said programming and the decrypted control signal portion to a second decryptor at said subscriber station;

decrypting said encrypted digital information portion of said programming using said second decryptor at said subscriber station based on the decrypted control signal portion; and

presenting said programming.

24. (**Currently Amended**) A method of controlling a remote transmitter station to communicate program material to a subscriber station and controlling said subscriber station to process or output a unit of programming, said method comprising the steps of:

receiving a control signal which operates at the remote transmitter station to control the communication of a unit of programming and one or more first instruct signals and communicating said control signal to said remote transmitter station;

receiving a code or datum identifying a unit of programming to be transmitted by the remote transmitter station, said remote transmitter station transferring said unit of programming to a transmitter;

receiving at said remote transmitter station one or more second instruct signals which operate at the subscriber station to identify ~~or~~ and decrypt said unit of programming or said one or more first instruct signals, said remote transmitter station transferring said one or more second instruct signals to said transmitter; and

transmitting from said remote transmitter station an information transmission comprising said unit of programming, said one or more first instruct signals, and said one or more second instruct signals, said one or more first instruct signals being transmitted in accordance with said control signal.

25. (Previously Presented) The method of claim 23, wherein said programming further includes encrypted video.

26. (Previously Presented) The method of claim 23, wherein said subscriber station stores information that evidences processing said programming.

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27. (Previously Presented) The method of claim 23, wherein said programming is received at said subscriber station in one channel of a multichannel signal and a second control signal portion used to decrypt said programming is included in said multichannel signal outside said one channel.

28. (Previously Presented) The method of claim 23, wherein said subscriber station detects, in a transmission channel including said programming, a second control signal portion used to decrypt the first control signal portion.

29. (Previously Presented) The method of claim 23, wherein the subscriber station detects, in a transmission channel for transmitting the programming, a second control signal portion used to decrypt the first control signal portion, and wherein the second control signal portion is encrypted, and wherein the second control signal portion is decrypted in order to enable decryption of the first control signal portion.

30. (Previously Presented) The method of claim 23, wherein said programming includes computer data.

31. (Previously Presented) A method of controlling at least one of a plurality of receiver stations, said method comprising the steps of:

receiving downloadable code which is effective at said at least one of said plurality of receiver stations to implement a new technique of decrypting and delivering the downloadable code to at least one transmitter;

receiving at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code; and

causing said at least one control signal to be communicated to said at least one transmitter at a specific time,

thereby to transmit at least one information transmission including the downloadable code and said at least one control signal.

32. (Previously Presented) The method of claim 31, wherein a television program is displayed at a receiver station and said downloadable code and said at least one control signal program said receiver station to decrypt said television program in accordance with said new technique.

33. (Previously Presented) A method of communicating television program material to one or more receiver stations, said method comprising the steps of:

receiving a television program at a transmitter station and delivering said television program to a transmitter;

receiving and storing one or more instruct signals at said transmitter station, said one or more instruct signals at said one or more receiver stations operative to implement a new technique of decrypting;

transferring said one or more instruct signals to said transmitter; and

transmitting said television program and said one or more instruct signals from said transmitter station to said one or more receiver stations.

34. (Previously Presented) A method of processing signals at a receiver station comprising the steps of:

receiving at least one information transmission;

detecting a plurality of signals in said at least one information transmission;

changing a decryption technique in response to at least a first of said plurality of signals;

decrypting a second of said plurality of signals on the basis of said changed decryption technique;

passing said decrypted second of said plurality of signals to a controllable device; and

controlling said controllable device on the basis of said passed decrypted second of said plurality of signals.

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35. (Previously Presented) The method of claim 33, wherein said step of transferring is performed based on comparison.

36. (Previously Presented) The method of claim 33, wherein said step of transferring is performed in accordance with a schedule.

37. (Previously Presented) The method of claim 36, wherein said schedule specifies a transmission time and a transmission channel, said method further comprising the steps of receiving and storing said schedule at said transmitter station.

38. (Previously Presented) The method of claim 33, wherein said one or more instruct signals operate at said one or more receiver stations based on an identifier, said method further comprising the step of transmitting said identifier.

39. (**Currently Amended**) The method of claim 38, wherein an information transmission including said television program is received at said one or more receiver stations, wherein said television program is outputted at said one or more receiver stations, and wherein said identifier identifies ~~at least one of~~ (i) said television program and (ii) a channel including said television program.

40. (**Currently Amended**) A method of processing signals at a receiver station comprising the steps of:

receiving at least one encrypted digital information transmission;

locating code;

passing said code to a processor;

controlling a decryptor that decrypts encrypted digital data to decrypt in a specific fashion on the basis of said code;

decrypting a portion of said at least one information transmission in said specific fashion; and

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passing said decrypted portion of said at least one encrypted digital information transmission to one of said processor and an output device.

41. (**Currently Amended**) A method of controlling a receiver station to detect digital data and control a decryptor that decrypts encrypted digital data based on a varying pattern of timing or location, said method of controlling comprising the steps of:

receiving programming and delivering said programming to a transmitter;

receiving digital data comprising at least an instruct signal and communicating said digital data to a signal embedder, said instruct signal operative at said receiver station to control said decryptor;

controlling said signal embedder to embed said digital data in an encrypted digital information transmission in a varying pattern of timing or location;

communicating said encrypted digital information transmission to said transmitter; and

transmitting said programming and said encrypted digital information transmission including said digital data.

42. (**Currently Amended**) A method of processing signals at a receiver station comprising the steps of:

receiving at least one encrypted digital information transmission;

detecting a plurality of signals on said at least one encrypted digital information transmission;

decrypting at least one of said plurality of signals, said at least one decrypted signal including at least one instruct signal which is effective to instruct;

passing the at least one decrypted instruct signal to a controllable device; and

controlling said controllable device on the basis of decrypted information included in said at least one decrypted instruct signal.

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43. (Previously Presented) A method for decryptor activation in a network comprising:

receiving a transmission comprising encrypted materials;

decrypting under first processor control a first portion of said encrypted materials in said transmission;

inputting said first portion of said encrypted materials to a decryptor;

decrypting under second processor control a second portion of said encrypted materials based on said step of decrypting said first portion of said encrypted materials.

44. (Previously Presented) The method of claim 43 wherein said transmission in said step of receiving a transmission is a multichannel signal separated in the frequency domain.

45. (Previously Presented) The method of claim 44 wherein said transmission is a cable system broadcast.

46. (Previously Presented) The method of claim 43 wherein said transmission in said step of receiving a transmission is a multichannel signal separated in the time domain.

47. (Previously Presented) The method of claim 43 wherein said transmission in said step of receiving a transmission is generated at a local data source.

48. (Previously Presented) The method of claim 47 wherein said local data source comprises a VCR.

49. (Previously Presented) The method of claim 47 wherein said local data source comprises a laser disk.

50. (Previously Presented) The method of claim 43 wherein said encrypted materials comprise a portion of a television program.

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51. (Previously Presented) The method of claim 43, wherein said transmission in said step of receiving a transmission and a signal necessary for decryption are received from different sources.

52. (Previously Presented) The method of claim 51, further comprising the step of contacting a remote transmitter station to receive one of said transmission and said signal necessary for decryption.

53. (Previously Presented) The method of claim 51, wherein a signal necessary for decryption is communicated by telephone.

54. (Previously Presented) A method of providing an enabling signal to a receiver station from a remote data source, said enabling signal for use in decrypting at the receiver station a programming signal, said receiver station being programmed to get information necessary for enabling a programming signal, said method comprising the steps of:

storing at the remote data source one or more control signals for enabling a decryptor to decrypt a video;

receiving at the remote data source from the receiver station a communication to get specific enabling information;

communicating, from the remote data source to the receiver station in response to said communication from the receiver station, a control signal,

whereby the receiver station inputs said control signal to a decryptor, and wherein said decryptor decrypts said programming signal.

55. (**Currently Amended**) A method of processing signals at a receiver station comprising the steps of:

receiving one or more encrypted digital information transmissions at said receiver station;

detecting a plurality of signals on said one or more encrypted digital information transmissions, at least a first of one of said plurality of signals including a control signal;

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controlling a decryptor that decrypts encrypted digital data in response to said control signal;

decrypting or enabling communication of at least a second of said plurality of signals on the basis of said step of controlling said decryptor;

passing said decrypted or enabled at least said second of said plurality of signals to a controllable device; and

controlling said controllable device on the basis of said passed decrypted or enabled at least said second of said plurality of signals.

56. (**Currently Amended**) A method of processing signals at a receiver station comprising the steps of:

receiving at least one encrypted digital information transmission;

identifying a plurality of signals in said at least one encrypted digital information transmission;

selecting a first signal of said plurality of signals including downloadable code;

passing said downloadable code to a processor;

controlling a decryptor that decrypts encrypted digital data to decrypt in a specific fashion on the basis of said downloadable code;

decrypting at least one second signal of said plurality of signals in said specific fashion; and

passing said at least one second signal to one of said processor and an output device.

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REMARKS

I. STATUS OF CLAIMS

Claims 22-56 are pending in this application. By this Amendment, claims 22, 24, 39 – 42, 55, and 56 are amended. Reconsideration is respectfully requested in view of the above amendments and the following remarks. An amendment submitted after a final office action in an application must comply with 37 C.F.R. § 1.116, which states that:

> *(1) An amendment may be made canceling claims or complying with any requirement of form expressly set forth in a previous Office action;*
> *(2) An amendment presenting rejected claims in better form for consideration on appeal may be admitted; or*
> *(3) An amendment touching the merits of the application or patent under reexamination may be admitted upon a showing of good and sufficient reasons why the amendment is necessary and was not earlier presented.*

37 C.F.R. § 1.116(b).

Applicants submit that this Amendment After Final Rejection and Request for Reconsideration places this application in condition for allowance by amending claims in manners that are believed to render all pending claims allowable over the cited art and/or at least place this application in better form for consideration on appeal under 37 C.F.R. § 1.116(b)(2). This Amendment is necessary because it at least clarifies and/or narrows the issues for consideration by the Board and was not earlier presented because Applicants believed that the prior response(s) placed this application in condition for allowance, for at least the reasons discussed in those responses. Moreover, pursuant to 37 C.F.R. § 1.116(b)(3), this Amendment is necessary to address the Office Action's new rejections that were not previously presented during the prosecution of this application. Accordingly, entry of the present Amendment, as an earnest attempt to advance prosecution and/or to reduce the number of issues, is requested under 37 C.F.R. § 1.116.

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Applicants earnestly solicit a favorable reconsideration and prompt allowance of the claims. Where the Office does not find that the claims are in condition for allowance, Applicants respectfully request that the Office withdraw the finality of the Office Action for the reasons set forth below.

II. DOUBLE PATENTING REJECTIONS

Claims 22, 34, 54, and 55 are rejected on the ground of nonstatutory obviousness-type double patenting as allegedly being unpatentable over claims 1, 22, and 23 of U.S. Patent No. 7,801,304. This is the patent that issued from Applicants' DECR 81 group "A" application, U.S. Patent Application Serial No. 08/449,263. Claim 24 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 14 of the DECR 81 group "A" patent, in view of Yanagimachi et al. (U.S. Patent No. 3,936,595) ("Yanagimachi"). Applicants maintain the arguments they asserted previously in regard to traversing the claim 24 rejection. If the Office maintains the rejections, Applicants acknowledge that a timely filed terminal disclaimer in compliance with 37 C.F.R. 1.321(c) or 1.321(d) may be necessary to overcome the nonstatutory double patenting rejection. However, Applicants request that the requirement for filing the terminal disclaimer be held in abeyance, pending an indication of allowable subject matter from the Office in the present application. If filed, the terminal disclaimer will disclaim, in essential terms, the terminal part of the statutory term of any patent granted on the above-referenced application, extending beyond the earliest expiration date of the DECR 81 group "A" patent, U.S. Patent No. 7,801,304.

III. SUMMARY OF PRIOR ART REJECTIONS

Many of the pending claims are rejected under 35 U.S.C. §§102 or 103 over references including Davidson (Re. 31,735), Yanagimachi et al. (U.S. Patent No. 3,936,595) ("Yanagimachi"), and Ostermann et al. (U.S. Patent No. 4,484,025) ("Ostermann"). The Office

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Action rejected claims 22, 40-42, 55, and 56 under 35 U.S.C. 102(e) as allegedly being anticipated by Davidson; claim 24 under 35 U.S.C. 102(b) as allegedly being anticipated by Yanagimachi; claims 31 and 54 under 35 U.S.C. 102(e) as allegedly being anticipated by Ostermann; and claims 32-36, 38, and 39 under 35 U.S.C. 103(a) as allegedly being unpatentable over the combination of Ostermann in view of Davidson.

IV. SUMMARY OF APPLIED PRIOR ART

A. Davidson

Davidson is the reissued patent of U.S. Patent No. 4,215,366 that issued on July 29, 1980. The reissued patent added new claims 65-74. The application for reissue was filed on July 26, 1982, well after the November 3, 1981 priority date of the instant application.

Davidson is directed to a "method and system for encoding and decoding of standard television signals..." Col. 3, ll. 26-28. "[V]ideo scrambling is effected by inversion of the video signals of some horizontal scan lines on a pseudo-random bias to produce a picture having some video signals inverted and others not inverted which is unpleasant to view and virtually unintelligible." Col. 3, ll. 29-34. Davidson discloses converting analog audio signals to coded digital audio signals. Col. 3, ll. 34-36. "A plurality of unique pulse-coded control signals consisting of 32- bit binary pulse trains are transmitted separately to... provide the information needed to unscramble the scrambled audio and video signals." Col. 3, ll. 36-41.

Claim 65, added to the patent via reissue, claims a receiver in a subscription television system having means for conveying television signals include a video portion, an aural portion, and an "encryption codes signal" comprising a sequence of "encryption codes." Col. 24, ll. 30-35. The aural portion is a digitized audio signal "encrypted" in accordance with the "encryption codes signal." Col. 24, ll. 35-39. The receiver has means to detect and separate the "encryption

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codes" signal from the television signals; to separate the digitized and "encrypted" audio signal from television signals; to return the detected audio signal to the "pre-encryption" digitized condition; and to return the audio signal to the original analog format. Col. 24, ll. 40-50. However, there is no mention of "encryption" anywhere in the disclosure of the patent. Only scrambling and unscrambling is disclosed. The term "encryption," as used in claim 65, was not added until sometime after the reissue filing date of July 26, 1982.

Claim 72, also added to the patent via reissue, claims a "television transmitter for generating television signals having a program video portion and program aural portion..." Col. 25, ll. 46-48. The transmitter has means to generate a continuous sequence of "encryption codes"; to convey the program video and program aural portions and the "encryption codes signal" from the transmitter to authorized subscribers; to sample and digitize the program audio signal; to digitally "encrypt" each digitized program audio sample in response to the "encryption codes signal"; and to combine the "encryption codes" signal, the digitized and "encrypted" audio program signal, and a video program signal, with the carrier signals. Col. 25, l. 52 – col. 26, l. 9. As mentioned above, there is no mention of "encryption" anywhere in the disclosure of the patent. Only scrambling and unscrambling is disclosed. The term "encryption," as used in claim 72, was not added until sometime after the reissue filing date of July 26, 1982.

The original Davidson '366 patent discloses video scrambling. The reliance on the reissue patent cannot change this fact. The use of the term "encryption" as added by the reissue claims does not change the fact that the fundamental video signal of Davidson is an analog television signal. The video signal of Davidson is not encrypted as encryption is a digital process. For this reason, the Davidson reissue patent is limited in its use as a prior art reference.

B. **Yanagimachi**

Yanagimachi is directed to "a programmed information transmission system wherein a number of different program materials and control signals for controlling the progress and combinations of the transmitted program materials are simultaneously transmitted and in which programmed information is constructed from a series of the transmitted program materials at a receiver end on the basis of the transmitted control signals." Col. 1, ll. 8-16.

A transmitter station receives video and audio signals from a video and audio signal generating device. Col. 14, l. 51 – Col. 15, l. 5. An allocation control device at the transmitter station produces control codes for effecting the channel allocation and transmission of the video and audio signals. Col. 14, l. 62 – Col. 15, l. 2. The audio and video signals are processed and the time division multiplexed. Col. 15, ll. 6-10. Program material control codes and video identification numbers supplied by the allocation control device are added to the video signals. Col. 15, ll. 11-16. Audio start and end signals are added to the audio signals. Col. 15, ll. 16-18. An item control code is inserted in the code frames of a transmission signal that is then combined with the video and audio signals. Col. 15, ll. 19-28. The combined information transmission signal is stored in memory and then transmitted to a receiver station. Col. 15, ll. 28-32.

The receiver station receives the information transmission containing video signals, audio signals, and a control code. Col. 16, ll. 23-25. A user makes a selection at an input terminal that is compared to the control code. Col. 16, ll. 25-30. The video and audio signals are separately processed based on the comparison. Col. 16, ll. 30-36; Col. 16, ll. 37-43. The desired video signal is fed to a frame video buffer memory and stored therein before being read out to a video output terminal. Col. 16, ll. 31-36. The desired audio signal is converted into an analog audio signal and supplied to an audio output terminal. Col. 16, ll. 37-43.

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C. Ostermann

Ostermann is directed to a "system for enciphering and deciphering data for transmission between a transmitter and a receiver, where the terms encipher and decipher are synonymous with encrypt and decrypt respectively." Col. 1, ll. 7-10. Ostermann discloses a receiver station transmitting a cipher algorithm "from the cipher program storage 18 over a data transmission channel 20 to the program memory 22 of the programmable cipher computer 12" at the transmitter station. Col. 2, ll. 38-41. "The cipher algorithm transmitted from the cipher program storage 18 of cipher equipment 16 via channel 20 is stored in program memory 22 and used to encipher the clear input data provided by input device 24 to transmitter 10."

Ostermann also discloses another embodiment of the invention where "the programmable cipher computer 12 is provided with long term memory 28 for storage of a plurality of different cipher programs which can be called up for storage in the program memory 22 as required." Col. 2, ll 59-62. The cipher equipment 12 at the transmitter station receives a bit sequence from cipher computer 16 at the receiver station that enables the cipher program to be transferred from long-term memory 28 to program memory 22. Col. 3, ll. 10-19.

V. RESPONSE TO PRIOR ART REJECTIONS

A. Rejection of claims 22, 40-42, and 55 under 35 U.S.C. §102(e)

Claims 22, 40-42, 55, and 56 are rejected under 35 U.S.C. §102(e) over Davidson. This rejection is respectfully traversed.

Claims 22, 40-42, 55, and 56 claim material relating to the encryption and decryption of signals. Applicants have consistently asserted that the Board of Patent Appeals and Interferences decided in Ex parte Personalized Media Communications, LLC (Appeal 2008-4228, Ex parte Reexamination Control 90/006,536) at pages 53-54, that encryption and decryption require a

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digital signal. The Board considered the very same specification that is part of this application in finding that encryption and decryption are limited to digital applications. The Board also held that "encryption and decryption are not broad enough to read on scrambling and unscrambling."

In the Office Action, the Examiner noted that the United States District Court for the Eastern District of Texas Marshall Division recently found that encryption and decryption were terms not limited to digital data. However, this ruling is not final and Applicants are seeking its reconsideration. The Examiner erred by ignoring the decision of the Board, the controlling administrative tribunal for examiners, in favor of a non-final, non-binding authority.

For the sake of advancing prosecution, Applicants propose to amend independent claims 22, 40-42, 55, and 56 to clarify that the information transmission received is an encrypted digital information transmission. Davidson does not teach the encryption of an entire digital signal transmission. These proposed amendments are fully supported by the specification. Applicants request entry of these amendments as they place this application in condition for allowance or at least place this application in better form for consideration on appeal under 37 C.F.R. § 1.116(b)(2).

These proposed amendments in no way affect Applicants' position that encryption and decryption require a digital signal. Applicants propose the claim amendments as an earnest attempt to advance the prosecution of the application. Therefore, the claims 22, 40-42, 55, and 56 are not anticipated by Davidson and are in allowable form.

Even assuming, *arguendo*, that Davidson teaches an encrypted digital information transmission, claims 22, 41, 42, 55, and 56 are not anticipated by Davidson for at least the following reasons:

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1. Claim 22

Claim 22, amended as proposed, recites in part:

> receiving encrypted digital programming, said encrypted digital programming having an encrypted control signal;
>
> detecting said control signal;
>
> passing said control signal to a decryptor that decrypts encrypted digital data at said subscriber station;
>
> decrypting said control signal;

These limitations are not taught by Davidson.

The Office Action points to Davidson's claim 65, column 24, lines 30-50, to show that the invention discloses all the limitations of claim 22. But, claim 22 claims receiving encrypted digital programming having an encrypted digital control signal. Applicants maintain that Davidson only teaches conveying a composite television signal including a video portion, an aural portion, and an encryption codes signal. There is no suggestion in claim 65 or anywhere else in Davidson that the encryption codes signal is an encrypted digital signal. This is evidenced by the lack of a decryptor, as claimed here, that decrypts the encrypted digital control signal. Claim 65 only claims a "signal detector means" for separating the encryption codes signal from the television signal, but claims a "inverse encryption means" for decrypting the encrypted audio signal. If the encryption codes signal was in fact encrypted, "inverse encryption means" would be necessary to decrypt it. Therefore, Davidson fails to teach all the limitations of claim 22.

2. Claim 41

Claim 41, amended as proposed, recites in part:

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receiving programming and delivering said programming to a transmitter;

receiving digital data comprising at least an instruct signal and communicating said digital data to a signal embedder, said instruct signal operative at said receiver station to control said decryptor;

controlling said signal embedder to embed said digital data in an encrypted digital information transmission in a varying pattern of timing or location;

These limitations are not taught by Davidson.

The Office Action points to Davidson's claim 72, column 25, line 45 – column 26, line 9, to show that the invention discloses all the limitations of claim 41. Davidson's claim only sets forth means for generating television signals and encryption codes. The audio signal is then digitized at the transmitter station. Davidson's claim is silent regarding delivering programming and communicating information to a transmitter. Moreover, as asserted by Applicants previously, claim 72 fails to teach embedding digital data in an information transmission in a varying pattern of timing or location. It only claims means for "combining the encryption codes signal, the digitized and encrypted audio program signal, a video program signal, with the carrier signals whereby... [they each] can be individually separated at a receiver." Col. 26, ll. 4-9. The Examiner argues that Davidson embeds an encryption codes signal within programming "in some varying pattern or fashion," but does not suggest where Davidson teaches that. Claim 72 is silent as embedding digital data in an encrypted digital information transmission. Davidson fails to teach all the limitations of claim 41.

3. Claim 42

Claim 42, amended as proposed, recites in part:

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detecting a plurality of signals on said at least one encrypted digital information transmission;

decrypting at least one of said plurality of signals, said at least one decrypted signal including at least one instruct signal which is effective to instruct;

passing the at least one decrypted instruct signal to a controllable device; and

controlling said controllable device on the basis of decrypted information included in said at least one decrypted instruct signal.

These limitations are not taught by Davidson.

The Office Action points to Davidson's claim 65, column 24, lines 30-50, to show that the invention discloses all the limitations of claim 42. Claim 65 teaches means for decrypting a digitized audio signal but fails to teach decrypting a signal that includes at least one instruct signal which is effective to instruct. The Examiner argues that the decrypted audio signal acts as an instruct signal that is passed to a controllable device and controls it by outputting/presenting the audio signal. But the limitation claims "at least one decrypted signal including at least one instruct signal," thereby disqualifying a decrypted signal acting as an instruct signal. Moreover, Davidson does not teach a plurality of signals on an encrypted digital information. Therefore, Davidson fails to teach all the limitations of claim 42.

4. Claim 55

Claim 55, amended as proposed, recites in part:

controlling said controllable device on the basis of said passed decrypted or enabled at least said second of said plurality of signals.

These limitations are not taught by Davidson.

The Office Action points to Davidson's claim 65, column 24, lines 30-50, to show that the invention discloses all the limitations of claim 55. Claim 65 teaches means for the

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decryption and analog conversion of an encrypted digital audio signal, but fails to teach controlling a controllable device on the basis of that decrypted analog audio signal. The "analog conversion means connected to the inverse encryption means to return the audio signal to the original analog format whereby program audio may be processed and presented in a conventional manner." Col. 24, ll. 47-50. Applicants maintain, as asserted previously, that in Davidson, the program audio is an element to be processed, it is not operable in the controlling of a controllable device. Davidson fails to teach all the limitations of claim 55.

5. Claim 56

Claim 56, amended as proposed, recites in part:

> receiving at least one encrypted digital information transmission;
>
> identifying a plurality of signals in said at least one information transmission;
>
> selecting a first signal of said plurality of signals including downloadable code;

These limitations are not taught by Davidson.

Davidson's receiver receives sets of signals at receiving antenna 36. Col. 8, ll. 57-68. The sets of signals are then split by RF splitter 114 so that the video, aural, and control signals can be separately processed. Col. 9, ll. 1-11. Applicants maintain, as asserted previously, that the receiver does not perform any "selecting" of a first signal in a transmission that includes downloadable code. Davidson's receiver continuously splits the received sets of signals and processes each according to its type. No "selecting" occurs because all signals are received and then processed. Davidson fails to teach "selecting" as set forth in claim 56.

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B. Rejection of claim 24 under 35 U.S.C. §102(e)

Claim 24 is rejected under 35 U.S.C. §102(e) over Yanagimachi. This rejection is respectfully traversed.

Claim 24, amended as proposed, recites, in part:

> receiving at said remote transmitter station one or more second instruct signals which operate at the subscriber station to identify and decrypt said unit of programming or said one or more first instruct signals, said remote transmitter station transferring said one or more second instruct signals to said transmitter; and

Applicants propose to amend this claim to use the conjunction "and" between identify and decrypt. In Applicant's Amendment filed on October 6, 2011, Applicants argued that Yanagimachi does not teach decrypting. The Final Office Action did not address this point. Instead, it asserted that Yanagimachi teaches the above limitation because Yanagimachi teaches identifying a unit of programming, which satisfies one of the alternatives claimed by the unamended claim that uses the disjunction "or."

The proposed amendment makes the decrypting of programming inclusive. Yanagimachi fails to address encryption or decryption. Therefore, Yanagimachi fails to describe each and every limitation as set forth in claim 24. Applicants request entry of this amendment as it places this application in condition for allowance or at least place this application in better form for consideration on appeal under 37 C.F.R. § 1.116(b)(2).

C. Rejection of claims 31 and 54 under 35 U.S.C. §102(e)

Claims 31 and 54 have been rejected under 35 U.S.C. §102(e) over Ostermann. This rejection is respectfully traversed.

1. Claim 31

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Claim 31 recites, in part:

> receiving at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code; and
>
> causing said at least one control signal to be communicated to said at least one transmitter at a specific time,
>
> thereby to transmit at least one information transmission including the downloadable code and said at least one control signal.

These limitations are not taught by Ostermann.

Applicants maintain the same arguments that they asserted in their previous Amendment. Ostermann discloses the cipher equipment 12 at the transmitter station receiving a bit sequence from the cipher computer 16 at the receiver station, but the bit sequence does not operate to execute the cipher algorithm at the receiver station. Moreover, Ostermann fails to teach the communication of the bit sequence, or any control signal, to a transmitter at the transmitter station at a specific time. When the transmitter station transmits, it only transmits the cipher algorithm. Ostermann fails to teach transmitting a transmission that includes a control signal and downloadable code. Ostermann does not describe each and every limitation as set forth in claim 31.

2. Claim 54

Claim 54, recites, in part: "storing at the remote data source one or more control signals for enabling a decryptor to decrypt a video." Ostermann does not address the decryption of video.

Applicants maintain the same arguments that they asserted in their previous Amendment. The Office Action points to cipher equipment 16 that contains cipher program storage 18 for

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storing a cipher algorithm, as described in column 2, lines 38-41, as teaching this limitation. However, Ostermann does not specifically address the decryption of video. It is directed to the transmission of a cipher program to allow encryption or encryption of "data." Without asserting any support, the Examiner argued that data "in a general sense" includes video. But there is no suggestion in Ostermann it applies to anything beyond cipher programs. Therefore, Ostermann fails to describe this limitation as set forth in claim 54.

D. Rejection of claims 32-36, 38, and 39 under 35 U.S.C. §103(a)

The Office Action rejected claims 32-36, 38, and 39 under 35 U.S.C. 103(a) as allegedly being unpatentable over the combination of Ostermann in view of Davidson. Applicants respectfully traverse the rejections and argue that Ostermann and Davidson, alone and in combination, fail to teach each of the claim's limitations.

1. Claim 32

Claim 32 claims the method of claim 31, "wherein a television program is displayed at a receiver station and said downloadable code and said at least one control signal program said receiver station to decrypt said television program in accordance with said new technique." Claim 32 is not rendered unpatentable by Ostermann for the same reasons as argued above in regard to claim 31.

The Office Action points to Davidson's claim 65 as teaching the application of encryption/decryption techniques to television signals. However, it would not have been obvious to combine the teachings of the references. Davidson is directed to the transmission and reception of standard television signals, which at the time of invention were analog television signals. As evidenced by Davidson only scrambling the analog video signal while embedding an

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encrypted digital audio signal, the encryption of a whole television signal was not obvious. There is no suggestion in Davidson that encryption could be applied to signals as complex as entire television signals. In fact, Davidson teaches away from encrypting/decrypting television signals by focusing on the processing of the video and audio signal components while leaving the television signal itself unaffected. Therefore, it would not have been obvious to combine Davidson and Ostermann.

Assuming, *arguendo*, that it would be obvious to combine Davidson and Ostermann, Davidson does not cure Ostermann's deficiencies. The combination of Davidson and Ostermann fails to teach receiving a control signal which operates to execute downloadable code, causing the control signal to be communicated to a transmitter at a specific time to transmit an information transmission including the downloadable code and the control signal. Applicants respectfully submit that even if the teachings of Ostermann were modified with the teachings of Davidson as suggested in the Non-Final Office Action, the modified composition still fails to satisfy every element recited in claim 32.

2. Claim 33

Claim 33 recites, in part: "receiving a television program at a transmitter station and delivering said television program to a transmitter." This limitation is not taught by Ostermann or Davidson.

Ostermann teaches the transfer of a cipher algorithm from a receiver station to a transmitter station, where the cipher algorithm is used to implement decrypting at the receiver station. The Office Action points to Davidson's claim 65, column 24, lines 30-50 to apply Ostermann's teachings to television signals. However, as argued above, it would not have been

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obvious to combine the teachings of the references. Davidson is directed to the transmission and reception of standard television signals, which at the time of invention were analog television signals. As evidenced by Davidson only scrambling the analog video signal while embedding an encrypted digital audio signal, the encryption of a whole television signal was not obvious. Davidson surely understood encryption and decryption, but did not apply it to television signals because that innovation was not obvious. In fact, Davidson teaches away from encrypting/decrypting television signals by focusing on the processing of the video and audio signal components while leaving the television signal itself unaffected. Therefore, it would not have been obvious to combine Davidson and Ostermann.

Assuming, *arguendo*, that it would be obvious to combine Davidson and Ostermann, claim 65 teaches conveying composite television signals, but the claim only discloses means for generating television signals and encryption codes. There is no teaching of receiving a television program at a transmitter station and delivering it to a transmitter. Even if someone of ordinary skill in the art were to apply the teachings of Ostermann and Davidson, the inventions fail to teach or suggest every limitation of claim 33.

3. Claim 34

Claim 34 recites, in part:

> passing said decrypted second of said plurality of signals to a controllable device; and
>
> controlling said controllable device on the basis of said passed decrypted second of said plurality of signals."

These limitations are not taught by Ostermann or Davidson.

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The Office Action points to Davidson's claim 65, column 24, lines 30-50, to show that the invention discloses the passing and controlling limitations of claim 34. Claim 65 teaches means for the decryption and analog conversion of an encrypted digital audio signal, but fails to teach passing the decrypted analog audio signal to a controllable device and controlling the controllable device on the basis of that decrypted analog audio signal. The "analog conversion means connected to the inverse encryption means connected to the inverse encryption means to return the audio signal to the original analog format whereby program audio may be processed and presented in a conventional manner." Col. 24, ll. 47-50. As asserted previously by Applicants, in Davidson, the program audio is an element to be processed, it is not operable in the controlling of a controllable device. Davidson and Ostermann fail to teach all the limitations of claim 34.

4. Claim 35

Claim 35 depends from independent claim 33. Claim 35 claims the method of claim 33, "wherein said step of transferring is performed based on comparison." Claim 35 further limits claim 33 and is not rendered unpatentable by Ostermann and Davidson for the same reasons as argued above in regard to claim 33.

5. Claim 36

Claim 36 depends from independent claim 33. Claim 36 claims the method of claim 33, "wherein said step of transferring in accordance with a schedule." Claim 36 further limits claim 33 and is not rendered unpatentable by Ostermann and Davidson for the same reasons as argued above in regard to claim 33.

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Assuming, *arguendo*, that it would be obvious to combine Davidson and Ostermann, the Office Action points to Ostermann as teaching "which cipher program is to be used at a particular time (schedule) as spoken of on column 3, lines 10-20." The Examiner argues that the transferring "is performed in accordance with a particular order or schedule depending on a received bit sequence indicating which cipher program is to be used at a particular time." But Ostermann does not teach anything other than the automatic transferring of the cipher program at the time the bit sequence is received. The bit sequence does not include any "scheduling" information. It's true that Ostermann's system will transfer the cipher programs at the time of bit sequence receipt and in the order of bit sequence receipt, but this does not mean that the transfers are made in accordance with a schedule. There is no teaching or suggestion in Ostermann of performing this step in accordance with a schedule. Ostermann and Davidson, alone and in combination, fail to teach each of the claim 36's limitations.

6. Claim 38

Claim 38 depends from independent claim 33. Claim 38 claims the method of claim 33, "wherein said one or more instruct signals operate at said one or more receiver stations based on an identifier, said method further comprising the step of transmitting said identifier." Claim 38 further limits claim 33 and is not rendered unpatentable by Ostermann and Davidson for the same reasons as argued above in regard to claim 33.

7. Claim 39

Claim 39 depends from independent claim 33. Claim 39, amended as proposed, claims the method of claim 38, "wherein an information transmission including said television program is received at said one or more receiver stations, wherein said television program is outputted at said one or more receiver stations, and wherein said identifier identifies (i) said television

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program and (ii) a channel including said television program." Claim 39 further limits claim 33 and is not rendered unpatentable by Ostermann and Davidson for the same reasons as argued above in regard to claim 33.

Assuming, *arguendo*, that it would be obvious to combine Davidson and Ostermann, the Office Action points to Ostermann, column 3, lines 49-61, as teaching "said identifier identifies (i) said television program and (ii) a channel including said television program. The cited section discloses a bit sequence "containing identification codes of both the transmitter 10 and the addressed receiver 14." Col. 3, ll. 59-61. The Examiner argues that the identification codes would "indicate a particular channel that a transmission is utilizing between a transmitter and an addressed receiver." However, Ostermann does not teach the identification of a television program, or anything transmitted to the receiver station. This limitation as set forth by the proposed amendment to claim 39 is not taught by Ostermann or Davidson. Applicants request entry of this amendment as it places this application in condition for allowance or at least place this application in better form for consideration on appeal under 37 C.F.R. § 1.116(b)(2). Applicants further request entry of this amendment under 37 C.F.R. § 1.116(b)(3) as it responds to the Examiner's new reason for rejection and could not have been earlier presented.

VI. CLAIMS 23, 25-30, AND 45-53 ARE ALLOWABLE

The Office Action identified claims 23, 25-30, and 45-30 as allowable over the prior art of record. This Amendment does not affect claims 23, 25-30, and 45-30. Applicants respectfully submit claims 23, 25-30, and 45-30 as previously presented.

The Office Action also identified claim 37 as objected to as being dependent upon a rejected base claim, but would be otherwise allowable if rewritten in independent form including

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all of the limitations of the base claim and any intervening claims. Applicants respectfully assert that the claim does not need to be rewritten.

Claim 37 depends from claim 36, which depends from independent claim 33. As argued above, claims 33 is allowable over Davidson, Ostermann, and the prior art of record. As identified by the examiner, the limitations of claim 37 are also allowable over the prior art of record. Applicants respectfully submit that claim 37 is allowable in its current dependent claim form.

VI. CONCLUSION

Applicants respectfully submit that all claims are allowable over the cited art for the reasons set forth above. Applicants request reconsideration of this application in view of the amendment and arguments set forth above. In the event Applicants have overlooked the need for an extension of time, payment of fee, or additional payment of fee, Applicant hereby petitions therefore and authorize that any charges be made to Deposit Account No. 50-4494.

Should the Examiner have any questions regarding any of the above, the Examiner is respectfully requested to telephone the undersigned at 202-346-4000.

Dated: February 29, 2012

Respectfully submitted,

By: /Thomas J. Scott, Jr./
Thomas J. Scott, Jr.
Registration No.: 27,836
GOODWIN PROCTER LLP
901 New York Avenue, NW
Washington, DC 20001
Attorney for Applicant

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

EXAMINER	
MOORE JR, MICHAEL J	

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

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

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

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PTOL-90A (Rev. 04/07)

Advisory Action Before the Filing of an Appeal Brief	**Application No.** *08/449,413*	**Applicant(s)** HARVEY ET AL.
	Examiner MICHAEL J. MOORE, JR.	**Art Unit** 2467

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 29 February 2012 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

NO NOTICE OF APPEAL FILED

1. ☒ The reply was filed after a final rejection. No Notice of Appeal has been filed. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance;

(2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114 if this is a utility or plant application. Note that RCEs are not permitted in design applications. The reply must be filed within one of the following time periods:

a) ☐ The period for reply expires _____months from the mailing date of the final rejection.

b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action; or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

c) ☐ A prior Advisory Action was mailed more than 3 months after the mailing date of the final rejection in response to a first after-final reply filed within 2 months of the mailing date of the final rejection. The current period for reply expires months from the mailing date of *the prior Advisory Action* or SIX MONTHS from the mailing date of the final rejection, whichever is earlier.

Examiner Note: If box 1 is checked, check either box (a), (b) or (c). ONLY CHECK BOX (b) WHEN THIS ADVISORY ACTION IS THE FIRST RESPONSE TO APPLICANT'S FIRST AFTER-FINAL REPLY WHICH WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. ONLY CHECK BOX (c) IN THE LIMITED SITUATION SET FORTH UNDER BOX (c). See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) or (c) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendments filed after a final rejection, but prior to the date of filing a brief, will not be entered because

a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);

b) ☐ They raise the issue of new matter (see NOTE below);

c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: *See Continuation Sheet*. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): (a) ☒ will not be entered, or (b) ☐ will be entered, and an explanation of how the new or amended claims would be rejected is provided below or appended.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing the Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.

12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____

13. ☐ Other: _____.

STATUS OF CLAIMS

14. The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: 23,25-30 and 43-53.

Claim(s) objected to: 37.

Claim(s) rejected: 22,24,31-36,38-42 and 54-56.

Claim(s) withdrawn from consideration: .

/Michael J. Moore, Jr./
Primary Examiner, Art Unit 2467

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Continuation of 3. NOTE: Amendments made by Applicant to claims 22, 24, 39-42, 55, and 56 raise new issues that would require further consideration and/or search.

Continuation of 11. does NOT place the application in condition for allowance because: Applicants arguments regarding claim rejections under obviousness-type double patenting, 35 U.S.C. 102 and 35 U.S.C. 103 will be addressed upon Applicant filing one of the above replies indicated in section 1 of this communication.

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DO NOT ENTER: /MM/

3/6/12

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: John C. Harvey *et al.*	
Application No.: 08/449,413	Confirmation No.: 1756
Filed: May 24, 1995	Art Unit: 2467
For: SIGNAL PROCESSING APPARATUS AND METHODS	Examiner: Moore Jr., Michael J.

AMENDMENT AFTER FINAL REJECTION AND REQUEST FOR RECONSIDERATION

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

Dear Sir:

In response to the Final Office Action dated December 30, 2011, please amend the above-identified application as follows.

Amendments to the claims begin on page 2.

Remarks begin on page 11.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: John C. Harvey *et al.*	
Application No.: 08/449,413	Confirmation No.: 1756
Filed: May 24, 1995	Art Unit: 2467
For: SIGNAL PROCESSING APPARATUS AND METHODS	Examiner: Moore Jr., Michael J.

SUBMISSION UNDER 37 C.F.R. § 1.129(a)

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

Dear Sir:

Applicants request that the finality of the final Office Action mailed December 30, 2011, be withdrawn in view of this timely filed first submission under 37 C.F.R. § 1.129(a). The fee set forth in 37 C.F.R. § 1.17(r) is submitted herewith. Applicants respectfully request that the amendments be entered and the arguments considered as set forth in the Amendment After Final Rejection filed February 29, 2012. The present application has an effective pendency of at least two years as of June 2, 1995, taking into account any reference of record to any earlier filed application under 35 U.S.C. §§ 120, 121, and 365(c). This submission is being filed prior to the filing of an appeal brief and prior to abandonment of the application.

This submission is filed prior to the 3-month expiration date for reply set forth in the December 30, 2011 Final Rejection and therefore does not require a request for an extension of time or a payment of extension fees. In the event Applicants have overlooked the need for an

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extension of time, payment of fee, or additional payment of fee, Applicant hereby petitions therefore and authorize that any charges be made to Deposit Account No. 50-4494.

Dated: March 13, 2012

Respectfully submitted,

By /Thomas J. Scott, Jr./
Thomas J. Scott, Jr.
Registration No.: 27,836
GOODWIN PROCTER LLP
901 New York Avenue, NW
Washington, DC 20001
(202) 346-4000
Attorney for Applicant

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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.
08/449,413	05/24/1995	JOHN C. HARVEY	5634.174	1756

70813 7590 06/08/2012

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

EXAMINER	
MOORE JR, MICHAEL J	

ART UNIT	PAPER NUMBER
2467	

NOTIFICATION DATE	DELIVERY MODE
06/08/2012	ELECTRONIC

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

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

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

AAlpha-Kpetewama@goodwinprocter.com
patentdc@goodwinprocter.com
fmckeon@goodwinprocter.com

PTOL-90A (Rev. 04/07)

Office Action Summary	Application No.	Applicant(s)	
	08/449,413	HARVEY ET AL.	
	Examiner	Art Unit	
	MICHAEL J. MOORE, JR.	2467	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 March 2012*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

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

Disposition of Claims

5)☒ Claim(s) *22-56* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☒ Claim(s) *23,25-30 and 43-53* is/are allowed.

7)☒ Claim(s) *22,24,31-36,38,40-42 and 54-56* is/are rejected.

8)☒ Claim(s) *37 and 39* is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

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

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

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DETAILED ACTION

Continued Examination Under 37 CFR 1.129

1. An amendment and request for reconsideration pursuant to 37 CFR 1.129 was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.129, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.129. Applicant's submission filed on 2/29/12 has been entered.

Double Patenting

2. The nonstatutory double patenting rejection 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 and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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).

3. Claims **22, 34, 54, and 55** are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims **1, 22, and 23** of *U.S. Patent No. 7,801,304*. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following correspondences.

Regarding claim **22**, "a method for controlling the decryption of encrypted programming at a subscriber station" corresponds to "a method for controlling the decryption of programming at a subscriber station" in claim **1** of the above U.S. Patent.

"Receiving encrypted digital programming, said encrypted digital programming having an encrypted digital control signal" corresponds to "receiving programming, said programming having a first encrypted digital control signal portion" in claim **1** of the above U.S. Patent.

"Detecting said control signal" corresponds to "detecting said first encrypted digital control signal portion of said programming" in claim **1** of the above U.S. Patent.

"Passing said control signal to a decryptor that decrypts encrypted digital data at said subscriber station" corresponds to "passing said first encrypted digital control signal portion of said programming to a decryptor at said subscriber station" in claim **1** of the above U.S. Patent.

"Decrypting said control signal" corresponds to "decrypting said first encrypted digital control signal portion" in claim **1** of the above U.S. Patent.

"Decrypting said encrypted digital programming to form decrypted programming based on said control signal" corresponds to "decrypting said encrypted digital information portion of said programming ... based on the decrypted control signal portion" in claim **1** of the above U.S. Patent.

Lastly, "presenting said decrypted programming to a viewer or listener" corresponds to "presenting said programming" in claim **1** of the above U.S. Patent.

Claim **22** of the instant application does not explicitly claim "passing said encrypted digital information portion of said programming to said decryptor". Therefore, claim **22** merely broadens the scope of claim **1** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Regarding claim **34**, "a method of processing signals at a receiver station" corresponds to the same in claim **23** of the above U.S. Patent.

"Receiving at least one information transmission" and "detecting a plurality of signals on said at least one information transmission" corresponds to "receiving a plurality of signals including digital programming and inputting at least some of said plurality of signals to said digital detector" as well as "detecting said encrypted digital data in said at least some of said plurality of signals" in claim **23** of the above U.S. Patent.

"Changing a decryption technique in response to at least a first of said plurality of signals" corresponds to "controlling said decryptor to alter its decryption pattern or technique on the basis of information included in said detected encrypted digital data" in claim **23** of the above U.S. Patent.

Lastly, "decrypting a second of said plurality of signals on the basis of said changed decryption technique; passing said decrypted second of said plurality of signals to a controllable device; and controlling said controllable device on the basis of said passed decrypted second of said plurality of signals" corresponds to "decrypting at least a portion of said digital programming using a selected decryption pattern or technique based on said step of detecting in order to provide a decrypted output of programming to a viewer or listener" in claim **23** of the above U.S. Patent.

Claim **34** of the instant application does not explicitly claim "said receiver station having a receiver, a digital detector operatively connected to said receiver for detecting encrypted digital data, a decryptor operatively connected to said digital detector for decrypting said encrypted digital data, and a controller operatively connected to said

digital detector or said decryptor for controlling said decryptor". Therefore, claim **34** merely broadens the scope of claim **23** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Regarding claim **54**, "a method of providing an enabling signal to a receiver station from a remote data source, said enabling signal for use in decrypting at the receiver station a programming signal, said receiver station being programmed to get information necessary for enabling a programming signal" corresponds to "a method of providing digital enabling information to a receiver station from a first remote source, said digital enabling information for use at the receiver station in decrypting a mass medium program presentation" in claim **22** of the above U.S. Patent.

"Storing at the remote data source one or more control signals for enabling a decryptor to decrypt a video" corresponds to "storing digital enabling information at said first remote source" in claim **22** of the above U.S. Patent.

"Receiving at the remote data source from the receiver station a communication to get specific enabling information" corresponds to "receiving at said first remote source a query from said receiver station" in claim **22** of the above U.S. Patent.

"Communicating, from the remote data source to the receiver station in response to said communication from the receiver station, a control signal" corresponds to

"transmitting said digital enabling information which is effective to enable decryption from said first remote source to said receiver station in response to said step of receiving said query, said receiver station storing at least some of said transmitted enabling information" in claim **22** of the above U.S. Patent.

Lastly, "whereby the receiver station inputs said control signal to a decryptor, and wherein said decryptor decrypts said programming signal" corresponds to "to said receiver station an encrypted digital mass medium presentation signal which is decrypted on the basis of said stored at least some of said digital enabling information" in claim **22** of the above U.S. Patent.

Claim **54** of the instant application does not claim "transmitting from a second remote source" as well as "to present said mass medium programming presentation". Therefore, claim **54** merely broadens the scope of claim **22** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Regarding claim **55**, "a method of processing signals at a receiver station" corresponds to the same in claim **23** of the above U.S. Patent.

"Receiving one or more encrypted digital information transmissions at said receiver station; detecting a plurality of signals on said one or more encrypted digital information transmissions, at least a first of one of said plurality of signals including a

control signal" corresponds to "receiving a plurality of signals including digital programming and inputting at least some of said plurality of signals to said digital detector" as well as "detecting said encrypted digital data in said at least some of said plurality of signals" in claim **23** of the above U.S. Patent.

"Controlling a decryptor that decrypts encrypted digital data in response to said control signal" corresponds to "controlling said decryptor to alter its decryption pattern or technique on the basis of information included in said detected encrypted digital data" in claim **23** of the above U.S. Patent.

"Decrypting or enabling communication of at least a second of said plurality of signals on the basis of said step of controlling said decryptor" corresponds to "decrypting at least a portion of said digital programming using a selected decryption pattern or technique based on said step of detecting" in claim **23** of the above U.S. Patent.

Lastly, "passing said decrypted or enabled at least said second of said plurality of signals to a controllable device; and controlling said controllable device on the basis of said passed decrypted or enabled at least said second of said plurality of signals" corresponds to "to provide a decrypted output of programming to a viewer or listener" in claim **23** of the above U.S. Patent.

Claim **55** of the instant application does not claim "detecting ... in accordance with a varying pattern of timing or location". Therefore, claim **55** merely broadens the scope of claim **23** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

4. Claim **24** is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim **14** of *U.S. Patent No. 7,801,304* in view of Yanagimachi et al. (U.S. 3,936,595) (hereinafter "Yanagimachi").

Regarding claim **24**, "a method of controlling a remote transmitter station to communicate program material to a subscriber station and controlling said subscriber station to process or output a unit of programming" corresponds to "a method of controlling a remote transmitter station to communicate program material to a subscriber station and controlling said subscriber station to process or output digital programming" in claim **14** of the above U.S. Patent.

"Receiving a control signal which operates at the remote transmitter station to control the communication of a unit of programming and one or more first instruct signals and communicating said control signal to said remote transmitter station" corresponds to "receiving at said remote transmitter station a first control signal which operates at the remote transmitter station to control communication of said digital programming and one or more first instruct signals" in claim **14** of the above U.S. Patent.

"Receiving at said remote transmitter station one or more second instruct signals which operate at the subscriber station to identify and decrypt said unit of programming or said one or more first instruct signals, said remote transmitter station transferring said one or more second instruct signals to said transmitter" corresponds to "receiving at said remote transmitter station said one or more digital second instruct signals which operate at the subscriber station to decrypt (identified) said digital programming" in claim **14** of the above U.S. Patent.

"Transmitting from said remote transmitter station an information transmission comprising said unit of programming, said one or more first instruct signals, and said one or more second instruct signals, said one or more first instruct signals being transmitted in accordance with said control signal" corresponds to "transmitting from said remote transmitter station to said subscriber station an information transmission comprising said digital programming, said one or more first instruct signals and said one or more digital second instruct signals, said one or more first instruct signals being transmitted in accordance with said first control signal" in claim **14** of the above U.S. Patent.

Claim **24** of the instant application further claims "receiving a code or datum identifying a unit of programming to be transmitted by the remote transmitter station, said remote transmitter station transferring said unit of programming to a transmitter" which is not claimed in claim **14** of the above U.S. Patent.

However, *Yanagimachi* teaches a similar method of controlling transmission and output of programming at a receiver station, where program control codes identifying

particular programming included in the transmission are utilized by a transmitter station 102 and receiver station 103 for transmission/reception and programming output as spoken of on column 15, lines 2-32 as well as column 16, lines 22-40.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, to apply the control code transmission of *Yanagimachi* to the method of claim **14** of the above U.S. Patent in order to provide selective output of programming in accordance with selection input provided from a subscriber as spoken of on column 16, lines 25-40 of *Yanagimachi.*

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims **40-42, 55, and 56** are rejected under 35 U.S.C. 102(e) as being anticipated by Davidson (Re. 31,735). *Davidson* teaches all of the limitations of the specified claims with the reasoning that follows.

Regarding claim **40**, "a method of processing signals at a receiver station" is anticipated by the decryption method spoken of on column 24, lines 30-50.

"Receiving at least one encrypted digital information transmission" and "locating code" is anticipated by the conveying of a composite television signal (encrypted digital information transmission) to a subscriber including a video portion, an aural portion, and an encryption codes signal (signal including code) comprising a sequence of encryption codes as spoken of on column 24, lines 30-35, as well as an encryption codes signal detector that detects (locates) and separates the encryption codes signal (signal including code) from the television signals as spoken of on column 24, lines 40-41.

"Passing said code to a processor; controlling a decryptor that decrypts encrypted digital data to decrypt in a specific fashion on the basis of said code; decrypting a portion of said at least one information transmission in said specific fashion" is anticipated by the inverse encryption means (decryptor processor) that uses the separated encryption codes signal to return the detected audio signal (portion of information transmission) to the pre-encryption digitized condition (decrypted portion) as spoken of on column 24, lines 44-46.

Lastly, "passing said decrypted portion of said at least one encrypted digital information transmission to one of said processor and an output device" is anticipated by returning of the audio signal to original analog format (decrypted portion) whereby program audio may be processed and presented (to an output device) in a conventional manner as spoken of on column 24, lines 47-50.

Regarding claim **41**, "a method of controlling a receiver station to detect digital data and control a decryptor that decrypts encrypted digital data based on a varying

pattern of timing or location" is anticipated by the encryption/decryption method spoken of on column 25 line 45 – column 26, line 9.

"Receiving programming and delivering said programming to a transmitter" is anticipated by the subscription television transmitter that generates television signals (programming) having video and audio portions as spoken of on column 25, lines 45-50.

"Receiving digital data comprising at least an instruct signal and communicating said digital data to a signal embedder, said instruct signal operative at said receiver station to control said decryptor; controlling said signal embedder to embed said digital data in an encrypted digital information transmission in a varying pattern of timing or location; communicating said encrypted digital information transmission to said transmitter; and transmitting said programming and said encrypted digital information transmission including said digital data" is anticipated by the encryption code signal generating means that generates a continuous sequence of encryption codes (digital data instruct signal) as well as the means for combining (signal embedder) that combines the encryption codes signal, the digitized and encrypted audio program signal, and a video program signal with carrier signals for transmission to a receiver as spoken of on column 25, lines 50-53 as well as column 26, lines 1-9.

Regarding claim **42**, "a method of processing signals at a receiver station" is anticipated by the decryption method spoken of on column 24, lines 30-50.

"Receiving at least one encrypted digital information transmission; detecting a plurality of signals on said at least one encrypted digital information transmission" is anticipated by the conveying of a composite television signal (information transmission)

to a subscriber including a video portion, an aural portion, and an encryption codes signal comprising a sequence of encryption codes as spoken of on column 24, lines 30-35.

"Decrypting at least one of said plurality of signals, said at least one decrypted signal including at least one instruct signal which is effective to instruct" is anticipated by the inverse encryption means (decryptor processor) that uses the separated encryption codes signal to return the detected audio signal to the pre-encryption digitized condition (decrypted signal) as spoken of on column 24, lines 44-46.

Lastly, "passing the at least one decrypted instruct signal to a controllable device; and controlling said controllable device on the basis of decrypted information included in said at least one decrypted instruct signal" is anticipated by returning of the audio signal to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50.

Regarding claim **55**, "a method of processing signals at a receiver station" is anticipated by the decryption method spoken of on column 24, lines 30-50.

"Receiving one or more encrypted digital information transmissions at said receiver station; detecting a plurality of signals on said one or more encrypted digital information transmissions, at least a first of one of said plurality of signals including a control signal" is anticipated by the conveying of a composite television signal (information transmission) to a subscriber including a video portion, an aural portion, and an encryption codes signal (control signal) comprising a sequence of encryption codes as spoken of on column 24, lines 30-35.

"Controlling a decryptor that decrypts encrypted digital data in response to said control signal; decrypting or enabling communication of at least a second of said plurality of signals on the basis of said step of controlling said decryptor" is anticipated by the inverse encryption means (decryptor) that uses the separated encryption codes signal (control signal) to return the detected audio signal to the pre-encryption digitized condition (decrypted signal) as spoken of on column 24, lines 44-46.

Lastly, "passing said decrypted or enabled at least said second of said plurality of signals to a controllable device; and controlling said controllable device on the basis of said passed decrypted or enabled at least said second of said plurality of signals" is anticipated by returning of the audio signal to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50.

Regarding claim **56**, "a method of processing signals at a receiver station" is anticipated by the decryption method spoken of on column 24, lines 30-50.

"Receiving at least one encrypted digital information transmission; identifying a plurality of signals in said at least one encrypted digital information transmission; selecting a first signal of said plurality of signals including downloadable code" is anticipated by the conveying of a composite television signal (information transmission) to a subscriber including a video portion, an aural portion, and an encryption codes signal (signal including code) comprising a sequence of encryption codes as spoken of on column 24, lines 30-35, as well as an encryption codes signal detector that detects

and separates (identification of and selection of) the encryption codes signal (signal including code) from the television signals as spoken of on column 24, lines 40-41.

"Passing said downloadable code to a processor; controlling a decryptor that decrypts encrypted digital data to decrypt in a specific fashion on the basis of said downloadable code; decrypting at least one second signal of said plurality of signals in said specific fashion" is anticipated by the inverse encryption means (decryptor processor) that uses the separated encryption codes signal to return the detected audio signal (second signal) to the pre-encryption digitized condition (decrypted programming) as spoken of on column 24, lines 44-46.

Lastly, "passing said at least one second signal to one of said processor and an output device" is anticipated by returning of the audio signal to original analog format whereby program audio may be processed and presented (to an output device) in a conventional manner as spoken of on column 24, lines 47-50.

3. Claims **31 and 54** are rejected under 35 U.S.C. 102(e) as being anticipated by Ostermann et al. (U.S. 4,484,025) (hereinafter "Ostermann"). *Ostermann* teaches all of the limitations of the specified claims with the reasoning that follows.

Regarding claim **31**, "a method of controlling at least one of a plurality of receiver stations" is anticipated by the enciphering/deciphering method performed by the terminals 1 and 2 of Figure 1.

"Receiving downloadable code which is effective at said at least one of said plurality of receiver stations to implement a new technique of decrypting and delivering

the downloadable code to at least one transmitter" is anticipated by the transmission of a cipher algorithm (downloadable code) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 (transmitter) that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

"Receiving at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code; and causing said at least one control signal to be communicated to said at least one transmitter at a specific time, thereby to transmit at least one information transmission including the downloadable code and said at least one control signal" is anticipated by the transmission of a bit sequence (control signal) from cipher equipment 16 to cipher computer 12 (transmitter) indicating a particular stored cipher program (downloadable code) to be used as spoken of on column 3, lines 10-19.

Regarding claim **54**, "a method of providing an enabling signal to a receiver station from a remote data source, said enabling signal for use in decrypting at the receiver station a programming signal, said receiver station being programmed to get information necessary for enabling a programming signal" is anticipated by the enciphering/deciphering method performed by the terminals 1 and 2 (receiver station and remote data source) of Figure 1.

"Storing at the remote data source one or more control signals for enabling a decryptor to decrypt a video" is anticipated by the cipher equipment 16 (remote data source) that contains cipher program storage 18 for storing a cipher algorithm as spoken of on column 2, lines 38-41.

"Receiving at the remote data source from the receiver station a communication to get specific enabling information" is anticipated by the cipher algorithm request (communication) transmitted from the terminal 1 to the terminal 2 (remote data source) requesting a cipher algorithm (enabling information) as spoken of on column 3, lines 4-9.

"Communicating, from the remote data source to the receiver station in response to said communication from the receiver station, a control signal" is anticipated by the transmission of a cipher algorithm (control signal) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

"Whereby the receiver station inputs said control signal to a decryptor, and wherein said decryptor decrypts said programming signal" is anticipated by a receiver terminal that contains means for deciphering (decryptor) received ciphered data text in accordance with a cipher algorithm and a cipher key as spoken of on column 4, lines 52-54, as well as column 2, lines 16-24, which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Claim Rejections - 35 USC § 103

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

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

5. 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(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims **32-36 and 38** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ostermann et al. (U.S. 4,484,025) (hereinafter "Ostermann") in view of Davidson (Re. 31,735).

Regarding claim **32**, *Ostermann* teaches the method of claim **31** as described above. *Ostermann* does not explicitly teach decryption of television programming.

However, *Davidson* teaches the application of encryption/decryption techniques to television signals as spoken of on column 24, lines 30-50.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of *Ostermann* to television program signals in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of *Davidson*.

Regarding claim **33**, *Ostermann* teaches the transmission of a cipher algorithm (instruct signal) from cipher program storage 18 to program memory 22 of a

programmable cipher computer 12 (transmitter) that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

Ostermann also teaches a receiver terminal that contains means for deciphering received ciphered data text in accordance with a cipher algorithm and a cipher key as spoken of on column 4, lines 52-54, as well as column 2, lines 16-24, which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Ostermann does not explicitly teach decryption of television programming.

However, *Davidson* teaches the application of encryption/decryption techniques to television signals as spoken of on column 24, lines 30-50.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of *Ostermann* to television program signals in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of *Davidson*.

Regarding claim **34**, *Ostermann* teaches the transmission of a cipher algorithm (signal) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 that indicates a particular enciphering/deciphering (encryption/decryption) technique as spoken of on column 2, lines 38-41.

Ostermann also teaches the transmission of a bit sequence (signal) from cipher equipment 16 to cipher computer 12 indicating a particular stored cipher program to be used (change in encryption/decryption technique) as spoken of on column 3, lines 10-19.

Ostermann also teaches a receiver terminal that contains means for deciphering received ciphered data text (signal) in accordance with a cipher algorithm and a cipher key as spoken of on column 4, lines 52-54, as well as column 2, lines 16-24, which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Ostermann does not explicitly teach passing a decrypted signal to a controllable device and controlling the controllable device on the basis of the passed decrypted signal.

However, *Davidson* teaches returning of an audio signal (decrypted signal) to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the post-decryption processing and presentation as taught in *Davidson* to the system of *Ostermann* in order to allow the receiving station to make appropriate use of the recovered decrypted signal.

Regarding claim **35**, *Ostermann* further teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit sequence as spoken of on column 3, lines 10-20.

Regarding claim **36**, *Ostermann* further teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit sequence that indicates which cipher program is to be used at a particular time (schedule) as spoken of on column 3, lines 10-20.

Regarding claim **38**, *Ostermann* further teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit sequence (identifier) as spoken of on column 3, lines 10-20.

Allowable Subject Matter

7. Claims **22-30 and 43-53** are allowable over the prior art of record.

8. Claims **37 and 39** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims **23, 25-30, 37, and 43-53,** these claims are allowable for the reasons indicated in the previous Office Action.

Response to Arguments

10. Applicant's arguments with respect to *amended* claim **22** have been fully considered and are persuasive. The prior art rejection of this claim has been withdrawn. Specifically, after further consideration of *amended* claim **22**, Examiner agrees with Applicant's argument that *Davidson* does not teach that the encryption codes signal is an encrypted digital signal itself that is decrypted by a decryptor. Accordingly, the prior art rejection has been withdrawn.

11. Applicant's arguments with respect to *amended* claim **24** have been fully considered and are persuasive. The prior art rejection of this claim has been withdrawn. Specifically, after further consideration of *amended* claim **24**, Examiner

agrees that the present amendment replacing the word "or" with "and" makes the decrypting of programming inclusive. *Yanagimachi* does not teach "receiving at said remote transmitter station one or more second instruct signals which operate at the subscriber station to identify and decrypt said unit of programming or said one or more first instruct signals" in combination with the other limitations of *amended* claim **24**. Accordingly, the prior art rejection has been withdrawn.

12. Applicant's arguments with respect to *amended* claim **39** have been fully considered and are persuasive. The prior art rejection of this claim has been withdrawn. Specifically, due to Applicant's present amendment removing the "at least one of" language from the last two lines of the claim, the claim now requires "said identifier identifies (i) said television program and (ii) a channel including said television program" which is not taught by the prior art of record. Accordingly, the prior art rejection has been withdrawn.

13. Applicant's other arguments filed 2/29/12 have been fully considered but they are not persuasive.

Regarding *amended* claim **24**, Applicant argues that claim **14** of U.S. Patent 7,801,304 does not teach "receiving at said remote transmitter station one **or** more second instruct signals which operate at the subscriber station to identify **and** decrypt said unit of programming **or** said one or more first instruct signals".

Claim **14** of the above U.S. Patent 7,801,304 recites "receiving at said remote transmitter station said one or more digital second instruct signals which operate at the subscriber station to decrypt said digital programming".

While Applicant's present amendment now makes the decryption of programming inclusive, it is maintained that the above decryption of digital programming recited in claim **14** would implicitly include an identification of the encrypted programming that is to be decrypted such that the identified encrypted programming may be decrypted.

Regarding claim **24**, Applicant further argues that *Yanagimachi* does not teach "receiving a code or datum identifying a unit of programming to be transmitted by the remote transmitter station". Applicant further argues that the control codes of *Yanagimachi* are not used to identify a unit of programming to be transmitted, but rather are used at a receiver station "to control a manner of sequentially connecting program materials to construct at least one significant program...".

However, as provided in the previous Office Action, *Yanagimachi* teaches where program control codes identifying particular programming included in the transmission are utilized by a transmitter station 102 and receiver station 103 for transmission/reception and programming output as spoken of on column 15, lines 2-32 as well as column 16, lines 22-40. Specifically, on column 16, lines 22-40, it is stated that "the control code transmitted with the video and audio signals is decoded by a transmission control code decoder 119 and the decoded control code is collated with a code set by the student through a selection input and answer input terminal 126. When these codes coincide with each other, the desired video signal of one television frame period is gated out by a video frame gate 122".

According to the above teachings of *Yanagimachi*, the received control codes do identify units of programming that are transmitted by the transmitter 102, as the control

codes are used at the receiver to identify particular units of programming to be extracted for output to a user.

Therefore, the obviousness-type double patenting rejection of claim **24** in view of claim **14** of the above U.S. Patent and *Yanagimachi* is maintained.

Regarding *amended* claims **22, 40-42, 55, and 56,** Applicant argues that there is no mention of "encryption" anywhere in the disclosure of *Davidson*. Applicant further argues that *Davidson* does not teach the encryption of an entire digital signal transmission. Applicant further argues that *Davidson* is limited in its use as a prior art reference due to the term "encryption" being added in the reissue application.

However, referring to MPEP 1401 regarding reissuing of patents:

> *35 U.S.C. 251. Reissue of defective patents.*
> Whenever any patent is, through error without any deceptive intention, deemed wholly or partly inoperative or invalid, by reason of a defective specification or drawing, or by reason of the patentee claiming more or less than he had a right to claim in the patent, the Director shall, on the surrender of such patent and the payment of the fee required by law, reissue the patent for the invention disclosed in the original patent, and in accordance with a new and amended application, for the unexpired part of the term of the original patent. No new matter shall be introduced into the application for reissue.

Further, referring to MPEP 1460 for Office treatment of a reissue:

> *35 U.S.C. 252. Effect of reissue.*
> The surrender of the original patent shall take effect upon the issue of the reissued patent, and every reissued patent shall have the same effect and operation in law, on the trial of actions for causes thereafter arising, as if the same had been originally granted in such amended form, but in so far as the claims of the original and reissued patents are substantially identical, such surrender shall not affect any action then pending nor abate any cause of action then existing, and the reissued patent, to the extent that its claims are substantially identical with the original patent, shall constitute a continuation thereof and have effect continuously from the date of the original patent.
>
> A reissued patent shall not abridge or affect the right of any person or that person's successors in business who, prior to the grant of a reissue, made, purchased, offered to sell, or used within the United States, or imported into the United States, anything patented by the reissued patent, to continue the use of, to offer to sell, or to sell to others to be used, offered for sale, or sold, the specific thing so made, purchased, offered for sale, used, or imported unless the making, using, offering for sale, or selling of such thing infringes a valid claim of the reissued patent which was in the original patent. The court before which such matter is in question may provide for the continued manufacture, use, offer for sale, or sale of the thing made, purchased, offered for sale, used, or imported as specified, or for the manufacture, use, offer for sale, or sale in the United States of which substantial preparation was made before the grant of the reissue, and the court may also provide for the continued practice of any process patented by the reissue that is practiced, or for the practice of which substantial preparation was made, before the grant of the reissue, to the extent and under such terms as the court deems equitable for the protection of investments made or business commenced before the grant of the reissue.

The effect of the reissue of a patent is stated in 35 U.S.C. 252. With respect to the Office treatment of the reissued patent, the reissued patent will be viewed as if the original patent had been originally granted in the amended form provided by the reissue. >With

Based upon the above sections, it is maintained that the added term "encryption" in the reissue has the benefit of the parent patent filing date of July 29, 1980 as well as the parent patent continuing priority date of October 19, 1977 and qualifies as prior art.

Further, as provided in the previous Final Office Action, claim **65** of *Davidson* recites "the aural portion comprising a periodically sampled and digitized audio signal encrypted in accordance with the encryption codes signal". Further, claim **72** recites "means responsive to the encryption code signal for digitally encrypting each digitized program audio sample from the digitizing means".

Further claim **65** recites "inverse encryption means responsive to the separated encryption codes signal to return the detected audio signal to the pre-encryption digitized condition".

Further, Figure 1 of Davidson shows a transmitter 12 and a receiver 14 that make use of A/D converter 31 for transmission and D/A converter 58 for reception which implies digital signal processing takes place. Further, Figure 8b of the description of *Davidson* shows a digitized aural signal consisting of 11 bits. Further, Figures 5, 9, and 10 show digital logic circuitry of the disclosed system of *Davidson* used for digital signal processing. It is maintained that *Davidson* teaches the encryption and decryption of a digital information transmission as claimed by Applicant.

Regarding *amended* claim **41**, Applicant argues that *Davidson* is silent regarding delivering programming and communicating information to a transmitter.

However, as provided in the previous Office Action, *Davidson* teaches the subscription television transmitter 12 in Figure 1 that generates television signals (programming) having video and audio portions for subsequent transmission (to/from a transmitter 20, 30) as spoken of on column 25, lines 45-50.

Applicant also argues that *Davidson* fails to teach embedding digital data in an information transmission in a varying pattern of timing or location.

However, as provided in the previous Office Action, *Davidson* teaches the encryption code signal generating means that generates a continuous sequence of encryption codes (digital data instruct signal) as well as the means for combining (signal embedder) that combines the encryption codes signal, the digitized and encrypted audio

program signal, and a video program signal with carrier signals for transmission to a receiver as spoken of on column 25, lines 50-53 as well as column 26, lines 1-9.

Since the above claim language does not indicate what specific type of varying timing pattern or varying location pattern is being claimed, it is maintained that the combination of the above encryption codes signal, the digitized and encrypted audio program signal, and a video program signal with carrier signals for transmission would include an embedding of the encryption codes signal within the programming in some varying location pattern or fashion such that the meaning of the data is preserved and can be recovered at the receiver.

Regarding *amended* claim **42**, Applicant argues that *Davidson* does not teach decrypting a signal that includes at least one instruct signal which is effective to instruct.

However, as provided in the previous Office Action, *Davidson* teaches the inverse encryption means (decryptor processor) that uses the separated encryption codes signal to return the detected audio signal to the pre-encryption digitized condition (decrypted signal) as spoken of on column 24, lines 44-46.

Applicant further argues that *Davidson* does not teach a plurality of signals on an encrypted digital information.

However, claim **42** recites "receiving at least one encrypted digital information transmission; detecting a plurality of signals on said at least one encrypted digital information transmission".

Claim **65** of *Davidson* teaches the transmission/reception of composite television signals each having digitally encrypted audio signals embedded therein.

Regarding *amended* claim **55**, Applicant argues that *Davidson* does not teach "controlling said controllable device on the basis of said passed decrypted or enabled at least said second of said plurality of signals".

However, as provided in the previous Office Action, *Davidson* teaches returning of the audio signal to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50. The controllable device being a device suitable for output/presentation of an audio signal. The audio signal is operable in the controlling of this type of device by causing output of the respective audio signal. It is maintained that an audio signal is operable in the controlling of the output of audio at an output device, as this output device would only provide output upon detection of an input audio signal.

Regarding *amended* claim **56**, Applicant argues that *Davidson* does not teach any selecting of a first signal in a transmission that includes downloadable code. Applicant further argues that in *Davidson* all signals are received and then processed.

However, as provided above, *Davidson* teaches an encryption codes signal detector that detects and separates (identification of and selection of) the encryption codes signal (signal including code) from the television signals as spoken of on column 24, lines 40-41.

It is maintained that the separation of the encryption codes signal from the television signals (plurality of signals) may be considered a selection of a signal, as the encryption codes signal portion is detected and separated (selecting one from multiple signals) from the composite signal.

Regarding claims **31 and 32**, Applicant argues that *Ostermann* fails to teach "receiving at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code: and causing said at least one control signal to be communicated to said at least one transmitter at a specific time, thereby to transmit at least one information transmission including the downloadable code and said at least one control signal".

However, as provided in the previous Office Action, *Ostermann* teaches the transmission of a bit sequence (control signal) from cipher equipment 16 to cipher computer 12 (transmitter) indicating a particular stored cipher program (downloadable code) to be used as spoken of on column 3, lines 10-19. The specific time of the bit sequence transmission is the time at which the particular cipher algorithm is selected. Furthermore, the type of encryption is selected via transmission of the bit sequence which causes the corresponding cipher program (downloadable code) to be transferred (downloaded).

Regarding claim **32**, Applicant further argues that it would not have been obvious to combine the teachings of *Davidson* and *Ostermann*. Applicant further argues that *Davidson* teaches away from encryption/decryption of television signals by focusing on the processing of the video and audio signal components while leaving the television signal itself unaffected.

However, the video and audio signal components of *Davidson* are a part of the television signal, so the encryption/decryption processing of a video and/or audio

component of the television signal would affect the state of the composite television signal.

Furthermore, as provided in the previous Office Action, *Davidson* teaches the application of encryption/decryption techniques to television signals as spoken of on column 24, lines 30-50.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of *Ostermann* to television program signals in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of *Davidson*.

Regarding claim **54**, Applicant argues that *Ostermann* does not address the decryption of video.

However, the language "for enabling a decryptor to decrypt a video" is an intended use clause that does not necessarily limit the scope of a claim. See MPEP 2106, II, C.

Furthermore, *Ostermann* is directed to the transmission of a cipher program to allow encryption or decryption of "data", where this data in a general sense could include audio, video, or other known types of data.

Regarding claim **33**, Applicant argues that neither *Davidson* nor *Ostermann* teach "receiving a television program at a transmitter station and delivering said television program to a transmitter". Applicant further argues that *Davidson* teaches away from encryption/decryption of television signals by focusing on the processing of

the video and audio signal components while leaving the television signal itself unaffected.

However, the video and audio signal components of *Davidson* are a part of the television signal, so the encryption/decryption processing of a video and/or audio component of the television signal would affect the state of the composite television signal.

Furthermore, as provided in the previous Office Action, *Ostermann* teaches the transmission of a cipher algorithm (instruct signal) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 (transmitter) that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

Ostermann also teaches a receiver terminal that contains means for deciphering received ciphered data text in accordance with a cipher algorithm and a cipher key as spoken of on column 4, lines 52-54, as well as column 2, lines 16-24, which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Ostermann does not explicitly teach decryption of television programming.

However, *Davidson* teaches the application of encryption/decryption techniques to television signals (that are transmitted and received) as spoken of on column 24, lines 30-50.

Davidson also teaches the subscription television transmitter 12 in Figure 1 that generates television signals (programming) having video and audio portions for subsequent transmission (to/from a transmitter 20, 30) as spoken of on column 25, lines 45-50.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of *Ostermann* to television program signals in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of *Davidson*.

Regarding claim **34**, Applicant argues that neither *Davidson* nor *Ostermann* teach "passing said decrypted second of said plurality of signals to a controllable device; and controlling said controllable device on the basis of said passed decrypted second of said plurality of signals".

However, as provided in the previous Office Action, *Davidson* teaches returning of the audio signal to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50. The controllable device being a device suitable for output/presentation of an audio signal. The audio signal is operable in the controlling of this type of device by causing output of the respective audio signal. It is maintained that an audio signal is operable in the controlling of the output of audio at an output device, as this output device would only provide output upon detection of an input audio signal.

Regarding claim **36**, Applicant argues that *Ostermann* does not teach "wherein said step of transferring is performed in accordance with a schedule".

However, as provided in the previous Office Action, *Ostermann* teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit sequence that indicates which cipher program is to be used at a particular

time (schedule) as spoken of on column 3, lines 10-20. In other words, the transferring of a particular cipher algorithm is performed in accordance with a particular order or schedule (sequence of algorithms transferred in a time order in relation to each other) depending on a received bit sequence indicating which cipher program is to be used at a particular time.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL J. MOORE, JR. whose telephone number is (571)272-3168. The examiner can normally be reached on Monday-Friday (7:30am - 4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached at (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J. Moore, Jr./
Primary Examiner, Art Unit 2467

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: John C. Harvey *et al.*	
Application No.: 08/449,413	Confirmation No.: 1756
Filed: May 24, 1995	Art Unit: 2467
For: SIGNAL PROCESSING APPARATUS AND METHODS	Examiner: Moore Jr., Michael J.

AMENDMENT AND REQUEST FOR RECONSIDERATION

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

Dear Sir:

In response to the Non-Final Office Action dated June 8, 2012, please amend the above-identified application as follows.

Amendments to the claims begin on page 2.

Remarks begin on page 11.

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AMENDMENT TO THE CLAIMS

Claims 22-56 are the only pending claims.

1 - 21. (Cancelled)

22. (Previously Presented) A method for controlling the decryption of encrypted programming at a subscriber station, said method comprising the steps of:

receiving encrypted digital programming, said encrypted digital programming having an encrypted digital control signal;

detecting said control signal;

passing said control signal to a decryptor that decrypts encrypted digital data at said subscriber station;

decrypting said control signal;

decrypting said encrypted digital programming to form decrypted programming based on said control signal; and

presenting said decrypted programming to a viewer or listener.

23. (Previously Presented) A method for controlling the decryption of programming at a subscriber station, said method comprising the steps of:

receiving programming, said programming having a first encrypted digital control signal portion and an encrypted digital information portion;

detecting said first encrypted digital control signal portion of said programming;

passing said first encrypted digital control signal portion of said programming to a first decryptor at said subscriber station;

decrypting said first encrypted digital control signal portion of said programming using said first decryptor at said subscriber station;

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passing said encrypted digital information portion of said programming and the decrypted control signal portion to a second decryptor at said subscriber station;

decrypting said encrypted digital information portion of said programming using said second decryptor at said subscriber station based on the decrypted control signal portion; and

presenting said programming.

24. (Previously Presented) A method of controlling a remote transmitter station to communicate program material to a subscriber station and controlling said subscriber station to process or output a unit of programming, said method comprising the steps of:

receiving a control signal which operates at the remote transmitter station to control the communication of a unit of programming and one or more first instruct signals and communicating said control signal to said remote transmitter station;

receiving a code or datum identifying a unit of programming to be transmitted by the remote transmitter station, said remote transmitter station transferring said unit of programming to a transmitter;

receiving at said remote transmitter station one or more second instruct signals which operate at the subscriber station to identify and decrypt said unit of programming or said one or more first instruct signals, said remote transmitter station transferring said one or more second instruct signals to said transmitter; and

transmitting from said remote transmitter station an information transmission comprising said unit of programming, said one or more first instruct signals, and said one or more second instruct signals, said one or more first instruct signals being transmitted in accordance with said control signal.

25. (Previously Presented) The method of claim 23, wherein said programming further includes encrypted video.

26. (Previously Presented) The method of claim 23, wherein said subscriber station stores information that evidences processing said programming.

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27. (Previously Presented) The method of claim 23, wherein said programming is received at said subscriber station in one channel of a multichannel signal and a second control signal portion used to decrypt said programming is included in said multichannel signal outside said one channel.

28. (Previously Presented) The method of claim 23, wherein said subscriber station detects, in a transmission channel including said programming, a second control signal portion used to decrypt the first control signal portion.

29. (Previously Presented) The method of claim 23, wherein the subscriber station detects, in a transmission channel for transmitting the programming, a second control signal portion used to decrypt the first control signal portion, and wherein the second control signal portion is encrypted, and wherein the second control signal portion is decrypted in order to enable decryption of the first control signal portion.

30. (Previously Presented) The method of claim 23, wherein said programming includes computer data.

31. (Previously Presented) A method of controlling at least one of a plurality of receiver stations, said method comprising the steps of:

receiving downloadable code which is effective at said at least one of said plurality of receiver stations to implement a new technique of decrypting and delivering the downloadable code to at least one transmitter;

receiving at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code; and

causing said at least one control signal to be communicated to said at least one transmitter at a specific time,

thereby to transmit at least one information transmission including the downloadable code and said at least one control signal.

32. (**Currently Amended**) The method of claim 31, wherein a digital television program is displayed at a receiver station and said downloadable code and said at least one control signal program said receiver station to decrypt said digital television program in accordance with said new technique.

33. (**Currently Amended**) A method of communicating digital television program material to one or more receiver stations, said method comprising the steps of:

receiving a digital television program at a transmitter station and delivering said digital television program to a transmitter;

receiving and storing one or more instruct signals at said transmitter station, said one or more instruct signals at said one or more receiver stations operative to implement a new technique of decrypting;

transferring said one or more instruct signals to said transmitter; and

transmitting said digital television program and said one or more instruct signals from said transmitter station to said one or more receiver stations.

34. (Previously Presented) A method of processing signals at a receiver station comprising the steps of:

receiving at least one information transmission;

detecting a plurality of signals in said at least one information transmission;

changing a decryption technique in response to at least a first of said plurality of signals;

decrypting a second of said plurality of signals on the basis of said changed decryption technique;

passing said decrypted second of said plurality of signals to a controllable device; and

controlling said controllable device on the basis of said passed decrypted second of said plurality of signals.

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35. (Previously Presented) The method of claim 33, wherein said step of transferring is performed based on comparison.

36. (Previously Presented) The method of claim 33, wherein said step of transferring is performed in accordance with a schedule.

37. (Previously Presented) The method of claim 36, wherein said schedule specifies a transmission time and a transmission channel, said method further comprising the steps of receiving and storing said schedule at said transmitter station.

38. (Previously Presented) The method of claim 33, wherein said one or more instruct signals operate at said one or more receiver stations based on an identifier, said method further comprising the step of transmitting said identifier.

39. (**Currently Amended**) The method of claim 38, wherein an information transmission including said digital television program is received at said one or more receiver stations, wherein said digital television program is outputted at said one or more receiver stations, and wherein said identifier identifies (i) said digital television program and (ii) a channel including said digital television program.

40. (Previously Presented) A method of processing signals at a receiver station comprising the steps of:

receiving at least one encrypted digital information transmission;

locating code;

passing said code to a processor;

controlling a decryptor that decrypts encrypted digital data to decrypt in a specific fashion on the basis of said code;

decrypting a portion of said at least one information transmission in said specific fashion; and

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passing said decrypted portion of said at least one encrypted digital information transmission to one of said processor and an output device.

41. (Previously Presented) A method of controlling a receiver station to detect digital data and control a decryptor that decrypts encrypted digital data based on a varying pattern of timing or location, said method of controlling comprising the steps of:

receiving programming and delivering said programming to a transmitter;

receiving digital data comprising at least an instruct signal and communicating said digital data to a signal embedder, said instruct signal operative at said receiver station to control said decryptor;

controlling said signal embedder to embed said digital data in an encrypted digital information transmission in a varying pattern of timing or location;

communicating said encrypted digital information transmission to said transmitter; and

transmitting said programming and said encrypted digital information transmission including said digital data.

42. (Previously Presented) A method of processing signals at a receiver station comprising the steps of:

receiving at least one encrypted digital information transmission;

detecting a plurality of signals on said at least one encrypted digital information transmission;

decrypting at least one of said plurality of signals, said at least one decrypted signal including at least one instruct signal which is effective to instruct;

passing the at least one decrypted instruct signal to a controllable device; and

controlling said controllable device on the basis of decrypted information included in said at least one decrypted instruct signal.

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43. (Previously Presented) A method for decryptor activation in a network comprising:

receiving a transmission comprising encrypted materials;

decrypting under first processor control a first portion of said encrypted materials in said transmission;

inputting said first portion of said encrypted materials to a decryptor;

decrypting under second processor control a second portion of said encrypted materials based on said step of decrypting said first portion of said encrypted materials.

44. (Previously Presented) The method of claim 43 wherein said transmission in said step of receiving a transmission is a multichannel signal separated in the frequency domain.

45. (Previously Presented) The method of claim 44 wherein said transmission is a cable system broadcast.

46. (Previously Presented) The method of claim 43 wherein said transmission in said step of receiving a transmission is a multichannel signal separated in the time domain.

47. (Previously Presented) The method of claim 43 wherein said transmission in said step of receiving a transmission is generated at a local data source.

48. (Previously Presented) The method of claim 47 wherein said local data source comprises a VCR.

49. (Previously Presented) The method of claim 47 wherein said local data source comprises a laser disk.

50. (Previously Presented) The method of claim 43 wherein said encrypted materials comprise a portion of a television program.

51. (Previously Presented) The method of claim 43, wherein said transmission in said step of receiving a transmission and a signal necessary for decryption are received from different sources.

52. (Previously Presented) The method of claim 51, further comprising the step of contacting a remote transmitter station to receive one of said transmission and said signal necessary for decryption.

53. (Previously Presented) The method of claim 51, wherein a signal necessary for decryption is communicated by telephone.

54. (**Currently Amended**) A method of providing an enabling signal to a receiver station from a remote data source, said enabling signal for use in decrypting at the receiver station a digital programming signal, said receiver station being programmed to get information necessary for enabling ~~a~~ said digital programming signal, said method comprising the steps of:

storing at the remote data source one or more control signals for enabling a decryptor to decrypt said digital programing signal including a video;

receiving at the remote data source from the receiver station a communication to get specific enabling information;

communicating, from the remote data source to the receiver station in response to said communication from the receiver station, a control signal,

whereby the receiver station inputs said control signal to a decryptor, and wherein said decryptor decrypts said digital programming signal including a video.

55. (Previously Presented) A method of processing signals at a receiver station comprising the steps of:

receiving one or more encrypted digital information transmissions at said receiver station;

detecting a plurality of signals on said one or more encrypted digital information transmissions, at least a first of one of said plurality of signals including a control signal;

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controlling a decryptor that decrypts encrypted digital data in response to said control signal;

decrypting or enabling communication of at least a second of said plurality of signals on the basis of said step of controlling said decryptor;

passing said decrypted or enabled at least said second of said plurality of signals to a controllable device; and

controlling said controllable device on the basis of said passed decrypted or enabled at least said second of said plurality of signals.

56. (Previously Presented) A method of processing signals at a receiver station comprising the steps of:

receiving at least one encrypted digital information transmission;

identifying a plurality of signals in said at least one encrypted digital information transmission;

selecting a first signal of said plurality of signals including downloadable code;

passing said downloadable code to a processor;

controlling a decryptor that decrypts encrypted digital data to decrypt in a specific fashion on the basis of said downloadable code;

decrypting at least one second signal of said plurality of signals in said specific fashion; and

passing said at least one second signal to one of said processor and an output device.

REMARKS

I. STATUS OF CLAIMS

Claims 22-56 are pending in this application. Claims 23, 25-30 and 43-53 are allowed. Claims 37 and 39 are allowable over the prior art, but objected to as dependent on non-allowable claims. Claims 22 and 24 are allowable over the prior art, but subject to a nonstatutory obviousness-type double patenting rejection. The remaining claims are rejected under 35 U.S.C. §§ 102 and 103 and/or nonstatutory obviousness-type double patenting. By this Amendment, claims 32, 33, 39, and 54 are amended. Reconsideration is respectfully requested in view of the above amendments and the following remarks. Applicants earnestly solicit a favorable reconsideration and prompt allowance of the claims.

II. DOUBLE PATENTING REJECTIONS

Claims 22, 34, 54, and 55 are rejected on the ground of nonstatutory obviousness-type double patenting as allegedly being unpatentable over claims 1, 22, and 23 of U.S. Patent No. 7,801,304. This is the patent that issued from Applicants' DECR 81 group "A" application, U.S. Patent Application Serial No. 08/449,263. Claim 24 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 14 of the DECR 81 group "A" patent, in view of Yanagimachi et al. (U.S. Patent No. 3,936,595) ("Yanagimachi"). Applicants maintain the arguments they asserted previously in regard to traversing the claim 24 rejection. If the Office maintains the rejections, Applicants acknowledge that a timely filed terminal disclaimer in compliance with 37 C.F.R. 1.321(c) or 1.321(d) may be necessary to overcome the nonstatutory double patenting rejections. However, Applicants request that the requirement for filing the terminal disclaimer be held in abeyance, pending an indication of allowable subject matter from the Office in the present application. If filed, the terminal

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disclaimer will disclaim, in essential terms, the terminal part of the statutory term of any patent granted on the above-referenced application, extending beyond the earliest expiration date of the DECR 81 group "A" patent, U.S. Patent No. 7,801,304.

III. SUMMARY OF PRIOR ART REJECTIONS

Many of the pending claims are rejected under 35 U.S.C. §§102 or 103 over references including Davidson (Re. 31,735) and Ostermann et al. (U.S. Patent No. 4,484,025) ("Ostermann"). The Office Action rejected claims 40-42, 55, and 56 under 35 U.S.C. 102(e) as allegedly being anticipated by Davidson; claims 31 and 54 under 35 U.S.C. 102(e) as allegedly being anticipated by Ostermann; and claims 32-36, 38, and 39 under 35 U.S.C. 103(a) as allegedly being unpatentable over the combination of Ostermann in view of Davidson.

IV. SUMMARY OF APPLIED PRIOR ART

A. Davidson

Davidson is the reissued patent of U.S. Patent No. 4,215,366 that issued on July 29, 1980. The reissued patent added new claims 65-74. The application for reissue was filed on July 26, 1982, well after the November 3, 1981 priority date of the instant application.

Davidson is directed to a "method and system for encoding and decoding of standard television signals..." Col. 3, ll. 26-28. "[V]ideo scrambling is effected by inversion of the video signals of some horizontal scan lines on a pseudo-random bias to produce a picture having some video signals inverted and others not inverted which is unpleasant to view and virtually unintelligible." Col. 3, ll. 29-34. Davidson discloses converting analog audio signals to coded digital audio signals. Col. 3, ll. 34-36. "A plurality of unique pulse-coded control signals consisting of 32- bit binary pulse trains are transmitted separately to... provide the information needed to unscramble the scrambled audio and video signals." Col. 3, ll. 36-41.

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Claim 65, added to the patent via reissue, claims a receiver in a subscription television system having means for conveying television signals include a video portion, an aural portion, and an "encryption codes signal" comprising a sequence of "encryption codes." Col. 24, ll. 30-35. The aural portion is a digitized audio signal "encrypted" in accordance with the "encryption codes signal." Col. 24, ll. 35-39. The receiver has means to detect and separate the "encryption codes" signal from the television signals; to separate the digitized and "encrypted" audio signal from television signals; to return the detected audio signal to the "pre-encryption" digitized condition; and to return the audio signal to the original analog format. Col. 24, ll. 40-50. However, there is no mention of "encryption" anywhere in the disclosure of the patent. Only scrambling and unscrambling is disclosed. The term "encryption," as used in claim 65, was not added until sometime after the reissue filing date of July 26, 1982.

Claim 72, also added to the patent via reissue, claims a "television transmitter for generating television signals having a program video portion and program aural portion..." Col. 25, ll. 46-48. The transmitter has means to generate a continuous sequence of "encryption codes"; to convey the program video and program aural portions and the "encryption codes signal" from the transmitter to authorized subscribers; to sample and digitize the program audio signal; to digitally "encrypt" each digitized program audio sample in response to the "encryption codes signal"; and to combine the "encryption codes" signal, the digitized and "encrypted" audio program signal, and a video program signal, with the carrier signals. Col. 25, l. 52 – col. 26, l. 9. As mentioned above, there is no mention of "encryption" anywhere in the disclosure of the patent. Only scrambling and unscrambling is disclosed. The term "encryption," as used in claim 72, was not added until sometime after the reissue filing date of July 26, 1982.

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The original Davidson '366 patent discloses video scrambling. The reliance on the reissue patent cannot change this fact. The use of the term "encryption" as added by the reissue claims does not change the fact that the fundamental video signal of Davidson is an analog television signal. The video signal of Davidson is not encrypted as encryption is a digital process. For this reason, the Davidson reissue patent is limited in its use as a prior art reference.

B. Ostermann

Ostermann is directed to a "system for enciphering and deciphering data for transmission between a transmitter and a receiver, where the terms encipher and decipher are synonymous with encrypt and decrypt respectively." Col. 1, ll. 7-10. Ostermann discloses a receiver station transmitting a cipher algorithm "from the cipher program storage 18 over a data transmission channel 20 to the program memory 22 of the programmable cipher computer 12" at the transmitter station. Col. 2, ll. 38-41. "The cipher algorithm transmitted from the cipher program storage 18 of cipher equipment 16 via channel 20 is stored in program memory 22 and used to encipher the clear input data provided by input device 24 to transmitter 10."

Ostermann also discloses another embodiment of the invention where "the programmable cipher computer 12 is provided with long term memory 28 for storage of a plurality of different cipher programs which can be called up for storage in the program memory 22 as required." Col. 2, ll. 59-62. The cipher equipment 12 at the transmitter station receives a bit sequence from cipher computer 16 at the receiver station that enables the cipher program to be transferred from long-term memory 28 to program memory 22. Col. 3, ll. 10-19.

V. RESPONSE TO PRIOR ART REJECTIONS

A. Rejection of claims 40-42, 55 and 56 under 35 U.S.C. §102(e)

Claims 40-42, 55, and 56 are rejected under 35 U.S.C. §102(e) over Davidson. This rejection is respectfully traversed.

Claims 40-42, 55, and 56 claim material relating to the encryption and decryption of signals. Applicants have consistently asserted that the Board of Patent Appeals and Interferences decided in Ex parte Personalized Media Communications, LLC (Appeal 2008-4228, Ex parte Reexamination Control 90/006,536) at pages 53-54, that encryption and decryption require a digital signal. The Board considered the very same specification that is part of this application in finding that encryption and decryption are limited to digital applications. The Board also held that "encryption and decryption are not broad enough to read on scrambling and unscrambling."

In the Office Action, the Examiner asserted that Davidson, a reissued patent, has the benefit of its parent's filing date of July 29, 1980, and therefore so does the term "encryption" disclosed in its reissue claims. Action at 25-26. Applicants do not dispute that a reissued patent is entitled to the filing date of its parent in accordance with 35 U.S.C. § 252. However, Applicants note that "encryption" is not disclosed anywhere in the specification of Davidson, only in the claims added via reissue. Davidson describes scrambling video signals and converting analog audio signals to coded digital audio signals, but does not teach or suggest "encryption" as claimed in the instant application and understood by the Board.

Regardless, the Examiner erred by not considering all the words in claims 40-42, 55, and 56. *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970) ("All words in a claim must be considered in judging the patentability of that claim against the prior art."). The claims recite receiving a

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"encrypted digital information transmission," but the Examiner did not fully consider this limitation.

The Examiner points to the A/D converter 31 and the D/A converter 58 disclosed in Davidson to show that digital signal processing takes place. Action at 27. However, Davidson only discloses that these analog/digital converters affect audio signals that are combined with video signals and control signals into a standard, *i.e.* not digital and not encrypted, television signal. Col. 5, ll. 36-42; Col. 24, ll. 30-35; Col. 25, ll. 46-48.

The information transmission taught by Davidson is an analog television signal. Regardless of whether the television signal includes a component comprising a digital signal, the television signal remains analog. Therefore, Davidson does not disclose an "encrypted digital information transmission." Claims 40-42, 55, and 56 are not anticipated by Davidson and are in allowable form.

Even assuming, *arguendo*, that Davidson teaches an "encrypted digital information transmission," claims 42, 55, and 56 are not anticipated by Davidson for at least the additional following reasons:

1. Claim 42

Claim 42 recites in part:

> decrypting at least one of said plurality of signals, said at least one decrypted signal including at least one instruct signal which is effective to instruct;
>
> passing the at least one decrypted instruct signal to a controllable device; and
>
> controlling said controllable device on the basis of decrypted information included in said at least one decrypted instruct signal.

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These limitations are not taught by Davidson.

The Office Action points to Davidson's claim 65, column 24, lines 30-50, to show that the invention discloses all the limitations of claim 42. Action at 13-14. Moreover, the Examiner asserts that the separated encryption codes signal that's effective to return the encrypted digital audio signal to a decrypted form teaches "said at least one decrypted signal **including** at least one instruct signal which is effective to instruct." Action at 28. The Examiner misunderstands Applicants previous arguments regarding this limitation.

Davidson's claim 65 teaches means for decrypting a digitized audio signal but fails to teach decrypting a signal that includes at least one instruct signal which is effective to instruct. Claim 42 recites "at least one decrypted signal including at least one instruct signal," thereby disqualifying the decrypted audio signal and the encryption codes signal from acting as an instruct signal as claimed. No additional instruct signal is included as part of the audio signal. Further, Davidson does not teach or suggest that encryption of the audio signal affects the audio signal such that when it is decrypted, it includes an instruct signal. Therefore, Davidson fails to teach all the limitations of claim 42.

2. Claim 55

Claim 55 recites in part:

> controlling said controllable device on the basis of said passed decrypted or enabled at least said second of said plurality of signals.

These limitations are not taught by Davidson.

The Office Action points to Davidson's claim 65, column 24, lines 30-50, to show that the invention discloses all the limitations of claim 55. Claim 65 teaches means for the

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decryption and analog conversion of an encrypted digital audio signal, but fails to teach controlling a controllable device on the basis of that decrypted analog audio signal. The "analog conversion means connected to the inverse encryption means to return the audio signal to the original analog format whereby program audio may be processed and presented in a conventional manner." Col. 24, ll. 47-50. Applicants maintain, as asserted previously, that in Davidson, the program audio is an element to be processed, it is not operable in the controlling of a controllable device. Davidson fails to teach all the limitations of claim 55.

3. Claim 56

Claim 56 recites in part:

> receiving at least one encrypted digital information transmission;
>
> identifying a plurality of signals in said at least one information transmission;
>
> selecting a first signal of said plurality of signals including downloadable code;

These limitations are not taught by Davidson.

Davidson's receiver receives sets of signals at receiving antenna 36. Col. 8, ll. 57-68. The sets of signals are then split by RF splitter 114 so that the video, aural, and control signals can be separately processed. Col. 9, ll. 1-11. Applicants maintain, as asserted previously, that the receiver does not perform any "selecting" of a first signal in a transmission that includes downloadable code. Davidson's receiver continuously splits the received sets of signals and processes each according to its type. No "selecting" occurs because all signals are received and then processed. Davidson fails to teach "selecting" as set forth in claim 56.

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B. Rejection of claims 31 and 54 under 35 U.S.C. §102(e)

Claims 31 and 54 have been rejected under 35 U.S.C. §102(e) over Ostermann. This rejection is respectfully traversed.

1. Claim 31

Claim 31 recites, in part:

> receiving at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code; and
>
> causing said at least one control signal to be communicated to said at least one transmitter at a specific time,
>
> thereby to transmit at least one information transmission including the downloadable code and said at least one control signal.

These limitations are not taught by Ostermann.

Applicants maintain the same arguments that they asserted in their previous Amendments. Ostermann discloses the cipher equipment 12 at the transmitter station receiving a bit sequence from the cipher computer 16 at the receiver station, but the bit sequence does not operate to execute the cipher algorithm at the receiver station. The bit sequence only identifies "which cipher program from long-term memory 28 is to be used." Col. 3, ll. 18-19. The cipher program is only executed upon entry of clear data text. To be clear, a bit sequence may be received that identifies a cipher program, but the cipher program is not executed upon identification. Therefore, Ostermann does not teach the limitation "receiving at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code."

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Moreover, Ostermann fails to teach transmitting an information transmission that includes a control signal and downloadable code. The cipher algorithm and bit sequence are described as being transmitted separately, never together. *See* col. 2, ll. 38-41; col. 3, ll. 15-19. Therefore, Ostermann does not describe each and every limitation as set forth in claim 31.

2. Claim 54

Claim 54 as amended, recites, in part "whereby the receiver station inputs said control signal to a decryptor, and wherein said decryptor decrypts said digital programming signal including a video." Ostermann does not addres the decryption of video.

The Examiner has asserted that Ostermann "is directed to the transmission of a cipher program to allow encryption or decryption of 'data', where this data in a general sense could include audio, video, or other known types of data." Action at 31. Yet, there is no suggestion in Ostermann that encryption/decryption applies to anything but text. "In particular, [Ostermann] relates to a system wherein clear data texts are enciphered at the transmitter end of the system and deciphered at the receiver end." Col. 1, ll. 11-13. "Data" as used in Ostermann is limited to text. Therefore, Ostermann does not disclose all the limitations recited in claim 54 and does not anticipate.

According to MPEP 2112, if the Examiner is making an argument that Ostermann discloses the claimed limitation inherently, he must provide support for his conclusion. "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy,* 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). The Examiner has not done so here.

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There is no support for his conclusion that that "data in a general sense could include video." Therefore, the Examiner has failed to establish a prima facie case of anticipation.

C. Rejection of claims 32-36, and 38 under 35 U.S.C. §103(a)

The Office Action rejected claims 32-36, and 38 under 35 U.S.C. 103(a) as allegedly being unpatentable over the combination of Ostermann in view of Davidson. Applicants respectfully traverse the rejections and argue that Ostermann and Davidson, alone and in combination, fail to teach each of the claim's limitations.

1. Claim 32

Claim 32 claims the method of claim 31, "wherein a digital television program is displayed at a receiver station and said downloadable code and said at least one control signal program said receiver station to decrypt said digital television program in accordance with said new technique." Claim 32 is not rendered unpatentable by Ostermann for the same reasons as argued above in regard to claim 31.

The Office Action points to Davidson's claim 65 as teaching the application of encryption/decryption techniques to television signals. However, as Applicants have argued previously, it would not have been obvious to combine the teachings of the references. Davidson is directed to the transmission and reception of standard television signals, which at the time of invention were analog television signals. To emphasize this digital/analog distinction, Applicants have amended the claim to recite "a digital television program." As evidenced by Davidson only scrambling the analog video signal while embedding an encrypted digital audio signal, the encryption of a whole television signal was not obvious. There is no suggestion in Davidson that encryption could be applied to signals as complex as entire television signals. In

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fact, Davidson teaches away from encrypting/decrypting television signals by focusing on the processing of the video and audio signal components while leaving the television signal itself unaffected. Therefore, it would not have been obvious to combine Davidson and Ostermann.

Assuming, *arguendo*, that it would be obvious to combine Davidson and Ostermann, Davidson does not cure Ostermann's deficiencies. The combination of Davidson and Ostermann fails to teach displaying a digital television program at a receiver station where the receiver decrypts the digital television program. Applicants respectfully submit that even if the teachings of Ostermann were modified with the teachings of Davidson as suggested in the Non-Final Office Action, the modified composition still fails to satisfy every element recited in claim 32.

2. Claim 33

Claim 33 recites, in part: "receiving a digital television program at a transmitter station and delivering said television program to a transmitter... and transmitting said digital television program and said one or more instruct signals from said transmitter station to said one or more receiver stations." These limitations are not taught by Ostermann or Davidson.

Ostermann teaches the transfer of a cipher algorithm from a receiver station to a transmitter station, where the cipher algorithm is used to implement decrypting at the receiver station. The Office Action points to Davidson's claim 65, column 24, lines 30-50 to apply Ostermann's teachings to television signals. However, as argued above, it would not have been obvious to combine the teachings of the references. Davidson is directed to the transmission and reception of standard television signals, which at the time of invention were analog television signals. To emphasize this digital/analog distinction, Applicants have amended the claim to recite "a digital television program." As evidenced by Davidson only scrambling the analog

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video signal while embedding an encrypted digital audio signal, the encryption of a whole television signal was not obvious. Davidson surely understood encryption and decryption, but did not apply it to television signals because that innovation was not obvious. In fact, Davidson teaches away from encrypting/decrypting television signals by focusing on the processing of the video and audio signal components while leaving the television signal itself unaffected. Therefore, it would not have been obvious to combine Davidson and Ostermann.

Assuming, *arguendo*, that it would be obvious to combine Davidson and Ostermann, claim 65 teaches conveying composite analog television signals, not digital television signals. Even if someone of ordinary skill in the art were to apply the teachings of Ostermann and Davidson, the inventions fail to teach or suggest every limitation of claim 33.

3. Claim 34

Claim 34 recites, in part:

> passing said decrypted second of said plurality of signals to a controllable device; and
>
> controlling said controllable device on the basis of said passed decrypted second of said plurality of signals."

These limitations are not taught by Ostermann or Davidson.

The Office Action points to Davidson's claim 65, column 24, lines 30-50, to show that the invention discloses the passing and controlling limitations of claim 34. Claim 65 teaches means for the decryption and analog conversion of an encrypted digital audio signal, but fails to teach passing the decrypted analog audio signal to a controllable device and controlling the controllable device on the basis of that decrypted analog audio signal. The "analog conversion means connected to the inverse encryption means connected to the inverse encryption means to

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return the audio signal to the original analog format whereby program audio may be processed and presented in a conventional manner." Col. 24, ll. 47-50. As asserted previously by Applicants, in Davidson, the program audio is an element to be processed, it is not operable in the controlling of a controllable device. Davidson and Ostermann fail to teach all the limitations of claim 34.

4. Claim 35

Claim 35 depends from independent claim 33. Claim 35 claims the method of claim 33, "wherein said step of transferring is performed based on comparison." Claim 35 further limits claim 33 and is not rendered unpatentable by Ostermann and Davidson for the same reasons as argued above in regard to claim 33.

5. Claim 36

Claim 36 depends from independent claim 33. Claim 36 claims the method of claim 33, "wherein said step of transferring in accordance with a schedule." Claim 36 further limits claim 33 and is not rendered unpatentable by Ostermann and Davidson for the same reasons as argued above in regard to claim 33.

Assuming, *arguendo*, that it would be obvious to combine Davidson and Ostermann, the Office Action points to Ostermann as teaching "which cipher program is to be used at a particular time (schedule) as spoken of on column 3, lines 10-20." The Examiner argues that the transferring "is performed in accordance with a particular order or schedule (sequence of algorithms transferred in a time order in relation to each other) depending on a received bit sequence indicating which cipher program is to be used at a particular time." Action at 34. But, as Applicants have argued previously, Ostermann does not teach anything other than the

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automatic transferring of the cipher program at the time the bit sequence is received. The bit sequence does not include any "scheduling" information. It's true that Ostermann's system will transfer the cipher programs at the time of bit sequence receipt and in the order of bit sequence receipt, but this does not mean that the transfers are made in accordance with a schedule. There is no teaching or suggestion in Ostermann of performing this step in accordance with a schedule. Ostermann and Davidson, alone and in combination, fail to teach each of the claim 36's limitations.

6. Claim 38

Claim 38 depends from independent claim 33. Claim 38 claims the method of claim 33, "wherein said one or more instruct signals operate at said one or more receiver stations based on an identifier, said method further comprising the step of transmitting said identifier." Claim 38 further limits claim 33 and is not rendered unpatentable by Ostermann and Davidson for the same reasons as argued above in regard to claim 33.

VI. CLAIMS 22-30, 37, 39, AND 43-53 ARE ALLOWABLE

The Office Action identified claims 22-30 and 43-53 as allowable over the prior art of record. This Amendment does not affect claims 22-30 and 43-53. Applicants respectfully submit claims 22-30 and 43-53 are allowable as previously presented.

The Office Action also identified claims 37 and 39 as objected to as being dependent upon rejected base claims, but would be otherwise allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims. Applicants respectfully assert that these claims do not need to be rewritten as independent claims.

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Claim 37 depends from claim 36, which depends from independent claim 33. As argued above, claims 33 is allowable over Davidson, Ostermann, and the prior art of record. As identified by the examiner, the limitations of claim 37 are also allowable over the prior art of record. Applicants respectfully submit that claim 37 is allowable in its current dependent claim form.

Similarly, claim 39 depends from claim 38, which depends from independent claim 33. Claim 39 has been amended only to maintain consistency with claim 33. As argued above, claims 33 is allowable over Davidson, Ostermann, and the prior art of record. As identified by the examiner, the limitations of claim 39 are also allowable over the prior art of record. Applicants respectfully submit that claim 39 is allowable in its current dependent claim form.

VI. CONCLUSION

Applicants respectfully submit that all claims are allowable over the cited art for the reasons set forth above. Applicants request reconsideration of this application in view of the amendment and arguments set forth above. In the event Applicants have overlooked the need for an extension of time, payment of fee, or additional payment of fee, Applicant hereby petitions therefore and authorize that any charges be made to Deposit Account No. 50-4494.

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Should the Examiner have any questions regarding any of the above, the Examiner is respectfully requested to telephone the undersigned at 202-346-4000.

Dated:

Respectfully submitted,

By:
Thomas J. Scott, Jr.
Registration No.: 27,836
GOODWIN PROCTER LLP
901 New York Avenue, NW
Washington, DC 20001
Attorney for Applicant

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

EXAMINER	
MOORE JR, MICHAEL J	

ART UNIT	PAPER NUMBER
2467	

NOTIFICATION DATE	DELIVERY MODE
11/02/2012	ELECTRONIC

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

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

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

AAlpha-Kpetewama@goodwinprocter.com
patentdc@goodwinprocter.com
fmckeon@goodwinprocter.com

PTOL-90A (Rev. 04/07)

Office Action Summary	Application No.	Applicant(s)	
	08/449,413	HARVEY ET AL.	
	Examiner	Art Unit	
	MICHAEL J. MOORE, JR.	2467	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 September 2012*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

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

Disposition of Claims

5)☒ Claim(s) *22-56* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☒ Claim(s) *23,25-30 and 43-53* is/are allowed.

7)☒ Claim(s) *22,24,31-36,38,40-42 and 54-56* is/are rejected.

8)☒ Claim(s) *37 and 39* is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

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

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection 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 and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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).

2. Claims **22, 34, 54, and 55** are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims **1, 22, and 23** of *U.S. Patent No. 7,801,304*. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following correspondences.

Regarding claim **22**, "a method for controlling the decryption of encrypted programming at a subscriber station" corresponds to "a method for controlling the decryption of programming at a subscriber station" in claim **1** of the above U.S. Patent.

"Receiving encrypted digital programming, said encrypted digital programming having an encrypted digital control signal" corresponds to "receiving programming, said programming having a first encrypted digital control signal portion" in claim **1** of the above U.S. Patent.

"Detecting said control signal" corresponds to "detecting said first encrypted digital control signal portion of said programming" in claim **1** of the above U.S. Patent.

"Passing said control signal to a decryptor that decrypts encrypted digital data at said subscriber station" corresponds to "passing said first encrypted digital control signal portion of said programming to a decryptor at said subscriber station" in claim **1** of the above U.S. Patent.

"Decrypting said control signal" corresponds to "decrypting said first encrypted digital control signal portion" in claim **1** of the above U.S. Patent.

"Decrypting said encrypted digital programming to form decrypted programming based on said control signal" corresponds to "decrypting said encrypted digital information portion of said programming ... based on the decrypted control signal portion" in claim **1** of the above U.S. Patent.

Lastly, "presenting said decrypted programming to a viewer or listener" corresponds to "presenting said programming" in claim **1** of the above U.S. Patent.

Claim **22** of the instant application does not explicitly claim "passing said encrypted digital information portion of said programming to said decryptor". Therefore, claim **22** merely broadens the scope of claim **1** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Regarding claim **34**, "a method of processing signals at a receiver station" corresponds to the same in claim **23** of the above U.S. Patent.

"Receiving at least one information transmission" and "detecting a plurality of signals on said at least one information transmission" corresponds to "receiving a plurality of signals including digital programming and inputting at least some of said plurality of signals to said digital detector" as well as "detecting said encrypted digital data in said at least some of said plurality of signals" in claim **23** of the above U.S. Patent.

"Changing a decryption technique in response to at least a first of said plurality of signals" corresponds to "controlling said decryptor to alter its decryption pattern or technique on the basis of information included in said detected encrypted digital data" in claim **23** of the above U.S. Patent.

Lastly, "decrypting a second of said plurality of signals on the basis of said changed decryption technique; passing said decrypted second of said plurality of signals to a controllable device; and controlling said controllable device on the basis of said passed decrypted second of said plurality of signals" corresponds to "decrypting at least a portion of said digital programming using a selected decryption pattern or technique based on said step of detecting in order to provide a decrypted output of programming to a viewer or listener" in claim **23** of the above U.S. Patent.

Claim **34** of the instant application does not explicitly claim "said receiver station having a receiver, a digital detector operatively connected to said receiver for detecting encrypted digital data, a decryptor operatively connected to said digital detector for decrypting said encrypted digital data, and a controller operatively connected to said digital detector or said decryptor for controlling said decryptor". Therefore, claim **34** merely broadens the scope of claim **23** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Regarding claim **54**, "a method of providing an enabling signal to a receiver station from a remote data source, said enabling signal for use in decrypting at the receiver station a programming signal, said receiver station being programmed to get information necessary for enabling a programming signal" corresponds to "a method of providing digital enabling information to a receiver station from a first remote source, said digital enabling information for use at the receiver station in decrypting a mass medium program presentation" in claim **22** of the above U.S. Patent.

"Storing at the remote data source one or more control signals for enabling a decryptor to decrypt a video" corresponds to "storing digital enabling information at said first remote source" in claim **22** of the above U.S. Patent.

"Receiving at the remote data source from the receiver station a communication to get specific enabling information" corresponds to "receiving at said first remote source a query from said receiver station" in claim **22** of the above U.S. Patent.

"Communicating, from the remote data source to the receiver station in response to said communication from the receiver station, a control signal" corresponds to "transmitting said digital enabling information which is effective to enable decryption from said first remote source to said receiver station in response to said step of receiving said query, said receiver station storing at least some of said transmitted enabling information" in claim **22** of the above U.S. Patent.

Lastly, "whereby the receiver station inputs said control signal to a decryptor, and wherein said decryptor decrypts said programming signal" corresponds to "to said receiver station an encrypted digital mass medium presentation signal which is

decrypted on the basis of said stored at least some of said digital enabling information" in claim **22** of the above U.S. Patent.

Claim **54** of the instant application does not claim "transmitting from a second remote source" as well as "to present said mass medium programming presentation". Therefore, claim **54** merely broadens the scope of claim **22** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Regarding claim **55**, "a method of processing signals at a receiver station" corresponds to the same in claim **23** of the above U.S. Patent.

"Receiving one or more encrypted digital information transmissions at said receiver station; detecting a plurality of signals on said one or more encrypted digital information transmissions, at least a first of one of said plurality of signals including a control signal" corresponds to "receiving a plurality of signals including digital programming and inputting at least some of said plurality of signals to said digital detector" as well as "detecting said encrypted digital data in said at least some of said plurality of signals" in claim **23** of the above U.S. Patent.

"Controlling a decryptor that decrypts encrypted digital data in response to said control signal" corresponds to "controlling said decryptor to alter its decryption pattern or

technique on the basis of information included in said detected encrypted digital data" in claim **23** of the above U.S. Patent.

"Decrypting or enabling communication of at least a second of said plurality of signals on the basis of said step of controlling said decryptor" corresponds to "decrypting at least a portion of said digital programming using a selected decryption pattern or technique based on said step of detecting" in claim **23** of the above U.S. Patent.

Lastly, "passing said decrypted or enabled at least said second of said plurality of signals to a controllable device; and controlling said controllable device on the basis of said passed decrypted or enabled at least said second of said plurality of signals" corresponds to "to provide a decrypted output of programming to a viewer or listener" in claim **23** of the above U.S. Patent.

Claim **55** of the instant application does not claim "detecting ... in accordance with a varying pattern of timing or location". Therefore, claim **55** merely broadens the scope of claim **23** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

3. Claim **24** is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim **14** of *U.S. Patent No. 7,801,304* in view of Yanagimachi et al. (U.S. 3,936,595) (hereinafter "Yanagimachi").

Regarding claim **24**, "a method of controlling a remote transmitter station to communicate program material to a subscriber station and controlling said subscriber station to process or output a unit of programming" corresponds to "a method of controlling a remote transmitter station to communicate program material to a subscriber station and controlling said subscriber station to process or output digital programming" in claim **14** of the above U.S. Patent.

"Receiving a control signal which operates at the remote transmitter station to control the communication of a unit of programming and one or more first instruct signals and communicating said control signal to said remote transmitter station" corresponds to "receiving at said remote transmitter station a first control signal which operates at the remote transmitter station to control communication of said digital programming and one or more first instruct signals" in claim **14** of the above U.S. Patent.

"Receiving at said remote transmitter station one or more second instruct signals which operate at the subscriber station to identify and decrypt said unit of programming or said one or more first instruct signals, said remote transmitter station transferring said one or more second instruct signals to said transmitter" corresponds to "receiving at said remote transmitter station said one or more digital second instruct signals which

operate at the subscriber station to decrypt (identified) said digital programming" in claim **14** of the above U.S. Patent.

"Transmitting from said remote transmitter station an information transmission comprising said unit of programming, said one or more first instruct signals, and said one or more second instruct signals, said one or more first instruct signals being transmitted in accordance with said control signal" corresponds to "transmitting from said remote transmitter station to said subscriber station an information transmission comprising said digital programming, said one or more first instruct signals and said one or more digital second instruct signals, said one or more first instruct signals being transmitted in accordance with said first control signal" in claim **14** of the above U.S. Patent.

Claim **24** of the instant application further claims "receiving a code or datum identifying a unit of programming to be transmitted by the remote transmitter station, said remote transmitter station transferring said unit of programming to a transmitter" which is not claimed in claim **14** of the above U.S. Patent.

However, *Yanagimachi* teaches a similar method of controlling transmission and output of programming at a receiver station, where program control codes identifying particular programming included in the transmission are utilized by a transmitter station 102 and receiver station 103 for transmission/reception and programming output as spoken of on column 15, lines 2-32 as well as column 16, lines 22-40.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, to apply the control code transmission of *Yanagimachi* to the method of

claim **14** of the above U.S. Patent in order to provide selective output of programming in accordance with selection input provided from a subscriber as spoken of on column 16, lines 25-40 of *Yanagimachi*.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims **40-42, 55, and 56** are rejected under 35 U.S.C. 102(e) as being anticipated by Davidson (Re. 31,735). *Davidson* teaches all of the limitations of the specified claims with the reasoning that follows.

Regarding claim **40**, "a method of processing signals at a receiver station" is anticipated by the decryption method spoken of on column 24, lines 30-50.

"Receiving at least one encrypted digital information transmission" and "locating code" is anticipated by the conveying of a composite television signal (encrypted digital information transmission) to a subscriber including a video portion, an aural portion, and an encryption codes signal (signal including code) comprising a sequence of encryption codes as spoken of on column 24, lines 30-35, as well as an encryption codes signal detector that detects (locates) and separates the encryption codes signal (signal including code) from the television signals as spoken of on column 24, lines 40-41.

"Passing said code to a processor; controlling a decryptor that decrypts encrypted digital data to decrypt in a specific fashion on the basis of said code; decrypting a portion of said at least one information transmission in said specific fashion" is anticipated by the inverse encryption means (decryptor processor) that uses the separated encryption codes signal to return the detected audio signal (portion of information transmission) to the pre-encryption digitized condition (decrypted portion) as spoken of on column 24, lines 44-46.

Lastly, "passing said decrypted portion of said at least one encrypted digital information transmission to one of said processor and an output device" is anticipated by returning of the audio signal to original analog format (decrypted portion) whereby program audio may be processed and presented (to an output device) in a conventional manner as spoken of on column 24, lines 47-50.

Regarding claim **41**, "a method of controlling a receiver station to detect digital data and control a decryptor that decrypts encrypted digital data based on a varying pattern of timing or location" is anticipated by the encryption/decryption method spoken of on column 25 line 45 – column 26, line 9.

"Receiving programming and delivering said programming to a transmitter" is anticipated by the subscription television transmitter that generates television signals (programming) having video and audio portions as spoken of on column 25, lines 45-50.

"Receiving digital data comprising at least an instruct signal and communicating said digital data to a signal embedder, said instruct signal operative at said receiver station to control said decryptor; controlling said signal embedder to embed said digital

data in an encrypted digital information transmission in a varying pattern of timing or location; communicating said encrypted digital information transmission to said transmitter; and transmitting said programming and said encrypted digital information transmission including said digital data" is anticipated by the encryption code signal generating means that generates a continuous sequence of encryption codes (digital data instruct signal) as well as the means for combining (signal embedder) that combines the encryption codes signal, the digitized and encrypted audio program signal, and a video program signal with carrier signals for transmission to a receiver as spoken of on column 25, lines 50-53 as well as column 26, lines 1-9.

Regarding claim **42**, "a method of processing signals at a receiver station" is anticipated by the decryption method spoken of on column 24, lines 30-50.

"Receiving at least one encrypted digital information transmission; detecting a plurality of signals on said at least one encrypted digital information transmission" is anticipated by the conveying of a composite television signal (information transmission) to a subscriber including a video portion, an aural portion, and an encryption codes signal comprising a sequence of encryption codes as spoken of on column 24, lines 30-35.

"Decrypting at least one of said plurality of signals, said at least one decrypted signal including at least one instruct signal which is effective to instruct" is anticipated by the inverse encryption means (decryptor processor) that uses the separated encryption codes signal to return the detected audio signal to the pre-encryption digitized condition (decrypted signal) as spoken of on column 24, lines 44-46.

Lastly, "passing the at least one decrypted instruct signal to a controllable device; and controlling said controllable device on the basis of decrypted information included in said at least one decrypted instruct signal" is anticipated by returning of the audio signal to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50.

Regarding claim **55**, "a method of processing signals at a receiver station" is anticipated by the decryption method spoken of on column 24, lines 30-50.

"Receiving one or more encrypted digital information transmissions at said receiver station; detecting a plurality of signals on said one or more encrypted digital information transmissions, at least a first of one of said plurality of signals including a control signal" is anticipated by the conveying of a composite television signal (information transmission) to a subscriber including a video portion, an aural portion, and an encryption codes signal (control signal) comprising a sequence of encryption codes as spoken of on column 24, lines 30-35.

"Controlling a decryptor that decrypts encrypted digital data in response to said control signal; decrypting or enabling communication of at least a second of said plurality of signals on the basis of said step of controlling said decryptor" is anticipated by the inverse encryption means (decryptor) that uses the separated encryption codes signal (control signal) to return the detected audio signal to the pre-encryption digitized condition (decrypted signal) as spoken of on column 24, lines 44-46.

Lastly, "passing said decrypted or enabled at least said second of said plurality of signals to a controllable device; and controlling said controllable device on the basis of

said passed decrypted or enabled at least said second of said plurality of signals" is anticipated by returning of the audio signal to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50.

Regarding claim **56**, "a method of processing signals at a receiver station" is anticipated by the decryption method spoken of on column 24, lines 30-50.

"Receiving at least one encrypted digital information transmission; identifying a plurality of signals in said at least one encrypted digital information transmission; selecting a first signal of said plurality of signals including downloadable code" is anticipated by the conveying of a composite television signal (information transmission) to a subscriber including a video portion, an aural portion, and an encryption codes signal (signal including code) comprising a sequence of encryption codes as spoken of on column 24, lines 30-35, as well as an encryption codes signal detector that detects and separates (identification of and selection of) the encryption codes signal (signal including code) from the television signals as spoken of on column 24, lines 40-41.

"Passing said downloadable code to a processor; controlling a decryptor that decrypts encrypted digital data to decrypt in a specific fashion on the basis of said downloadable code; decrypting at least one second signal of said plurality of signals in said specific fashion" is anticipated by the inverse encryption means (decryptor processor) that uses the separated encryption codes signal to return the detected audio signal (second signal) to the pre-encryption digitized condition (decrypted programming) as spoken of on column 24, lines 44-46.

Lastly, "passing said at least one second signal to one of said processor and an output device" is anticipated by returning of the audio signal to original analog format whereby program audio may be processed and presented (to an output device) in a conventional manner as spoken of on column 24, lines 47-50.

6. Claim **31** is rejected under 35 U.S.C. 102(e) as being anticipated by Ostermann et al. (U.S. 4,484,025) (hereinafter "Ostermann"). *Ostermann* teaches all of the limitations of the specified claims with the reasoning that follows.

Regarding claim **31**, "a method of controlling at least one of a plurality of receiver stations" is anticipated by the enciphering/deciphering method performed by the terminals 1 and 2 of Figure 1.

"Receiving downloadable code which is effective at said at least one of said plurality of receiver stations to implement a new technique of decrypting and delivering the downloadable code to at least one transmitter" is anticipated by the transmission of a cipher algorithm (downloadable code) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 (transmitter) that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

"Receiving at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code; and causing said at least one control signal to be communicated to said at least one transmitter at a specific time, thereby to transmit at least one information transmission including the downloadable code and said at least one control signal" is anticipated by the transmission of a bit

sequence (control signal) from cipher equipment 16 to cipher computer 12 (transmitter) indicating a particular stored cipher program (downloadable code) to be used as spoken of on column 3, lines 10-19.

Claim Rejections - 35 USC § 103

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

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

8. 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(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims **32-36, 38, and 54** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ostermann et al. (U.S. 4,484,025) (hereinafter "Ostermann") in view of Davidson (Re. 31,735).

Regarding claim **32**, *Ostermann* teaches the method of claim **31** as described above. *Ostermann* does not explicitly teach decryption of television programming.

However, *Davidson* teaches the application of encryption/decryption techniques to television signals as spoken of on column 24, lines 30-50.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of *Ostermann* to television program signals in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of *Davidson*.

Regarding claim **33**, *Ostermann* teaches the transmission of a cipher algorithm (instruct signal) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 (transmitter) that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

Ostermann also teaches a receiver terminal that contains means for deciphering received ciphered data text in accordance with a cipher algorithm and a cipher key as spoken of on column 4, lines 52-54, as well as column 2, lines 16-24, which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Ostermann does not explicitly teach decryption of television programming.

However, *Davidson* teaches the application of encryption/decryption techniques to television signals as spoken of on column 24, lines 30-50.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of *Ostermann* to television program signals in order to effectively enable high security and

deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of *Davidson*.

Regarding claim **34**, *Ostermann* teaches the transmission of a cipher algorithm (signal) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 that indicates a particular enciphering/deciphering (encryption/decryption) technique as spoken of on column 2, lines 38-41.

Ostermann also teaches the transmission of a bit sequence (signal) from cipher equipment 16 to cipher computer 12 indicating a particular stored cipher program to be used (change in encryption/decryption technique) as spoken of on column 3, lines 10-19.

Ostermann also teaches a receiver terminal that contains means for deciphering received ciphered data text (signal) in accordance with a cipher algorithm and a cipher key as spoken of on column 4, lines 52-54, as well as column 2, lines 16-24, which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Ostermann does not explicitly teach passing a decrypted signal to a controllable device and controlling the controllable device on the basis of the passed decrypted signal.

However, *Davidson* teaches returning of an audio signal (decrypted signal) to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the post-decryption processing and presentation as taught in *Davidson* to the system of *Ostermann* in order to allow the receiving station to make appropriate use of the recovered decrypted signal.

Regarding claim **35**, *Ostermann* further teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit sequence as spoken of on column 3, lines 10-20.

Regarding claim **36**, *Ostermann* further teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit sequence that indicates which cipher program is to be used at a particular time (schedule) as spoken of on column 3, lines 10-20.

Regarding claim **38**, *Ostermann* further teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit sequence (identifier) as spoken of on column 3, lines 10-20.

Regarding claim **54**, *Ostermann* teaches the enciphering/deciphering method performed by the terminals 1 and 2 (receiver station and remote data source) of Figure 1.

Ostermann also teaches the cipher equipment 16 (remote data source) that contains cipher program storage 18 for storing a cipher algorithm as spoken of on column 2, lines 38-41.

Ostermann also teaches the cipher algorithm request (communication) transmitted from the terminal 1 to the terminal 2 (remote data source) requesting a cipher algorithm (enabling information) as spoken of on column 3, lines 4-9.

Ostermann also teaches the transmission of a cipher algorithm (control signal) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

Ostermann also teaches a receiver terminal that contains means for deciphering (decryptor) received ciphered data text in accordance with a cipher algorithm and a cipher key as spoken of on column 4, lines 52-54, as well as column 2, lines 16-24, which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Ostermann does not explicitly teach the decryption of a digital programming signal including a video.

However, *Davidson* teaches the application of encryption/decryption techniques to television signals as spoken of on column 24, lines 30-50.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of *Ostermann* to television program signals in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of *Davidson*.

Allowable Subject Matter

10. Claims **22-30 and 43-53** are allowable over the prior art of record.

11. Claims **37 and 39** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims **23, 25-30, 37, and 43-53,** these claims are allowable for the reasons indicated in the previous Office Action.

Response to Arguments

13. Applicant's arguments filed 9/10/12 have been fully considered but they are not persuasive.

Regarding claims **40-42, 55, and 56,** Applicant argues that "encryption" is not disclosed anywhere in the specification of *Davidson*, but only in the claims added via reissue. Applicant further argues that *Davidson* describes scrambling video signals and converting analog audio signals to coded digital audio signals, but does not teach or suggest "encryption" as claimed in the instant application and understood by the Board.

However, as provided in the previous Office Action, claim **65** of *Davidson* recites "the aural portion comprising a periodically sampled and digitized audio signal encrypted in accordance with the encryption codes signal". Further, claim **72** recites "means responsive to the encryption code signal for digitally encrypting each digitized program audio sample from the digitizing means".

Further claim **65** recites "inverse encryption means responsive to the separated encryption codes signal to return the detected audio signal to the pre-encryption digitized condition".

Further, Figure 1 of Davidson shows a transmitter 12 and a receiver 14 that make use of A/D converter 31 for transmission and D/A converter 58 for reception which implies digital signal processing takes place. Further, Figure 8b of the description of *Davidson* shows a digitized aural signal consisting of 11 bits. Further, Figures 5, 9, and 10 show digital logic circuitry of the disclosed system of *Davidson* used for digital signal processing.

Further, since the claims added via reissue must not introduce any new matter into the application, the specification of *Davidson* must contain support for the added claims.

It is maintained that the specification of *Davidson* teaches the encryption and decryption of a digital information transmission as described above, as the above audio signals constitutes "an encrypted digital information transmission".

Regarding claim **42**, Applicant argues that *Davidson* does not teach "said at least one decrypted signal including at least one instruct signal which is effective to instruct".

However, as provided in the previous Office Action, *Davidson* teaches the inverse encryption means (decryptor processor) that uses the separated encryption codes signal to return the detected audio signal to the pre-encryption digitized condition (decrypted signal) as spoken of on column 24, lines 44-46.

It is maintained that the decrypted audio signal may be considered an instruct signal effective to instruct, as this signal is operable in the instructing of an audio output device to present audio to a user as spoken of on column 24, lines 47-50.

Further, the above claim language is rather broad in the sense that the language does not indicate what the instruct signal is composed of and/or what/whom the instruct signal is instructing.

Regarding claim **55**, Applicant argues that *Davidson* fails to teach controlling a controllable device on the basis of a decrypted analog audio signal. Applicant further argues that in *Davidson*, the program audio is an element to be processed, and is not operable in the controlling of a controllable device. Examiner respectfully disagrees.

As provided in the previous Office Action, *Davidson* teaches returning of the audio signal to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50. The controllable device being a device suitable for output/presentation of an audio signal. The audio signal is operable in the controlling of this type of device by causing output of the respective audio signal. It is maintained that an audio signal is operable in the controlling of the output of audio at an output device, as this output device would only provide output upon detection of an input audio signal (e.g. a speaker would only output sound if an audio signal is present to be outputted). Further, the claim language is rather broad in that it does not indicate what the "controllable device" is or what is being controlled.

Regarding claim **56**, Applicant argues that the receiver of *Davidson* does not perform any "selecting" of a first signal in a transmission that includes downloadable code.

However, as provided in the previous Office Action, *Davidson* teaches an encryption codes signal detector that detects and separates (identification of and selection of) the encryption codes signal (signal including code) from the television signals as spoken of on column 24, lines 40-41.

It is maintained that the separation of the encryption codes signal from the television signals (plurality of signals) may be considered a selection of a signal, as the encryption codes signal portion is detected and separated (selecting one from multiple signals) from the composite signal. As noted by Applicant, *Davidson's* receiver continuously splits the received sets of signals and processes each according to its type. The encryption codes signal detector means detects and separates (identification of and selection of) the encryption codes signal from the composite television signal while the aural detector means detects and separates (identification of and selection of) the digital encrypted audio signal from the composite television signal as spoken of on column 24, lines 40-44. It is maintained that the above process constitutes a "selection", as a particular type of processor is only processing its corresponding type of information signal.

Regarding claim **31**, Applicant argues that *Ostermann* does not teach "receiving at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code".

However, as provided in the previous Office Action, *Ostermann* teaches the transmission of a bit sequence (control signal) from cipher equipment 16 to cipher computer 12 (transmitter) indicating a particular stored cipher program (downloadable code) to be used as spoken of on column 3, lines 10-19. The specific time of the bit sequence transmission is the time at which the particular cipher algorithm is selected. Furthermore, the type of encryption is selected via transmission of the bit sequence which causes the corresponding cipher program (downloadable code) to be transferred (downloaded).

It is maintained that the bit sequence operates to execute the cipher program, as the bit sequence indicates which stored cipher program is to be used and causes the transferring (downloading) and subsequent use (execution) of the corresponding cipher program.

Applicant further argues that *Ostermann* fails to teach transmitting an information transmission that includes a control signal and downloadable code, and that the cipher algorithm and bit sequence of *Ostermann* are transmitted separately, never together.

However, what is claimed is "thereby to transmit at least one information transmission including the downloadable code and said at least one control signal". The above language indicates that there could be one or multiple transmissions of information, where the information includes downloadable code and at least one control signal.

As provided in the previous Office Action, *Ostermann* teaches the transmission of a bit sequence (control signal) from cipher equipment 16 to cipher computer 12

(transmitter) indicating a particular stored cipher program (downloadable code) to be used, and the subsequent transfer (transmission) of the corresponding cipher program as spoken of on column 3, lines 10-19.

Regarding *amended* claim **54**, Applicant argues that *Ostermann* does not address the decryption of video.

While *Ostermann* is directed to the transmission of a cipher program to allow encryption or decryption of "data", where this data in a general sense could include audio, video, or other known types of data, this argument is considered moot as the teachings of *Davidson* are considered to supplement *Ostermann* as described above.

Regarding claim **32**, Applicant argues that that it would not have been obvious to combine the teachings of *Davidson* and *Ostermann*. Applicant further argues that *Davidson* teaches away from encryption/decryption of television signals by focusing on the processing of the video and audio signal components while leaving the television signal itself unaffected.

However, the video and audio signal components of *Davidson* are a part of the television signal, so the encryption/decryption processing of a video and/or audio component of the television signal would affect the state of the composite television signal (which includes audio, video, and/or control components).

Furthermore, as provided in the previous Office Action, *Davidson* teaches the application of encryption/decryption techniques to television signals containing digital information as spoken of on column 24, lines 30-50.

It is maintained that at the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of *Ostermann* to television program signals in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of *Davidson*.

Regarding claim **33**, Applicant argues that neither *Davidson* nor *Ostermann* teach "receiving a television program at a transmitter station and delivering said television program to a transmitter". Applicant further argues that *Davidson* teaches away from encryption/decryption of television signals by focusing on the processing of the video and audio signal components while leaving the television signal itself unaffected.

However, the video and audio signal components of *Davidson* are a part of the television signal, so the encryption/decryption processing of a video and/or audio component of the television signal would affect the state of the composite television signal (which includes audio, video, and/or control components).

Furthermore, as provided in the previous Office Action, *Ostermann* teaches the transmission of a cipher algorithm (instruct signal) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 (transmitter) that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

Ostermann also teaches a receiver terminal that contains means for deciphering received ciphered data text in accordance with a cipher algorithm and a cipher key as

spoken of on column 4, lines 52-54, as well as column 2, lines 16-24, which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Ostermann does not explicitly teach decryption of television programming.

However, *Davidson* teaches the application of encryption/decryption techniques to television signals (that are transmitted and received) as spoken of on column 24, lines 30-50.

Davidson also teaches the subscription television transmitter 12 in Figure 1 that generates television signals (programming) having video and audio portions for subsequent transmission (to/from a transmitter 20, 30) as spoken of on column 25, lines 45-50.

It is maintained that at the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of *Ostermann* to television program signals in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of *Davidson*.

Regarding claim **34**, Applicant argues that neither *Davidson* nor *Ostermann* teach "passing said decrypted second of said plurality of signals to a controllable device; and controlling said controllable device on the basis of said passed decrypted second of said plurality of signals".

However, as provided in the previous Office Action, *Davidson* teaches returning of the audio signal to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on

column 24, lines 47-50. The controllable device being a device suitable for output/presentation of an audio signal. The audio signal is operable in the controlling of this type of device by causing output of the respective audio signal. It is maintained that an audio signal is operable in the controlling of the output of audio at an output device, as this output device would only provide output upon detection of an input audio signal (e.g. a speaker would only output sound if an audio signal is present to be outputted). Further, the claim language is rather broad in that it does not indicate what the "controllable device" is or what is being controlled.

Regarding claim **36**, Applicant argues that *Ostermann* does not teach "wherein said step of transferring is performed in accordance with a schedule".

However, as provided in the previous Office Action, *Ostermann* teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit sequence that indicates which cipher program is to be used at a particular time (schedule) as spoken of on column 3, lines 10-20. In other words, the transferring of a particular cipher algorithm is performed in accordance with a particular order or schedule (sequence of algorithms transferred in a time order in relation to each other) depending on a received bit sequence indicating which cipher program is to be used at a particular time.

It is maintained that *Ostermann* teaches the above limitation in question.

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL J. MOORE, JR., whose telephone number is (571)272-3168. The examiner can normally be reached on Monday-Friday (7:30am - 4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached at (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J. Moore, Jr./
Primary Examiner, Art Unit 2467

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: John C. Harvey *et al.*	
Application No.: 08/449,413	Confirmation No.: 1756
Filed: May 24, 1995	Art Unit: 2467
For: SIGNAL PROCESSING APPARATUS AND METHODS	Examiner: Moore Jr., Michael J.

AMENDMENT AND REQUEST FOR RECONSIDERATION

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

Dear Sir:

In response to the Final Office Action dated November 2, 2012, please amend the above-identified application as follows.

Amendments to the claims begin on page 2.

Remarks begin on page 11.

LJBW/1849126.1

AMENDMENT TO THE CLAIMS

Claims 22-56 are the only pending claims.

1 - 21. (Cancelled)

22. (Previously Presented) A method for controlling the decryption of encrypted programming at a subscriber station, said method comprising the steps of:

receiving encrypted digital programming, said encrypted digital programming having an encrypted digital control signal;

detecting said control signal;

passing said control signal to a decryptor that decrypts encrypted digital data at said subscriber station;

decrypting said control signal;

decrypting said encrypted digital programming to form decrypted programming based on said control signal; and

presenting said decrypted programming to a viewer or listener.

23. (Previously Presented) A method for controlling the decryption of programming at a subscriber station, said method comprising the steps of:

receiving programming, said programming having a first encrypted digital control signal portion and an encrypted digital information portion;

detecting said first encrypted digital control signal portion of said programming;

passing said first encrypted digital control signal portion of said programming to a first decryptor at said subscriber station;

decrypting said first encrypted digital control signal portion of said programming using said first decryptor at said subscriber station;

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passing said encrypted digital information portion of said programming and the decrypted control signal portion to a second decryptor at said subscriber station;

decrypting said encrypted digital information portion of said programming using said second decryptor at said subscriber station based on the decrypted control signal portion; and

presenting said programming.

24. (Previously Presented) A method of controlling a remote transmitter station to communicate program material to a subscriber station and controlling said subscriber station to process or output a unit of programming, said method comprising the steps of:

receiving a control signal which operates at the remote transmitter station to control the communication of a unit of programming and one or more first instruct signals and communicating said control signal to said remote transmitter station;

receiving a code or datum identifying a unit of programming to be transmitted by the remote transmitter station, said remote transmitter station transferring said unit of programming to a transmitter;

receiving at said remote transmitter station one or more second instruct signals which operate at the subscriber station to identify and decrypt said unit of programming or said one or more first instruct signals, said remote transmitter station transferring said one or more second instruct signals to said transmitter; and

transmitting from said remote transmitter station an information transmission comprising said unit of programming, said one or more first instruct signals, and said one or more second instruct signals, said one or more first instruct signals being transmitted in accordance with said control signal.

25. (Previously Presented) The method of claim 23, wherein said programming further includes encrypted video.

26. (Previously Presented) The method of claim 23, wherein said subscriber station stores information that evidences processing said programming.

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27. (Previously Presented) The method of claim 23, wherein said programming is received at said subscriber station in one channel of a multichannel signal and a second control signal portion used to decrypt said programming is included in said multichannel signal outside said one channel.

28. (Previously Presented) The method of claim 23, wherein said subscriber station detects, in a transmission channel including said programming, a second control signal portion used to decrypt the first control signal portion.

29. (Previously Presented) The method of claim 23, wherein the subscriber station detects, in a transmission channel for transmitting the programming, a second control signal portion used to decrypt the first control signal portion, and wherein the second control signal portion is encrypted, and wherein the second control signal portion is decrypted in order to enable decryption of the first control signal portion.

30. (Previously Presented) The method of claim 23, wherein said programming includes computer data.

31. (Previously Presented) A method of controlling at least one of a plurality of receiver stations, said method comprising the steps of:

receiving downloadable code which is effective at said at least one of said plurality of receiver stations to implement a new technique of decrypting and delivering the downloadable code to at least one transmitter;

receiving at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code; and

causing said at least one control signal to be communicated to said at least one transmitter at a specific time,

thereby to transmit at least one information transmission including the downloadable code and said at least one control signal.

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32. (Previously Presented) The method of claim 31, wherein a digital television program is displayed at a receiver station and said downloadable code and said at least one control signal program said receiver station to decrypt said digital television program in accordance with said new technique.

33. (Previously Presented) A method of communicating digital television program material to one or more receiver stations, said method comprising the steps of:

receiving a digital television program at a transmitter station and delivering said digital television program to a transmitter;

receiving and storing one or more instruct signals at said transmitter station, said one or more instruct signals at said one or more receiver stations operative to implement a new technique of decrypting;

transferring said one or more instruct signals to said transmitter; and

transmitting said digital television program and said one or more instruct signals from said transmitter station to said one or more receiver stations.

34. (Previously Presented) A method of processing signals at a receiver station comprising the steps of:

receiving at least one information transmission;

detecting a plurality of signals in said at least one information transmission;

changing a decryption technique in response to at least a first of said plurality of signals;

decrypting a second of said plurality of signals on the basis of said changed decryption technique;

passing said decrypted second of said plurality of signals to a controllable device; and

controlling said controllable device on the basis of said passed decrypted second of said plurality of signals.

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35. (Previously Presented) The method of claim 33, wherein said step of transferring is performed based on comparison.

36. (Previously Presented) The method of claim 33, wherein said step of transferring is performed in accordance with a schedule.

37. (Previously Presented) The method of claim 36, wherein said schedule specifies a transmission time and a transmission channel, said method further comprising the steps of receiving and storing said schedule at said transmitter station.

38. (Previously Presented) The method of claim 33, wherein said one or more instruct signals operate at said one or more receiver stations based on an identifier, said method further comprising the step of transmitting said identifier.

39. (Previously Presented) The method of claim 38, wherein an information transmission including said digital television program is received at said one or more receiver stations, wherein said digital television program is outputted at said one or more receiver stations, and wherein said identifier identifies (i) said digital television program and (ii) a channel including said digital television program.

40. (Previously Presented) A method of processing signals at a receiver station comprising the steps of:

receiving at least one encrypted digital information transmission;

locating code;

passing said code to a processor;

controlling a decryptor that decrypts encrypted digital data to decrypt in a specific fashion on the basis of said code;

decrypting a portion of said at least one information transmission in said specific fashion; and

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passing said decrypted portion of said at least one encrypted digital information transmission to one of said processor and an output device.

41. (Previously Presented) A method of controlling a receiver station to detect digital data and control a decryptor that decrypts encrypted digital data based on a varying pattern of timing or location, said method of controlling comprising the steps of:

receiving programming and delivering said programming to a transmitter;

receiving digital data comprising at least an instruct signal and communicating said digital data to a signal embedder, said instruct signal operative at said receiver station to control said decryptor;

controlling said signal embedder to embed said digital data in an encrypted digital information transmission in a varying pattern of timing or location;

communicating said encrypted digital information transmission to said transmitter; and

transmitting said programming and said encrypted digital information transmission including said digital data.

42. (**Currently Amended**) A method of processing signals at a receiver station comprising the steps of:

receiving at least one encrypted digital information transmission;

detecting a plurality of signals on said at least one encrypted digital information transmission;

decrypting at least one of said plurality of signals, said at least one decrypted signal ~~including~~ containing at least one instruct signal which is effective to instruct;

passing the at least one decrypted instruct signal to a controllable device; and

controlling said controllable device on the basis of decrypted information included in said at least one decrypted instruct signal.

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43. (Previously Presented) A method for decryptor activation in a network comprising:

receiving a transmission comprising encrypted materials;

decrypting under first processor control a first portion of said encrypted materials in said transmission;

inputting said first portion of said encrypted materials to a decryptor;

decrypting under second processor control a second portion of said encrypted materials based on said step of decrypting said first portion of said encrypted materials.

44. (Previously Presented) The method of claim 43 wherein said transmission in said step of receiving a transmission is a multichannel signal separated in the frequency domain.

45. (Previously Presented) The method of claim 44 wherein said transmission is a cable system broadcast.

46. (Previously Presented) The method of claim 43 wherein said transmission in said step of receiving a transmission is a multichannel signal separated in the time domain.

47. (Previously Presented) The method of claim 43 wherein said transmission in said step of receiving a transmission is generated at a local data source.

48. (Previously Presented) The method of claim 47 wherein said local data source comprises a VCR.

49. (Previously Presented) The method of claim 47 wherein said local data source comprises a laser disk.

50. (Previously Presented) The method of claim 43 wherein said encrypted materials comprise a portion of a television program.

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51. (Previously Presented) The method of claim 43, wherein said transmission in said step of receiving a transmission and a signal necessary for decryption are received from different sources.

52. (Previously Presented) The method of claim 51, further comprising the step of contacting a remote transmitter station to receive one of said transmission and said signal necessary for decryption.

53. (Previously Presented) The method of claim 51, wherein a signal necessary for decryption is communicated by telephone.

54. (**Currently Amended**) A method of providing an enabling signal to a receiver station from a remote data source, said enabling signal for use in decrypting at the receiver station a digital television programming signal, said receiver station being programmed to get information necessary for enabling said digital programming signal, said method comprising the steps of:

storing at the remote data source one or more control signals for enabling a decryptor to decrypt said digital television programming signal ~~including a video~~;

receiving at the remote data source from the receiver station a communication to get specific enabling information;

communicating, from the remote data source to the receiver station in response to said communication from the receiver station, a control signal,

whereby the receiver station inputs said control signal to a decryptor, and wherein said decryptor decrypts said digital television programming signal ~~including a video~~.

55. (Previously Presented) A method of processing signals at a receiver station comprising the steps of:

receiving one or more encrypted digital information transmissions at said receiver station;

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detecting a plurality of signals on said one or more encrypted digital information transmissions, at least a first of one of said plurality of signals including a control signal;

controlling a decryptor that decrypts encrypted digital data in response to said control signal;

decrypting or enabling communication of at least a second of said plurality of signals on the basis of said step of controlling said decryptor;

passing said decrypted or enabled at least said second of said plurality of signals to a controllable device; and

controlling said controllable device on the basis of said passed decrypted or enabled at least said second of said plurality of signals.

56. (Previously Presented) A method of processing signals at a receiver station comprising the steps of:

receiving at least one encrypted digital information transmission;

identifying a plurality of signals in said at least one encrypted digital information transmission;

selecting a first signal of said plurality of signals including downloadable code;

passing said downloadable code to a processor;

controlling a decryptor that decrypts encrypted digital data to decrypt in a specific fashion on the basis of said downloadable code;

decrypting at least one second signal of said plurality of signals in said specific fashion; and

passing said at least one second signal to one of said processor and an output device.

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REMARKS

I. STATUS OF CLAIMS

Claims 22-56 are pending in this application. Claims 23, 25-30 and 43-53 are allowed. Claims 37 and 39 are allowable over the prior art, but objected to as dependent on non-allowable claims. Claims 22 and 24 are allowable over the prior art, but subject to a nonstatutory obviousness-type double patenting rejection. The remaining claims are rejected under 35 U.S.C. §§ 102 and 103 and/or nonstatutory obviousness-type double patenting. By this Amendment, claims 42 and 54 are amended.

Applicants respectfully request reconsideration of the present application in view of the remarks below. An amendment submitted after a final office action in an application must comply with 37 C.F.R. § 1.116, which states that:

> (1) An amendment may be made canceling claims or complying with any requirement of form expressly set forth in a previous Office action;
>
> (2) An amendment presenting rejected claims in better form for consideration on appeal may be admitted; or
>
> (3) An amendment touching the merits of the application or patent under reexamination may be admitted upon a showing of good and sufficient reasons why the amendment is necessary and was not earlier presented.

37 C.F.R. 1.116(b).

Applicants submit that this Amendment After Final Rejection places this application in condition for allowance by amending claims in manners that are believed to render all pending claims allowable over the cited art and/or at least place this application in better form for consideration on appeal under 37 C.F.R. § 1.116(2). This Amendment is also necessary to at least clarify and/or narrow the issues for consideration by the Board and was not presented earlier because Applicants believed that the prior response(s) placed this application in condition

for allowance, for at least the reasons discussed in those responses. Accordingly, entry of the present Amendment, as an earnest attempt to advance prosecution and/or to reduce the number of issues, is requested under 37 C.F.R. § 1.116.

Applicants earnestly solicit a favorable reconsideration and prompt allowance of the claims. Where the Office does not find that the claims are in condition for allowance, Applicants respectfully request that the Office withdraw the finality of the office action for the reasons set forth below.

II. DOUBLE PATENTING REJECTIONS

Claims 22, 34, 54, and 55 are rejected on the ground of nonstatutory obviousness-type double patenting as allegedly being unpatentable over claims 1, 22, and 23 of U.S. Patent No. 7,801,304. This is the patent that issued from Applicants' DECR 81 group "A" application, U.S. Patent Application Serial No. 08/449,263. Claim 24 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 14 of the DECR 81 group "A" patent, in view of Yanagimachi et al. (U.S. Patent No. 3,936,595) ("Yanagimachi"). Applicants maintain the arguments they asserted previously in regard to traversing the claim 24 rejection. If the Office maintains the rejections, Applicants acknowledge that a timely filed terminal disclaimer in compliance with 37 C.F.R. 1.321(c) or 1.321(d) may be necessary to overcome the nonstatutory double patenting rejections. However, Applicants request that the requirement for filing the terminal disclaimer be held in abeyance, pending an indication of allowable subject matter from the Office in the present application. If filed, the terminal disclaimer will disclaim, in essential terms, the terminal part of the statutory term of any patent granted on the above-referenced application, extending beyond the earliest expiration date of the DECR 81 group "A" patent, U.S. Patent No. 7,801,304.

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III. SUMMARY OF PRIOR ART REJECTIONS

Many of the pending claims are rejected under 35 U.S.C. §§102 or 103 over references including Davidson (Re. 31,735) and Ostermann et al. (U.S. Patent No. 4,484,025) ("Ostermann"). The Office Action rejected claims 40-42, 55, and 56 under 35 U.S.C. 102(e) as allegedly being anticipated by Davidson; claim 31 under 35 U.S.C. 102(e) as allegedly being anticipated by Ostermann; and claims 32-36, 38, and 54 under 35 U.S.C. 103(a) as allegedly being unpatentable over the combination of Ostermann in view of Davidson.

IV. SUMMARY OF APPLIED PRIOR ART

A. Davidson

Davidson is the reissued patent of U.S. Patent No. 4,215,366 that issued on July 29, 1980. The reissued patent added new claims 65-74. The application for reissue was filed on July 26, 1982, well after the November 3, 1981 priority date of the instant application.

Davidson is directed to a "method and system for encoding and decoding of standard television signals..." Col. 3, ll. 26-28. "[V]ideo scrambling is effected by inversion of the video signals of some horizontal scan lines on a pseudo-random bias to produce a picture having some video signals inverted and others not inverted which is unpleasant to view and virtually unintelligible." Col. 3, ll. 29-34. Davidson discloses converting analog audio signals to coded digital audio signals. Col. 3, ll. 34-36. "A plurality of unique pulse-coded control signals consisting of 32- bit binary pulse trains are transmitted separately to... provide the information needed to unscramble the scrambled audio and video signals." Col. 3, ll. 36-41.

Claim 65, added to the patent via reissue, claims a receiver in a subscription television system having means for conveying television signals include a video portion, an aural portion, and an "encryption codes signal" comprising a sequence of "encryption codes." Col. 24, ll. 30-

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35. The aural portion is a digitized audio signal "encrypted" in accordance with the "encryption codes signal." Col. 24, ll. 35-39. The receiver has means to detect and separate the "encryption codes" signal from the television signals; to separate the digitized and "encrypted" audio signal from television signals; to return the detected audio signal to the "pre-encryption" digitized condition; and to return the audio signal to the original analog format. Col. 24, ll. 40-50. However, there is no mention of "encryption" anywhere in the disclosure of the patent. Only scrambling and unscrambling is disclosed. The term "encryption," as used in claim 65, was not added until sometime after the reissue filing date of July 26, 1982.

Claim 72, also added to the patent via reissue, claims a "television transmitter for generating television signals having a program video portion and program aural portion..." Col. 25, ll. 46-48. The transmitter has means to generate a continuous sequence of "encryption codes"; to convey the program video and program aural portions and the "encryption codes signal" from the transmitter to authorized subscribers; to sample and digitize the program audio signal; to digitally "encrypt" each digitized program audio sample in response to the "encryption codes signal"; and to combine the "encryption codes" signal, the digitized and "encrypted" audio program signal, and a video program signal, with the carrier signals. Col. 25, l. 52 – col. 26, l. 9. As mentioned above, there is no mention of "encryption" anywhere in the disclosure of the patent. Only scrambling and unscrambling is disclosed. The term "encryption," as used in claim 72, was not added until sometime after the reissue filing date of July 26, 1982.

The original Davidson '366 patent discloses video scrambling. The reliance on the reissue patent cannot change this fact. The use of the term "encryption" as added by the reissue claims does not change the fact that the fundamental video signal of Davidson is an analog

television signal. The video signal of Davidson is not encrypted as encryption is a digital process. For this reason, the Davidson reissue patent is limited in its use as a prior art reference.

B. Ostermann

Ostermann is directed to a "system for enciphering and deciphering data for transmission between a transmitter and a receiver, where the terms encipher and decipher are synonymous with encrypt and decrypt respectively." Col. 1, ll. 7-10. Ostermann discloses a receiver station transmitting a cipher algorithm "from the cipher program storage 18 over a data transmission channel 20 to the program memory 22 of the programmable cipher computer 12" at the transmitter station. Col. 2, ll. 38-41. "The cipher algorithm transmitted from the cipher program storage 18 of cipher equipment 16 via channel 20 is stored in program memory 22 and used to encipher the clear input data provided by input device 24 to transmitter 10."

Ostermann also discloses another embodiment of the invention where "the programmable cipher computer 12 is provided with long term memory 28 for storage of a plurality of different cipher programs which can be called up for storage in the program memory 22 as required." Col. 2, ll. 59-62. The cipher equipment 12 at the transmitter station receives a bit sequence from cipher computer 16 at the receiver station that enables the cipher program to be transferred from long-term memory 28 to program memory 22. Col. 3, ll. 10-19.

V. RESPONSE TO PRIOR ART REJECTIONS

A. Rejection of claims 40-42, 55 and 56 under 35 U.S.C. §102(e)

Claims 40-42, 55, and 56 are rejected under 35 U.S.C. §102(e) over Davidson. This rejection is respectfully traversed.

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Claims 40-42, 55, and 56 claim material relating to the encryption and decryption of a digital information transmission. The Examiner relies on the analog television signal as teaching the digital information transmission. Action at 11. The Examiner points to the A/D converter 31 and the D/A converter 58 disclosed in Davidson to show that digital signal processing takes place. Action at 23. However, Davidson only discloses that these analog/digital converters affect audio signals that are combined with video signals and control signals into a standard, *i.e.* not digital and not encrypted, television signal. Col. 5, ll. 36-42; Col. 24, ll. 30-35; Col. 25, ll. 46-48. Davidson fails to teach an "encrypted digital information transmission."

Applicants addressed this point in their September 10, 2012 Response, but the Examiner did not respond to this argument in the Office Action. As argued previously, the Examiner erred by not considering all the words in claims 40-42, 55, and 56. *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970) ("All words in a claim must be considered in judging the patentability of that claim against the prior art."). The claims recite receiving a "encrypted digital information transmission," but the Examiner did not fully consider the meaning of this limitation.

The information transmission taught by Davidson is only an analog television signal. Regardless of whether the television signal includes a component comprising a digital signal, the television signal remains analog. As recited in claims 40-42, 55, and 56, an "encrypted digital information transmission" requires that the digital information transmission itself be encrypted. Davidson only teaches an analog television signal, not a digital information transmission, and the mere fact that an "encrypted" digital audio signal is added to the analog television signal does not change the analog television signal to an encrypted digital television signal. Therefore, Davidson does not disclose an "encrypted digital information transmission." Claims 40-42, 55, and 56 are not anticipated by Davidson and are in allowable form.

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Additionally, Applicants have consistently asserted in their previous Responses that the Board of Patent Appeals and Interferences decided in Ex parte Personalized Media Communications, LLC (Appeal 2008-4228, Ex parte Reexamination Control 90/006,536) at pages 53-54, that encryption and decryption require a digital signal. The Board considered the very same specification that is part of this application in finding that encryption and decryption are limited to digital applications. The Board also held that "encryption and decryption are not broad enough to read on scrambling and unscrambling."

Applicants do not dispute that a reissued patent is entitled to the filing date of its parent in accordance with 35 U.S.C. § 252. However, Applicants note that "encryption" is not disclosed anywhere in the specification of Davidson, only in the claims added via reissue. Davidson describes scrambling video signals and converting analog audio signals to coded digital audio signals, but does not teach or suggest "encryption" as claimed in the instant application and understood by the Board. Claims 40-42, 55, and 56 are not anticipated by Davidson and are in allowable form.

Even assuming, *arguendo*, that Davidson teaches an "encrypted digital information transmission," claims 42, 55, and 56 are not anticipated by Davidson for at least the additional following reasons:

1. Claim 42

Claim 42, as amended, recites in part:

> decrypting at least one of said plurality of signals, said at least one decrypted signal containing at least one instruct signal which is effective to instruct;

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passing the at least one decrypted instruct signal to a controllable device; and

controlling said controllable device on the basis of decrypted information included in said at least one decrypted instruct signal.

These limitations are not taught by Davidson.

The claim is amended to emphasize that the at least one decrypted signal contains at least one instruct signal; the instruct signal is part of the decrypted signal, but not the decrypted signal itself. Applicants make this amendment to quell the Examiner's concern regarding the broadness of the claim and "what the instruct signal is composed of." Action at 24.

The Office Action points to Davidson's claim 65, column 24, lines 30-50, to show that the invention discloses all the limitations of claim 42. Action at 13-14. The Examiner also asserts that the separated encryption codes signal that's effective to return the encrypted digital audio signal to a decrypted form teaches "said at least one decrypted signal including at least one instruct signal which is effective to instruct." Action at 23.

In light of the clarifying amendment, Davidson's claim 65 teaches means for decrypting a digitized audio signal but fails to teach decrypting a signal that contains at least one instruct signal which is effective to instruct. Claim 42 recites "at least one decrypted signal containing at least one instruct signal," thereby disqualifying the decrypted audio signal and the encryption codes signal from acting as an instruct signal as claimed. No additional instruct signal is contained in the audio signal. The audio signal is indivisible. Further, Davidson does not teach or suggest that encryption of the audio signal affects the audio signal such that when it is decrypted it then contains an instruct signal. Therefore, Davidson fails to teach all the limitations of claim 42.

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2. Claim 55

Claim 55 recites in part:

> controlling said controllable device on the basis of said passed decrypted or enabled at least said second of said plurality of signals.

These limitations are not taught by Davidson.

The Office Action points to Davidson's claim 65, column 24, lines 30-50, to show that the invention discloses all the limitations of claim 55. Claim 65 teaches means for the decryption and analog conversion of an encrypted digital audio signal, but fails to teach controlling a controllable device on the basis of that decrypted analog audio signal. The "analog conversion means connected to the inverse encryption means to return the audio signal to the original analog format whereby program audio may be processed and presented in a conventional manner." Col. 24, ll. 47-50. Applicants maintain, as asserted previously, that in Davidson, the program audio is an element to be processed, it is not operable in the controlling of a controllable device. For example, a speaker is not controlled by an audio signal. Rather, it is an enable signal that instructs the speaker to turn on, detect, process, and output the audio signal. The speaker will output sound if an audio signal is present, but only after an enable signal instructs the speaker to perform. Davidson fails to teach all the limitations of claim 55.

3. Claim 56

Claim 56 recites in part:

> receiving at least one encrypted digital information transmission;
>
> identifying a plurality of signals in said at least one information transmission;
>
> selecting a first signal of said plurality of signals including downloadable code;

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These limitations are not taught by Davidson.

Davidson's receiver receives sets of signals at receiving antenna 36. Col. 8, ll. 57-68. The sets of signals are then split by RF splitter 114 so that the video, aural, and control signals can be separately processed. Col. 9, ll. 1-11. Applicants maintain, as asserted previously, that the receiver does not perform any "selecting" of a first signal in a transmission that includes downloadable code. Davidson's receiver continuously splits the received sets of signals and processes each according to its type. **No "selecting" occurs because all signals are received and then processed**. Davidson fails to teach "selecting" as set forth in claim 56.

B. Rejection of claim 31 under 35 U.S.C. §102(e)

Claim 31 has been rejected under 35 U.S.C. §102(e) over Ostermann. This rejection is respectfully traversed.

1. Claim 31

Claim 31 recites, in part:

> receiving at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code; and
>
> causing said at least one control signal to be communicated to said at least one transmitter at a specific time,
>
> thereby to transmit at least one information transmission including the downloadable code and said at least one control signal.

These limitations are not taught by Ostermann.

Applicants maintain the same arguments that they asserted in their previous Responses. Ostermann discloses the cipher equipment 12 at the transmitter station receiving a bit sequence from the cipher computer 16 at the receiver station, but the bit sequence does not operate to

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execute the cipher algorithm at the receiver station. The bit sequence only identifies "which cipher program from long-term memory 28 is to be used." Col. 3, ll. 18-19. The cipher program is only executed upon entry of clear data text. To be clear, a bit sequence may be received that identifies a cipher program, but the cipher program is not executed upon identification.

The bit sequence does not "operate to execute" as maintained by the Examiner. Action at 26. Rather, the clear data text "operates to execute" the cipher program, which requires reading the bit sequence identification information. The bit sequence is a passive element that is operated upon to execute. Therefore, Ostermann does not teach the limitation "receiving at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code."

Ostermann also fails to teach transmitting an information transmission that includes a control signal and downloadable code. The cipher algorithm and bit sequence are described as being transmitted separately, never together. *See* col. 2, ll. 38-41; col. 3, ll. 15-19. The Office Action asserts that because claim 31 recites "thereby to transmit at least one information transmission including the downloadable code and said at least one control signal" that the separate transmissions of the cipher algorithm and bit sequence teaches the limitation. Action at 26-27. But, the Examiner admits that the cipher algorithm and bit sequence are not transmitted together. *Id.* Regardless of whether there is a plurality of transmissions, only one element is transmitted at a time. An information transmission including downloadable code and at least one control signal is never transmitted. Therefore, Ostermann does not describe each and every limitation as set forth in claim 31.

C. Rejection of claims 32-36, 38, and 54 under 35 U.S.C. §103(a)

The Office Action rejected claims 32-36, and 38 under 35 U.S.C. 103(a) as allegedly being unpatentable over the combination of Ostermann in view of Davidson. Applicants respectfully traverse the rejections and argue that Ostermann and Davidson, alone and in combination, fail to teach each of the claim's limitations.

1. Claim 32

Claim 32 claims the method of claim 31, "wherein a digital television program is displayed at a receiver station and said downloadable code and said at least one control signal program said receiver station to decrypt said digital television program in accordance with said new technique." Claim 32 is not rendered unpatentable by Ostermann for the same reasons as argued above in regard to claim 31.

The Office Action points to Davidson's claim 65 as teaching the application of encryption/decryption techniques to television signals. Action at 27-28. However, as Applicants have argued previously, it would not have been obvious to combine the teachings of the references. Davidson is directed to the transmission and reception of standard television signals, which at the time of invention were analog television signals. To emphasize this digital/analog distinction, Applicants previously amended the claim to recite "a digital television program." The Office Action does not address Applicants' amendment and assertions regarding "a digital television program."

As evidenced by Davidson only scrambling the analog video signal while embedding an encrypted digital audio signal, **the encryption of a whole television signal was not obvious**. There is no suggestion in Davidson that encryption could be applied to signals as complex as

entire television signals. In fact, Davidson teaches away from encrypting/decrypting television signals by focusing on the processing of the video and audio signal components while leaving the television signal itself unaffected. The Examiner asserts that "the encryption/decryption processing of a video and/or audio component of the television signal would affect the state of the composite television signal." Action at 27. But, the composite television signal remains analog. Therefore, it would not have been obvious to combine Davidson and Ostermann.

Assuming, *arguendo*, that it would be obvious to combine Davidson and Ostermann, Davidson does not cure Ostermann's deficiencies. The combination of Davidson and Ostermann fails to teach displaying a digital television program at a receiver station where the receiver decrypts the digital television program. Neither Davidson or Ostermann teaches displaying or decrypting a digital television program. Applicants respectfully submit that even if the teachings of Ostermann were modified with the teachings of Davidson as suggested in the Final Office Action, the modified composition still fails to satisfy every element recited in claim 32.

2. Claim 33

Claim 33 recites, in part: "receiving a digital television program at a transmitter station and delivering said television program to a transmitter... and transmitting said digital television program and said one or more instruct signals from said transmitter station to said one or more receiver stations." These limitations are not taught by Ostermann or Davidson.

Ostermann teaches the transfer of a cipher algorithm from a receiver station to a transmitter station, where the cipher algorithm is used to implement decrypting at the receiver station. The Office Action points to Davidson's claim 65, column 24, lines 30-50 to apply Ostermann's teachings to television signals. Action at 28-29. However, as argued above, it

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would not have been obvious to combine the teachings of the references. Davidson is directed to the transmission and reception of standard television signals, which at the time of invention were analog television signals. To emphasize this digital/analog distinction, Applicants previously amended the claim to recite "a digital television program." The Office Action does not address Applicants' amendment and assertions regarding "a digital television program."

As evidenced by Davidson only scrambling the analog video signal while embedding an encrypted digital audio signal, **the encryption of a whole television signal was not obvious**. Davidson surely understood encryption and decryption, but did not apply it to television signals because that innovation was not obvious. In fact, Davidson teaches away from encrypting/decrypting television signals by focusing on the processing of the video and audio signal components while leaving the television signal itself unaffected. The Examiner asserts that "the encryption/decryption processing of a video and/or audio component of the television signal would affect the state of the composite television signal." Action at 28. But, the composite television signal remains analog. Therefore, it would not have been obvious to combine Davidson and Ostermann.

Assuming, *arguendo*, that it would be obvious to combine Davidson and Ostermann, claim 65 teaches conveying composite analog television signals, not digital television signals. Neither Davidson or Ostermann teaches receiving or transmitting a digital television program. Even if someone of ordinary skill in the art were to apply the teachings of Ostermann and Davidson, the inventions fail to teach or suggest every limitation of claim 33.

3. Claim 34

Claim 34 recites, in part:

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passing said decrypted second of said plurality of signals to a controllable device; and

controlling said controllable device on the basis of said passed decrypted second of said plurality of signals."

These limitations are not taught by Ostermann or Davidson.

The Office Action points to Davidson's claim 65, column 24, lines 30-50, to show that the invention discloses the passing and controlling limitations of claim 34. Claim 65 teaches means for the decryption and analog conversion of an encrypted digital audio signal, but fails to teach passing the decrypted analog audio signal to a controllable device and controlling the controllable device on the basis of that decrypted analog audio signal. The "analog conversion means connected to the inverse encryption means connected to the inverse encryption means to return the audio signal to the original analog format whereby program audio may be processed and presented in a conventional manner." Col. 24, ll. 47-50. As asserted previously by Applicants, in Davidson, the program audio is an element to be processed, it is not operable in the controlling of a controllable device. For example, a speaker is not controlled by an audio signal. Rather, it is an enable signal that instructs the speaker to turn on, detect, process, and output the audio signal. The speaker will output sound if an audio signal is present, but only after an enable signal instructs the speaker to perform. Davidson and Ostermann fail to teach all the limitations of claim 34.

4. Claim 35

Claim 35 depends from independent claim 33. Claim 35 claims the method of claim 33, "wherein said step of transferring is performed based on comparison." Claim 35 further limits claim 33 and is not rendered unpatentable by Ostermann and Davidson for the same reasons as argued above in regard to claim 33.

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5. Claim 36

Claim 36 depends from independent claim 33. Claim 36 claims the method of claim 33, "wherein said step of transferring in accordance with a schedule." Claim 36 further limits claim 33 and is not rendered unpatentable by Ostermann and Davidson for the same reasons as argued above in regard to claim 33.

Assuming, *arguendo*, that it would be obvious to combine Davidson and Ostermann, the Office Action points to Ostermann as teaching "which cipher program is to be used at a particular time (schedule) as spoken of on column 3, lines 10-20." Action at 30. The Examiner argues that the transferring "is performed in accordance with a particular order or schedule (sequence of algorithms transferred in a time order in relation to each other) depending on a received bit sequence indicating which cipher program is to be used at a particular time." *Id.* But, as Applicants have argued previously, Ostermann does not teach anything other than the automatic transferring of the cipher program at the time the bit sequence is received.

The bit sequence does not include any "scheduling" information. It's true that Ostermann's system will transfer the cipher programs at the time of bit sequence receipt and in the order of bit sequence receipt, but this does not mean that the transfers are made in accordance with a schedule. There is no teaching or suggestion in Ostermann of performing this step in accordance with a schedule. Ostermann and Davidson, alone and in combination, fail to teach each of the claim 36's limitations.

6. Claim 38

Claim 38 depends from independent claim 33. Claim 38 claims the method of claim 33, "wherein said one or more instruct signals operate at said one or more receiver stations based on

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an identifier, said method further comprising the step of transmitting said identifier." Claim 38 further limits claim 33 and is not rendered unpatentable by Ostermann and Davidson for the same reasons as argued above in regard to claim 33.

7. Claim 54

Claim 54 as amended, recites, in part "whereby the receiver station inputs said control signal to a decryptor, and wherein said decryptor decrypts said digital television programming signal." Neither Ostermann or Davidson addresses decrypting a digital television programming signal.

The Examiner has asserted that Ostermann "is directed to the transmission of a cipher program to allow encryption or decryption of 'data', where this data in a general sense could include audio, video, or other known types of data." Action at 31. Yet, there is no suggestion in Ostermann that encryption/decryption applies to anything but text. "In particular, [Ostermann] relates to a system wherein clear data texts are enciphered at the transmitter end of the system and deciphered at the receiver end." Col. 1, ll. 11-13. "Data" as used in Ostermann is limited to text. Therefore, Ostermann does not teach decrypting a digital television programming signal.

Davidson is directed to the transmission and reception of standard television signals, which at the time of invention were analog television signals. As evidenced by Davidson only scrambling the analog video signal while embedding an encrypted digital audio signal, **the encryption of a digital television programming signal was not obvious**. Davidson surely understood encryption and decryption, but did not apply it to television programming signals because that innovation was not obvious. In fact, Davidson teaches away from encrypting/decrypting television signals by focusing on the processing of the video and audio

signal components while leaving the television signal itself unaffected. The Examiner asserts elsewhere in the Office Action that "the encryption/decryption processing of a video and/or audio component of the television signal would affect the state of the composite television signal." Action at 28. But, the composite television signal remains analog.

Neither Davidson or Ostermann teaches decrypting a digital television programming signal. Even if someone of ordinary skill in the art were to apply the teachings of Ostermann and Davidson, the inventions fail to teach or suggest every limitation of claim 54.

VI. CLAIMS 22-30, 37, 39, AND 43-53 ARE ALLOWABLE

The Office Action identified claims 22-30 and 43-53 as allowable over the prior art of record. This Amendment does not affect claims 22-30 and 43-53. Applicants respectfully submit claims 22-30 and 43-53 are allowable as previously presented.

The Office Action also identified claims 37 and 39 as objected to as being dependent upon rejected base claims, but would be otherwise allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims. Applicants respectfully assert that these claims do not need to be rewritten as independent claims.

Claim 37 depends from claim 36, which depends from independent claim 33. As argued above, claims 33 is allowable over Davidson, Ostermann, and the prior art of record. As identified by the examiner, the limitations of claim 37 are also allowable over the prior art of record. Applicants respectfully submit that claim 37 is allowable in its current dependent claim form.

Similarly, claim 39 depends from claim 38, which depends from independent claim 33. Claim 39 has been amended only to maintain consistency with claim 33. As argued above, claims 33 is allowable over Davidson, Ostermann, and the prior art of record. As identified by the examiner, the limitations of claim 39 are also allowable over the prior art of record. Applicants respectfully submit that claim 39 is allowable in its current dependent claim form.

VI. CONCLUSION

Applicants respectfully submit that all claims are allowable over the cited art for the reasons set forth above. Applicants request reconsideration of this application in view of the amendment and arguments set forth above. In the event Applicants have overlooked the need for an extension of time, payment of fee, or additional payment of fee, Applicant hereby petitions therefore and authorize that any charges be made to Deposit Account No. 50-4494.

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Should the Examiner have any questions regarding any of the above, the Examiner is respectfully requested to telephone the undersigned at 202-346-4000.

Dated: January 2, 2013

Respectfully submitted,

By: /Thomas J. Scott, Jr./
Thomas J. Scott, Jr.
Registration No.: 27,836
GOODWIN PROCTER LLP
901 New York Avenue, NW
Washington, DC 20001
Attorney for Applicant

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

EXAMINER	
MOORE JR, MICHAEL J	

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

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

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

AAlpha-Kpetewama@goodwinprocter.com
patentdc@goodwinprocter.com
fmckeon@goodwinprocter.com

PTOL-90A (Rev. 04/07)

Advisory Action Before the Filing of an Appeal Brief	Application No. *08/449,413*	Applicant(s) HARVEY ET AL.
	Examiner MICHAEL J. MOORE, JR.	Art Unit 2467

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 02 January 2013 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

NO NOTICE OF APPEAL FILED

1. ☒ The reply was filed after a final rejection. No Notice of Appeal has been filed. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114 if this is a utility or plant application. Note that RCEs are not permitted in design applications. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires _____months from the mailing date of the final rejection.
   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action; or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
   c) ☐ A prior Advisory Action was mailed more than 3 months after the mailing date of the final rejection in response to a first after-final reply filed within 2 months of the mailing date of the final rejection. The current period for reply expires months from the mailing date of *the prior Advisory Action* or SIX MONTHS from the mailing date of the final rejection, whichever is earlier.
   Examiner Note: If box 1 is checked, check either box (a), (b) or (c). ONLY CHECK BOX (b) WHEN THIS ADVISORY ACTION IS THE FIRST RESPONSE TO APPLICANT'S FIRST AFTER-FINAL REPLY WHICH WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. ONLY CHECK BOX (c) IN THE LIMITED SITUATION SET FORTH UNDER BOX (c). See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) or (c) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendments filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   b) ☐ They raise the issue of new matter (see NOTE below);
   c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.
   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): (a) ☐ will not be entered, or (b) ☒ will be entered, and an explanation of how the new or amended claims would be rejected is provided below or appended.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing the Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

STATUS OF CLAIMS

14. The status of the claim(s) is (or will be) as follows:
    Claim(s) allowed: 23,25-30 and 43-53.
    Claim(s) objected to: 37 and 39.
    Claim(s) rejected: 22,24,31-36,38,40-42 and 54-56.
    Claim(s) withdrawn from consideration: .

/Michael J. Moore, Jr./
Primary Examiner, Art Unit 2467

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Continuation of 11. does NOT place the application in condition for allowance because:

Regarding the obviousness-type double patenting rejections of claims 22, 24, 34, 54, and 55, Applicants request that the requirement for filing a terminal disclaimer be held in abeyance, pending an indication of allowable subject matter from the Office in the present application, is acknowledged. Accordingly, these particular rejections are maintained for the reasons indicated in the Final Office Action.

Regarding claims 40-42, 55, and 56, Applicants argue that Davidson (Re. 31,735) fails to teach an "encrypted digital information transmission". Applicants further argue that the information tranmission taught by Davidson is only an analog television signal, and that the encrypted digital audio signal which is a part of the analog television signal of Davidson cannot be considered an "encrypted digital informaiton transmission".

However, as provided in the Final Office Action, Examiner maintains that the encrypted digital audio signal of Davidson may be reasonably considered as an "encrypted digital information transmission", as this audio "information" signal is "digital" in nature, "encrypted" using a digital process, and "transmitted" within the composite television signal. Using this interpretation of the claimed term, it is maintained that all words of this claim term have been considered in judging the patentability of the claim against the prior art.

Regarding claim 42, Applicant further argues that Davidson does not teach "said at least one decrypted signal containing at least one instruct signal which is effective to instruct" as amended.

However, as provided in the Final Office Action, Davidson teaches the inverse encryption means (decryptor processor) that uses the separated encryption codes signal to return the detected audio signal to the pre-encryption digitized condition (decrypted signal) as spoken of on column 24, lines 44-46.

It is maintained that the decrypted audio signal may be considered as including (or containing) an instruct signal effective to instruct, as the content of this signal is operable in the instructing of an audio output device to present audio to a user as spoken of on column 24, lines 47-50.

Further, the above claim language is rather broad in the sense that the language does not indicate what the instruct signal is composed of and/or what/whom the instruct signal is instructing. The above amendment made to claim 42 changing the word "including" to "containing" was made according to Applicant to quell Examiner's concern regarding the broadness of the claim and "what the instruct signal is composed of". However, since the words "including" and "containing" are synonymous, it does not appear that the meaning of this limitation has been clarified further. Therefore, this rejection is maintained.

Regarding claim 55, Applicant argues that Davidson fails to teach controlling a controllable device on the basis of a decrypted analog audio signal. Applicant further argues that in Davidson, the program audio is an element to be processed, and is not operable in the controlling of a controllable device. Examiner respectfully disagrees.

As provided in the Final Office Action, Davidson teaches returning of the audio signal to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50. The controllable device being a device suitable for output/presentation of an audio signal. The audio signal is operable in the controlling of this type of device by causing output of the respective audio signal. It is maintained that an audio signal is operable in the controlling of the output of audio at an output device, as this output device would only provide output upon detection of an input audio signal (e.g. a speaker would only output sound if an audio signal is present to be outputted). While an additional enable signal may potentially be required to output an audio signal from a speaker (as asserted by Applicant), the audio signal itself is also operable in the controlling operation as an enable signal alone would not be able to cause signal output without the presence of an actual audio signal to be outputted.

Further, the claim language is rather broad in that it does not indicate what the "controllable device" is or what is being controlled. It is maintained that Davidson teaches the above limitation in question.

Regarding claim 56, Applicant argues that the receiver of Davidson does not perform any "selecting" of a first signal in a transmission that includes downloadable code.

However, as provided in the Final Office Action, Davidson teaches an encryption codes signal detector that detects and separates (identification of and selection of) the encryption codes signal (signal including code) from the television signals as spoken of on column 24, lines 40-41.

It is maintained that the separation of the encryption codes signal from the television signals (plurality of signals) may be considered a selection of a signal, as the encryption codes signal portion is detected and separated (selecting one from multiple signals) from the composite signal. As noted by Applicant, Davidson's receiver continuously splits the received sets of signals and processes each according to its type. The encryption codes signal detector means detects and separates (identification of and selection of) the encryption codes signal from the composite television signal while the aural detector means detects and separates (identification of and selection of) the digital encrypted audio signal from the composite television signal as spoken of on column 24, lines 40-44. It is maintained that the above process constitutes a "selection", as a particular type of processor is only processing its corresponding type of information signal.

Regarding claim 31, Applicant argues that Ostermann (U.S. 4,484,025) does not teach "receiving at least one control signal which at said at least one of said plurality of receiver stations operates to execute the downloadable code".

However, as provided in the Final Office Action, Ostermann teaches the transmission of a bit sequence (control signal) from cipher equipment 16 to cipher computer 12 (transmitter) indicating a particular stored cipher program (downloadable code) to be used as spoken of on column 3, lines 10-19. The specific time of the bit sequence transmission is the time at which the particular cipher algorithm is selected. Furthermore, the type of encryption is selected via transmission of the bit sequence which causes the corresponding cipher program (downloadable code) to be transferred (downloaded).

It is maintained that the bit sequence "operates" to execute the cipher program, as the bit sequence indicates which stored cipher program is to be used and causes the transferring (downloading) and subsequent use (execution) of the corresponding cipher program.

Applicant further argues that Ostermann fails to teach transmitting an information transmission that includes a control signal and downloadable code, and that the cipher algorithm and bit sequence of Ostermann are transmitted separately, never together. However, what is claimed is "thereby to transmit at least one information transmission including the downloadable code and said at least one control signal". The above language indicates that there could be "one or multiple transmissions" of information, where the information includes downloadable code "and" at least one control signal.

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As provided in the previous Office Action, Ostermann teaches the transmission of a bit sequence (control signal) from cipher equipment 16 to cipher computer 12 (transmitter) indicating a particular stored cipher program (downloadable code) to be used, and the subsequent transfer (transmission) of the corresponding cipher program as spoken of on column 3, lines 10-19.

Regarding claim 32, Applicant argues that that it would not have been obvious to combine the teachings of Davidson and Ostermann. Applicant further argues that Davidson teaches away from encryption/decryption of television signals by focusing on the processing of the video and audio signal components while leaving the television signal itself unaffected.

However, the video and audio signal components of Davidson are a part of the television signal, so the encryption/decryption processing of a video and/or audio component of the television signal would affect the state of the composite television signal (which includes audio, video, and/or control components).

Furthermore, as provided in the previous Office Action, Davidson teaches the application of encryption/decryption techniques to television signals containing "digital information" as spoken of on column 24, lines 30-50.

It is maintained that at the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of Ostermann to television program signals (containing digital format components) in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of Davidson.

Regarding claim 33, Applicant argues that neither Davidson nor Ostermann teach "receiving a television program at a transmitter station and delivering said television program to a transmitter". Applicant further argues that Davidson teaches away from encryption/decryption of television signals by focusing on the processing of the video and audio signal components while leaving the television signal itself unaffected.

However, the video and audio signal components of Davidson are a part of the television signal, so the encryption/decryption processing of a video and/or audio component of the television signal would affect the state of the composite television signal (which includes audio, video, and/or control components).

Furthermore, as provided in the previous Office Action, Ostermann teaches the transmission of a cipher algorithm (instruct signal) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 (transmitter) that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

Ostermann also teaches a receiver terminal that contains means for deciphering received ciphered data text in accordance with a cipher algorithm and a cipher key as spoken of on column 4, lines 52-54, as well as column 2, lines 16-24, which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Ostermann does not explicitly teach decryption of television programming.

However, Davidson teaches the application of encryption/decryption techniques to television signals (that are transmitted and received) as spoken of on column 24, lines 30-50.

Davidson also teaches the subscription television transmitter 12 in Figure 1 that generates television signals (programming) having video and audio portions for subsequent transmission (to/from a transmitter 20, 30) as spoken of on column 25, lines 45-50.

It is maintained that at the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of Ostermann to television program signals (containing digital format components) in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of Davidson.

Regarding claim 34, Applicant argues that neither Davidson nor Ostermann teach "passing said decrypted second of said plurality of signals to a controllable device; and controlling said controllable device on the basis of said passed decrypted second of said plurality of signals".

However, as provided in the previous Office Action, Davidson teaches returning of the audio signal to original analog format whereby program audio may be processed and presented (to a controllable device) in a conventional manner as spoken of on column 24, lines 47-50. The controllable device being a device suitable for output/presentation of an audio signal. The audio signal is operable in the controlling of this type of device by causing output of the respective audio signal. It is maintained that an audio signal is operable in the controlling of the output of audio at an output device, as this output device would only provide output upon detection of an input audio signal (e.g. a speaker would only output sound if an audio signal is present to be outputted). While an additional enable signal may potentially be required to output an audio signal from a speaker (as asserted by Applicant), the audio signal itself is also operable in the controlling operation as an enable signal alone would not be able to cause signal output without the presence of an actual audio signal to be outputted.

Further, the claim language is rather broad in that it does not indicate what the "controllable device" is or what is being controlled.

Regarding claim 36, Applicant argues that Ostermann does not teach "wherein said step of transferring is performed in accordance with a schedule".

However, as provided in the previous Office Action, Ostermann teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit sequence that indicates which cipher program is to be used at a "particular time" (schedule) as spoken of on column 3, lines 10-20. In other words, the transferring of a particular cipher algorithm is performed in accordance with a "particular order or schedule" (sequence of algorithms transferred in a time order in relation to each other) depending on a received bit sequence indicating which cipher program is to be used at "a particular time".

It is maintained that Ostermann teaches the above limitation in question.

Regarding claim 54, Applicant argues that Ostermann or Davidson does not teach decrypting a digital television programming signal.

However, Ostermann is directed to the transmission of a cipher program to allow encryption or decryption of "data", where this data in a general sense could include audio, video, or other known types of data.

Further, the video and audio signal components of Davidson are a part of the television signal, so the encryption/decryption processing of a video and/or audio component of the television signal would affect the state of the composite television signal (which includes audio, video, and/or control components).

Furthermore, as provided in the Final Office Action, Davidson teaches the application of encryption/decryption techniques to television signals containing digital information as spoken of on column 24, lines 30-50.

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It is maintained that at the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of Ostermann to television program signals in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of Davidson.

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OK TO ENTER: /MM/

2/1/13

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: John C. Harvey *et al.*	
Application No.: 08/449,413	Confirmation No.: 1756
Filed: May 24, 1995	Art Unit: 2467
For: SIGNAL PROCESSING APPARATUS AND METHODS	Examiner: Moore Jr., Michael J.

AMENDMENT AND REQUEST FOR RECONSIDERATION

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

Dear Sir:

In response to the Final Office Action dated November 2, 2012, please amend the above-identified application as follows.

Amendments to the claims begin on page 2.

Remarks begin on page 11.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: John C. Harvey *et al.*	
Application No.: 08/449,413	Confirmation No.: 1756
Filed: May 24, 1995	Art Unit: 2467
For: SIGNAL PROCESSING APPARATUS AND METHODS	Examiner: Moore Jr., Michael J.

AMENDMENT AND REQUEST FOR CONSIDERATION PURSUANT TO 37 C.F.R. § 1.129

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

Dear Sir:

In response to the Final Office Action dated November 2, 2012, and Advisory Action dated February 6, 2013, Applicants respectfully request consideration of the pending claims pursuant to 37 C.F.R. § 1.129(a) in view of the following amendments and remarks. Please amend the above-identified application as follows.

Amendments to the claims begin on page 2.

Remarks begin on page 12.

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AMENDMENT TO THE CLAIMS

Claims 22-56 are the only pending claims.

1 - 21. (Cancelled)

22. (Previously Presented) A method for controlling the decryption of encrypted programming at a subscriber station, said method comprising the steps of:

receiving encrypted digital programming, said encrypted digital programming having an encrypted digital control signal;

detecting said control signal;

passing said control signal to a decryptor that decrypts encrypted digital data at said subscriber station;

decrypting said control signal;

decrypting said encrypted digital programming to form decrypted programming based on said control signal; and

presenting said decrypted programming to a viewer or listener.

23. (Previously Presented) A method for controlling the decryption of programming at a subscriber station, said method comprising the steps of:

receiving programming, said programming having a first encrypted digital control signal portion and an encrypted digital information portion;

detecting said first encrypted digital control signal portion of said programming;

passing said first encrypted digital control signal portion of said programming to a first decryptor at said subscriber station;

decrypting said first encrypted digital control signal portion of said programming using said first decryptor at said subscriber station;

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passing said encrypted digital information portion of said programming and the decrypted control signal portion to a second decryptor at said subscriber station;

decrypting said encrypted digital information portion of said programming using said second decryptor at said subscriber station based on the decrypted control signal portion; and

presenting said programming.

24. (Previously Presented) A method of controlling a remote transmitter station to communicate program material to a subscriber station and controlling said subscriber station to process or output a unit of programming, said method comprising the steps of:

receiving a control signal which operates at the remote transmitter station to control the communication of a unit of programming and one or more first instruct signals and communicating said control signal to said remote transmitter station;

receiving a code or datum identifying a unit of programming to be transmitted by the remote transmitter station, said remote transmitter station transferring said unit of programming to a transmitter;

receiving at said remote transmitter station one or more second instruct signals which operate at the subscriber station to identify and decrypt said unit of programming or said one or more first instruct signals, said remote transmitter station transferring said one or more second instruct signals to said transmitter; and

transmitting from said remote transmitter station an information transmission comprising said unit of programming, said one or more first instruct signals, and said one or more second instruct signals, said one or more first instruct signals being transmitted in accordance with said control signal.

25. (Previously Presented) The method of claim 23, wherein said programming further includes encrypted video.

26. (Previously Presented) The method of claim 23, wherein said subscriber station stores information that evidences processing said programming.

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27. (Previously Presented) The method of claim 23, wherein said programming is received at said subscriber station in one channel of a multichannel signal and a second control signal portion used to decrypt said programming is included in said multichannel signal outside said one channel.

28. (Previously Presented) The method of claim 23, wherein said subscriber station detects, in a transmission channel including said programming, a second control signal portion used to decrypt the first control signal portion.

29. (Previously Presented) The method of claim 23, wherein the subscriber station detects, in a transmission channel for transmitting the programming, a second control signal portion used to decrypt the first control signal portion, and wherein the second control signal portion is encrypted, and wherein the second control signal portion is decrypted in order to enable decryption of the first control signal portion.

30. (Previously Presented) The method of claim 23, wherein said programming includes computer data.

31. (**Currently Amended**) A method of controlling at least one of a plurality of receiver stations, said method comprising the steps of:

receiving downloadable code which is effective at said at least one of said plurality of receiver stations to implement a new technique of decrypting and delivering the downloadable code to at least one transmitter;

receiving at least one control signal which at said at least one of said plurality of receiver stations directly operates to execute the downloadable code; and

causing said at least one control signal to be communicated to said at least one transmitter at a specific time,

thereby to transmit at least one information transmission, wherein each information transmission includes ~~including~~ the downloadable code and said at least one control signal.

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32. (Previously Presented) The method of claim 31, wherein a digital television program is displayed at a receiver station and said downloadable code and said at least one control signal program said receiver station to decrypt said digital television program in accordance with said new technique.

33. (Previously Presented) A method of communicating digital television program material to one or more receiver stations, said method comprising the steps of:

receiving a digital television program at a transmitter station and delivering said digital television program to a transmitter;

receiving and storing one or more instruct signals at said transmitter station, said one or more instruct signals at said one or more receiver stations operative to implement a new technique of decrypting;

transferring said one or more instruct signals to said transmitter; and

transmitting said digital television program and said one or more instruct signals from said transmitter station to said one or more receiver stations.

34. (**Currently Amended**) A method of processing signals at a receiver station comprising the steps of:

receiving at least one information transmission;

detecting a plurality of signals in said at least one information transmission;

changing a decryption technique in response to at least a first of said plurality of signals;

decrypting a second of said plurality of signals on the basis of said changed decryption technique, wherein said decrypted second of said plurality of signals is embedded with executable instructions;

passing said decrypted second of said plurality of signals to a controllable device; and

controlling said controllable device on the basis of said embedded executable instructions of said passed decrypted second of said plurality of signals.

35. (Previously Presented) The method of claim 33, wherein said step of transferring is performed based on comparison.

36. (**Currently**) The method of claim 33, wherein said step of transferring is performed in accordance with a predetermined schedule.

37. (Previously Presented) The method of claim 36, wherein said schedule specifies a transmission time and a transmission channel, said method further comprising the steps of receiving and storing said schedule at said transmitter station.

38. (Previously Presented) The method of claim 33, wherein said one or more instruct signals operate at said one or more receiver stations based on an identifier, said method further comprising the step of transmitting said identifier.

39. (Previously Presented) The method of claim 38, wherein an information transmission including said digital television program is received at said one or more receiver stations, wherein said digital television program is outputted at said one or more receiver stations, and wherein said identifier identifies (i) said digital television program and (ii) a channel including said digital television program.

40. (**Currently Amended**) A method of processing signals at a receiver station comprising the steps of:

receiving at least one encrypted digital information transmission, wherein the at least one encrypted digital information transmission is unaccompanied by any non-digital information transmission;

locating code;

passing said code to a processor;

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controlling a decryptor that decrypts encrypted digital data to decrypt in a specific fashion on the basis of said code;

decrypting a portion of said at least one information transmission in said specific fashion; and

passing said decrypted portion of said at least one encrypted digital information transmission to one of said processor and an output device.

41. (**Currently Amended**) A method of controlling a receiver station to detect digital data and control a decryptor that decrypts encrypted digital data based on a varying pattern of timing or location, said method of controlling comprising the steps of:

receiving programming and delivering said programming to a transmitter;

receiving digital data comprising at least an instruct signal and communicating said digital data to a signal embedder, said instruct signal operative at said receiver station to control said decryptor;

controlling said signal embedder to embed said digital data in an encrypted digital information transmission in a varying pattern of timing or location;

communicating said encrypted digital information transmission to said transmitter; ~~and~~

transmitting said programming; and

transmitting ~~and~~ said encrypted digital information transmission including said digital data separately from said transmitted programming.

42. (**Currently Amended**) A method of processing signals at a receiver station comprising the steps of:

receiving at least one encrypted digital information transmission, wherein the at least one encrypted digital information transmission is unaccompanied by any non-digital information transmission;

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detecting a plurality of signals on said at least one encrypted digital information transmission;

decrypting at least one of said plurality of signals, said at least one decrypted signal ~~containing~~ embedded with at least one instruct signal which is effective to instruct;

passing the at least one decrypted instruct signal to a controllable device; and

controlling said controllable device on the basis of decrypted information included in said at least one decrypted instruct signal.

43. (Previously Presented) A method for decryptor activation in a network comprising:

receiving a transmission comprising encrypted materials;

decrypting under first processor control a first portion of said encrypted materials in said transmission;

inputting said first portion of said encrypted materials to a decryptor;

decrypting under second processor control a second portion of said encrypted materials based on said step of decrypting said first portion of said encrypted materials.

44. (Previously Presented) The method of claim 43 wherein said transmission in said step of receiving a transmission is a multichannel signal separated in the frequency domain.

45. (Previously Presented) The method of claim 44 wherein said transmission is a cable system broadcast.

46. (Previously Presented) The method of claim 43 wherein said transmission in said step of receiving a transmission is a multichannel signal separated in the time domain.

47. (Previously Presented) The method of claim 43 wherein said transmission in said step of receiving a transmission is generated at a local data source.

48. (Previously Presented) The method of claim 47 wherein said local data source comprises a VCR.

49. (Previously Presented) The method of claim 47 wherein said local data source comprises a laser disk.

50. (Previously Presented) The method of claim 43 wherein said encrypted materials comprise a portion of a television program.

51. (Previously Presented) The method of claim 43, wherein said transmission in said step of receiving a transmission and a signal necessary for decryption are received from different sources.

52. (Previously Presented) The method of claim 51, further comprising the step of contacting a remote transmitter station to receive one of said transmission and said signal necessary for decryption.

53. (Previously Presented) The method of claim 51, wherein a signal necessary for decryption is communicated by telephone.

54. (Previously Presented) A method of providing an enabling signal to a receiver station from a remote data source, said enabling signal for use in decrypting at the receiver station a digital television programming signal, said receiver station being programmed to get information necessary for enabling said digital programming signal, said method comprising the steps of:

storing at the remote data source one or more control signals for enabling a decryptor to decrypt said digital television programming signal;

receiving at the remote data source from the receiver station a communication to get specific enabling information;

communicating, from the remote data source to the receiver station in response to said communication from the receiver station, a control signal,

whereby the receiver station inputs said control signal to a decryptor, and wherein said decryptor decrypts said digital television programming signal.

55. (**Currently Amended**) A method of processing signals at a receiver station comprising the steps of:

receiving one or more encrypted digital information transmissions at said receiver station, wherein said one or more encrypted digital information transmissions are unaccompanied by any non-digital information transmission;

detecting a plurality of signals on said one or more encrypted digital information transmissions, at least a first of one of said plurality of signals including a control signal;

controlling a decryptor that decrypts encrypted digital data in response to said control signal;

decrypting or enabling communication of at least a second of said plurality of signals on the basis of said step of controlling said decryptor;

passing said decrypted or enabled at least said second of said plurality of signals to a controllable device; and

controlling said controllable device ~~on the basis of~~ by processing instructions embedded in said passed decrypted or enabled at least said second of said plurality of signals.

56. (**Currently Amended**) A method of processing signals at a receiver station comprising the steps of:

receiving at least one encrypted digital information transmission, wherein the at least one encrypted digital information transmission is unaccompanied by any non-digital information transmission;

identifying a plurality of signals in said at least one encrypted digital information transmission;

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selecting, by processing selection criteria, a first signal of said plurality of signals including downloadable code;

passing said downloadable code to a processor;

controlling a decryptor that decrypts encrypted digital data to decrypt in a specific fashion on the basis of said downloadable code;

decrypting at least one second signal of said plurality of signals in said specific fashion; and

passing said at least one second signal to one of said processor and an output device.

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REMARKS

I. STATUS OF CLAIMS

Claims 22-56 are pending in this application. Claims 23, 25-30 and 43-53 are allowed. Claims 37 and 39 are allowable over the prior art, but objected to as dependent on non-allowable claims. Claims 22 and 24 are allowable over the prior art, but subject to a nonstatutory obviousness-type double patenting rejection. The remaining claims are rejected under 35 U.S.C. §§ 102 and 103 and/or nonstatutory obviousness-type double patenting.

By this Amendment, claims 31, 34, 36, 40-42, 55, and 56 are amended. Reconsideration is respectfully requested in view of Applicants' arguments asserted in their Amendment And Request for Reconsideration filed January 2, 2013, the above amendments, and the following remarks.

II. DOUBLE PATENTING REJECTIONS

Claims 22, 34, 54, and 55 are rejected on the ground of nonstatutory obviousness-type double patenting as allegedly being unpatentable over claims 1, 22, and 23 of U.S. Patent No. 7,801,304. This is the patent that issued from Applicants' DECR 81 group "A" application, U.S. Patent Application Serial No. 08/449,263. Claim 24 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 14 of the DECR 81 group "A" patent, in view of Yanagimachi et al. (U.S. Patent No. 3,936,595) ("Yanagimachi"). Applicants maintain the arguments they asserted previously in regard to traversing the claim 24 rejection.

The Advisory Action asserts that the rejections are maintained. Applicants acknowledge that a timely filed terminal disclaimer in compliance with 37 C.F.R. 1.321(c) or 1.321(d) may be necessary to overcome the nonstatutory double patenting rejections. However, Applicants

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request that the requirement for filing the terminal disclaimer be held in abeyance, pending an indication of allowable subject matter from the Office in the present application. If filed, the terminal disclaimer will disclaim, in essential terms, the terminal part of the statutory term of any patent granted on the above-referenced application, extending beyond the earliest expiration date of the DECR 81 group "A" patent, U.S. Patent No. 7,801,304.

III. SUMMARY OF PRIOR ART REJECTIONS

Many of the pending claims are rejected under 35 U.S.C. §§102 or 103 over references including Davidson (Re. 31,735) and Ostermann et al. (U.S. Patent No. 4,484,025) ("Ostermann"). The Office Action rejected claims 40-42, 55, and 56 under 35 U.S.C. 102(e) as allegedly being anticipated by Davidson; claim 31 under 35 U.S.C. 102(e) as allegedly being anticipated by Ostermann; and claims 32-36, 38, and 54 under 35 U.S.C. 103(a) as allegedly being unpatentable over the combination of Ostermann in view of Davidson.

IV. SUMMARY OF APPLIED PRIOR ART

A. Davidson

Davidson is the reissued patent of U.S. Patent No. 4,215,366 that issued on July 29, 1980. The reissued patent added new claims 65-74. The application for reissue was filed on July 26, 1982, well after the November 3, 1981 priority date of the instant application.

Davidson is directed to a "method and system for encoding and decoding of standard television signals..." Col. 3, ll. 26-28. "[V]ideo scrambling is effected by inversion of the video signals of some horizontal scan lines on a pseudo-random bias to produce a picture having some video signals inverted and others not inverted which is unpleasant to view and virtually unintelligible." Col. 3, ll. 29-34. Davidson discloses converting analog audio signals to coded digital audio signals. Col. 3, ll. 34-36. "A plurality of unique pulse-coded control signals

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consisting of 32- bit binary pulse trains are transmitted separately to… provide the information needed to unscramble the scrambled audio and video signals." Col. 3, ll. 36-41.

Claim 65, added to the patent via reissue, claims a receiver in a subscription television system having means for conveying television signals include a video portion, an aural portion, and an "encryption codes signal" comprising a sequence of "encryption codes." Col. 24, ll. 30-35. The aural portion is a digitized audio signal "encrypted" in accordance with the "encryption codes signal." Col. 24, ll. 35-39. The receiver has means to detect and separate the "encryption codes" signal from the television signals; to separate the digitized and "encrypted" audio signal from television signals; to return the detected audio signal to the "pre-encryption" digitized condition; and to return the audio signal to the original analog format. Col. 24, ll. 40-50. However, there is no mention of "encryption" anywhere in the disclosure of the patent. Only scrambling and unscrambling is disclosed. The term "encryption," as used in claim 65, was not added until sometime after the reissue filing date of July 26, 1982.

Claim 72, also added to the patent via reissue, claims a "television transmitter for generating television signals having a program video portion and program aural portion…" Col. 25, ll. 46-48. The transmitter has means to generate a continuous sequence of "encryption codes"; to convey the program video and program aural portions and the "encryption codes signal" from the transmitter to authorized subscribers; to sample and digitize the program audio signal; to digitally "encrypt" each digitized program audio sample in response to the "encryption codes signal"; and to combine the "encryption codes" signal, the digitized and "encrypted" audio program signal, and a video program signal, with the carrier signals. Col. 25, l. 52 – col. 26, l. 9. As mentioned above, there is no mention of "encryption" anywhere in the disclosure of the

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patent. Only scrambling and unscrambling is disclosed. The term "encryption," as used in claim 72, was not added until sometime after the reissue filing date of July 26, 1982.

The original Davidson '366 patent discloses video scrambling. The reliance on the reissue patent cannot change this fact. The use of the term "encryption" as added by the reissue claims does not change the fact that the fundamental video signal of Davidson is an analog television signal. The video signal of Davidson is not encrypted as encryption is a digital process. For this reason, the Davidson reissue patent is limited in its use as a prior art reference.

B. Ostermann

Ostermann is directed to a "system for enciphering and deciphering data for transmission between a transmitter and a receiver, where the terms encipher and decipher are synonymous with encrypt and decrypt respectively." Col. 1, ll. 7-10. Ostermann discloses a receiver station transmitting a cipher algorithm "from the cipher program storage 18 over a data transmission channel 20 to the program memory 22 of the programmable cipher computer 12" at the transmitter station. Col. 2, ll. 38-41. "The cipher algorithm transmitted from the cipher program storage 18 of cipher equipment 16 via channel 20 is stored in program memory 22 and used to encipher the clear input data provided by input device 24 to transmitter 10."

Ostermann also discloses another embodiment of the invention where "the programmable cipher computer 12 is provided with long term memory 28 for storage of a plurality of different cipher programs which can be called up for storage in the program memory 22 as required." Col. 2, ll. 59-62. The cipher equipment 12 at the transmitter station receives a bit sequence from cipher computer 16 at the receiver station that enables the cipher program to be transferred from long-term memory 28 to program memory 22. Col. 3, ll. 10-19.

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V. RESPONSE TO PRIOR ART REJECTIONS

A. Rejection of claims 40-42, 55 and 56 under 35 U.S.C. §102(e)

Claims 40-42, 55, and 56 are rejected under 35 U.S.C. §102(e) over Davidson. This rejection is respectfully traversed.

1. Previously Asserted Arguments

Claims 40-42, 55, and 56 claim material relating to the encryption and decryption of a digital information transmission. The Examiner relies on the analog television signal as teaching the digital information transmission. Office Action at 11. The Examiner points to the A/D converter 31 and the D/A converter 58 disclosed in Davidson to show that digital signal processing takes place. Office Action at 23. However, Davidson only discloses that these analog/digital converters affect audio signals that are combined with video signals and control signals into a standard, *i.e.* not digital and not encrypted, television signal. Col. 5, ll. 36-42; Col. 24, ll. 30-35; Col. 25, ll. 46-48. Davidson fails to teach an "encrypted digital information transmission."

As previously asserted by Applicants, the information transmission taught by Davidson is only an analog television signal. Regardless of whether the television signal includes a component comprising a digital signal, the television signal remains analog. As recited in claims 40-42, 55, and 56, an "encrypted digital information transmission" requires that the digital information transmission itself be encrypted. Davidson only teaches an analog television signal, not a digital information transmission, and the mere fact that an "encrypted" digital audio signal is added to the analog television signal does not change the analog television signal to an encrypted digital television signal. Therefore, Davidson does not disclose an "encrypted digital information transmission."

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Additionally, Applicants have consistently asserted in their previous Responses that the Board of Patent Appeals and Interferences decided in Ex parte Personalized Media Communications, LLC (Appeal 2008-4228, Ex parte Reexamination Control 90/006,536) at pages 53-54, that encryption and decryption require a digital signal. The Board considered the very same specification that is part of this application in finding that encryption and decryption are limited to digital applications. The Board also held that "encryption and decryption are not broad enough to read on scrambling and unscrambling."

Applicants do not dispute that a reissued patent is entitled to the filing date of its parent in accordance with 35 U.S.C. § 252. However, Applicants note that "encryption" is not disclosed anywhere in the specification of Davidson, only in the claims added via reissue. Davidson describes scrambling video signals and converting analog audio signals to coded digital audio signals, but does not teach or suggest "encryption" as claimed in the instant application and understood by the Board. Claims 40-42, 55, and 56 are not anticipated by Davidson and are in allowable form.

2. New Argument

The Advisory Action asserts that Davidson's encrypted digital audio signal is an "encrypted digital information transmission" and "transmitted" with the composite television signal, thereby satisfying the recited limitation. Advisory Action at 1, ¶ 3. Applicants disagree that the audio signal is itself an "encrypted digital information transmission" for the reasons stated above, but for the sake of advancing prosecution, amend claims 40-42, 55, and 56 to clarify that the encrypted digital information transmission is not part of a composite signal. For example, claim 40 is amended to recite that "the at least one encrypted digital information

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transmission is unaccompanied by any non-digital information transmission." Claims 41, 42, 55, and 56 are amended to recite similar limitations.

Davidson only teaches the transmission of an analog signal that comprises a digital audio signal. The digital audio signal is never transmitted by itself. Therefore, Davidson fails to teach that "the at least one encrypted digital information transmission is unaccompanied by any non-digital information transmission." The transmission is always a composite of analog and digital components. Claims 40-42, 55, and 56 are not anticipated by Davidson and are in allowable form.

3. Claim Specific Arguments

Even assuming, *arguendo*, that Davidson teaches "receiving at least one encrypted digital information transmission, wherein the at least one encrypted digital information transmission is unaccompanied by any non-digital information transmission" claims 42, 55, and 56 are not anticipated by Davidson for at least the additional following reasons:

a. Claim 42

Claim 42, as amended, recites in part:

> decrypting at least one of said plurality of signals, said at least one decrypted signal embedded with at least one instruct signal which is effective to instruct;
>
> passing the at least one decrypted instruct signal to a controllable device; and
>
> controlling said controllable device on the basis of decrypted information included in said at least one decrypted instruct signal.

These limitations are not taught by Davidson.

The claim is further amended to emphasize that the at least one decrypted signal is embedded with at least one instruct signal; the instruct signal is part of the decrypted signal, but not the decrypted signal itself. Applicants make this amendment in response to the Examiner's concerns regarding the broadness of the claim and "what the instruct signal is composed of." Office Action at 24; Advisory Action at 1, ¶ 7.

The Office Action points to Davidson's claim 65, column 24, lines 30-50, to show that the invention discloses all the limitations of claim 42. Office Action at 13-14; *See* Advisory Action at 1, ¶¶ 5 and 6. The Examiner also asserts that the separated encryption codes signal that's effective to return the encrypted digital audio signal to a decrypted form teaches "said at least one decrypted signal including at least one instruct signal which is effective to instruct." Office Action at 23.

In light of the clarifying amendment, Davidson's claim 65 teaches means for decrypting a digitized audio signal but fails to teach decrypting a signal that is embedded with at least one instruct signal which is effective to instruct. Claim 42 recites "at least one decrypted signal embedded with at least one instruct signal," thereby disqualifying the decrypted audio signal and the encryption codes signal from acting as an instruct signal as claimed. No additional instruct signal is embedded in the audio signal. The audio signal is indivisible. Further, Davidson does not teach or suggest that encryption of the audio signal affects the audio signal such that when it is decrypted it then is embedded with an instruct signal. Therefore, Davidson fails to teach all the limitations of claim 42.

b. Claim 55

Claim 55, as amended, recites in part:

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controlling said controllable device by processing instructions embedded in said passed decrypted or enabled at least said second of said plurality of signals.

These limitations are not taught by Davidson.

The Office Action points to Davidson's claim 65, column 24, lines 30-50, to show that the invention discloses all the limitations of claim 55. Claim 65 teaches means for the decryption and analog conversion of an encrypted digital audio signal, but fails to teach controlling a controllable device by processing instructions embedded in the decrypted analog audio signal. The "analog conversion means connected to the inverse encryption means to return the audio signal to the original analog format whereby program audio may be processed and presented in a conventional manner." Col. 24, ll. 47-50. The audio signals lacks embedded instructions, therefore Davidson fails to teach the limitation.

The Advisory Action maintains that the audio signal itself is operable in the controlling of output of audio at an output device "as this output device would only provide output upon detection of an input audio signal (e.g. a speaker would only output sound if an audio signal is present to be outputted.)" Advisory Action at 1, ¶ 9. Applicants have previously asserted that in Davidson, the program audio is an element to be processed, it is not operable in the controlling of a controllable device. For example, a speaker is not controlled by an audio signal. Rather, it is an enable signal that instructs the speaker to turn on, detect, process, and output the audio signal. The speaker will output sound if an audio signal is present, but only after an enable signal instructs the speaker to perform.

Regardless of whether the audio signal itself is operable, no instructions are embedded in the signal. Even though the analog conversion means and the inverse encryption means audio

process the audio signal for its output to a speaker, Davidson is silent as to processing instructions embedded in an audio signal. Therefore, Davidson fails to teach all the limitations of claim 55.

4. Claim 56

Claim 56, as amended, recites in part:

> receiving at least one encrypted digital information transmission;
>
> identifying a plurality of signals in said at least one information transmission;
>
> selecting, by processing selection criteria, a first signal of said plurality of signals including downloadable code;

These limitations are not taught by Davidson.

Davidson's receiver receives sets of signals at receiving antenna 36. Col. 8, ll. 57-68. The sets of signals are then split by RF splitter 114 so that the video, aural, and control signals can be separately processed. Col. 9, ll. 1-11. Davidson's receiver continuously splits the received sets of signals and processes each according to its type. The Advisory Action asserts that "the separation of the encryption codes signal from the television signals (plurality of signals) may be considered a selection of a signal." Advisory Action at 2, ¶ 13. Applicants, on the other hand, maintain that no "selecting" occurs because all signals are received and then processed.

In the interest of furthering prosecution, however, Applicants amend the claim to clarify that the "selecting" occurs "by processing selection criteria." Davidson is silent as to processing selection criteria. The receiver merely splits the video, aural, and control signals apart. Therefore, Davidson fails to teach all the limitations of claim 56.

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B. Rejection of claim 31 under 35 U.S.C. §102(e)

Claim 31 has been rejected under 35 U.S.C. §102(e) over Ostermann. This rejection is respectfully traversed.

1. Claim 31

Amended claim 31 recites, in part:

> receiving at least one control signal which at said at least one of said plurality of receiver stations directly operates to execute the downloadable code; and
>
> causing said at least one control signal to be communicated to said at least one transmitter at a specific time,
>
> thereby to transmit at least one information transmission , wherein each information transmission includes the downloadable code and said at least one control signal.

These limitations are not taught by Ostermann.

Ostermann discloses the cipher equipment 12 at the transmitter station receiving a bit sequence from the cipher computer 16 at the receiver station, but the bit sequence does not directly operate to execute the cipher algorithm at the receiver station. The bit sequence only identifies "which cipher program from long-term memory 28 is to be used." Col. 3, ll. 18-19. The cipher program is only executed upon entry of clear data text. To be clear, a bit sequence may be received that identifies a cipher program, but the cipher program is not executed upon identification.

The claim is amended to emphasize that the control signal directly operates to execute the downloadable code. In contrast, Ostermann fails to disclose a direct link between the identification of the cipher program by the bit sequence and the execution of the cipher program. Indeed, it is the clear data text that "directly operates to execute" the cipher program. The bit

sequence is a passive element that only identifies the cipher program. The entry of the clear data text directly causes the execution of the cipher program, not the bit sequence. Therefore, Ostermann does not teach the limitation "receiving at least one control signal which at said at least one of said plurality of receiver stations directly operates to execute the downloadable code."

Claim 31 is also amended to clarify that each information transmission includes the downloadable code and said at least one control signal. Ostermann fails to teach this limitation. The cipher algorithm and bit sequence are described as being transmitted separately, never together. *See* col. 2, ll. 38-41; col. 3, ll. 15-19. The Examiner acknowledged that the cipher algorithm and bit sequence are not transmitted together. Advisory Action at 2, ¶ 13. Accordingly, Ostermann is silent as to an information transmission including downloadable code and at least one control signal. Therefore, Ostermann does not describe each and every limitation as set forth in claim 31.

C. Rejection of claims 32-36, 38, and 54 under 35 U.S.C. §103(a)

The Office Action rejected claims 32-36, and 38 under 35 U.S.C. 103(a) as allegedly being unpatentable over the combination of Ostermann in view of Davidson. Applicants respectfully traverse the rejections and argue that Ostermann and Davidson, alone and in combination, fail to teach each of the claim's limitations.

1. Claim 32

Claim 32 claims the method of claim 31, "wherein a digital television program is displayed at a receiver station and said downloadable code and said at least one control signal program said receiver station to decrypt said digital television program in accordance with said

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new technique." Claim 32 is not rendered unpatentable by Ostermann for the same reasons as argued above in regard to claim 31.

The Office Action points to Davidson's claim 65 as teaching the application of encryption/decryption techniques to television signals. Action at 27-28. However, as Applicants have argued previously, it would not have been obvious to combine the teachings of the references. Davidson is directed to the transmission and reception of standard television signals, which at the time of invention were analog television signals. To emphasize this digital/analog distinction, Applicants previously amended the claim to recite "a digital television program."

As evidenced by Davidson only scrambling the analog video signal while embedding an encrypted digital audio signal, **the encryption of a whole television signal was not obvious**. There is no suggestion in Davidson that encryption could be applied to signals as complex as entire television signals. In fact, Davidson teaches away from encrypting/decrypting television signals by focusing on the processing of the video and audio signal components while leaving the television signal itself unaffected. The Examiner asserts that "the encryption/decryption processing of a video and/or audio component of the television signal would affect the state of the composite television signal." Office Action at 27. But, the composite television signal remains analog. Therefore, it would not have been obvious to combine Davidson and Ostermann.

Assuming, *arguendo*, that it would be obvious to combine Davidson and Ostermann, Davidson does not cure Ostermann's deficiencies. The combination of Davidson and Ostermann fails to teach displaying a digital television program at a receiver station where the receiver decrypts the digital television program. Neither Davidson or Ostermann teaches displaying or

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decrypting a digital television program. Applicants respectfully submit that even if the teachings of Ostermann were modified with the teachings of Davidson as suggested in the Final Office Action, the modified composition still fails to satisfy every element recited in claim 32.

2. Claim 33

Claim 33 recites, in part: "receiving a digital television program at a transmitter station and delivering said television program to a transmitter... and transmitting said digital television program and said one or more instruct signals from said transmitter station to said one or more receiver stations." These limitations are not taught by Ostermann or Davidson.

Ostermann teaches the transfer of a cipher algorithm from a receiver station to a transmitter station, where the cipher algorithm is used to implement decrypting at the receiver station. The Office Action points to Davidson's claim 65, column 24, lines 30-50 to apply Ostermann's teachings to television signals. Action at 28-29. However, as argued above, it would not have been obvious to combine the teachings of the references. Davidson is directed to the transmission and reception of standard television signals, which at the time of invention were analog television signals. To emphasize this digital/analog distinction, Applicants previously amended the claim to recite "a digital television program."

As evidenced by Davidson only scrambling the analog video signal while embedding an encrypted digital audio signal, **the encryption of a whole television signal was not obvious**. Davidson surely understood encryption and decryption, but did not apply it to television signals because that innovation was not obvious. In fact, Davidson teaches away from encrypting/decrypting television signals by focusing on the processing of the video and audio signal components while leaving the television signal itself unaffected. The Examiner asserts

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that "the encryption/decryption processing of a video and/or audio component of the television signal would affect the state of the composite television signal." Office Action at 28. But, the composite television signal remains analog. Therefore, it would not have been obvious to combine Davidson and Ostermann.

Assuming, *arguendo*, that it would be obvious to combine Davidson and Ostermann, claim 65 teaches conveying composite analog television signals, not digital television signals. Neither Davidson or Ostermann teaches receiving or transmitting a digital television program. Even if someone of ordinary skill in the art were to apply the teachings of Ostermann and Davidson, the inventions fail to teach or suggest every limitation of claim 33.

3. Claim 34

Amended claim 34 recites, in part:

> decrypting a second of said plurality of signals on the basis of said changed decryption technique, wherein said decrypted second of said plurality of signals is embedded with executable instructions;
>
> passing said decrypted second of said plurality of signals to a controllable device; and
>
> controlling said controllable device on the basis of said embedded executable instructions of said passed decrypted second of said plurality of signals."

These limitations are not taught by Ostermann or Davidson.

The Office Action points to Davidson's claim 65, column 24, lines 30-50, to show that the invention discloses the passing and controlling limitations of claim 34. Claim 65 teaches means for the decryption and analog conversion of an encrypted digital audio signal, but fails to teach passing the decrypted analog audio signal to a controllable device and controlling the controllable device on the basis of executable instructions embedded in the decrypted analog

audio signal. The "analog conversion means connected to the inverse encryption means connected to the inverse encryption means to return the audio signal to the original analog format whereby program audio may be processed and presented in a conventional manner." Col. 24, ll. 47-50. The audio signals lacks embedded executable instructions, therefore Davidson fails to teach the limitation.

The Advisory Action maintains that the audio signal itself is operable in the controlling of output of audio at an output device "as this output device would only provide output upon detection of an input audio signal (e.g. a speaker would only output sound if an audio signal is present to be outputted.)" Advisory Action at 2, ¶ 15. As asserted previously by Applicants, in Davidson, the program audio is an element to be processed, it is not operable in the controlling of a controllable device. For example, a speaker is not controlled by an audio signal. Rather, it is an enable signal that instructs the speaker to turn on, detect, process, and output the audio signal. The speaker will output sound if an audio signal is present, but only after an enable signal instructs the speaker to perform.

Regardless of whether the audio signal itself is operable, no executable instructions are embedded in the signal. Even though the analog conversion means and the inverse encryption means audio process the audio signal for its output to a speaker, Davidson is silent as to controlling the speaker based on executable instructions embedded in an audio signal. Ostermann is similarly silent as to teaching the limitation. Therefore, Davidson and Ostermann fail to teach all the limitations of claim 34.

4. Claim 35

Claim 35 depends from independent claim 33. Claim 35 claims the method of claim 33, "wherein said step of transferring is performed based on comparison." Claim 35 further limits claim 33 and is not rendered unpatentable by Ostermann and Davidson for the same reasons as argued above in regard to claim 33.

5. Claim 36

Claim 36 depends from independent claim 33. Claim 36 claims the method of claim 33, "wherein said step of transferring in accordance with a predetermined schedule." Claim 36 further limits claim 33 and is not rendered unpatentable by Ostermann and Davidson for the same reasons as argued above in regard to claim 33.

Assuming, *arguendo*, that it would be obvious to combine Davidson and Ostermann, the Office Action points to Ostermann as teaching "which cipher program is to be used at a particular time (schedule) as spoken of on column 3, lines 10-20." Office Action at 30. The Examiner argues that the transferring "is performed in accordance with a particular order or schedule (sequence of algorithms transferred in a time order in relation to each other) depending on a received bit sequence indicating which cipher program is to be used at a particular time." *Id.* But, as Applicants have argued previously, Ostermann does not teach anything other than the automatic transferring of the cipher program at the time the bit sequence is received.

The bit sequence does not include any "predetermined scheduling" information. It's true that Ostermann's system will transfer the cipher programs at the time of bit sequence receipt and in the order of bit sequence receipt, but this does not mean that the transfers are made in accordance with a predetermined schedule. There is no teaching or suggestion in Ostermann of

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performing this step in accordance with a predetermined schedule. All transferring occurs on the fly. Ostermann and Davidson, alone and in combination, fail to teach each of the claim 36's limitations.

6. Claim 38

Claim 38 depends from independent claim 33. Claim 38 claims the method of claim 33, "wherein said one or more instruct signals operate at said one or more receiver stations based on an identifier, said method further comprising the step of transmitting said identifier." Claim 38 further limits claim 33 and is not rendered unpatentable by Ostermann and Davidson for the same reasons as argued above in regard to claim 33.

7. Claim 54

Claim 54, recites in part "whereby the receiver station inputs said control signal to a decryptor, and wherein said decryptor decrypts said digital television programming signal." Neither Ostermann or Davidson addresses decrypting a digital television programming signal.

The Examiner has asserted that Ostermann "is directed to the transmission of a cipher program to allow encryption or decryption of 'data', where this data in a general sense could include audio, video, or other known types of data." Office Action at 31. Yet, there is no suggestion in Ostermann that encryption/decryption applies to anything but text. "In particular, [Ostermann] relates to a system wherein clear data texts are enciphered at the transmitter end of the system and deciphered at the receiver end." Col. 1, ll. 11-13. "Data" as used in Ostermann is limited to text. Therefore, Ostermann does not teach decrypting a digital television programming signal.

Davidson is directed to the transmission and reception of standard television signals, which at the time of invention were analog television signals. As evidenced by Davidson only scrambling the analog video signal while embedding an encrypted digital audio signal, **the encryption of a digital television programming signal was not obvious**. Davidson surely understood encryption and decryption, but did not apply it to television programming signals because that innovation was not obvious. In fact, Davidson teaches away from encrypting/decrypting television signals by focusing on the processing of the video and audio signal components while leaving the television signal itself unaffected. The Examiner asserts elsewhere in the Office Action that "the encryption/decryption processing of a video and/or audio component of the television signal would affect the state of the composite television signal." Office Action at 28. But, the composite television signal remains analog. Therefore, it would not have been obvious to combine Davidson and Ostermann.

Assuming, *arguendo*, that it would be obvious to combine Davidson and Ostermann, claim 65 teaches conveying composite analog television signals, not digital television signals. Neither Davidson or Ostermann teaches receiving or transmitting a digital television program. Even if someone of ordinary skill in the art were to apply the teachings of Ostermann and Davidson, the inventions fail to teach or suggest every limitation of claim 54.

VI. CLAIMS 22-30, 37, 39, AND 43-53 ARE ALLOWABLE

The Office Action identified claims 22-30 and 43-53 as allowable over the prior art of record. This Amendment does not affect claims 22-30 and 43-53. Applicants respectfully submit claims 22-30 and 43-53 are allowable as previously presented.

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The Office Action also identified claims 37 and 39 as objected to as being dependent upon rejected base claims, but would be otherwise allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims. Applicants respectfully assert that these claims do not need to be rewritten as independent claims.

Claim 37 depends from claim 36, which depends from independent claim 33. As argued above, claims 33 is allowable over Davidson, Ostermann, and the prior art of record. As identified by the Examiner, the limitations of claim 37 are also allowable over the prior art of record. Applicants respectfully submit that claim 37 is allowable in its current dependent claim form.

Similarly, claim 39 depends from claim 38, which depends from independent claim 33. As argued above, claims 33 is allowable over Davidson, Ostermann, and the prior art of record. As identified by the examiner, the limitations of claim 39 are also allowable over the prior art of record. Applicants respectfully submit that claim 39 is allowable in its current dependent claim form.

VI. CONCLUSION

Applicants respectfully submit that all claims are allowable over the cited art for the reasons set forth above. Applicants request reconsideration of this application in view of the amendment and arguments set forth above. In the event Applicants have overlooked the need for an extension of time, payment of fee, or additional payment of fee, Applicant hereby petitions therefore and authorize that any charges be made to Deposit Account No. 50-4494.

Should the Examiner have any questions regarding any of the above, the Examiner is respectfully requested to telephone the undersigned at 202-346-4000.

Dated: April 2, 2013

Respectfully submitted,

By:
Thomas J. Scott, Jr.
Registration No.: 27,836
GOODWIN PROCTER LLP
901 New York Avenue, NW
Washington, DC 20001
Attorney for Applicant

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PTO/SB/22 (03-13)
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PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)

Docket Number (Optional): 5634.174

Application Number: 08/449,413 | Filed: 5-24-1995

For: SIGNAL PROCESSING APPARATUS AND METHODS

Art Unit: 2467 | Examiner: Michael J. Moore Jr

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

		Fee	Small Entity Fee	Micro Entity Fee	
☑	One month (37 CFR 1.17(a)(1))	$200	$100	$50	$ 100
☐	Two months (37 CFR 1.17(a)(2))	$600	$300	$150	$
☐	Three months (37 CFR 1.17(a)(3))	$1,400	$700	$350	$
☐	Four months (37 CFR 1.17(a)(4))	$2,200	$1,100	$550	$
☐	Five months (37 CFR 1.17(a)(5))	$3,000	$1,500	$750	$

☑ Applicant asserts small entity status. See 37 CFR 1.27.

☐ Applicant certifies micro entity status. See 37 CFR 1.29.
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☐ A check in the amount of the fee is enclosed.

☑ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☑ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 50-4494.

☐ Payment made via EFS-Web.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest. See 37 CFR 3.71. 37 CFR 3.73(b) statement is enclosed (Form PTO/SB/96).

☐ attorney or agent of record. Registration number .....

☑ attorney or agent acting under 37 CFR 1.34. Registration number 67292.

/Ted Nissly/ — Signature

April 2, 2013 — Date

Ted Nissly — Typed or printed name

202-346-4000 — Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

☑ * Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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Privacy Act Statement

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The information provided by you in this form will be subject to the following routine uses:

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6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/449,413	05/24/1995	JOHN C. HARVEY	5634.174	1756

70813 7590 05/29/2013

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

EXAMINER	
MOORE JR, MICHAEL J	

ART UNIT	PAPER NUMBER
2467	

NOTIFICATION DATE	DELIVERY MODE
05/29/2013	ELECTRONIC

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

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

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

AAlpha-Kpetewama@goodwinprocter.com
patentdc@goodwinprocter.com
fmckeon@goodwinprocter.com

PTOL-90A (Rev. 04/07)

Office Action Summary	Application No. 08/449,413	Applicant(s) HARVEY ET AL.	
	Examiner MICHAEL J. MOORE, JR.	Art Unit 2467	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *2 April 2013*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

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

Disposition of Claims

5)☒ Claim(s) *22-56* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☒ Claim(s) *23,25-32,40-53 and 56* is/are allowed.

7)☒ Claim(s) *22,24,33-35,38,54 and 55* is/are rejected.

8)☒ Claim(s) *36,37 and 39* is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

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

Certified copies:

a)☐ All b)☐ Some * c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Interim copies:

a)☐ All b)☐ Some c)☐ None of the: Interim copies of the priority documents have been received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

4) ☐ Other: _____.

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DETAILED ACTION

Continued Examination Under 37 CFR 1.129

1. An amendment and request for reconsideration pursuant to 37 CFR 1.129 was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.129, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.129. Applicant's submission filed on 4/2/13 has been entered.

Double Patenting

2. The nonstatutory double patenting rejection 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 and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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).

3. Claims **22, 34, 54, and 55** are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims **1, 22, and 23** of *U.S. Patent No. 7,801,304*. Although the conflicting claims are not identical, they are not patentably distinct from each other because the following correspondences.

Regarding claim **22**, "a method for controlling the decryption of encrypted programming at a subscriber station" corresponds to "a method for controlling the decryption of programming at a subscriber station" in claim **1** of the above U.S. Patent.

"Receiving encrypted digital programming, said encrypted digital programming having an encrypted digital control signal" corresponds to "receiving programming, said programming having a first encrypted digital control signal portion" in claim **1** of the above U.S. Patent.

"Detecting said control signal" corresponds to "detecting said first encrypted digital control signal portion of said programming" in claim **1** of the above U.S. Patent.

"Passing said control signal to a decryptor that decrypts encrypted digital data at said subscriber station" corresponds to "passing said first encrypted digital control signal portion of said programming to a decryptor at said subscriber station" in claim **1** of the above U.S. Patent.

"Decrypting said control signal" corresponds to "decrypting said first encrypted digital control signal portion" in claim **1** of the above U.S. Patent.

"Decrypting said encrypted digital programming to form decrypted programming based on said control signal" corresponds to "decrypting said encrypted digital information portion of said programming ... based on the decrypted control signal portion" in claim **1** of the above U.S. Patent.

Lastly, "presenting said decrypted programming to a viewer or listener" corresponds to "presenting said programming" in claim **1** of the above U.S. Patent.

Claim **22** of the instant application does not explicitly claim "passing said encrypted digital information portion of said programming to said decryptor". Therefore, claim **22** merely broadens the scope of claim **1** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Regarding claim **34**, "a method of processing signals at a receiver station" corresponds to the same in claim **23** of the above U.S. Patent.

"Receiving at least one information transmission" and "detecting a plurality of signals on said at least one information transmission" corresponds to "receiving a plurality of signals including digital programming and inputting at least some of said plurality of signals to said digital detector" as well as "detecting said encrypted digital data in said at least some of said plurality of signals" in claim **23** of the above U.S. Patent.

"Changing a decryption technique in response to at least a first of said plurality of signals" corresponds to "controlling said decryptor to alter its decryption pattern or technique on the basis of information included in said detected encrypted digital data" in claim **23** of the above U.S. Patent.

Lastly, "decrypting a second of said plurality of signals on the basis of said changed decryption technique, wherein said decrypted second of said plurality of signals is embedded with executable instructions; passing said decrypted second of said plurality of signals to a controllable device; and controlling said controllable device on the basis of said passed decrypted second of said plurality of signals" corresponds to "decrypting at least a portion of said digital programming using a selected decryption pattern or technique based on said step of detecting in order to provide a decrypted output of programming to a viewer or listener" in claim **23** of the above U.S. Patent.

Claim **34** of the instant application does not explicitly claim "said receiver station having a receiver, a digital detector operatively connected to said receiver for detecting encrypted digital data, a decryptor operatively connected to said digital detector for decrypting said encrypted digital data, and a controller operatively connected to said

digital detector or said decryptor for controlling said decryptor". Therefore, claim **34** merely broadens the scope of claim **23** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Regarding claim **54**, "a method of providing an enabling signal to a receiver station from a remote data source, said enabling signal for use in decrypting at the receiver station a programming signal, said receiver station being programmed to get information necessary for enabling a programming signal" corresponds to "a method of providing digital enabling information to a receiver station from a first remote source, said digital enabling information for use at the receiver station in decrypting a mass medium program presentation" in claim **22** of the above U.S. Patent.

"Storing at the remote data source one or more control signals for enabling a decryptor to decrypt a video" corresponds to "storing digital enabling information at said first remote source" in claim **22** of the above U.S. Patent.

"Receiving at the remote data source from the receiver station a communication to get specific enabling information" corresponds to "receiving at said first remote source a query from said receiver station" in claim **22** of the above U.S. Patent.

"Communicating, from the remote data source to the receiver station in response to said communication from the receiver station, a control signal" corresponds to

"transmitting said digital enabling information which is effective to enable decryption from said first remote source to said receiver station in response to said step of receiving said query, said receiver station storing at least some of said transmitted enabling information" in claim **22** of the above U.S. Patent.

Lastly, "whereby the receiver station inputs said control signal to a decryptor, and wherein said decryptor decrypts said programming signal" corresponds to "to said receiver station an encrypted digital mass medium presentation signal which is decrypted on the basis of said stored at least some of said digital enabling information" in claim **22** of the above U.S. Patent.

Claim **54** of the instant application does not claim "transmitting from a second remote source" as well as "to present said mass medium programming presentation". Therefore, claim **54** merely broadens the scope of claim **22** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Regarding claim **55**, "a method of processing signals at a receiver station" corresponds to the same in claim **23** of the above U.S. Patent.

"Receiving one or more encrypted digital information transmissions at said receiver station, wherein said one or more encrypted digital information transmissions are unaccompanied by any non-digital information transmission; detecting a plurality of

signals on said one or more encrypted digital information transmissions, at least a first of one of said plurality of signals including a control signal" corresponds to "receiving a plurality of signals including digital programming and inputting at least some of said plurality of signals to said digital detector" as well as "detecting said encrypted digital data in said at least some of said plurality of signals" in claim **23** of the above U.S. Patent.

"Controlling a decryptor that decrypts encrypted digital data in response to said control signal" corresponds to "controlling said decryptor to alter its decryption pattern or technique on the basis of information included in said detected encrypted digital data" in claim **23** of the above U.S. Patent.

"Decrypting or enabling communication of at least a second of said plurality of signals on the basis of said step of controlling said decryptor" corresponds to "decrypting at least a portion of said digital programming using a selected decryption pattern or technique based on said step of detecting" in claim **23** of the above U.S. Patent.

Lastly, "passing said decrypted or enabled at least said second of said plurality of signals to a controllable device; and controlling said controllable device on the basis of said passed decrypted or enabled at least said second of said plurality of signals" corresponds to "to provide a decrypted output of programming to a viewer or listener" in claim **23** of the above U.S. Patent.

Claim **55** of the instant application does not claim "detecting ... in accordance with a varying pattern of timing or location". Therefore, claim **55** merely broadens the scope of claim **23** of the above U.S. Patent.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969). The omission of a reference element whose function is not needed would be obvious to one skilled in the art.

4. Claim **24** is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim **14** of *U.S. Patent No. 7,801,304* in view of Yanagimachi et al. (U.S. 3,936,595) (hereinafter "Yanagimachi").

Regarding claim **24**, "a method of controlling a remote transmitter station to communicate program material to a subscriber station and controlling said subscriber station to process or output a unit of programming" corresponds to "a method of controlling a remote transmitter station to communicate program material to a subscriber station and controlling said subscriber station to process or output digital programming" in claim **14** of the above U.S. Patent.

"Receiving a control signal which operates at the remote transmitter station to control the communication of a unit of programming and one or more first instruct signals and communicating said control signal to said remote transmitter station" corresponds to "receiving at said remote transmitter station a first control signal which

operates at the remote transmitter station to control communication of said digital programming and one or more first instruct signals" in claim **14** of the above U.S. Patent.

"Receiving at said remote transmitter station one or more second instruct signals which operate at the subscriber station to identify and decrypt said unit of programming or said one or more first instruct signals, said remote transmitter station transferring said one or more second instruct signals to said transmitter" corresponds to "receiving at said remote transmitter station said one or more digital second instruct signals which operate at the subscriber station to decrypt (identified) said digital programming" in claim **14** of the above U.S. Patent.

"Transmitting from said remote transmitter station an information transmission comprising said unit of programming, said one or more first instruct signals, and said one or more second instruct signals, said one or more first instruct signals being transmitted in accordance with said control signal" corresponds to "transmitting from said remote transmitter station to said subscriber station an information transmission comprising said digital programming, said one or more first instruct signals and said one or more digital second instruct signals, said one or more first instruct signals being transmitted in accordance with said first control signal" in claim **14** of the above U.S. Patent.

Claim **24** of the instant application further claims "receiving a code or datum identifying a unit of programming to be transmitted by the remote transmitter station,

said remote transmitter station transferring said unit of programming to a transmitter" which is not claimed in claim **14** of the above U.S. Patent.

However, *Yanagimachi* teaches a similar method of controlling transmission and output of programming at a receiver station, where program control codes identifying particular programming included in the transmission are utilized by a transmitter station 102 and receiver station 103 for transmission/reception and programming output as spoken of on column 15, lines 2-32 as well as column 16, lines 22-40.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, to apply the control code transmission of *Yanagimachi* to the method of claim **14** of the above U.S. Patent in order to provide selective output of programming in accordance with selection input provided from a subscriber as spoken of on column 16, lines 25-40 of *Yanagimachi*.

Claim Rejections - 35 USC § 103

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

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

6. 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(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims **33, 35, 38, and 54** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ostermann et al. (U.S. 4,484,025) (hereinafter "Ostermann") in view of Davidson (Re. 31,735).

Regarding claim **33**, *Ostermann* teaches the transmission of a cipher algorithm (instruct signal) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 (transmitter) that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

Ostermann also teaches a receiver terminal that contains means for deciphering received ciphered data text in accordance with a cipher algorithm and a cipher key as spoken of on column 4, lines 52-54, as well as column 2, lines 16-24, which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Ostermann does not explicitly teach decryption of television programming.

However, *Davidson* teaches the application of encryption/decryption techniques to television signals as spoken of on column 24, lines 30-50.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of *Ostermann* to television program signals in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of *Davidson*.

Regarding claim **35**, *Ostermann* further teaches where the cipher algorithm (instruct signal) is transferred that matches information (comparison) provided in a received bit sequence as spoken of on column 3, lines 10-20.

Regarding claim **38**, *Ostermann* further teaches where the cipher algorithm (instruct signal) is transferred that matches information provided in a received bit sequence (identifier) as spoken of on column 3, lines 10-20.

Regarding claim **54**, *Ostermann* teaches the enciphering/deciphering method performed by the terminals 1 and 2 (receiver station and remote data source) of Figure 1.

Ostermann also teaches the cipher equipment 16 (remote data source) that contains cipher program storage 18 for storing a cipher algorithm as spoken of on column 2, lines 38-41.

Ostermann also teaches the cipher algorithm request (communication) transmitted from the terminal 1 to the terminal 2 (remote data source) requesting a cipher algorithm (enabling information) as spoken of on column 3, lines 4-9.

Ostermann also teaches the transmission of a cipher algorithm (control signal) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

Ostermann also teaches a receiver terminal that contains means for deciphering (decryptor) received ciphered data text in accordance with a cipher algorithm and a cipher key as spoken of on column 4, lines 52-54, as well as column 2, lines 16-24,

which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Ostermann does not explicitly teach the decryption of a digital television programming signal.

However, *Davidson* teaches the application of encryption/decryption techniques to television signals as spoken of on column 24, lines 30-50.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of *Ostermann* to television program signals in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of *Davidson*.

Allowable Subject Matter

8. Claims **22-32, 34, 40-53, 55, and 56** are allowable over the prior art of record.

9. Claims **36, 37, and 39** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. Applicant's arguments, filed 4/2/13, with respect to *amended* claims **31, 32, 34, 40-42, 55, and 56** have been fully considered and are persuasive. The prior art rejections of these claims have accordingly been withdrawn.

11. Applicant's arguments filed 4/2/13 with respect to claims **33, 35, 38, and 54** have been fully considered but they are not persuasive.

Regarding claims **33, 35, and 38**, Applicant argues that neither *Davidson* nor *Ostermann* teach "receiving a digital television program at a transmitter station and delivering said television program to a transmitter ... and transmitting said digital television program and said one or more instruct signals from said transmitter station to said one or more receiver stations. Applicant further argues that *Davidson* teaches away from encryption/decryption of television signals by focusing on the processing of the video and audio signal components while leaving the television signal itself unaffected.

However, as provided in the previous Office Action, the video and audio signal components of *Davidson* are a part of the television signal, so the encryption/decryption processing of a video and/or audio component of the television signal would affect the state of the composite television signal (which includes audio, video, and/or control components).

Furthermore, as provided in the previous Office Action and reiterated above, *Ostermann* teaches the transmission of a cipher algorithm (instruct signal) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 (transmitter) that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

Ostermann also teaches a receiver terminal that contains means for deciphering received ciphered data text in accordance with a cipher algorithm and a cipher key as spoken of on column 4, lines 52-54, as well as column 2, lines 16-24, which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Ostermann does not explicitly teach decryption of digital television programming.

However, *Davidson* teaches the application of encryption/decryption techniques to television signals (that are transmitted and received) as spoken of on column 24, lines 30-50.

Davidson also teaches the subscription television transmitter 12 in Figure 1 that generates television signals (programming) having video and audio portions for subsequent transmission (to/from a transmitter 20, 30) as spoken of on column 25, lines 45-50.

It is maintained that at the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of *Ostermann* to television program signals (containing digital format components) as taught in *Davidson* in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of Davidson. It is also maintained that *Davidson* teaches transmission/reception of "digital" television programming as the composite signal of *Davidson* includes a digital audio component which may be reasonably interpreted as digital television programming information.

Regarding claim **54**, Applicant argues that neither *Ostermann* nor *Davidson* addresses decrypting a digital television programming signal.

However, as provided in the previous Office Action and reiterated above, *Ostermann* teaches the enciphering/deciphering method performed by the terminals 1 and 2 (receiver station and remote data source) of Figure 1.

Ostermann also teaches the cipher equipment 16 (remote data source) that contains cipher program storage 18 for storing a cipher algorithm as spoken of on column 2, lines 38-41.

Ostermann also teaches the cipher algorithm request (communication) transmitted from the terminal 1 to the terminal 2 (remote data source) requesting a cipher algorithm (enabling information) as spoken of on column 3, lines 4-9.

Ostermann also teaches the transmission of a cipher algorithm (control signal) from cipher program storage 18 to program memory 22 of a programmable cipher computer 12 that indicates a particular enciphering/deciphering technique as spoken of on column 2, lines 38-41.

Ostermann also teaches a receiver terminal that contains means for deciphering (decryptor) received ciphered data text in accordance with a cipher algorithm and a cipher key as spoken of on column 4, lines 52-54, as well as column 2, lines 16-24, which states that terminals 1 and 2 each contain transmitters and receivers as shown in Figure 1.

Ostermann does not explicitly teach the decryption of a digital television programming signal.

However, *Davidson* teaches the application of encryption/decryption techniques to television signals as spoken of on column 24, lines 30-50.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the enciphering/deciphering methods of *Ostermann* to television program signals (containing digital format components) as

taught in *Davidson* in order to effectively enable high security and deterring of unauthorized viewers in a television environment as spoken of on column 2, lines 31-36 of Davidson. It is also maintained that *Davidson* teaches transmission/reception and decryption of "digital" television programming as the composite signal of *Davidson* includes an encrypted digital audio component which may be reasonably interpreted as digital television programming information that is decrypted at the receiver station.

Conclusion

12. Under the final action practice for Office actions following a submission under 37 CFR 1.129(a) filed on or after June 8, 2005, the next Office action following timely filing of a submission under 37 CFR 1.129(a) will be equivalent to the next Office action following a reply to a non-final Office action. Under existing Office second action final practice, such an Office action on the merits will be made final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p). See MPEP § 706.07(a).

In this Office action, there is no new ground of rejection that was not necessitated by applicant's amendment of the claims or based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c) with

the fee set forth in 37 CFR 1.17(p). Accordingly, **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL J. MOORE, JR. whose telephone number is (571)272-3168. The examiner can normally be reached on Monday-Friday (7:30am - 4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch, can be reached at (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J. Moore, Jr./
Primary Examiner, Art Unit 2467

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: John C. Harvey *et al.*	
Application No.: 08/449,413	Confirmation No.: 1756
Filed: May 24, 1995	Art Unit: 2467
For: SIGNAL PROCESSING APPARATUS AND METHODS	Examiner: Moore Jr., Michael J.

AMENDMENT AND REQUEST FOR RECONSIDERATION

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

Dear Sir:

In response to the Final Office Action dated May 29, 2013, Applicants respectfully request consideration of the pending claims in view of the following amendments and remarks.

Please amend the above-identified application as follows.

Amendments to the claims begin on page 2.

Remarks begin on page 11.

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AMENDMENT TO THE CLAIMS

Claims 22-35, 37-53, 55, and 56 are the only pending claims.

1 - 21. (Cancelled)

22. (Previously Presented) A method for controlling the decryption of encrypted programming at a subscriber station, said method comprising the steps of:

receiving encrypted digital programming, said encrypted digital programming having an encrypted digital control signal;

detecting said control signal;

passing said control signal to a decryptor that decrypts encrypted digital data at said subscriber station;

decrypting said control signal;

decrypting said encrypted digital programming to form decrypted programming based on said control signal; and

presenting said decrypted programming to a viewer or listener.

23. (Previously Presented) A method for controlling the decryption of programming at a subscriber station, said method comprising the steps of:

receiving programming, said programming having a first encrypted digital control signal portion and an encrypted digital information portion;

detecting said first encrypted digital control signal portion of said programming;

passing said first encrypted digital control signal portion of said programming to a first decryptor at said subscriber station;

decrypting said first encrypted digital control signal portion of said programming using said first decryptor at said subscriber station;

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passing said encrypted digital information portion of said programming and the decrypted control signal portion to a second decryptor at said subscriber station;

decrypting said encrypted digital information portion of said programming using said second decryptor at said subscriber station based on the decrypted control signal portion; and

presenting said programming.

24. (Previously Presented) A method of controlling a remote transmitter station to communicate program material to a subscriber station and controlling said subscriber station to process or output a unit of programming, said method comprising the steps of:

receiving a control signal which operates at the remote transmitter station to control the communication of a unit of programming and one or more first instruct signals and communicating said control signal to said remote transmitter station;

receiving a code or datum identifying a unit of programming to be transmitted by the remote transmitter station, said remote transmitter station transferring said unit of programming to a transmitter;

receiving at said remote transmitter station one or more second instruct signals which operate at the subscriber station to identify and decrypt said unit of programming or said one or more first instruct signals, said remote transmitter station transferring said one or more second instruct signals to said transmitter; and

transmitting from said remote transmitter station an information transmission comprising said unit of programming, said one or more first instruct signals, and said one or more second instruct signals, said one or more first instruct signals being transmitted in accordance with said control signal.

25. (Previously Presented) The method of claim 23, wherein said programming further includes encrypted video.

26. (Previously Presented) The method of claim 23, wherein said subscriber station stores information that evidences processing said programming.

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27. (Previously Presented) The method of claim 23, wherein said programming is received at said subscriber station in one channel of a multichannel signal and a second control signal portion used to decrypt said programming is included in said multichannel signal outside said one channel.

28. (Previously Presented) The method of claim 23, wherein said subscriber station detects, in a transmission channel including said programming, a second control signal portion used to decrypt the first control signal portion.

29. (Previously Presented) The method of claim 23, wherein the subscriber station detects, in a transmission channel for transmitting the programming, a second control signal portion used to decrypt the first control signal portion, and wherein the second control signal portion is encrypted, and wherein the second control signal portion is decrypted in order to enable decryption of the first control signal portion.

30. (Previously Presented) The method of claim 23, wherein said programming includes computer data.

31. (Previously Presented) A method of controlling at least one of a plurality of receiver stations, said method comprising the steps of:

receiving downloadable code which is effective at said at least one of said plurality of receiver stations to implement a new technique of decrypting and delivering the downloadable code to at least one transmitter;

receiving at least one control signal which at said at least one of said plurality of receiver stations directly operates to execute the downloadable code; and

causing said at least one control signal to be communicated to said at least one transmitter at a specific time,

thereby to transmit at least one information transmission, wherein each information transmission includes the downloadable code and said at least one control signal.

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32. (Previously Presented) The method of claim 31, wherein a digital television program is displayed at a receiver station and said downloadable code and said at least one control signal program said receiver station to decrypt said digital television program in accordance with said new technique.

33. (**Currently Amended**) A method of communicating digital television program material to one or more receiver stations, said method comprising the steps of:

receiving a digital television program at a transmitter station and delivering said digital television program to a transmitter;

receiving and storing one or more instruct signals at said transmitter station, said one or more instruct signals at said one or more receiver stations operative to implement a new technique of decrypting;

transferring in accordance with a predetermined schedule said one or more instruct signals to said transmitter; and

transmitting said digital television program and said one or more instruct signals from said transmitter station to said one or more receiver stations.

34. (Previously Presented) A method of processing signals at a receiver station comprising the steps of:

receiving at least one information transmission;

detecting a plurality of signals in said at least one information transmission;

changing a decryption technique in response to at least a first of said plurality of signals;

decrypting a second of said plurality of signals on the basis of said changed decryption technique, wherein said decrypted second of said plurality of signals is embedded with executable instructions;

passing said decrypted second of said plurality of signals to a controllable device; and

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controlling said controllable device on the basis of said embedded executable instructions of said passed decrypted second of said plurality of signals.

35. (Previously Presented) The method of claim 33, wherein said step of transferring is performed based on comparison.

36. (Cancelled).

37. (**Currently Amended**) The method of claim ~~36~~ 33, wherein said schedule specifies a transmission time and a transmission channel, said method further comprising the steps of receiving and storing said schedule at said transmitter station.

38. (Previously Presented) The method of claim 33, wherein said one or more instruct signals operate at said one or more receiver stations based on an identifier, said method further comprising the step of transmitting said identifier.

39. (Previously Presented) The method of claim 38, wherein an information transmission including said digital television program is received at said one or more receiver stations, wherein said digital television program is outputted at said one or more receiver stations, and wherein said identifier identifies (i) said digital television program and (ii) a channel including said digital television program.

40. (Previously Presented) A method of processing signals at a receiver station comprising the steps of:

receiving at least one encrypted digital information transmission, wherein the at least one encrypted digital information transmission is unaccompanied by any non-digital information transmission;

locating code;

passing said code to a processor;

controlling a decryptor that decrypts encrypted digital data to decrypt in a specific fashion on the basis of said code;

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decrypting a portion of said at least one information transmission in said specific fashion; and

passing said decrypted portion of said at least one encrypted digital information transmission to one of said processor and an output device.

41. (Previously Presented) A method of controlling a receiver station to detect digital data and control a decryptor that decrypts encrypted digital data based on a varying pattern of timing or location, said method of controlling comprising the steps of:

receiving programming and delivering said programming to a transmitter;

receiving digital data comprising at least an instruct signal and communicating said digital data to a signal embedder, said instruct signal operative at said receiver station to control said decryptor;

controlling said signal embedder to embed said digital data in an encrypted digital information transmission in a varying pattern of timing or location;

communicating said encrypted digital information transmission to said transmitter;

transmitting said programming; and

transmitting said encrypted digital information transmission including said digital data separately from said transmitted programming.

42. (Previously Presented) A method of processing signals at a receiver station comprising the steps of:

receiving at least one encrypted digital information transmission, wherein the at least one encrypted digital information transmission is unaccompanied by any non-digital information transmission;

detecting a plurality of signals on said at least one encrypted digital information transmission;

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decrypting at least one of said plurality of signals, said at least one decrypted signal embedded with at least one instruct signal which is effective to instruct;

passing the at least one decrypted instruct signal to a controllable device; and

controlling said controllable device on the basis of decrypted information included in said at least one decrypted instruct signal.

43. (Previously Presented) A method for decryptor activation in a network comprising:

receiving a transmission comprising encrypted materials;

decrypting under first processor control a first portion of said encrypted materials in said transmission;

inputting said first portion of said encrypted materials to a decryptor;

decrypting under second processor control a second portion of said encrypted materials based on said step of decrypting said first portion of said encrypted materials.

44. (Previously Presented) The method of claim 43 wherein said transmission in said step of receiving a transmission is a multichannel signal separated in the frequency domain.

45. (Previously Presented) The method of claim 44 wherein said transmission is a cable system broadcast.

46. (Previously Presented) The method of claim 43 wherein said transmission in said step of receiving a transmission is a multichannel signal separated in the time domain.

47. (Previously Presented) The method of claim 43 wherein said transmission in said step of receiving a transmission is generated at a local data source.

48. (Previously Presented) The method of claim 47 wherein said local data source comprises a VCR.

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49. (Previously Presented) The method of claim 47 wherein said local data source comprises a laser disk.

50. (Previously Presented) The method of claim 43 wherein said encrypted materials comprise a portion of a television program.

51. (Previously Presented) The method of claim 43, wherein said transmission in said step of receiving a transmission and a signal necessary for decryption are received from different sources.

52. (Previously Presented) The method of claim 51, further comprising the step of contacting a remote transmitter station to receive one of said transmission and said signal necessary for decryption.

53. (Previously Presented) The method of claim 51, wherein a signal necessary for decryption is communicated by telephone.

54. (Cancelled)

55. (Previously Presented) A method of processing signals at a receiver station comprising the steps of:

receiving one or more encrypted digital information transmissions at said receiver station, wherein said one or more encrypted digital information transmissions are unaccompanied by any non-digital information transmission;

detecting a plurality of signals on said one or more encrypted digital information transmissions, at least a first of one of said plurality of signals including a control signal;

controlling a decryptor that decrypts encrypted digital data in response to said control signal;

decrypting or enabling communication of at least a second of said plurality of signals on the basis of said step of controlling said decryptor;

passing said decrypted or enabled at least said second of said plurality of signals to a controllable device; and

controlling said controllable device by processing instructions embedded in said passed decrypted or enabled at least said second of said plurality of signals.

56. (Previously Presented) A method of processing signals at a receiver station comprising the steps of:

receiving at least one encrypted digital information transmission, wherein the at least one encrypted digital information transmission is unaccompanied by any non-digital information transmission;

identifying a plurality of signals in said at least one encrypted digital information transmission;

selecting, by processing selection criteria, a first signal of said plurality of signals including downloadable code;

passing said downloadable code to a processor;

controlling a decryptor that decrypts encrypted digital data to decrypt in a specific fashion on the basis of said downloadable code;

decrypting at least one second signal of said plurality of signals in said specific fashion; and

passing said at least one second signal to one of said processor and an output device.

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REMARKS

I. STATUS OF CLAIMS

Claims 22-56 are pending in this application. Claims 22-32, 34, 40-53, 55, and 56 are allowed. Claims 36, 37, and 39 are allowable over the prior art, but objected to as dependent on non-allowable claims. Claims 22, 24, 34, 54, and 55 are subject to a nonstatutory obviousness-type double patenting rejection. The remaining claims are rejected under 35 U.S.C. § 103. By this Amendment, claims 33 and 37 are amended. Claims 36 and 54 are cancelled.

An amendment submitted after a final office action in an application must comply with 37 C.F.R. § 1.116, which states that:

> (1) An amendment may be made canceling claims or complying with any requirement of form expressly set forth in a previous Office action;
>
> (2) An amendment presenting rejected claims in better form for consideration on appeal may be admitted; or
>
> (3) An amendment touching the merits of the application or patent under reexamination may be admitted upon a showing of good and sufficient reasons why the amendment is necessary and was not earlier presented.

37 C.F.R. 1.116(b).

Applicants submit that this Amendment And Request For Reconsideration places this application in condition for allowance by amending claims in manners that are believed to render all pending claims allowable over the cited art and/or at least place this application in better form for consideration on appeal under 37 C.F.R. § 1.116(2). This Amendment is also necessary to at least clarify and/or narrow the issues for consideration by the Board and was not presented earlier because Applicants believed that the prior response(s) placed this application in condition for allowance, for at least the reasons discussed in those responses. Accordingly, entry of the

present Amendment, as an earnest attempt to advance prosecution and/or to reduce the number of issues, is requested under 37 C.F.R. § 1.116.

Applicants earnestly solicit a favorable reconsideration and prompt allowance of the claims. Where the Office does not find that the claims are in condition for allowance, Applicants respectfully request that the Office withdraw the finality of the office action for the reasons set forth below.

II. DOUBLE PATENTING REJECTIONS

Claims 22, 34, 54, and 55 are rejected on the ground of nonstatutory obviousness-type double patenting as allegedly being unpatentable over claims 1, 22, and 23 of U.S. Patent No. 7,801,304. This is the patent that issued from Applicants' DECR 81 group "A" application, U.S. Patent Application Serial No. 08/449,263. Claim 24 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 14 of the DECR 81 group "A" patent, in view of Yanagimachi et al. (U.S. Patent No. 3,936,595) ("Yanagimachi").

Submitted with this Amendment And Request For Reconsideration is a terminal disclaimer disclaiming, in essential terms, the terminal part of the statutory term of the patent granted on the instant application, extending beyond the earliest expiration date of the DECR 81 group "A" patent, U.S. Patent No. 7,801,304.

III. PRIOR ART REJECTIONS

The Office Action rejected claims 33, 35, 38, and 54 under 35 U.S.C. 103(a) as allegedly being unpatentable over the combination of Ostermann et al. (U.S. Patent No. 4,484,025) ("Ostermann") in view of Davidson (Re. 31,735) ("Davidson").

In response, Applicants have amended claim 33 to incorporate the limitations of now cancelled claim 36, which the Examiner indicated as allowable but objected to because it depended on rejected base claim 33. The claim now recites "***transferring in accordance with a***

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predetermined schedule." Claim 37 is amended to depend from claim 33, instead of now cancelled claim 36.

Applicants respectfully submit that amended claim 33 is in allowable form. Accordingly, claims 35, 37, 38, and 39 are allowable because they depend from claim 33.

In an effort to place the instant application in condition for allowance, Applicants have cancelled rejected claim 54. Therefore, Applicants respectfully submit that all pending claims are allowable in their current form.

VI. CONCLUSION

Applicants respectfully submit that all claims are allowable over the cited art for the reasons set forth above. Applicants request reconsideration of this application in view of the amendment and arguments set forth above. In the event Applicants have overlooked the need for an extension of time, payment of fee, or additional payment of fee, Applicant hereby petitions therefore and authorize that any charges be made to Deposit Account No. 50-4494.

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Should the Examiner have any questions regarding any of the above, the Examiner is respectfully requested to telephone the undersigned at 202-346-4000.

Dated: June 14, 2013

Respectfully submitted,

By: /Thomas J. Scott, Jr./
Thomas J. Scott, Jr.
Registration No.: 27,836
GOODWIN PROCTER LLP
901 New York Avenue, NW
Washington, DC 20001
Attorney for Applicant

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TERMINAL DISCLAIMER	Docket Number (Optional) PMC003-C247

In re Application of: John C. Harvey et al.

Application No.: 08/449,413 (Conf. No. 1756)

Filed: May 24, 1995

For: SIGNAL PROCESSING APPARATUS AND METHODS

The owner*, PERSONALIZED MEDIA COMMUNICATIONS, L.L.C. , of 100 percent interest in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full patent granted on pending **reference** patent No. 7,801,304 issued, on September 21, 2010 , as such term is defined in 35 U.S.C. 154 and 173, and as the term of any patent granted on said **reference** application may be shortened by any terminal disclaimer filed prior to the grant of any patent on the pending **reference** application. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and any patent granted on the **reference** application are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the owner does not disclaim the terminal part of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. 154 and 173 of any patent granted on said **reference** application, "as the term of any patent granted on said **reference** application may be shortened by any terminal disclaimer filed prior to the grant of any patent on the pending **reference** application," in the event that: any such patent: granted on the pending **reference** application: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321, has all claims canceled by a reexamination certificate, is reissued, or is in any manner terminated prior to the expiration of its full statutory term as shortened by any terminal disclaimer filed prior to its grant.

Check either box 1 or 2 below, if appropriate.

1. ☐ For submissions on behalf of a business/organization (e.g., corporation, partnership, university, government agency, etc.), the undersigned is empowered to act on behalf of the business/organization.

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

2. ☒ The undersigned is an attorney or agent of record.
Reg. No. 27,836

/Thomas J. Scott, Jr./ — Signature
June 14, 2013 — Date

Thomas J. Scott, Jr. — Typed or printed name

(202) 346-4000 — Telephone Number

☒ Terminal disclaimer fee under 37 CFR 1.20(d) is included.

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*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner). Form PTO/SB/96 may be used for making this statement. See MPEP § 324.

PTO/SB/26 (08-11)
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TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING REJECTION OVER A "PRIOR" PATENT	Docket Number (Optional) PMC093-C247

In re Application of: John C. Harvey et al.

Application No.: 08/449,413

Filed: May 24, 1995

For: SIGNAL PROCESSING APPARATUS AND METHODS

The owner*, Personalized Media Communications, L.L.C., of 100 percent interest in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of **prior patent** No. 7,801,304 as the term of said **prior patent** is presently shortened by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the **prior patent** are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the owner does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the **full** statutory term of the **prior patent**, "as the term of said **prior patent** is presently shortened by any terminal disclaimer," in the event that said **prior patent** later:

expires for failure to pay a maintenance fee;
is held unenforceable;
is found invalid by a court of competent jurisdiction;
is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321;
has all claims canceled by a reexamination certificate;
is reissued; or
is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

Check either box 1 or 2 below, if appropriate.

1. ☐ For submissions on behalf of a business/organization (e.g., corporation, partnership, university, government agency, etc.), the undersigned is empowered to act on behalf of the business/organization.

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

2. ☑ The undersigned is an attorney or agent of record. Reg. No. 27,836

/Thomas J. Scott/ — Signature
June 14, 2013 — Date

Thomas J. Scott, Jr. — Typed or printed name

(202) 346-4000 — Telephone Number

☑ Terminal disclaimer fee under 37 CFR 1.20(d) included.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner).
Form PTO/SB/96 may be used for making this certification. See MPEP § 324.

This collection of information is required by 37 CFR 1.321. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

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

NOTICE OF ALLOWANCE AND FEE(S) DUE

70813 7590 07/11/2013
GOODWIN PROCTER LLP
901 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20001

EXAMINER	
MOORE JR, MICHAEL J	
ART UNIT	PAPER NUMBER
2467	

DATE MAILED: 07/11/2013

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/449,413	05/24/1995	JOHN C. HARVEY	5634.174	1756

TITLE OF INVENTION: SIGNAL PROCESSING APPARATUS AND METHODS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$890	$0	$0	$890	10/11/2013

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 02/11)

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PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

70813 7590 07/11/2013
GOODWIN PROCTER LLP
901 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20001

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/449,413	05/24/1995	JOHN C. HARVEY	5634.174	1756

TITLE OF INVENTION: SIGNAL PROCESSING APPARATUS AND METHODS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$890	$0	$0	$890	10/11/2013

EXAMINER	ART UNIT	CLASS-SUBCLASS
MOORE JR, MICHAEL J	2467	380-211000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ❑ Change of correspondence address for Change of Correspondence Address form PTO/SB/122) attached.
- ❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:
- ❑ Issue Fee
- ❑ Publication Fee (No small entity discount permitted)
- ❑ Advance Order - # of Copies

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ❑ A check is enclosed.
- ❑ Payment by credit card. Form PTO-2038 is attached.
- ❑ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).

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5. **Change in Entity Status** (from status indicated above)

❑ Applicant certifying micro entity status. See 37 CFR 1.29	NOTE: Absent a valid certification of Micro Entity Status (see form PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
❑ Applicant asserting small entity status. See 37 CFR 1.27	NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
❑ Applicant changing to regular undiscounted fee status.	NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature	Date
Typed or printed name	Registration No.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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

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UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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70813 7590 07/11/2013

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

EXAMINER	
MOORE JR, MICHAEL J	

ART UNIT	PAPER NUMBER
2467	

DATE MAILED: 07/11/2013

Determination of Patent Term Extension or Adjustment under 35 U.S.C. 154 (b)
(application filed prior to June 8, 1995)

This patent application was filed prior to June 8, 1995, thus no Patent Term Extension or Adjustment applies.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 02/11)

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Privacy Act Statement

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1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
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3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
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6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
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9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 08/449,413	Applicant(s) HARVEY ET AL.	
	Examiner MICHAEL J. MOORE, JR.	Art Unit 2467	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the After-Final Amendment filed 6/17/13*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *22-35,37-53,55 and 56 (renumbered 1-33, respectively)*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov .
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   Certified copies:
   a) ☐ All b) ☐ Some *c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☐ Examiner's Amendment/Comment
6. ☒ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/Michael J. Moore, Jr./
Primary Examiner, Art Unit 2467

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Terminal Disclaimer

1. The terminal disclaimer filed on 6/18/13 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. 7,801,304 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Allowable Subject Matter

2. Claims **22-35, 37-53, 55, and 56** *(renumbered 1-33, respectively)* are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL J. MOORE, JR., whose telephone number is (571)272-3168. The examiner can normally be reached on Monday-Friday (7:30am - 4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached at (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J. Moore, Jr./
Primary Examiner, Art Unit 2467

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	08449413	HARVEY ET AL.
	Examiner	Art Unit
	MICHAEL J MOORE JR	2467

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☒ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	06/21/2011	12/08/2011	05/21/2012	10/24/2012	05/20/2013	06/24/2013			
	1	-	-	-	-	-	-			
	2	-	-	-	-	-	-			
	3	-	-	-	-	-	-			
	4	-	-	-	-	-	-			
	5	-	-	-	-	-	-			
	6	-	-	-	-	-	-			
	7	-	-	-	-	-	-			
	8	-	-	-	-	-	-			
	9	-	-	-	-	-	-			
	10	-	-	-	-	-	-			
	11	-	-	-	-	-	-			
	12	-	-	-	-	-	-			
	13	-	-	-	-	-	-			
	14	-	-	-	-	-	-			
	15	-	-	-	-	-	-			
	16	-	-	-	-	-	-			
	17	-	-	-	-	-	-			
	18	-	-	-	-	-	-			
	19	-	-	-	-	-	-			
	20	-	-	-	-	-	-			
	21	-	-	-	-	-	-			
	22	✓	✓	✓	✓	✓	=			
	23	=	=	=	=	=	=			
	24	✓	✓	✓	✓	✓	=			
	25	=	=	=	=	=	=			
	26	=	=	=	=	=	=			
	27	=	=	=	=	=	=			
	28	=	=	=	=	=	=			
	29	=	=	=	=	=	=			
	30	=	=	=	=	=	=			
	31	✓	✓	✓	✓	=	=			
	32	✓	✓	✓	✓	=	=			
	33	✓	✓	✓	✓	✓	=			
	34	✓	✓	✓	✓	✓	=			
	35	✓	✓	✓	✓	✓	=			
	36	✓	✓	✓	✓	O	-			

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	08449413	HARVEY ET AL.
	Examiner	Art Unit
	MICHAEL J MOORE JR	2467

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CLAIM		DATE								
Final	Original	06/21/2011	12/08/2011	05/21/2012	10/24/2012	05/20/2013	06/24/2013			
	37	O	O	O	O	O	=			
	38	✓	✓	✓	✓	✓	=			
	39	✓	✓	O	O	O	=			
	40	✓	✓	✓	✓	=	=			
	41	✓	✓	✓	✓	=	=			
	42	✓	✓	✓	✓	=	=			
	43	=	=	=	=	=	=			
	44	=	=	=	=	=	=			
	45	=	=	=	=	=	=			
	46	=	=	=	=	=	=			
	47	=	=	=	=	=	=			
	48	=	=	=	=	=	=			
	49	=	=	=	=	=	=			
	50	=	=	=	=	=	=			
	51	=	=	=	=	=	=			
	52	=	=	=	=	=	=			
	53	=	=	=	=	=	=			
	54	✓	✓	✓	✓	✓	-			
	55	✓	✓	✓	✓	✓	=			
	56		✓	✓	✓	=	=			

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Apple v. PMC
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Page 1395

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	08449413	HARVEY ET AL.
	Examiner	Art Unit
	MICHAEL J MOORE JR	2467

CPC		
Symbol	Type	Version

CPC Combination Sets				
Symbol	Type	Set	Ranking	Version

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	33	
/MICHAEL J MOORE JR/ Primary Examiner.Art Unit 2467	06/24/2013	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	22	1

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Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	08449413	HARVEY ET AL.
	Examiner	Art Unit
	MICHAEL J MOORE JR	2467

US ORIGINAL CLASSIFICATION		INTERNATIONAL CLASSIFICATION									
CLASS	SUBCLASS	CLAIMED					NON-CLAIMED				
380	211	H	0	4	N	7 / 16 (2011.01.01)	H	0	4	N	7 / 16 (2011.01.01)

CROSS REFERENCE(S)					
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)				
725	139	136	86	104	

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	33	
/MICHAEL J MOORE JR/ Primary Examiner.Art Unit 2467	06/24/2013	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	22	1

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Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	08449413	HARVEY ET AL.
	Examiner	Art Unit
	MICHAEL J MOORE JR	2467

☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☒ T.D. ☐ R.1.47

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	33	
/MICHAEL J MOORE JR/ Primary Examiner.Art Unit 2467	06/24/2013	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	22	1

U.S. Patent and Trademark Office Part of Paper No. 20130624

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

70813 7590 07/11/2013
GOODWIN PROCTER LLP
901 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20001

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/449,413	05/24/1995	JOHN C. HARVEY	5634.174	1756

TITLE OF INVENTION: SIGNAL PROCESSING APPARATUS AND METHODS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEES DUE	DATE DUE
nonprovisional	SMALL	$890	$0	$0	$890	10/11/2013

EXAMINER	ART UNIT	CLASS-SUBCLASS
MOORE JR, MICHAEL J	2467	380-211000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 Goodwin Procter LLP
2
3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE: Personalized Media Communications, L.L.C.

(B) RESIDENCE: (CITY and STATE OR COUNTRY): New York, NY

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:
- ☒ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ☐ A check is enclosed.
- ☒ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).

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5. **Change in Entity Status** (from status indicated above)

☐ Applicant certifying micro entity status. See 37 CFR 1.29

NOTE: Absent a valid certification of Micro Entity Status (see form PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

☐ Applicant asserting small entity status. See 37 CFR 1.27

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

☒ Applicant changing to regular undiscounted fee status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature	/Thomas J. Scott, Jr./	Date	July 17, 2013
Typed or printed name	Thomas J. Scott, Jr.	Registration No.	27,836

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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

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Apple v. PMC
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: John C. Harvey *et al.*	
Application No.: 08/449,413	Confirmation No.: 1756
Filed: May 24, 1995	Art Unit: 2467
For: SIGNAL PROCESSING APPARATUS AND METHODS	Examiner: Moore Jr., Michael J.

SUBMISSION UNDER 37 C.F.R. § 1.312

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

Dear Madam:

This amendment is submitted to ensure full compliance with 37 C.F.R. § 1.78(a)(2)(i).

Please amend the above-identified application as follows.

Amendment to the Specification begins on page **2** of this paper.

Remarks begin on page **3** of this paper.

LJBW/1849126.1

AMENDMENT TO THE SPECIFICATION

Please delete the section titled "CROSS-REFERENCE TO RELATED APPLICATIONS" on page 1 of the specification and replace the deleted section with the following replacement section:

CROSS-REFERENCE TO RELATED APPLICATIONS

This is a continuation of application ~~serial no.~~ Ser. No. 08/113,329, filed ~~August 30,1993~~ Aug. 30, 1993, now U.S. Patent No. 7,856,650, herein incorporated by reference in its entirety, which is a continuation of application ~~serial no. 056,501~~ Ser. No. 08/056,501, filed May 3, 1993, now U.S. Patent 5,335,277, which was a continuation of application ~~serial no. 849,226~~ Ser. No. 07/849,226, filed ~~March 10, 1992~~Mar. 10, 1992, now U.S. Patent No. 5,233,654, which was a continuation of application ~~serial no. 588,126~~ Ser. No. 07/588,126, filed ~~Sept. 25, 1990~~ Sep. 25, 1990, now U.S. Patent No. 5,109,414, which was a continuation of application ~~serial no. 096, 096~~ Ser. No. 07/096,096, filed ~~Sept. 11, 1987~~ Sep. 11, 1987, now U.S. Patent No. 4,965,825, which was a continuation–in-part of application ~~serial no. 829, 531~~ Ser. No. 06/829,531, filed Feb. 14, 1986, now U.S. Patent No. 4,704,725, which was a continuation of application ~~serial no. 317,510~~ Ser. No. 06/317,510, filed Nov. 3, 1981, now U.S. Patent No. 4,694,490.

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REMARKS

Applicants have received notices in co-pending applications, that the first paragraph of the specification is not in compliance with 37 C.F.R. § 1.78(a). Title 37 C.F.R. § 1.78(a)(2)(i) sets forth:

> [A]ny nonprovisional application . . . claiming the benefit of one or more prior-filed copending nonprovisional applications . . . must contain or be amended to contain a reference to each such prior-filed application, identifying it by application number (consisting of the series code and serial number) . . . and indicating the relationship of the applications.

The current specification does not identify all prior filed nonprovisional applications by application number including the series code. The above amendment to the first sentence of the application amends the application numbers to include their series codes. The specification with this amendment complies with 37 C.F.R. § 1.78(a)(2).

In the event Applicants have overlooked the need for the payment of any fee Applicants hereby petition therefore and authorize that any charges be made to Deposit Account No. 50-4494.

Dated: July 17, 2013

Respectfully submitted,

By / Thomas J. Scott, Jr./___
Thomas J. Scott, Jr.
Registration No.: 27,836
GOODWIN PROCTER LLP
901 New York Avenue, NW
Washington, DC 20001
(202) 346-4000
Attorney for Applicants

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UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/449,413	05/24/1995	JOHN C. HARVEY	5634.174	1756

70813 7590 07/25/2013

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

EXAMINER	
MOORE JR, MICHAEL J	

ART UNIT	PAPER NUMBER
2467	

NOTIFICATION DATE	DELIVERY MODE
07/25/2013	ELECTRONIC

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

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

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

AAlpha-Kpetewama@goodwinprocter.com
patentdc@goodwinprocter.com
fmckeon@goodwinprocter.com

PTOL-90A (Rev. 04/07)

Response to Rule 312 Communication	Application No.	Applicant(s)
	08/449,413	HARVEY ET AL.
	Examiner	Art Unit
	MICHAEL J. MOORE, JR.	2467

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

1. ☒ The amendment filed on *17 July 2013* under 37 CFR 1.312 has been considered, and has been:

a) ☐ entered.

b) ☒ entered as directed to matters of form not affecting the scope of the invention.

c) ☐ disapproved because the amendment was filed after the payment of the issue fee.
Any amendment filed after the date the issue fee is paid must be accompanied by a petition under 37 CFR 1.313(c)(1) and the required fee to withdraw the application from issue.

d) ☐ disapproved. See explanation below.

e) ☐ entered in part. See explanation below.

/Michael J. Moore, Jr./
Primary Examiner, Art Unit 2467

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UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/449,413	10/15/2013	8559635	5634.174	1756

70813 7590 09/25/2013

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

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Extension or Adjustment under 35 U.S.C. 154 (b)
(application filed prior to June 8, 1995)

This patent application was filed prior to June 8, 1995, thus no Patent Term Extension or Adjustment applies.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

JOHN C. HARVEY, NEW YORK, NY;
JAMES W. CUDDIHY, NEW YORK, NY;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

AO 120 (Rev. 08/10)

TO:	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Eastern District of Texas, Marshall Division on the following

☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO. 2:15-cv-1366	DATE FILED 07/30/2015	U.S. DISTRICT COURT Eastern District of Texas, Marshall Division
PLAINTIFF Personalized Media Communications, LLC		DEFENDANT Apple, Inc.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	8,191,091 B1	5/29/2012	Personalized Media Communications, LLC
2	8,559,635 B1	10/15/2013	Personalized Media Communications, LLC
3			
4			
5			

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT		
CLERK	(BY) DEPUTY CLERK	DATE

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy