

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMAZON.COM, INC.,
AMAZON.COM SERVICES LLC,
AMAZON WEB SERVICES, INC., and
TWITCH INTERACTIVE, INC.
Petitioner

v.

NL GIKEN INC.
Patent Owner

Inter Partes Review No.: IPR2024-01345

**PETITION FOR INTER PARTES REVIEW OF
U.S. PATENT NO. 9,948,968
UNDER 35 U.S.C. §§311-319 AND 37 C.F.R. §§42.1-100, ET SEQ**

TABLE OF CONTENTS

	Page
I. INTRODUCTION	1
II. STATEMENT OF PRECISE RELIEF REQUESTED	1
III. THE '968 PATENT	1
A. Summary of the Alleged Invention	1
B. Overview of the 968 patent's File History	3
C. Person of Ordinary Skill in the Art	3
D. Claim Construction Under 37 C.F.R. §42.104(b)(3)	4
1. "commutatively" (claims 1, 9)	5
2. "designate a part of the digital moving image contents in the provider" (claim 1)	5
3. Limitation 1.c (claim 1)	5
4. "designate an optional part" (claims 4, 8)	6
E. Patent Owner's Infringement Contentions	6
IV. GROUND 1: CLAIMS 1-2, 4-6, 8-10, AND 12 ARE OBVIOUS IN VIEW OF LEE AND THE KNOWLEDGE OF A POSITA.	7
A. Lee	7
B. Claim 1	12
1. [1.pre]	12
2. [1.a]	14
3. [1.b]	17
4. [1.c]	20
5. [1.d]	21
6. [1.e]	24
C. Claim 2	25
D. Claim 4	26
E. Claim 5	27
1. [5.pre]	27

2.	[5.a]	27
3.	[5.b]	27
4.	[5.c]	28
5.	[5.d]	28
6.	[5.e]	28
F.	Claim 6	28
G.	Claim 8	29
H.	Claim 9	29
1.	[9.pre]	29
2.	[9.a]	29
3.	[9.b]	29
4.	[9.c]	29
5.	[9.d]	30
6.	[9.e]	30
I.	Claim 10	30
J.	Claim 12	30
V.	GROUND 2: CLAIMS 3, 7, AND 11 ARE OBVIOUS IN VIEW OF LEE AND HUNT	31
A.	Overview of Prior Art References	31
1.	Lee	31
2.	Hunt	31
B.	Motivation to Combine Hunt with Lee	36
C.	Claim 3	37
D.	Claim 7	39
E.	Claim 11	39
VI.	GROUND 3: CLAIMS 1-2, 4-6, 8-10, AND 12 ARE OBVIOUS IN VIEW OF HUNT	39
A.	Hunt	39
B.	Claim 1	39
1.	[1.pre]	39

2.	[1.a]	43
3.	[1.b]	45
4.	[1.c]	47
5.	[1.d]	49
6.	[1.e]	52
C.	Claim 2	53
D.	Claim 4	54
E.	Claim 5	57
1.	[5.pre]	57
2.	[5.a]	58
3.	[5.b]	58
4.	[5.c]	58
5.	[5.d]	58
6.	[5.e]	59
F.	Claim 6	59
G.	Claim 8	59
H.	Claim 9	59
1.	[9.pre]	59
2.	[9.a]	60
3.	[9.b]	60
4.	[9.c]	60
5.	[9.d]	60
6.	[9.e]	60
I.	Claim 10	60
J.	Claim 12	60
VII.	GROUND 4: CLAIMS 2, 6, AND 10 ARE OBVIOUS IN VIEW OF HUNT AND DIETRICH.....	61
A.	Overview of the Prior Art References.....	61
1.	Hunt.....	61

2.	Dietrich.....	61
B.	Motivation to Combine	62
C.	Claim 2	63
D.	Claim 6	64
E.	Claim 10	65
VIII.	GROUND 5: CLAIMS 3, 7, AND 11 ARE OBVIOUS IN VIEW OF HUNT AND WALKER	65
A.	Overview of the Prior Art References.....	65
1.	Hunt.....	65
2.	Walker	65
B.	Motivation to Combine	66
C.	Claim 3	67
D.	Claim 7	70
E.	Claim 10	70
IX.	DISCRETIONARY DENIAL IS NOT WARRANTED.....	70
A.	35 U.S.C. §314(a) Analysis.....	70
1.	Stay.....	71
2.	Trial Date	71
3.	Parallel Proceeding	71
4.	Issue Overlap.....	72
5.	Same Party	72
6.	Other Considerations	73
B.	35 U.S.C. §325(d) Analysis	74
X.	COMPLIANCE WITH FORMAL REQUIREMENTS	75
A.	Mandatory Notices Under 37 C.F.R. §§42.8(b)(1)-(4)	75
1.	Real Party-in-Interest	75
2.	Related Matters	75
3.	Lead and Backup Counsel	76
4.	Service Information.....	76

B.	Proof of Service on the Patent Owner.....	77
C.	Power of Attorney	77
D.	Standing.....	77
E.	Fees.....	77
XI.	CONCLUSION.....	78

INDEX OF EXHIBITS

Exhibit No.	Description
1001	U.S. Patent No. 9,948,968 (the “ 968 patent ”).
1002	Declaration of Dr. Chandrajit Bajaj.
1003	File History of U.S. Patent No. 9,948,968.
1004	U.S. Patent App. Pub. No. 2008/0025693 (“ Lee ”).
1005	U.S. Patent No. 8,365,235 (“ Hunt ”).
1006	U.S. Patent No. 7,688,384 (“ Davis ”).
1007	U.S. Patent No. 8,032,919 (“ Inoue ”).
1008	U.S. Patent App. Pub. No. 2008/0122825 (“ Choi ”).
1009	U.S. Patent No. 7,643,095 (“ Yoshii ”).
1010	U.S. District Courts— <i>Combined Civil and Criminal Federal Court Management Statistics</i> (June 30, 2024).
1011	<i>NL Giken Inc. v. Amazon.com, Inc.</i> , No. 1:24-cv-00028, Dkt. 32 (D. Del. Jun. 18, 2024) (Scheduling Order).
1012	<i>NL Giken Inc. v. Amazon.com, Inc.</i> , No. 1:24-cv-00028, Dkt. 19-2 (D. Del. Mar. 18, 2024) (Amended Complaint Exhibit H).
1013	U.S. Patent No. 7,929,551 (“ Deitrich ”).
1014	U.S. Patent App. Pub. No. 2005/0160465 (“ Walker ”).
1015	U.S. Gen. Accounting Office, GAO-08-510, Report to Congressional Requesters: <i>Digital Television Transition Majority of Broadcasters Are Prepared for the DTV Transition, but Some Technical and Coordination Issues Remain</i> (April 2008) (“ GAO ”).
1016	U.S. Patent No. 5,699,125 (“ Rzeszewski ”).
1017	U.S. Provisional App. No. 61/014,745 (“ Provisional ”).
1018	U.S. Patent No. 9,019,830 (“ Delay ”).

CHART OF CLAIMS	
[1.pre]	A receiving apparatus configured to receive digital moving image contents from a provider of the digital moving image contents, the provider being commutatively connected to the receiving apparatus, the receiving apparatus comprising:
[1.a]	a processor executing instructions to designate a part of the digital moving image contents in the provider automatically or in response to a manual operation;
[1.b]	a memory that keeps information necessary for the processor to automatically designate a succeeding part of the digital moving image contents to a viewed part of the digital moving image contents;
[1.c]	a designation software controller configured to control the memory to keep the information in response to a termination of viewing the viewed part and control the processor to automatically designate the succeeding part of the digital moving image contents when the viewing starts again;
[1.d]	a receiver of the designated succeeding part of the digital moving image contents in response to the designation by the processor; and
[1.e]	a display configured to display the succeeding part of the digital moving image contents received by the receiver.
[2]	The receiving apparatus according to claim 1, wherein the processor is configured to designate the part of the digital moving image contents by selecting the provider, wherein the part of the digital moving image contents is provided by the selected provider.
[3]	The receiving apparatus according to claim 1, wherein the processor is configured to designate a part of the digital moving image contents provided by the provider by streaming technology in accordance with a program schedule table.
[4]	The receiving apparatus according to claim 1, wherein the processor is configured to designate an optional part of the digital moving image contents in response to the manual operation.
[5.pre]	A receiving method configured to receive digital moving image contents from a provider of the digital moving image contents, the receiving method comprising:
[5.a]	a step of executing, by a computer processor, instructions to designate a part of the digital moving image contents in the provider automatically or in response to a manual operation;

CHART OF CLAIMS
[5.b] a step of keeping information necessary for the executing step to automatically designate a succeeding part of the digital moving image contents to a viewed part of the digital moving image contents;
[5.c] a step of controlling the keeping step to keep the information in response to a termination of viewing the viewed part and control the executing step to automatically designate the succeeding part of the digital moving image contents when the viewing starts again;
[5.d] a step of receiving the designated succeeding part of the digital moving image contents in response to the designation by the executing step; and
[5.e] a step of displaying the succeeding part of the digital moving image contents received by the receiving step.
[6] The receiving method according to claim 5, wherein the executing step is configured to designate the part of the digital moving image contents by selecting the provider, wherein the part of the digital moving image contents is provided by the selected provider.
[7] The receiving method according to claim 5, wherein the executing step is configured to designate a part of the digital moving image contents provided by the provider by streaming technology in accordance with a program schedule table.
[8] The receiving method according to claim 5, wherein the receiving method is further configured to designate an optional part of the digital moving image contents in response to the manual operation.
[9.pre] A receiving system configured to receive digital moving image contents from a provider of the digital moving image contents, the provider being commutatively connected to the receiving system, the receiving system comprising:
[9.a] a processor executing instructions to designate a part of the digital moving image contents from the provider automatically or in response to a manual operation;
[9.b] a memory that keeps information necessary for the processor to automatically designate a succeeding part of the digital moving image contents to a viewed part of the digital moving image contents;
[9.c] a designation software controller configured to control the memory to keep the information in response to a termination of viewing the viewed part and control the processor to automatically designate a succeeding part of the digital moving image contents when the viewing starts again;
[9.d] a receiver of the designated succeeding part of the digital moving image contents in response to the designation by the processor; and

CHART OF CLAIMS
[9.e] a display configured to display the succeeding part of the digital moving image contents received by the receiver.
[10] The receiving system according to claim 9, wherein the processor is configured to designate the part of the digital moving image contents by selecting the provider, wherein the part of the digital moving image contents is provided by the selected provider.
[11] The receiving system according to claim 9, wherein the processor is configured to designate a part of the digital moving image contents provided by the provider by streaming technology in accordance with a program schedule table.
[12] The receiving system according to claim 9, wherein the processor is configured to designate an optional part of the digital moving image contents in response to the manual operation.

I. INTRODUCTION

Amazon.com Inc., Amazon.com Services LLC, Amazon Web Services, Inc., and Twitch Interactive, Inc. (collectively, “Petitioner”) petitions for *inter partes* review of U.S. Patent No. 9,948,968 (“’968 patent”) (EX1001). As shown below, the claims of the ’968 patent were known in the art.

II. STATEMENT OF PRECISE RELIEF REQUESTED

In accordance with 35 U.S.C. §311, Petitioner requests cancelation of claims 1-12 of the ’968 patent in view of the following grounds:

Ground	Claims	Statutory Basis	Prior Art
1	1-2, 4-6, 8-10, 12	35 U.S.C. §103	Lee in view of the knowledge of a POSITA
2	3, 7, 11	35 U.S.C. §103	Lee in view of Hunt and the knowledge of a POSITA
3	1-2, 4-6, 8-10, 12	35 U.S.C. §103	Hunt in view of the knowledge of a POSITA
4	2, 6, 10	35 U.S.C. §103	Hunt in view of Dietrich and the knowledge of a POSITA
5	3, 7, 11	35 U.S.C. §103	Hunt in view of Walker and the knowledge of a POSITA

III. THE ’968 PATENT

A. Summary of the Alleged Invention

The ’968 Patent issued from U.S. Patent Application No. 15/633,776 filed June 27, 2017, and claims priority to a Japanese Application filed September 14, 2008. Accordingly, the ’968 patent’s priority date is no earlier than September 14,

2008. EX1002, ¶42.

The '968 patent relates to a television that “is capable of receiving both broadcast program from television station and corresponding digital file of the same contents from a server station through internet.” EX1001, Abstract. The '968 patent describes that the increase of options of available digital contents results in a majority of users being unable to fully appreciate these options. EX1001, 1:54-57. The '968 patent asserts that “there still exist in this field of art many demands for improvements of the digital contents receiving apparatuses.” EX1001, 1:57-59. EX1002, ¶43.

The '968 patent attempts to address these concerns by allowing “turning-on the television set or changing the channel with any program not in mind to feel interest in the program on display by chance can enjoy the program from the beginning by means of downloading corresponding digital file of the same contents through internet by an automatic link.” EX1001, Abstract. The system maintains the user’s watching progress such that the user can re-visit the recording and continue watching the program where the user last left off. EX1001, Abstract (keeps a “URL for the moving image program enjoyed upon turning-off of the television set until the next turning-on for instantly enjoying the moving image content provided at the URL”). As best understood by Petitioner, the '968 patent is directed to a bookmarking function that manually or automatically stores the

current location of a digital content to allow a user who has stopped viewing a particular digital content, either by turning off the viewing device or navigating away from content, such as by the changing the channel or selecting a different content or website, to resume viewing from the point in the digital content at which the user previously stopped viewing. This alleged solution, however, was also well known in the art, as described in detail below. EX1002, ¶44.

B. Overview of the 968 patent's File History

In relevant part, the Applicant responded to a rejection during prosecution by amending claims to recite, in part, “a receiver of ~~configured to receive~~ the designated succeeding part of the digital moving image contents in response to the designation by the processor,” and “a display configured to display the succeeding part of the digital moving image contents received by the receiver,” and argued that the “claims have been suitably amended to overcome the rejection.” EX1003, 64-68, 71-80. EX1002, ¶45-47.

C. Person of Ordinary Skill in the Art

A person of ordinary skill in the art at the time of filing of the alleged invention in the '968 patent (September 14, 2008) (“POSITA”) would have had a Bachelors' degree in electrical or computer engineering or a comparable field of study, plus approximately two to three years of professional experience with television and digital display systems, distributed multimedia communications, and

networked computer systems, or other relevant experience. Additional education could substitute for professional experience, and industry experience could substitute for formal education. EX1002, ¶48.

D. Claim Construction Under 37 C.F.R. §42.104(b)(3)

The challenged claims are interpreted using the same claim construction standard that is used to construe claims in a civil action in federal district court. 37 C.F.R. §42.100(b). Petitioner does not contend that its proposed constructions are complete constructions of these claims for any other purpose, including for issues that have been raised in the related litigation. Because the asserted prior art discloses the embodiments within the indisputable scope of the claims, the Board need not construe the outer bounds of the claims. The district court may have to address other bounds of the claims in addressing infringement. Any claim term not listed below should be given its plain meaning to a POSITA at the time of the '968 patent's supposed invention. Moreover, because certain theories of invalidity (*e.g.*, written description, enablement, and indefiniteness) are outside the scope of an IPR proceeding, Petitioner addresses various claim terms in this Petition as best understood in light of Patent Owner infringement allegations, reserving the right to assert one or more of these presently out-of-scope theories before the district court. EX1002, ¶49.

1. “commutatively” (claims 1, 9)

As best understood by Petitioner, based on Plaintiff’s implicit construction in its Amended Complaint (EX1012, 2-4) and the specification’s embodiments, this term includes a provider transmitting the digital moving image contents to the receiving apparatus via a digital communication network. EX1001, 4:62-65 (“Television set 2 in the system includes tuner 6 for receiving a digital broadcast television program content transmitted on digital airwave 4 from television station 5.”). Another possible meaning of commutatively to a POSITA in the context of these claims and specification might be that term includes communications that allow for packet-based communication with reordering of received packets. The petition addresses both options in the below grounds. EX1002, ¶50.

2. “designate a part of the digital moving image contents in the provider” (claim 1)

In the context of this claim, this limitation at least includes the receiving apparatus selecting or identifying part of digital moving image contents associated with a provider. EX1001, 3:22-26; EX1002, ¶51.

3. Limitation 1.c (claim 1)

“Designation software controller” and its functionality are not described in the specification. Based on Plaintiff’s implicit construction in its contentions (EX1012, 2-4) and the patent, this limitation includes software instructions that cause the system to perform the claimed functions of controlling the memory to

keep the information in response to a termination of viewing the viewed part and controlling the processor to automatically designate the part succeeding the viewed part of the digital moving image contents when the viewing starts again. EX1002, ¶52.

4. “designate an optional part” (claims 4, 8)

Petitioner believes this term should be given its plain and ordinary meaning in the context of this claim, which includes designating by a processor in response to a user input any part that is not required to be displayed as part of the designated program. The '968 specification describes an “optional shift” to shift a position of the digital moving image content to start at an optionally shifted position, which can include the beginning of the content. EX1001, 8:14-18. EX1002, ¶53-54.

E. Patent Owner’s Infringement Contentions

“[P]atent owners may not, like a ‘nose of wax,’ twist the meaning of patent claims one way to avoid a finding of unpatentability and in another way so as to find infringement.” *Ericsson Inc. v. Intellectual Ventures II LLC*, IPR2014-00919, Paper 37 at 9 (PTAB Dec. 7, 2015). In this regard, Patent Owner’s infringement allegations are “probative” of whether Patent Owner is taking “inconsistent positions” between this proceeding and district court litigation and are “relevant of the credibility” of Patent Owner’s “characterization of the [asserted] Patent in this proceeding.” *Id.*, 9-10; *Square, Inc. v. Unwired Planet LLC*, IPR2014-01164,

Paper 28 at 37-38 (PTAB Nov. 19, 2015). Accordingly, Petitioner includes Patent Owner's initial infringement contention for the '968 patent (Exhibit H to the Complaint, EX1012) from the *NL Giken Inc. v. Amazon.com, Inc.* case referenced below. EX1002, ¶55.

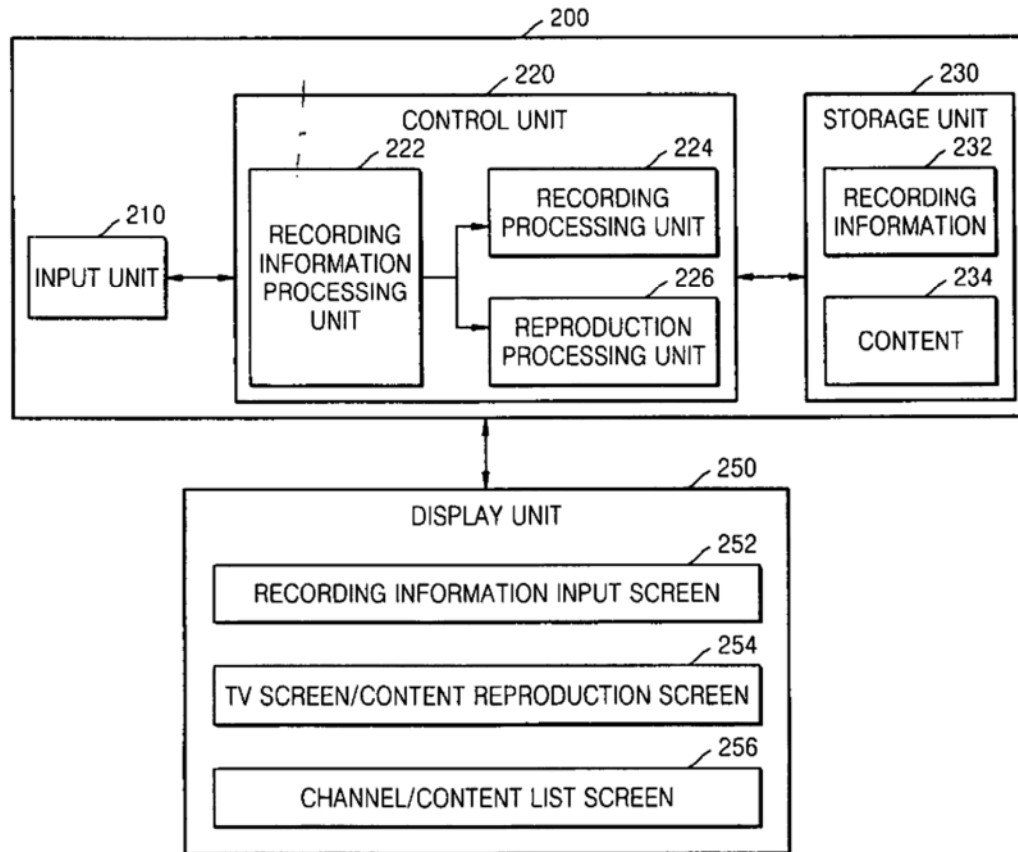
IV. GROUND 1: CLAIMS 1-2, 4-6, 8-10, AND 12 ARE OBVIOUS IN VIEW OF LEE AND THE KNOWLEDGE OF A POSITA.

A. Lee

Lee is a publication of U.S. Patent Application No. 11/635,587, which was filed on December 8, 2006, and published on January 31, 2008. EX1004, cover page. Lee is prior art under 35 U.S.C. §102(a), (e). EX1002, ¶56.

Lee teaches a system to “enable a user to easily and simply record and reproduce a broadcasting program.” EX1004, Abstract. Lee describes an apparatus for receiving an audiovisual broadcasting program, storing it, and reproducing that audiovisual broadcasting program content on a display unit. EX1004, ¶¶32-33; Fig. 2. Lee's apparatus 200 includes an input unit 210, a control unit 220, and a storage unit 230. EX1004, ¶33, Fig. 2. The input unit 210 receives recording information 232 input by a user. *Id.* The control unit 220 processes recording of a broadcasting program “based on the recording information (232) input by the user” and reproduces the broadcasting program on a display unit 250. *Id.* The storage unit 230 “stores the recording information (232) input through the input unit,” such as an identifier of the broadcasting program and a broadcasting time, and “content

(234) recorded by the control unit 220.” *Id.* This is all shown in Figure 2 below:

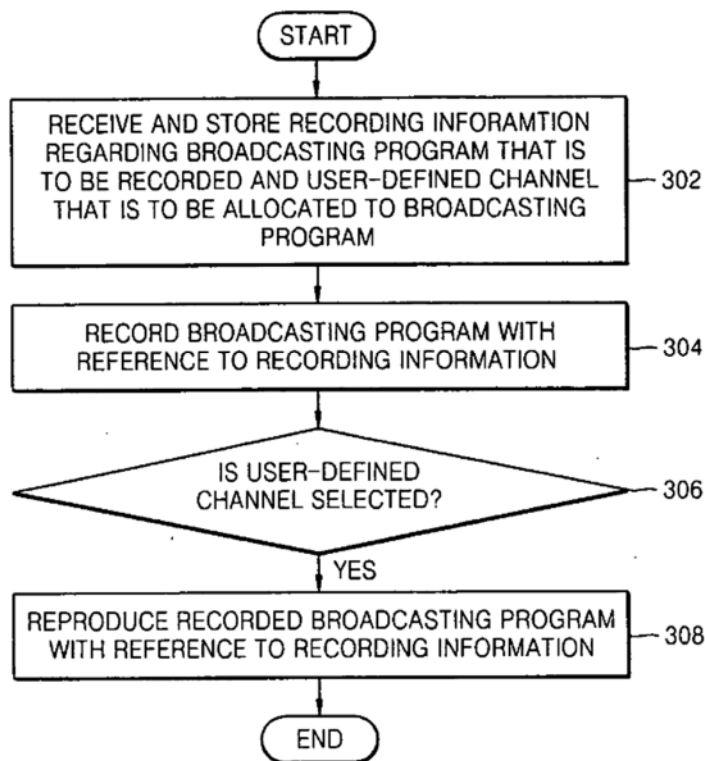


EX1004, Fig. 2. EX1002, ¶¶57-59.

Lee describes several examples for recording and reproducing audiovisual broadcasting content to support a seamless viewing function. For example, the recording information processing unit 222 “receives the recording information (232) regarding a broadcasting program desired for recording and regarding a user-defined channel ... and stores the received recording information 232 in the storage unit 230 (operation 302).” EX1004, ¶36; Fig. 3. The recording information processing unit 222 “instructs the recording processing unit 224 to record and store a broadcasting program that is desired by the user when the broadcasting time of

the broadcasting program occurs (operation 304).” EX1004, ¶36. If the channel selected by the user is determined to be a user-defined channel (operation 306), the recording information processing unit 222 “instructs the reproduction processing unit 226 to read and reproduce a determined broadcasting program (operation 308).” EX1004, ¶37. The receiving, recording, and reproducing a broadcasting program are shown below:

FIG. 3

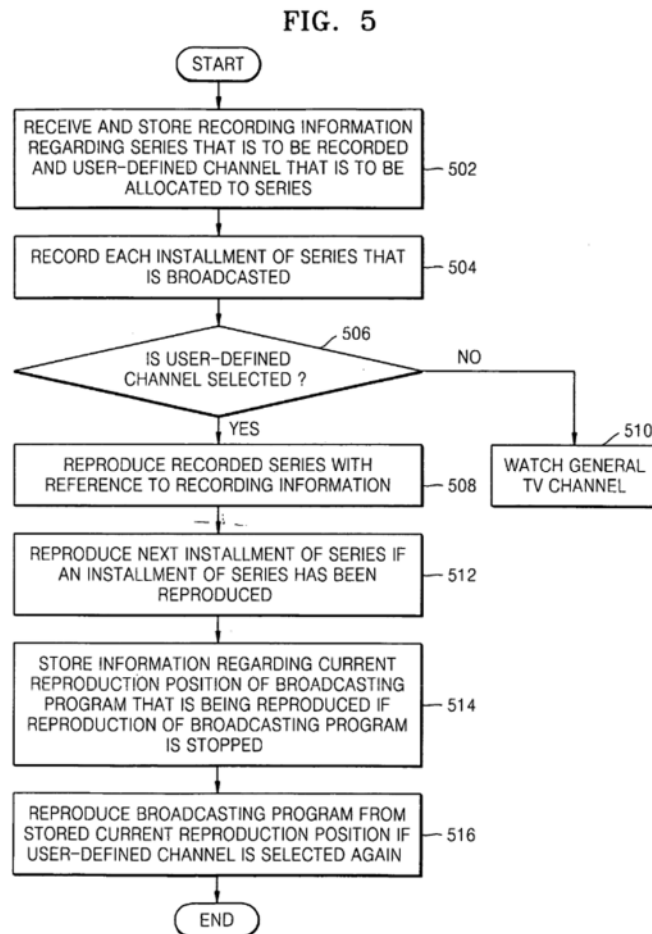


EX1004, Fig. 3. EX1002, ¶60-61.

In another example, the broadcasting program to be recorded is part of a series. EX1004, ¶42; Fig. 5. In this example, the recording information processing unit 222 “receives and stores recording information 232 regarding a series that is to

be recorded and a user-defined channel that is to be allocated to the series (operation 502).” EX1004, ¶43, Fig. 5. The series of installments can be recorded “whenever the series is broadcasted (operation 504).” EX1004, ¶43, Fig. 5. If the channel selected by the user is determined to be a user-defined channel (operation 506), the recording information processing unit 222 “determines recorded content that is to be reproduced with reference to the recording information 232” and “instructs the reproduction processing unit 226 to reproduce the recorded content, i.e., the series, from a first installment of the series (operation 508).” EX1004, ¶44. Further, “[i]f an installment of the series has been previously reproduced, the recording information processing unit 222 instructs the reproduction processing unit 226 to reproduce a next installment of the series (operation 512).” EX1004, ¶44. If the user changes the channel or turns off the apparatus, the recording information processing unit “stores a current reproduction position of the broadcasting program being reproduced (operation 514).” EX1004, ¶44. A POSITA would have understood that a current reproduction position of the broadcasting program to include information like the point in time in the episode/series where the viewer stopped. The current reproduction position of the broadcasting program being reproduced is stored at the storage unit, and when the user changes to the user-defined channel or turns on the apparatus, the recording information processing unit “instructs the reproduction processing unit to

reproduce the broadcasting program from the current reproduction position stored in operation 514 (operation 516).” EX1004, Fig. 5, ¶44. This function “enables a user who stopped watching a broadcasting program on a user-defined channel, to watch the same user-defined channel later from the position where the broadcasting program was stopped,” which is shown below:



EX1004, Fig. 5 (item 514). EX1002, ¶62-64.

Lee is analogous art to the '968 patent and was not considered during prosecution. EX1002, ¶65-66.

B. Claim 1

Lee discloses and renders claim 1 obvious. EX1002, ¶¶67-98.

1. [1.pre]

Lee discloses and renders obvious *a receiving apparatus* (collectively apparatus 200 and display unit 250) *configured to receive digital moving image contents* (broadcast program or program series) *from a provider of the digital moving image contents* (broadcaster/channel), *the provider being commutatively connected* (digital communication network) *to the receiving apparatus*. EX1004, ¶6, ¶¶32-33, Figs. 1-2. EX1002, ¶¶68-75.

Lee's apparatus 200 and display unit 250 is a receiving apparatus that receives moving image contents. EX1004, ¶¶31-33 ("The storage unit 230 stores the recording information 232 input through the input unit 210 and content 234 recorded by the control unit 220"), Fig. 2. Content 234 includes a broadcast program, such as a television series or episode, which a POSITA would have understood to be moving image contents. EX1004, ¶6 ("a content repository 130 stores a recorded broadcasting program the broadcasting program is recorded when the particular broadcasting program starts"), ¶¶12-13, ¶32, ¶33 ("a television program of a channel selected by the user or recorded content"). EX1002, ¶70.

A POSITA would have understood and found it obvious that Lee discloses and renders obvious receiving digital television broadcasts. Digital broadcasts of

television programs were well-known at the time. *See, e.g.*, EX1006, 1:15-18 (“A set-top box is a device that enables a television set to receive and decode digital television (DTV) broadcasts.”), 5:27-31; EX1007, Title, Abstract, 1:18-2:22; EX1015, 7-8 (noting that 91% of television broadcast stations in the U.S. were transmitting a digital television signal as of February 2008). Given that all full power analog television broadcasts were required to cease as of February 17, 2009 (EX1015, 1), a POSITA would have understood and found it obvious to implement Lee to receive digital broadcasts because consumers would not want to purchase a device that would soon become obsolete. EX1002, ¶71-72.

Lee discloses and renders obvious receiving digital moving image contents from a provider of the digital moving image contents and receiver 200 via a digital communication network. Lee receives a broadcast television program from a broadcaster. EX1004, ¶34, ¶36 (“general broadcasting channel and a broadcasting time”). A POSITA would have understood that Lee’s receiver 200 is commutatively connected to the provider because Lee discloses the transmission of a broadcasting program from a broadcaster to receiver 200 via a communication network. §III(D)(1) (construction of “commutatively”). EX1002, ¶73.

Lee also renders obvious the provider being *commutatively* coupled with the receiving apparatus that allows for packet-based communication with reordering of received packets. §III(D)(1) (construction of “commutatively”). A POSITA would

have found obvious to modify Lee's receiver 200 to be connected to the provider via the Internet because it was well known in the art at the time to broadcast via streaming over the Internet. *See, e.g.*, §V(A)(2) (Hunt). A POSITA would have understood that Internet routers supported packet-based communication with reordering of received packets. EX1018, 4:35-46 ("source 12 and router 18 can support various protocols" which "can ... be utilized to guarantee correct delivery of each bit in the media stream"), 8:61-65 ("The packet header 72 can also include a packet sequence identifier 82 that identifies the sequence of a particular packet so the packets can be ordered appropriately in sequence for processing and presenting the program at the set top box."). EX1002, ¶74.

2. [1.a]

Lee renders obvious *a processor* (control unit 220) *executing instructions to designate a part* (e.g., installment or part of an installment) *of the digital moving image contents* (broadcasting program series) *in the provider automatically* (automatically recording series whenever the series is broadcasted, *e.g.*, operation 504) *or in response to a manual operation* (manual input from the user to record a program using input unit). EX1004, ¶¶32-34, ¶¶42-44, Figs. 2, 5. EX1002, ¶76-81.

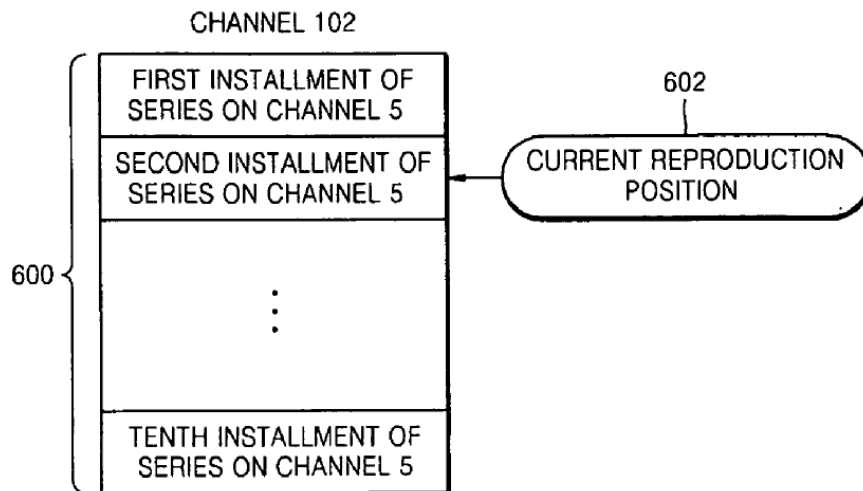
A POSITA would have understood that control unit 220 is a processor that includes processing units 222/224/226, and that processors function by executing instructions. EX1004, ¶34 (recording information processing unit 222 "instructs a

recording processing unit 224 to record a broadcasting program desired by the user”). To the extent that Lee does not disclose that control unit 220 is a processor, a POSITA would have found it obvious and been motivated to implement control unit 220 using a processor such as a microprocessor because microprocessor implementation of control functions were well-known in the art to be an efficient and effective way to implement the types of functions described in Lee and required no more than ordinary skill in the art. EX1016, 4:42-50 (“microprocessor 14 acts according to stored programs, either in internal memory ... or external memory 18, to control most of the TV receiver’s functions” and “also generates data for the on-screen program data display, and executes all decisions regarding program data capture, storage and display”). EX1002, ¶78.

Lee’s control unit 220 designates a part of the digital moving image contents in the provider ... *in response to a manual operation*. Specifically, Lee’s apparatus receives an input from a user (which is a manual operation) indicating whether to record each installment of a series that is broadcasted. EX1004, ¶20 (“apparatus includes an input unit used by a user to input channel selection and recording information”), ¶34 (recording information processing unit 222 “determines when and which broadcasting program should be recorded”), Fig. 5 (operation 504). Lee discloses that a particular series is associated with a particular broadcaster (i.e., provider). EX1004, ¶¶12-14; §III(D)(2) (construction of “designates...in the

provider”). The recording information processing unit receives the recording information 232 “input by the user” at the input unit 210 that specifies “a broadcasting program that is to be recorded, and/or a user-defined broadcasting time.” EX1004, ¶33. Processing unit 226 then designates part of the content as a particular installment in that series in the provider as shown in Fig. 6. EX1004, ¶47.

FIG. 6



EX1004, Fig. 6 (showing designations of parts of a provider’s series as installments). A POSITA would have understood that the system “designates a part” of the content by assigning a particular recording as an installment of a series in the provider. EX1002, ¶79.

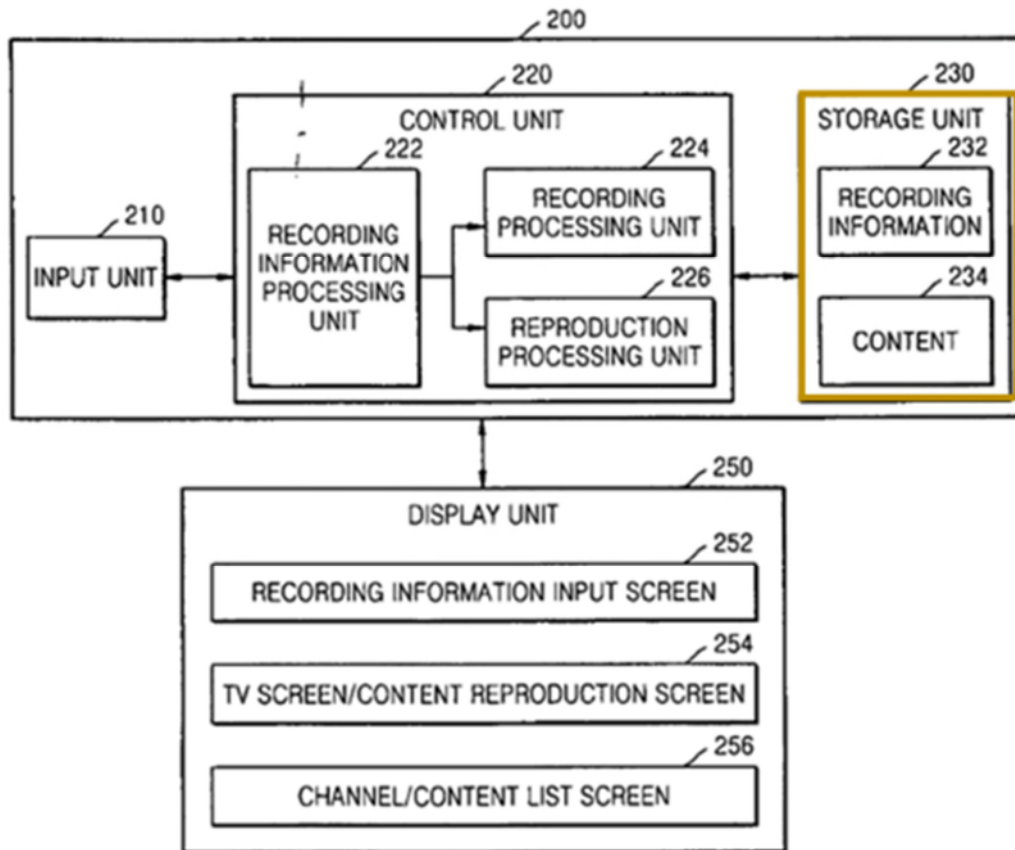
Lee also discloses that the control unit executes instructions to designate a part of a broadcasting program automatically. EX1004, ¶¶42-44, Fig. 5. The

recording information processing unit instructs the recording processing unit to record the series automatically “whenever the series is broadcasted (operation 504)” based on the recording information regarding the series that is to be recorded. EX1004, ¶43, Fig. 5. Thus, the system automatically records and designates a succeeding part of the broadcast series as a subsequent installment of the series. EX1002, ¶80.

3. [1.b]

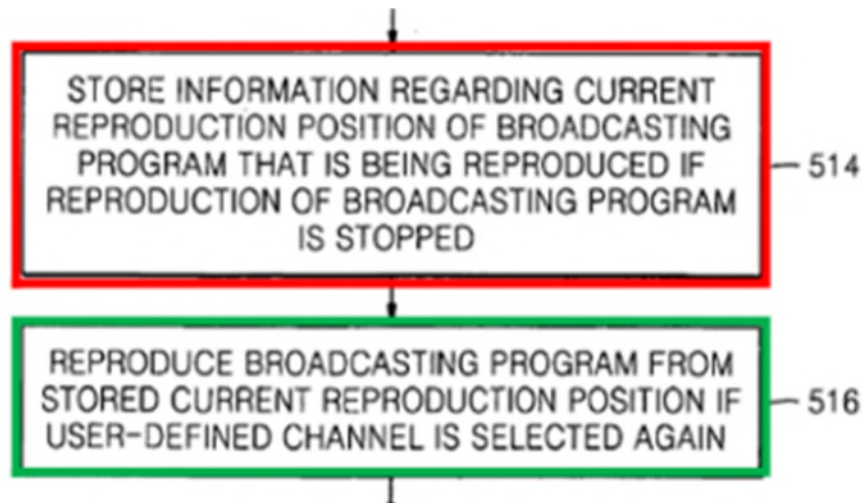
Lee discloses and renders obvious *a memory (storage unit 230) that keeps information necessary for the processor to automatically designate a succeeding part of the digital moving image contents to a viewed part of the digital moving image contents* (e.g., operation 514). EX1004, ¶33, ¶44, ¶47, Figs. 2, 5; §IV(B)(2) (limitation 1.a). EX1002, ¶82-86.

Lee discloses a memory (storage unit 230, shown in gold) that stores recording information that includes the current reproduction position for a broadcasting program. EX1004, ¶47 (“information regarding a current reproduction position 602 is stored in the storage unit 230 by the reproduction processing unit 226”).



EX1004, Fig. 6. With reference to the excerpt of Figure 5 shown below, information regarding the current reproduction position of the broadcast program is stored (operation 514, shown in red) responsive to the reproduction of the broadcast program being stopped (e.g., the viewer turns the apparatus off).

EX1004, ¶33, ¶44.



EX1004, Fig. 5 (excerpted). A POSITA would have understood that Lee's disclosure that the current reproduction position is stored in storage unit 230 discloses that the information is stored in a memory. EX1002, ¶84.

The information stored at operation 514 is the information necessary for Lee's recording information processing unit to automatically designate a succeeding part of Lee's broadcast program to a viewed part of the broadcast program. Specifically, the information stored at operation 514 is used by recording information processing unit 222 to automatically reproduce the broadcasting program from the current reproduction position (operation 516, shown above in green) responsive to a selection to start reproduction of the series. EX1004, ¶44, Fig. 5 (operation 516). In this regard, Lee allows "a user who stopped watching a broadcasting program" to watch "from the position where the broadcasting program was stopped." EX1004, ¶44. A POSITA would have understood and found obvious that Lee uses the current reproduction position information

automatically to designate the succeeding part when the user requests to continue watching a broadcast program/series that has been previously partially viewed “to support a seamless viewing function.” EX1004, ¶44, ¶47. EX1002, ¶85.

4. [1.c]

Lee discloses and renders this limitation obvious. §IV(B)(3) (limitation 1.b). Control unit 220 (*a designation software controller*) instructs the system to control the memory to keep the information in response to a termination of viewing the viewed part and controls the processor to automatically designate the succeeding part of the digital moving image contents when the viewing starts again. §III(D)(3) (construction of limitation 1.c). EX1002, ¶87-91.

Control unit 220 runs software that makes processing unit 226 store a current reproduction position 602 in the storage unit 230 (EX1004, ¶44, Fig. 5)—thereby *controlling the memory to keep the information in response to a termination of viewing the viewed part*. §IV(B)(3) (limitation 1.b). EX1002, ¶88.

Control unit 220 also runs software that makes recording information processing unit 222 instruct reproduction processing unit 226 to reproduce the installment, whose reproduction was stopped, from the reproduction position stored in current reproduction position 602 (EX1004, ¶¶44-47, Fig. 5)—thereby *controlling the processor to automatically designate the succeeding part of the digital moving image contents when the viewing starts again*. §IV(B)(3) (limitation

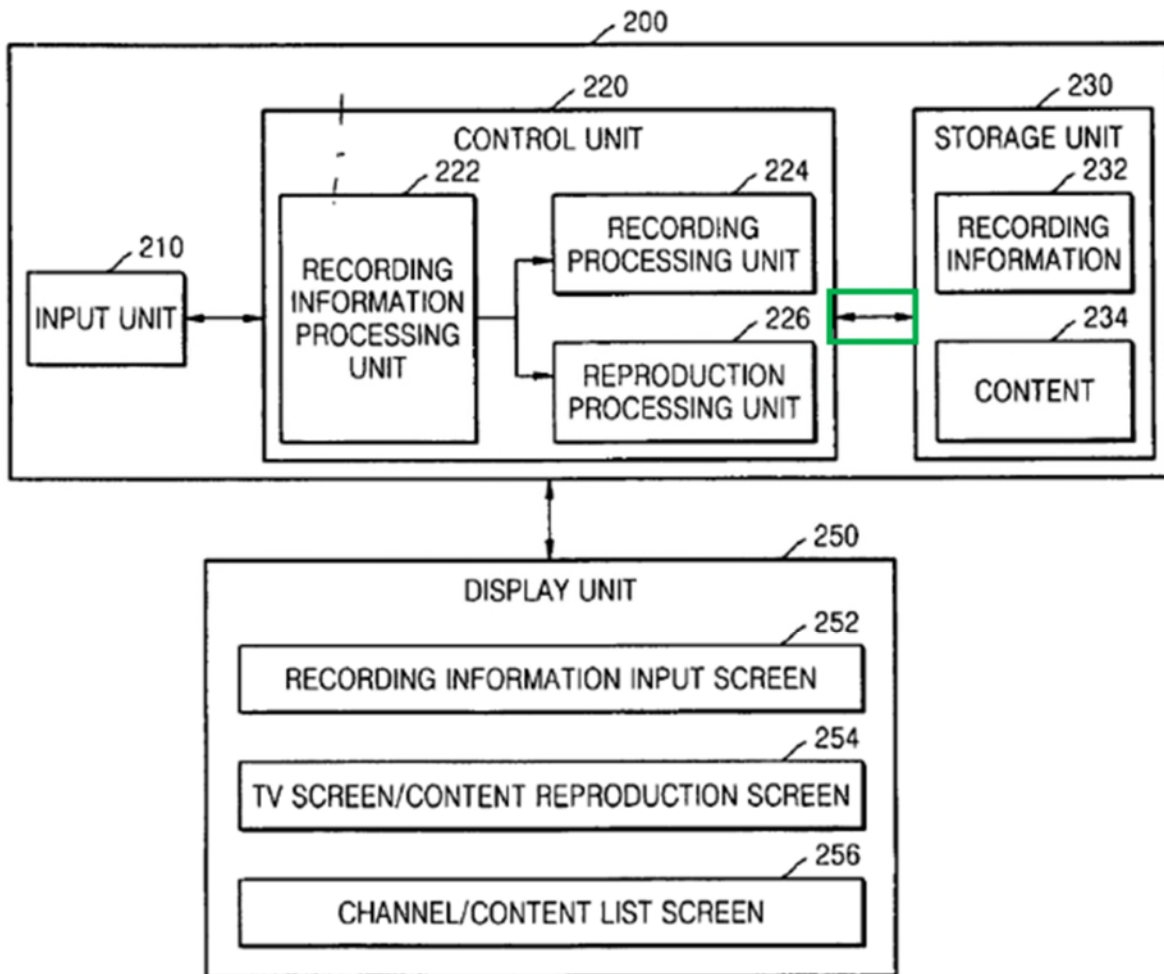
1.b). EX1002, ¶89.

To the extent that Patent Owner argues that a designation software controller is not expressly disclosed in Lee, a POSITA would have understood and found it obvious that Lee's control unit 220 possessed this functionality or it would be obvious to implement Lee's disclosed designation software controller functionality as instructions in its control processing units. Motivation to do so arises at least from a POSITA's understanding of implementing Lee's disclosed functionality in a straightforward and natural manner. EX1002, ¶90.

5. [1.d]

Lee discloses and renders this limitation obvious. §IV(B)(3) (limitation 1.b). A POSITA would have understood that reproduction processing unit 226 (*a receiver*) receives the designated succeeding part of the digital moving image contents in response to the designation by the processor. As shown in Figure 2, there is an arrow between storage unit 230 and control unit 220.

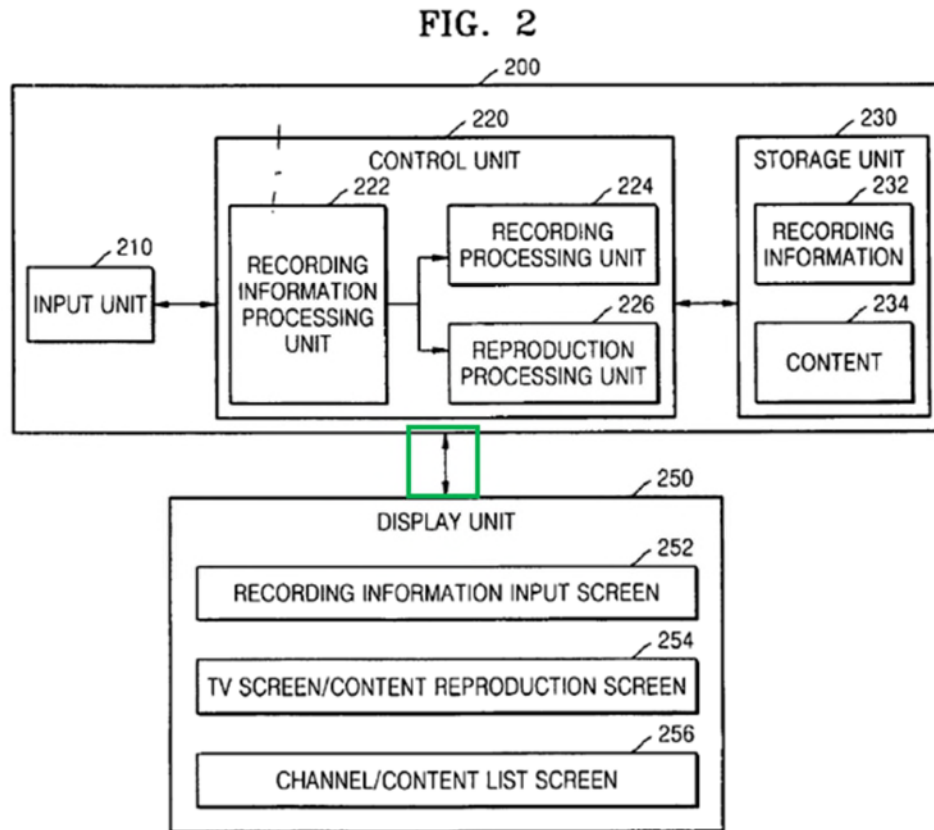
FIG. 2



EX1004, Fig. 2. A POSITA would have understood that this bidirectional arrow in Figure 2 discloses and renders obvious that the designated succeeding part of the digital moving image content is retrieved from storage unit 230 by reproduction processing unit 226. EX1004, ¶¶44-47. EX1002, ¶¶92-95.

Alternatively, a POSITA would have understood that display unit 250 (also *a receiver*) receives the designated succeeding part of the digital moving image contents in response to the designation by the processor. As shown in Figure 2,

there is a bi-directional arrow between apparatus 200 and display unit 250.

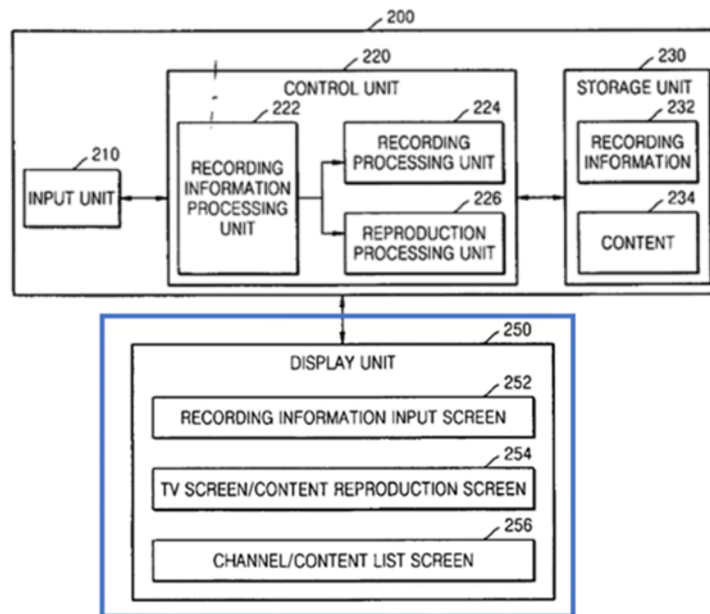


EX1004, Fig. 2. A POSITA would have understood that this bidirectional arrow in Figure 2 discloses and renders obvious that the designated succeeding part of the digital moving image content is transmitted from storage unit 230 and received by a receiver in display unit 250. Further, a POSITA would have found it obvious that display unit 250 would include both a receiver circuit such as an I/O circuit and a display screen. It was well-known to a POSITA that a display unit would be implemented with both a screen and a receiver circuit such as an I/O circuit.

EX1008, Fig. 4 (item 210 “Second Transmitting/Receiving Unit;” item 230 “Display Unit”), ¶50, ¶63, ¶67, ¶84; EX1009, Fig. 15 (item 54 (“LCD Panel”), item 46 (“Video Switch”)), 8:19-21, 14:43-15:21. EX1002, ¶94-95.

6. [1.e]

Lee discloses a *display* (display unit 250) *configured to display the succeeding part of the digital moving image contents received by the receiver.* EX1004, ¶¶33-34, ¶¶43-44, Figs. 2, 5; §IV(B)(3) (limitation 1.b); §IV(B)(5) (limitation 1.d). Apparatus 200 of Lee is connected to display unit 250 (shown in blue). EX1004, ¶¶33-34.



EX1004, Fig. 2. When a viewer selects a broadcast program series that has been previously viewed, the system is configured such that display unit 250 displays the

succeeding part of the digital moving image contents received by the receiver.

EX1004, ¶¶44-47, Figs. 5-6; §IV(B)(5) (limitation 1.d). A POSITA would have found it obvious that display unit 250 would include both a receiver circuit such as an I/O circuit and a display screen. §IV(B)(5) (limitation 1.d). EX1002, ¶¶96-98.

C. Claim 2

Lee discloses and renders obvious this claim. §IV(B) (claim 1). EX1002, ¶¶99-103.

Lee discloses that *the processor is configured to designate the part of the digital moving image contents* (control unit 220 designating an installment) *by selecting the provider* (a broadcaster of the broadcasting program series), *wherein the part of the digital moving image contents is provided by the selected provider* (the designated installment is provided by the broadcaster). EX1004, ¶¶33-34, ¶37; §IV(B)(1) (limitation 1.pre). EX1002, ¶101.

As described above, the control unit designates a part of the digital moving image contents provided by the broadcaster. §IV(B)(2) (limitation 1.a). The control unit 220 allows a user to select a particular channel (i.e., broadcaster) to record for a particular installment of a show on an EPG. EX1004, ¶¶33-34, ¶36 (“recording information input screen 252 may display electronic program guide (EPG) information so that the user can select a broadcasting program desired for recording”). A POSITA would have understood Lee’s disclosure of a user being

able to select a digital moving image contents on a particular channel as the user selecting the provider. Additionally, a POSITA would have understood Lee to disclose allowing a user to record the broadcast program on the selected channel (*i.e.*, broadcaster) for recording instantly or at a later time. EX1002, ¶102.

D. Claim 4

Lee discloses and renders obvious this claim. §IV(B) (claim 1). EX1002, ¶104-109.

Lee discloses that *the processor is configured to designate an optional part of the digital moving image contents* (control unit 220 designating a broadcasting program from a position corresponding to a time the user selected the broadcasting program) *in response to the manual operation* (manual selection from the user to record a program using input unit). EX1004, ¶¶33-34, ¶50; §IV(B)(2) (limitation 1.a); §III(D)(4) (construction of “designate an optional part”). EX1002, ¶106.

The control unit is a processor that designates a part of the digital moving image contents. EX1004, ¶¶33-34; §IV(B)(2) (limitation 1.a); §III(D)(4) (construction of “designate an optional part”). Lee discloses that the processor designates an optional part, *e.g.*, designating succeeding installments of a series. §IV(B)(2) (limitation 1.a). As the user has not yet selected to watch the succeeding installments, Lee’s system has designated an optional part of the series that is not required to be designated. §IV(B)(2) (limitation 1.a). EX1002, ¶107.

Further, the designation of the optional part (designating succeeding installments of a series) is in response to the manual operation (*i.e.*, Lee’s input from a user selecting an episode). §IV(B)(2) (limitation 1.a). EX1002, ¶108.

E. Claim 5

Lee discloses and renders claim 5 obvious. §IV(B) (claim 1). EX1002, ¶110-116.

1. [5.pre]

Lee discloses and renders the preamble obvious. §IV(B)(1) (limitation 1.pre). The “receiving method” corresponds to the functional limitations performed by the “receiving apparatus” of claim 1. EX1002, ¶111.

2. [5.a]

Lee discloses and renders this limitation obvious. §IV(B)(2) (limitation 1.a). This limitation is substantially similar to limitation 1.a, however, limitation 5.a recasts limitation 1.a as a method step performed by a computer processor. EX1002, ¶112.

3. [5.b]

Lee discloses and renders this limitation obvious. §IV(B)(3) (limitation 1.b). This limitation is substantially similar to limitation 1.b, however, limitation 5.b is broader as it does not require “a memory” to perform the functionality recited in the step. EX1002, ¶113.

4. [5.c]

Lee discloses and renders this limitation obvious. §IV(B)(4) (limitation 1.c). This limitation is substantially similar to limitation 1.c, however, limitation 5.c is broader as it does not require “a designation software controller configured to control the memory” to perform the functionality recited in the step. EX1002, ¶114.

5. [5.d]

Lee discloses and renders this limitation obvious. §IV(B)(5) (limitation 1.d). This limitation is substantially similar to limitation 1.d, however, limitation 5.d is broader as it does not require “a receiver” to perform the functionality recited in the step. EX1002, ¶115.

6. [5.e]

Lee discloses and renders this limitation obvious. §IV(B)(6) (limitation 1.e). This limitation is substantially similar to limitation 1.e, however, limitation 5.e is broader as it does not require “a display” to perform the functionality recited in the step. EX1002, ¶116.

F. Claim 6

Lee discloses and renders this claim obvious. §IV(C), (E) (claims 2, 5). Claim 6 (dependent on claim 5) is substantially similar to claim 2 (dependent on claim 1), however, claim 6 is broader as it does not require “a processor configured to” perform the functionality recited in the step. EX1002, ¶117.

G. Claim 8

Lee discloses and renders this claim obvious. §IV(D)-(E) (claims 4-5).

Claim 8 (dependent on claim 5) is substantially similar to claim 4 (dependent on claim 1), however, claim 8 is broader as it does not require “a processor configured to” perform the functionality recited in the step. EX1002, ¶118.

H. Claim 9

Lee discloses and renders claim 9 obvious. §IV(B) (claim 1). EX1002, ¶119-125.

1. [9.pre]

Lee discloses and renders the preamble obvious. §IV(B)(1) (limitation 1.pre). The “receiving system” corresponds to the “receiving apparatus” of claim 1. EX1002, ¶120.

2. [9.a]

Lee discloses and renders this limitation obvious. §IV(B)(2) (limitation 1.a). EX1002, ¶121.

3. [9.b]

Lee discloses and renders this limitation obvious. §IV(B)(3) (limitation 1.b). EX1002, ¶122.

4. [9.c]

Lee discloses and renders this limitation obvious. §IV(B)(4) (limitation 1.c). EX1002, ¶123.

5. [9.d]

Lee discloses and renders this limitation obvious. §IV(B)(5) (limitation 1.d).
EX1002, ¶124.

6. [9.e]

Lee discloses and renders this limitation obvious. §IV(B)(4) (limitation 1.e).
EX1002, ¶125.

I. Claim 10

Lee discloses and renders claim 10 obvious. §IV(C), (H) (claims 2, 9).
EX1002, ¶126.

J. Claim 12

Lee discloses and renders claim 12 obvious. §IV(D), (H) (claims 4, 9).
EX1002, ¶127.

* * *

If Patent Owner argues the portions of Lee cited above relate to different, incompatible embodiments (which they do not), it would have been obvious to a POSITA to combine such embodiments into a single system for providing the ability to receive digital moving image contents from a provider at least because such embodiments are described in the same prior art reference, are fully compatible with each other, and could be combined with minimal effort to achieve predictable results. EX1002, ¶128.

If the Board finds that Lee does not disclose any limitation of the challenged

claims, such limitation would have nonetheless been obvious to a POSITA in light of Lee and a POSITA's knowledge. Practicing any limitation of the challenged claims in light of Lee would have been within the knowledge and skill of a POSITA, would have required minimal effort, would have yielded predictable results, would have been fully compatible with the Lee system, and would have been a mere design choice. Motivation to do so arises from at least common sense and the disclosures of Lee set forth above. EX1002, ¶129.

V. GROUND 2: CLAIMS 3, 7, AND 11 ARE OBVIOUS IN VIEW OF LEE AND HUNT

A. Overview of Prior Art References

1. Lee

§IV(A). EX1002, ¶130.

2. Hunt

a. Overview

Hunt was filed September 5, 2008, and issued as U.S. Patent No. 8,365,235. EX1005, cover page. Hunt is prior art under 35 U.S.C. §102(e). EX1005, (60). EX1002, ¶131.

Hunt is a Netflix application generally directed to a system for playing streaming media. EX1005, 5:40-31 (“FIG. 1 illustrates a media delivery system, media selection service, viewing location, and ordering location”), Fig. 1. Hunt's computing environment includes a media delivery system 102, media selection

service 108, and viewing location 130 communicating via data network 120.

EX1005, 5:40-8:55, Fig. 1. Media delivery system 202 is configured to manage and/or store streaming media to be provided to end users at viewing location 130.

EX1005, 5:47-49 (“media delivery system 102 comprises a media library 104 that comprises audiovisual programs 107A”), 5:62-63 (“[m]edia delivery system 102 further comprises streaming media logic”), 5:62-67 (“streaming media logic 106 ... is configured to retrieve a selected or specified streaming media file from media library 104 and deliver the streaming media file using a streaming media protocol to the viewing location 130”). When the user watches a program provided by media delivery system 102, the user’s progress of watching that program is stored at the media delivery system 102 so that, when revisited, the user can resume watching the program from where the user last left off, such as the next episode in a television series. EX1005, 18:55-64. EX1002, ¶132.

Hunt is analogous art to the ’968 patent and was not considered during prosecution. EX1002, ¶133-134.

b. Hunt is Entitled to the Filing Date of Its Provisional.

Hunt expressly claims the priority to provisional application 61/014,745 filed December 18, 2007 (the “Provisional”). EX1017, cover page. Because the Provisional provides written support for at least one claim of Hunt, as shown below, and because the portions of Hunt the Petitioner rely upon are also present in

the Provisional, as evidenced by the parallel cites to the Provisional, Hunt is effective as prior art as of the filing date of the Provisional. *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1379-1381 (Fed. Cir. 2015).

Hunt Claim 1 (EX1005)	Provisional Support EX1017
1. A data processing system to simulate video output of a requested trick play mode, the data processing system comprising:	¶11, ¶34, ¶57, ¶74, Figs. 1, 13 (“media delivery system”).
a network interface configured to couple to a data network;	¶46 (“streaming media processor 140 is a computer configured as a set-top box and comprising . . . a network interface configured to couple to the data network 120”), Figs. 1, 13.
one or more processors coupled to the network interface;	¶46 (“streaming media processor 140 is a computer configured as a set-top box and comprising a processor”), Figs. 1, 13.
memory coupled to the one or more processors;	¶46 (“streaming media processor 140 is a computer configured as a set-top box and comprising ... volatile memory such as RAM ... and logic stored in non-volatile memory (such as flash memory)”), Figs. 1, 13.
a video interface coupled to the one or more processors and configured to output video data to a video display device; and	¶46 (“streaming media processor 140 is a computer configured as a set-top box and comprising ... a video interface configured to generate video output for display 142”), Figs. 1, 13.
one or more computer-readable media that include instructions that, when executed by the one or more processors, cause:	¶46 (“streaming media processor 140 is a computer configured as a set-top box and comprising ... logic stored in non-volatile memory (such as flash memory)”), Figs. 1, 13.
receiving and storing in the memory a plurality of different still images from an audiovisual program, wherein each	Abstract, Claims 1, 10, ¶¶37 (“[m]edia delivery system 102 ... comprises still frame logic 109 ... configured to

Hunt Claim 1 (EX1005)	Provisional Support EX1017
of the still images is associated with a distinct time point within the audiovisual program;	retrieve an audiovisual program 107A and to generate and store a plurality of still images 107B”), 39 (“the still images may be taken at chapter break points within the program 107A” and/or “the still images may be sampled from the program 107A at ten-second intervals, or any other time points within the program” or “regular time points are used”), 56 (“[s]till frame logic 109 provides the still images 107B via network 120 to the processor 140, which extracts the still images from an archive file if necessary and stores the still images in memory”), 56 (“processor 140 requests the still images 107B that correspond to the selected audiovisual program 107A” and “[s]till frame logic 109 provides the still images 107B via network 120”), ¶¶38-39, 62-64.
receiving, during normal playback of the audiovisual program, a first user input requesting invocation of a trick play mode of playing the audiovisual program, wherein normal playback of the audiovisual program comprises generating video output based on the audiovisual program, wherein the requested trick play mode comprises one of fast-forward playback and reverse playback of the audiovisual program; and	¶73 (“streaming media processor 140 displays screen display 402 in response to user input from user device 144 requesting trick play function”), 79 (“[w]hen a rewind trick play mode is selected, the still images in screen display 402 move as indicated”), 76 (“repeated selection of a fast forward button or rewind button on device 144 causes the system to toggle through successively higher movement speeds for the current trick play mode (fast forward or rewind) until the highest movement speed is reached”), 76 (“assume that a user is viewing a movie using the processor 140 and a streaming video protocol and the presses a ‘fast forward’ button on

Hunt Claim 1 (EX1005)	Provisional Support EX1017
	device 144, which generates and sends a fast forward command to processor 140” which, “[i]n response to the fast forward command, processor 140 changes the display 142 to show screen display 402”), ¶79, Figs. 2-10.
responsive to the first user input, generating, based on the still images, a video output sequence that simulates video output of the requested trick play mode.	¶11 (“[t]rick play modes for streaming media programs are facilitated using techniques in a data processor that enable simulated fast forward and rewind motion through a streaming media file”), 74 (“[t]he process ... does not involve displaying the audiovisual program 407A using a streaming media protocol, but rather involves successively displaying the separately received still images in successively different positions on the screen, and concurrently moving the images to their new positions, the provide an illusion of rapidly moving through the streaming data of the audiovisual program 407A”), Figs. 2-10.

EX1002, ¶135-137.

c. Hunt Incorporated the Provisional for All Purposes.

Hunt expressly incorporated by reference the entirety of the Provisional. EX1004 1:8-10. Thus, the disclosure of the Provisional forms part of Hunt for all purposes as if explicitly contained therein. *Ultradent Prods., Inc. v. Life-Like Cosmetics, Inc.*, 127 F.3d 1065, 1069 (Fed. Cir. 1997) (rejecting argument that anticipatory reference “sa[id] nothing” about pertinent portions of an incorporated reference because “the entire contents” were incorporated); *Apple Inc. v. Koss*

Corp., IPR2021-00255, Paper 54 (Final Written Decision) at 25-30 (PTAB May 31, 2022) (holding claims obvious over host reference, relying on material from two provisional applications incorporated in their entirety).

B. Motivation to Combine Hunt with Lee

A POSITA would have been motivated to modify the teachings of Lee (§IV(A)) based on the teachings of Hunt (§V(A)(2)) because Lee teaches the receiving, recording, and reproduction of audiovisual TV broadcast episodes and series programming to end user devices, and Hunt provides an example protocol for delivering audiovisual programming to end user devices in the form of streaming audiovisual media. EX1002, ¶140.

A POSITA would have been motivated by the teachings of Hunt to implement Hunt's streaming audiovisual protocols in Lee's system to function in a streaming environment. Such a combination involves a simple substitution of one known element (Hunt's streaming audio/video protocols) for another (broadcast video protocol) to obtain predictable results (providing users with more content). Accordingly, a POSITA would have had a reasonable expectation of success in making the proposed combination given the teachings of Lee and Hunt. Such a combination would have required minimal modifications to Lee to implement Hunt's streaming audio/video protocols, and thus would have been well within the skillset of a POSITA. The proposed combination would not have required undue

experimentation and would have yielded a predictable result. EX1002, ¶141.

If Patent Owner argues the portions of Lee or Hunt cited below relate to different, incompatible embodiments (which they do not), it would have been obvious to a POSITA to combine such embodiments into a single system for providing the ability to receive digital moving image contents from a provider at least because such embodiments are described in the same prior art reference, are fully compatible with each other, and could be combined with minimal effort to achieve predictable results. EX1002, ¶142.

C. Claim 3

Lee in view of Hunt discloses and renders obvious this claim. §IV(B) (claim 1). EX1002, ¶143-148.

The combination of Lee and Hunt discloses that *the processor is configured to designate a part of the digital moving image contents provided by the provider* (control unit 220 designating an installment) *by streaming technology* (Hunt's video streaming technology) *in accordance with a program schedule table* (an electronic program guide). EX1004, ¶¶33-34, ¶36; §IV(B)(1)-(2) (limitations 1.pre-1a); §V(B) (motivation to combine Lee and Hunt). EX1002, ¶145.

A POSITA would have understood and found it obvious that the combined Lee-Hunt system is capable of receiving digital video content through streaming technology. The control unit of Lee designates a part of the digital moving image

contents. EX1004, ¶¶33-34; §IV(B)(2) (limitation 1.a). Hunt discloses that it was well known to use streaming technology to provide digital video contents to end users. EX1005, 1:63-66 and EX1017, ¶3 (“streaming media delivery techniques are now widely used for the delivery of short video clips, music, and audio files”); EX1005, 5:47-49 and EX1017, ¶35 (“media delivery system 102 comprises a media library 104 that comprises audiovisual programs 107A”); EX1005, 5:54-57 and EX1017, ¶35 (“[t]he term ‘audiovisual program’ as used herein refers broadly to any audio, video, or audiovisual information that can be delivered using a streaming media protocol over a data network”); EX1005, 5:57-61 and EX1017, ¶35 (“[e]xamples of audiovisual programs include music, recordings of spoken words, movies, sports programs, television series episodes, documentary motion pictures, instructional programs or any other form of program”). Thus, it would have been obvious to a POSITA to implement Lee using the digital media delivery protocols of Hunt such that the designated digital moving image contents would stream to the end user over a communication network. §V(B) (motivation to combine). EX1002, ¶146.

Further, Lee discloses that the control unit further designates a part of the digital moving image contents in accordance with an electronic program guide (EPG). EX1004, ¶6, ¶36. A user can “select a broadcasting program desired for recording” from an input screen that displays an “electronic program guide (EPG)

information so that the user can select a broadcasting program desired for recording.” EX1004, ¶36. Accordingly, the combination of Lee and Hunt discloses that the program selected for recording in the EPG can be provided to the receiving apparatus through streaming technology. EX1002, ¶147.

D. Claim 7

Lee in view of Hunt discloses and renders this claim obvious. §V(C) (claim 3); §IV(E) (claim 5). EX1002, ¶149.

E. Claim 11

Lee in view of Hunt discloses and renders this claim obvious. §V(C) (claim 3); §IV(H) (claim 9). EX1002, ¶150.

VI. GROUND 3: CLAIMS 1-2, 4-6, 8-10, AND 12 ARE OBVIOUS IN VIEW OF HUNT

A. Hunt

§V(A)(2). EX1002, ¶151-153.

B. Claim 1

Hunt discloses and renders claim 1 obvious. EX1002, ¶154-183.

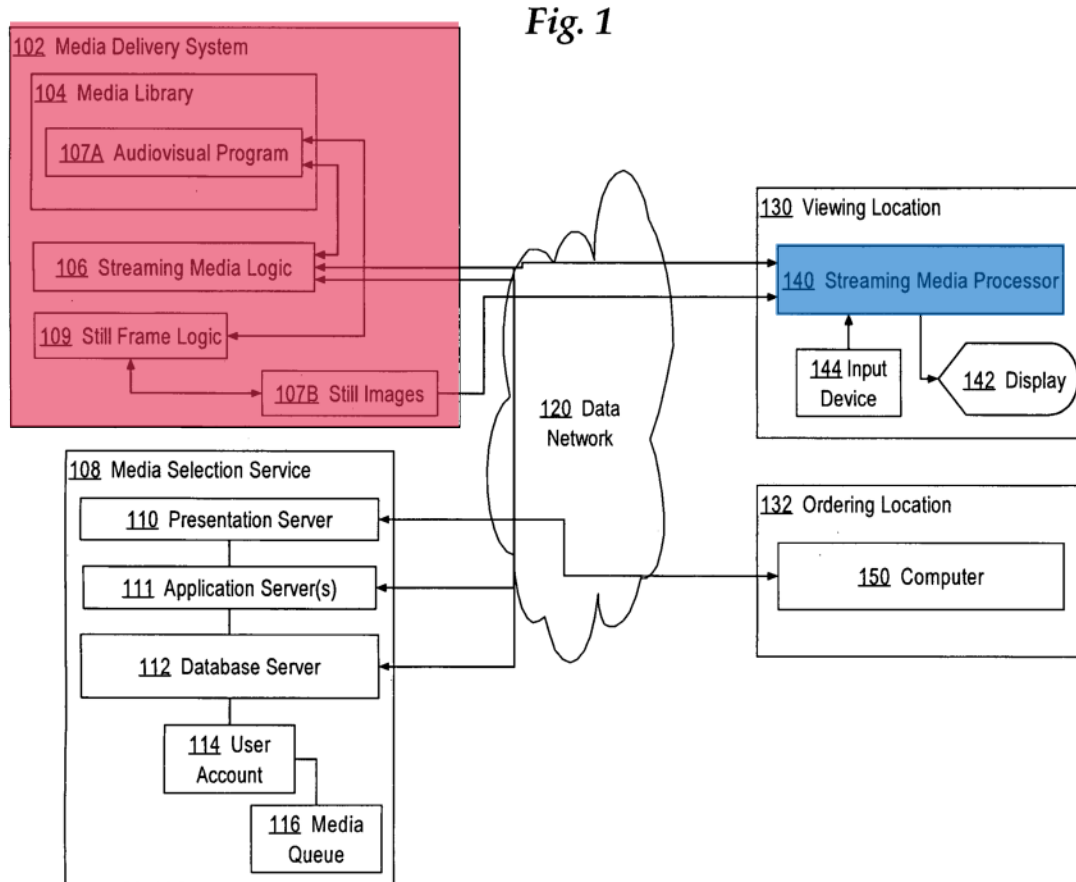
1. [1.pre]

Hunt discloses and renders obvious *a receiving apparatus* (streaming media processor 140) *configured to receive digital moving image contents* (a series) *from a provider of the digital moving image contents* (media delivery system 102), *the provider being commutatively connected to the receiving apparatus*. EX1005,

5:42-44, 5:47-52, 5:54-61, 6:1-4, 7:44-52, 7:58-64, 8:1-4, 8:36-43, Fig. 1; EX1017, ¶¶35-36, ¶46, ¶47, ¶49, Fig. 1. EX1002, ¶155-161.

Hunt discloses a media delivery system 102 (shown below in red) that delivers audiovisual programs to streaming media processor 140 (shown below in blue). EX1005, 5:47-52 and EX1017, ¶35 (“media delivery system 102 comprises a media library 104 that comprises audiovisual programs 107A ... that can be delivered on demand over a network connection to a computer such as streaming media processor 140”), EX1005, 7:44-52 and EX1017, ¶46 (“streaming media processor 140 is a computer configured as a set-top box and comprising a processor, volatile memory such as RAM, a network interface configured to couple to the data network 120, a video interface configured to generate video output for display 142, an input interface configured to receive data input and commands from input device 144, and logic stored in non-volatile memory (such as flash

memory) configured to perform the functions that are described further herein”).



EX1005, Fig. 1; EX1017, Fig. 1. EX1002, ¶157.

Hunt’s “series” of audiovisual programs are digital moving image contents. EX1005, 5:54-57 and EX1017, ¶35 (“[t]he term ‘audiovisual program’ as used herein refers broadly to any audio, video, or audiovisual information that can be delivered using a streaming media protocol over a data network”), EX1005, 5:57-61 and EX1017, ¶35 (“[e]xamples of audiovisual programs include music, recordings of spoken words, movies, sports programs, television series episodes, documentary motion pictures, instructional programs, or any other form of program”), EX1005, 7:58-62 and EX1017, ¶47 (“streaming media processor 140 is

configured to enable a user to stream movies or other video programs directly from networked servers on the Internet to a television or video monitor”), EX1005, 7:63-64 and EX1017, ¶47 (“the volatile memory of media processor 140 is capable of storing about one to five minutes of buffered video data”), EX1005, 7:65-67 and EX1017, ¶47 (“buffered video data represents full-screen motion picture or video images according to NTSC ... standards for conventional video, HD video, or other [standards]”). EX1002, ¶158.

Hunt discloses that streaming media processor 140 is commutatively connected to the media delivery system 102. §III(D)(1) (construction of “commutatively”); EX1005, 5:41-46, Fig. 1 and EX1017, ¶34 (“a media delivery system 102, media selection service 108, streaming media processor 140, and computer 150 are coupled to a data network 120. The data network 120 comprises any of a local area network, wide area network, or one or more internetworks such as the public internet.”), EX1005, 6:1-4 and EX1017, ¶36 (“streaming media logic is configured to deliver the audiovisual program 107A using HTTP progressive downloading through network 120 to streaming media processor 140”), EX1005, 8:36-39 and EX1017, ¶49 (“the logic in the processor 140 can establish a network connection to media delivery system 102 and can issue commands to the media delivery system to obtain data relating to a user account 114”). EX1002, ¶159.

Hunt also discloses and renders obvious the provider being *commutatively*

coupled with the receiving apparatus that allows for packet-based communication with reordering of received packets. §III(D)(1) (construction of “commutatively”). A POSITA would have understood that Hunt’s disclosure of streaming would have obviously used routers with packet-based communication with reordering of received packets. EX1018, 4:35-46 (“source 12 and router 18 can support various protocols”), 8:61-65 (“The packet header 72 can also include a packet sequence identifier 82 that identifies the sequence of a particular packet so the packets can be ordered appropriately in sequence for processing and presenting the program at the set top box”). EX1002, ¶160.

2. [1.a]

Hunt renders obvious *a processor* (streaming media processor 140) *executing instructions to designate a part* (an episode of a show) *of the digital moving image contents* (a series) *in the provider automatically or in response to a manual operation*. EX1005, 6:64-66, 7:11-13, 7:19-22, 7:58-62, 8:19-26, 9:31-35, 9:43-48, 16:16-22, 17:44-47, 17:49-55, Fig. 1; EX1017, ¶¶42-43, 47, 48, 55-56, 90, 97, Fig. 1. EX1002, ¶162-166.

Streaming media processor 140 includes a processor that executes instructions to allow a user to select a television show or an episode of a television show in the provider. §III(D)(2) (construction of “designates ... in the provider”); EX1005, 7:58-62 and EX1017, ¶47 (“streaming media processor 140 is configured

to enable to a user to stream movies or other video programs directly from networked servers on the Internet to a television or video monitor”); EX1005, 6:64-66 and EX1017, ¶42 (“media selection service 108 may be integrated into ... the media delivery system 102 as a single system”); EX1005, 7:11-13 and EX1017, ¶43 (“database server 112 [of media selection service 108] is configured with an inventory of audiovisual programs that are available for delivery using the media delivery system 102”); EX1005, 7:19-22 and EX1017, ¶43 (“presentation server 110 [of media selection service 108] is configured with programs for ... receiving user input selecting audiovisual programs for rental or viewing”); EX1005, 9:31-35 and EX1017, ¶55 (“the viewing location 130 receives a program selection and generates a request for the selected program”), EX1005, 19:58-60 and EX1017, ¶110 (“Fig. 13 is a block diagram that illustrates a computer system 1300 upon which an embodiment of the invention may be implemented”), EX1005, 19:60-63 and EX1017, ¶110 (“system 1300 includes ... a processor 1304 ... for processing information”), EX1005 and EX1017, Fig. 13 (“processor 1304”). EX1002, ¶164.

The selection of a show or program may be in response to a manual input provided by the user with respect to viewing options on display 142. EX1005, 8:15-17 and EX1017, ¶48 (“input device 144 is a remote control device that uses infrared light-emitting diode emissions to communicate with processor 140”);

EX1005, 8:19-21 and EX1017, ¶48 (“input device comprises a forward button, a back button, and a selection button”); EX1005, 16:16-22 and EX1017, ¶90 (“the streaming media processor 140 generates screen display 502 for video output ... in response to a user making a selection from a user interface in which the user requests to view movies or other audiovisual programs that are available for instant viewing”); EX1005, 17:44-47 and EX1017, ¶97 (“screen 802 comprises a poster image 520A of the selected movie ... and functional options such as a Play option 808”); EX1005, 17:49-55 and EX1017, ¶97 (“[w]hen Play option 808 is selected, streaming media processor 140 initiates streaming media play of the selected movie by requesting and downloading a streaming media file for the movie in cooperation with streaming media logic 106 or other elements of media delivery system 102 or media selection service 108”); EX1005, 9:43-48 and EX1017, ¶56 (“processor 140 requests the selected audiovisual program 107A and initiates stream delivery of audiovisual program 107A as indicated in step 316”). EX1002, ¶165.

3. [1.b]

Hunt discloses and renders obvious *a memory (RAM) that keeps information (bookmark) necessary for the processor to automatically designate a succeeding part of the digital moving image contents to a viewed part of the digital moving image contents*. EX1005, 7:44-52, 15:52-55, 18:52-63, Figs. 1, 13 EX1017, ¶¶46,

85, 102, Figs. 1, 13. EX1002, ¶167-170.

The streaming media processor 140 includes a memory. EX1005, 7:44-52 and EX1017, ¶46 (“streaming media processor 140 is a computer configured as a set-top box and comprising a processor, volatile memory such as RAM ... and logic stored in non-volatile memory (such as flash memory) configured to perform the functions that are described further herein”); EX1005, 19:58-60 and EX1017, ¶110 (“Fig. 13 is a block diagram that illustrates a computer system 1300 upon which an embodiment of the invention may be implemented”), EX1005, 19:63-67 and EX1017, ¶110 (“system 1300 ... includes a main memory 1306, such as a random access memory (RAM) or other dynamic storage device ... for storing information and instructions to be executed by the processor 1304”), EX1005, 19:67-20:3 and EX1017, ¶110 (“[m]ain memory 1306 ... may be used for storing temporary variables or other intermediate information during execution of instructions to be executed by processor 1304”), EX1005, 20:3-8 and EX1017, ¶110 (“system 1300 further includes a read only memory ... for storing static information and instructions for processor 1304” and “storage device 1310, such as a magnetic disc or optical device, is provided ... for storing information and instructions.”), EX1005 and EX1017, Fig. 13 (“main memory 1306,” “ROM 1308,” “storage device 1310”). The memory associated with streaming media processor 140 stores information that is used to automatically select a next portion of the movie or

television program (i.e., a succeeding part of the digital moving image contents) following the viewed portion of the movie or television program (i.e., a viewed part of the digital moving image contents) that the user is watching. EX1005, 18:52-63 and EX1017, ¶102 (“database server 112 or other elements of media delivery system 102 or media selection system 108 may store a series bookmark for the user that indicates which episode was last watched by the user among all episodes of a season of a series” and “database server 112 also may store bookmarks indicating the point at which a user stopped watching a particular episode, movie, or other audiovisual program 107A, so that later uses of processor 140 can resume playback of a program at the correct point”). The bookmark is information necessary for the processor to automatically designate a succeeding part of the digital moving image contents to a viewed part of the digital moving image contents. EX1005, 18:52-63; EX1017, ¶102. A POSITA would have understood and found obvious that the processor uses the bookmark information to automatically designate a succeeding part of the digital moving image contents. EX1002, ¶169.

4. [1.c]

Hunt discloses and renders this limitation obvious. §VI(B)(3) (limitation 1.b). EX1002, ¶171-175.

A POSITA would have understood and found it obvious that streaming

media processor 140 executes designation software that instructs the system to control the memory to keep information in response to a termination of viewing the viewed part and control the processor to automatically designate the succeeding part of the digital moving image contents when the viewing starts again. EX1005, 19:60-63 and EX1017, ¶110, EX1005, 20:22-27 and EX1017, ¶112 (“[t]he invention is related to the use of computer system 1300 for implementing the techniques described herein ... those techniques are performed by computer system 1300 in response to processor 1304 executing one or more sequences of one or more instructions contained in memory 1306”); §III(D)(3) (construction of “designation software controller”). EX1002, ¶172.

Streaming media processor 140 executes instructions to perform various functions. EX1005, 7:45-52 and EX1017, ¶46 (“streaming media processor 140 is a computer ... comprising a processor, volatile memory such as RAM, ... and logic stored in non-volatile memory (such as flash memory) configured to perform the functions that are described further herein”). One of the functions performed by the software controlling streaming media processor 140 is to store a bookmark in memory, thereby controlling the memory to keep the information in response to a termination of viewing the viewed part. EX1005, 18:52-63 and EX1017, ¶102 (“database server 112 or other elements of media delivery system 102 or media selection system 108 may store a series bookmark for the user that indicates which

episode was last watched by the user among all episodes of a season of a series” and “database server 112 also may store bookmarks indicating the point at which a user stopped watching a particular episode, movie, or other audiovisual program 107A, so that later uses of processor 140 can resume playback of a program at the correct point”). EX1002, ¶173.

The controlling software on the streaming media processor 140 executes to begin the movie or television program using the bookmark information, thereby performing the function of automatically designating the succeeding part of the digital moving image contents when the viewing starts again. EX1005, 20:22-36 and Provisional EX1017, ¶112 (“hard-wired circuitry may be used in place of or in combination with software instructions to implement the invention. Thus, embodiments of the invention are not limited to any specific combination of hardware circuitry and software”). §VI(B)(3) (limitation 1.b). EX1002, ¶174.

5. [1.d]

Hunt discloses *a receiver (a network interface) of the designated succeeding part of the digital moving image contents in response to the designation by the processor*. EX1005, 5:63-67, 7:44-52, 7:58-64, 8:4-8, 18:52-63, 18:59-63, Figs. 1, 11-113; EX1017, ¶¶36, 46, 47, 102, Figs. 1, 11-13; §VI(B)(3) (limitation 1.b). EX1002, ¶176-179.

The streaming media processor 140 includes a network interface for

receiving audiovisual programs from media delivery system 102. EX1005, 7:44-47 and EX1017, ¶46 (“streaming media processor 140 is a computer ... comprising ... a network interface configured to couple to the data network 120”); EX1005, 19:58-60 and EX1017, ¶110 (“FIG. 13 is a block diagram that illustrates a computer system 1300 upon which an embodiment of the invention may be implemented”); EX1005, 21:12-26 and EX1017, ¶116 (“[c]omputer system 1300 also includes a communication interface 1318 ... [that] sends and receives electrical, electromagnetic or optical signals that carry digital data streams representing various types of information”); EX1005, Fig. 13 and EX1017, Fig. 13. When a user resumes viewing the audiovisual program from media delivery system 102, the user does so in accordance with the bookmark information, i.e., the user picks up where they last left off. EX1005, 18:55-63 and EX1017, ¶102 (“database server 112 or other elements of media delivery system 102 or media selection system 108 may store a series bookmark for the user that indicates which episode was last watched by the user among all episodes of a season of a series” and “database server 112 also may store bookmarks indicating the point at which a user stopped watching a particular episode, movie, or other audiovisual program 107A, so that later uses of processor 140 can resume playback of a program at the correct point”); EX1005, 18:52-55 and EX1017, ¶102 (“[t]he ‘Play episode 12’ option indicates that the media processor 140 knows that the user already viewed episodes

1 to 11 and has automatically selected episode 12 as the next episode to be viewed”); EX1005, 21:12-16 and EX1017, ¶116 (“system 1300 ... includes a communication interface 1318” that “provides a two-way data communication coupling to a network link 1320 that is connected to a local network 1322”); EX1005, 20:23-26 and EX1017, ¶116 (“communication interface 1318 sends and receives electrical, electromagnetic or optical signals that carry digital data streams representing various types of information”); EX1005, Fig. 13 (“communication interface 1328[sic]”); EX1017, Fig. 13 (“communication interface 1318”). Accordingly, the data received by the network interface from the media delivery system is that of the succeeding part of the audiovisual content following the viewed part of the audiovisual content. EX1005, 18:59-63 and EX1017, ¶102 (“[t]he database server 112 also may store bookmarks indicating the point at which a user stopped watching a particular episode, movie, or other audiovisual program 107A, so that later uses of processor 140 can resume playback of a program at the correct point”); EX1005, 5:63-67 and EX1017, ¶36 (“streaming media logic 106 generally is configured to retrieve a selected or specified streaming media file from the media library 104 and deliver the streaming media file using a streaming media protocol to the viewing location 130”); EX1005, 7:58-62 and EX1017, ¶47 (“[t]he streaming media processor 140 is configured to enable a user to stream movies or other video programs directly from networked servers on the Internet to a

television or video monitor”); EX1005, 7:63-64 and EX1017, ¶47 (“the volatile memory of media processor 140 is capable of storing about one to five minutes of buffered video data”); EX1005, 8:4-8 and EX1017, ¶47 (“when a movie or other long audiovisual program 107A is played the memory essentially stores a rolling window or circular buffer for a few minutes of the program but typically the entire program is not downloaded and stored because too much memory would be required”). EX1002, ¶178.

6. [1.e]

Hunt discloses *a display (display 142) configured to display the succeeding part of the digital moving image contents received by the receiver*. EX1005, 7:38-39, 7:44-52, 9:49-53, Figs. 1, 13; EX1017, ¶¶45-46, 56, Figs. 1, 13; §VI(B)(5) (limitation 1.d). EX1002, ¶180-183.

Hunt’s computer located at viewing location 130 that includes streaming media processor 140 includes a video interface coupled with a display for displaying the succeeding part of the audiovisual content. EX1005, 7:38-39 and EX1017, ¶45 (“[v]iewing location 130 comprises ... a display 142”); EX1005, 7:44-52 and EX1017, ¶46 (“streaming media processor 140 is a computer configured as a set-top box and comprising ... a video interface configured to generate video output for display 142”); EX1005, 9:49-53 and EX1017, ¶56 (“[s]treaming media logic 106 initiates a streaming data transfer of a data file

representing the audiovisual program 107A and sends the data to the processor 140, which converts the streaming data to video output and displays the video output on display 142”); EX1005, 20:9-11 and EX1017, ¶111 (“system 1300 may be coupled ... to a display 1312, such as a cathode ray tube ... for displaying information to a computer user”), EX1005 and EX1017, Fig. 1 (“display 142”), Fig. 13 (“display 1312”). EX1002, ¶182.

C. Claim 2

See §VI(B) (claim 1). Hunt further discloses *wherein the processor is configured to designate the part of the digital moving image contents (processor indicating a show or selection) by selecting the provider (automatically logging into a streaming service), wherein the part of the digital moving image contents is provided by the selected provider* (media delivery system 102 delivers the audiovisual contents). EX1005, 7:8-11,16:35-41; EX1017, ¶¶43, 91. EX1002, ¶184-190.

Hunt discloses *the processor selecting the provider*. As part of this process, in order to view audiovisual content provided by media delivery system 102, the processor must select the media delivery system 102, which is performed through the process of the processor logging the user into their account with media delivery system 102. EX1005, 7:8-11 and EX1017, ¶43 (“database server 112 [of media selection service 108] maintains a user account 114 for a user of the service ... [t]he

user account 114 ... associated with a user of ... the viewing location 130”);

EX1005, 16:35-41 and EX1017, ¶91 (“upon power-up and completing bootstrap operations, processor 140 connects to the streaming media logic 106 or other elements of media delivery system 102 or media selection service 108, presents user login information or processor identifying information or other credentials”).

EX1002, ¶187.

Hunt discloses *the processor is configured to designate the part of the digital moving image contents (§VI(B)(2) (limitation 1.a)) by selecting the provider*. A POSITA would have understood that Hunt’s disclosure of the processor selecting the provider enables the processor to designate the part of the digital moving image contents in the provider as explained in limitation 1.a.

EX1002, ¶188.

Hunt discloses that the provider *provides the part of the digital moving image contents*. Once logged into their account with media delivery system 102, only then can the user select audiovisual contents, which are provided by the selected provider. §VI(B)(2) (limitation 1.a). EX1002, ¶189.

D. Claim 4

See §VI(B) (claim 1). Hunt further discloses *the processor is configured to designate an optional part of the digital moving image contents in response to the manual operation*. §VI(B)(2) (limitation 1.a); §III(D)(4) (construction of

“designates an optional part”). When the processor executes instructions to allow a user to select audiovisual content, the processor also selects additional audiovisual content (e.g., additional episodes of the same show or similar audiovisual content to the selected audiovisual content) that is not required to be displayed as part of the designated episode. EX1005, 18:64-19:1 and EX1017, ¶103 (“[s]creen display 1102...comprises ‘Choose another episode’ option 1112” and “[w]hen selected...causes streaming media processor to generate the display of FIG. 12” that shows “screen display 1202 [that] comprises an ordered list 1204 of icons representing episodes in a program series”). For example, when a user selects an episode of the show “Scrubs,” the user is prompted with additional episodes (annotated red) and similar content (annotated blue) selected by the processor for display, which the user may optionally select.

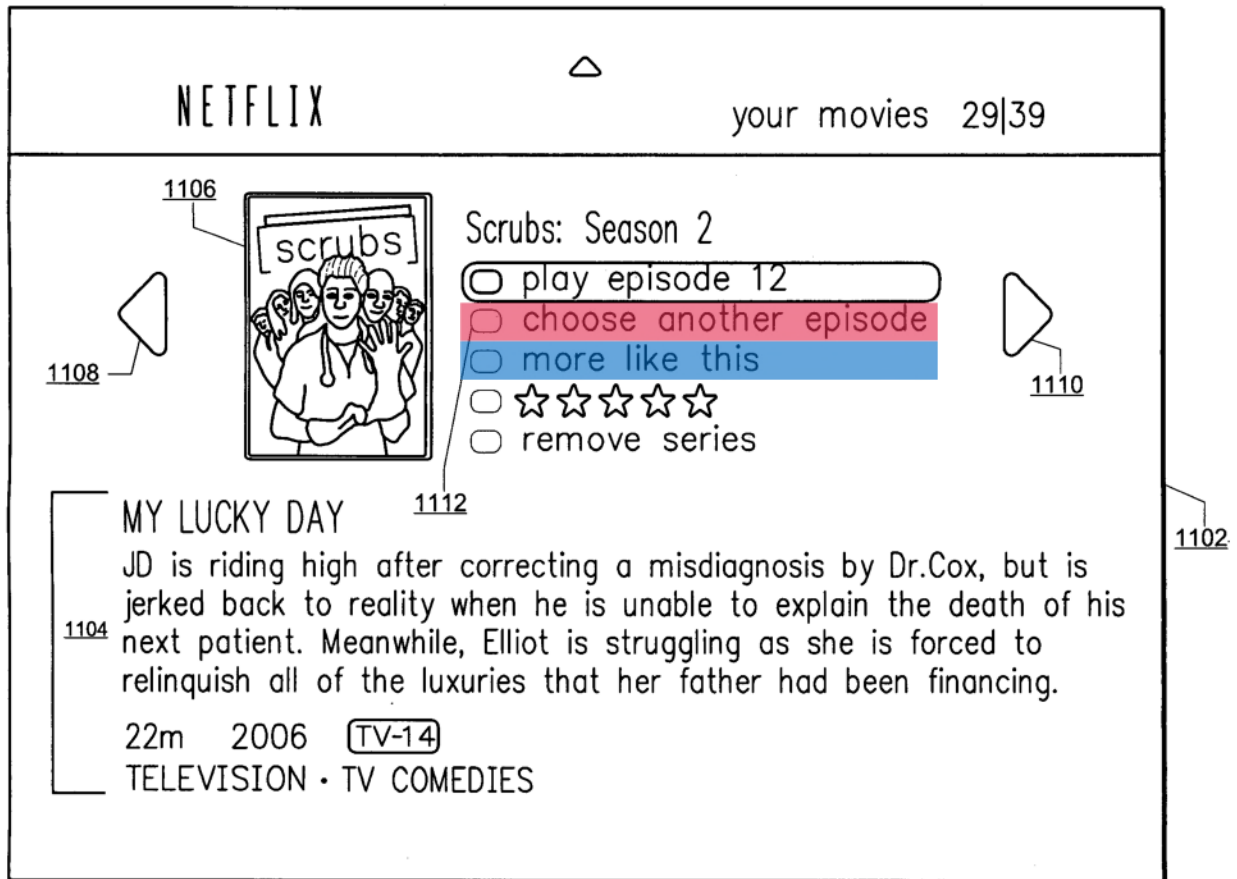


FIG. 11

EX1005, Fig. 11, 18:32-66; EX1017, Fig. 11, ¶¶99-103. If the user selects “choose another episode,” they are presented with an additional screen that shows all episodes of the current season with designations for episodes they watched (annotated green) and episodes they did not watch (annotated purple). The episodes that have not yet been watched are not required for selection by the user but have been selected by the processor based on the user’s selection of “Scrubs” Season 2.

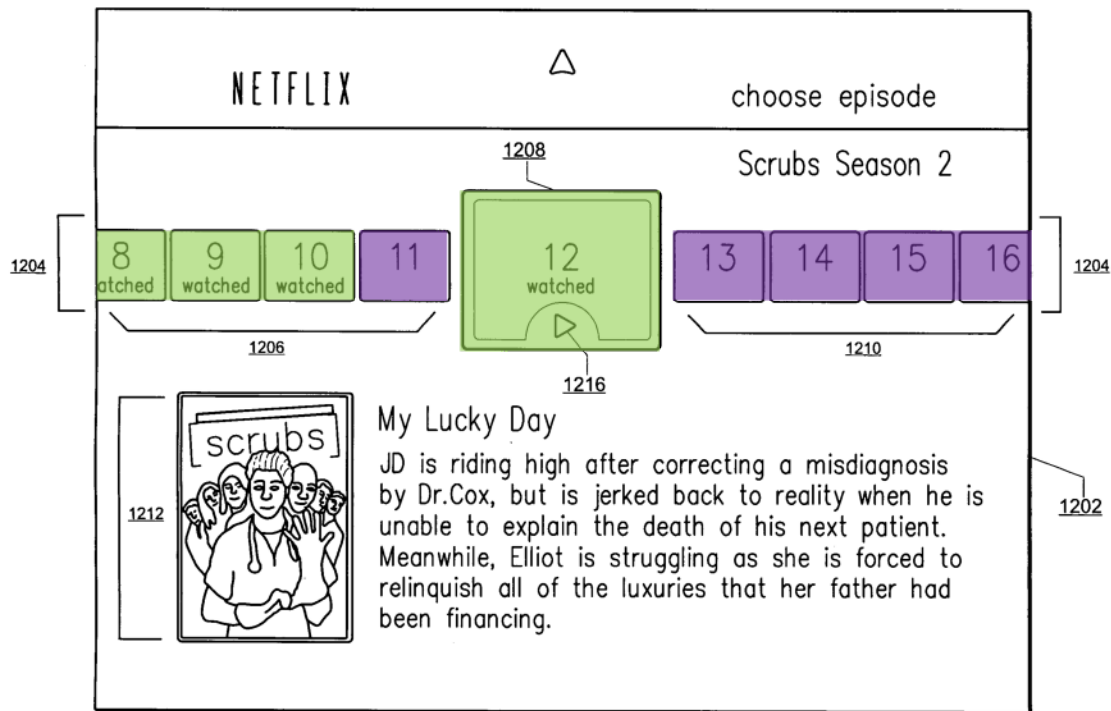


FIG. 12

EX1005, Fig. 12, 18:67-19:56; EX1017, Fig. 12, ¶¶103-108. Accordingly, the unwatched episodes are each an “optional part” selected by the processor in response to the user selecting an episode of the audiovisual content to watch. EX1002, ¶191-194.

E. Claim 5

Hunt discloses and renders claim 5 obvious. §VI(B) (claim 1). EX1002, ¶195-201.

1. [5.pre]

Hunt discloses and renders this limitation obvious. §VI(B)(1) (limitation 1.pre). The “receiving method” corresponds to the functional limitations performed

by the “receiving apparatus” of claim 1. EX1002, ¶196.

2. [5.a]

Hunt discloses and renders this limitation obvious. §VI(B)(2) (limitation 1.a). This limitation is substantially similar to limitation 1.a, however, limitation 5.a recasts limitation 1.a as a method step performed by a computer processor. EX1002, ¶197.

3. [5.b]

Hunt discloses and renders this limitation obvious. §VI(B)(3) (limitation 1.b). This limitation is substantially similar to limitation 1.b, however, limitation 5.b is broader as it does not require “a memory” to perform the functionality recited in the step. EX1002, ¶198.

4. [5.c]

Hunt discloses and renders this limitation obvious. §VI(B)(4) (limitation 1.c). This limitation is substantially similar to limitation 1.c, however, limitation 5.c is broader as it does not require “a designation software controller configured to control the memory” to perform the functionality recited in the step. EX1002, ¶199.

5. [5.d]

Hunt discloses and renders this limitation obvious. §VI(B)(5) (limitation 1.d). This limitation is substantially similar to limitation 1.d, however, limitation 5.d is broader as it does not require “a receiver” to perform the functionality recited

in the step. EX1002, ¶200.

6. [5.e]

Hunt discloses and renders this limitation obvious. §VI(B)(6) (limitation 1.e). This limitation is substantially similar to limitation 1.e, however, limitation 5.e is broader as it does not require “a display” configured to perform the functionality recited in the step. EX1002, ¶201.

F. Claim 6

Hunt discloses and renders claim 6 obvious. §VI(C), (E) (claims 2, 5). Claim 6 is substantially similar to claim 2, however, claim 6 is broader as it does not require “a processor configured to” perform the functionality recited in the step. EX1002, ¶202.

G. Claim 8

Hunt discloses and renders claim 8 obvious. Claim 8 is substantially similar to claim 4, however, claim 8 is broader as it does not require “a processor configured to” perform the functionality recited in the step. §§VI(D), (E) (claims 4, 5). EX1002, ¶203.

H. Claim 9

Hunt discloses and renders claim 9 obvious. §§VI(B), (E) (claims 1, 5). EX1002, ¶204-210.

1. [9.pre]

Hunt discloses and renders this limitation obvious. §§VI(B)(1), (E)(1)

(limitations 1.pre, 5.pre). The “receiving system” corresponds to the “receiving apparatus” of claim 1. EX1002, ¶205.

2. [9.a]

Hunt discloses and renders this limitation obvious. §§VI(B)(2), (E)(2) (limitations 1.a, 5.a). EX1002, ¶206.

3. [9.b]

Hunt discloses and renders this limitation obvious. §§VI(B)(3), (E)(3) (limitations 1.b, 5.b). EX1002, ¶207.

4. [9.c]

Hunt discloses and renders this limitation obvious. §§VI(B)(4), (E)(4) (limitations 1.c, 5.c). EX1002, ¶208.

5. [9.d]

Hunt discloses and renders this limitation obvious. §§VI(B)(5), (E)(5) (limitations 1.d, 5.d). EX1002, ¶209.

6. [9.e]

Hunt discloses and renders this limitation obvious. §§VI(B)(6), (E)(6) (limitations 1.e, 5.e). EX1002, ¶210.

I. Claim 10

Hunt discloses and renders claim 10 obvious. §§VI(C), (F), (H) (claims 2, 6, 9). EX1002, ¶211.

J. Claim 12

Hunt discloses and renders claim 12 obvious. §§VI(D), (G), (H) (claims 4,

8-9). EX1002, ¶212.

VII. GROUND 4: CLAIMS 2, 6, AND 10 ARE OBVIOUS IN VIEW OF HUNT AND DIETRICH

A. Overview of the Prior Art References

1. Hunt

§V(A)(2). EX1002, ¶213.

2. Dietrich

Dietrich was filed June 1, 2006, published December 6, 2007, and issued as U.S. Patent No. 7,929,551. EX1013, cover page. Dietrich is prior art under 35 U.S.C. §102(a), (e). EX1002, ¶214.

Dietrich is generally directed to a network interface device for transferring media across a network. EX1013, 1:9-12. Dietrich describes the current state of the art has resulted in movement toward digital media delivered over the Internet. EX1013, 1:13-24. To help organize the digital media and allow a user to select from a variety of digital media, Dietrich discloses a content directory, which acts as a file system directory and sub-directory, allowing the user to not only choose an item of digital media but also a provider of the digital media. EX1013, 2:4-6 (“the host device interface module generates a content directory based on digital media available over the network”), 2:7-11 (“host device interface module presents the content directory, as file system directories and sub-directories, to the host device in accordance with the file system protocol on the host device”), 8:6-15.

EX1002, ¶215.

Dietrich is analogous art to the '968 patent and was not considered during prosecution. EX1002, ¶216-217.

B. Motivation to Combine

A POSITA would have been motivated to modify the teachings of Hunt (§V(A)(2)) based on the teachings of Dietrich (§VII(A)(2)) because although Hunt teaches the delivery of digital streaming audiovisual programming to end users, Hunt is silent regarding a file structure of media deliver system 102, and Dietrich provides an example file structure in the form of its content directory and example user interface through which a user may select a provider of the digital streaming audiovisual programming from a plurality of possible providers in the content directory. A POSITA would have been motivated by the teachings of Dietrich to implement the system in Hunt to include Dietrich's content directory that allows users to select media content from any of multiple providers in a digital streaming environment. Such a combination involves combining prior art elements (Dietrich's content directory organization and example user interface with Hunt's streaming platform) according to known methods to yield predictable results (allowing a user to select audiovisual content from a plurality of possible providers). Accordingly, a POSITA would have had a reasonable expectation of success in making the proposed combination given the teachings of Hunt and

Dietrich. Such a combination would have required minimal modifications to Hunt to implement Dietrich's file structure and user interface, and thus would have been well within the skillset of a POSITA. The proposed combination would not have required undue experimentation and would have yielded the predictable result.

EX1002, ¶218-219.

C. Claim 2

Hunt in view of Dietrich discloses and renders obvious this claim. §VI(B)-(C) (claims 1-2). To the extent that Hunt does not explicitly disclose or suggest that the processor is configured to designate the part of the digital moving image contents *by selecting the provider*, Dietrich discloses this limitation. EX1004, ¶¶33-34, ¶37; §VI(B)(1) (limitation 1.pre). EX1002, ¶220-224.

Dietrich discloses a content directory 810 for a mass storage file system and a user interface menu for selecting content from the content directory 810. EX1013, 7:31-32 ("FIG. 8 is a block diagram illustrating an example content directory"), 7:44-45 ("the system wide content menu 815 comprises a user interface menu for selecting content"), 7:45 ("[t]he user interface menu is rendered on the media device"). The content directory 810 and user interface menu allow users to select audiovisual content from any of several providers. EX1013, 8:6-8 ("a number of directories, identifying content sources, are located beneath the root directory"), 8:9-12 ("directories for content sources include home network 830,

and several content providers (e.g., content provider₁ (840), content provider₂ (850), and content provider_n (860))”). A user selects (i.e., designates) the part of the content by selecting a provider and viewing content associated with the provider by navigating through the content directory using the user interface. EX1013, 8:34-41 (“the user selects the directory ‘home network’ [or content provider₁, content provider₂, or content provider_n] from directory information ... displayed in the media device ... then selects a file (i.e., media item) to open, and in response, the network bridge opens a connection with the computer, and the media item is streamed or copied to the media device”). EX1002, ¶223.

A POSITA would be motivated by the teachings of Deitrich to modify Hunt’s system to store content in accordance with the exemplary file directory structure in Dietrich and present the file directory structure to users (with a provider account) for selection of parts of audiovisual content. §VII(B) (motivation to combine). Accordingly, Hunt in view of Deitrich yields a system in which a user selects part of audiovisual content by selecting the provider corresponding to that audiovisual content (i.e., navigating to the provider folder and then selecting audiovisual content from the provider folder). EX1002, ¶224.

D. Claim 6

Hunt in view of Dietrich discloses and renders claim 6 obvious. §VI(E) (claim 5); §VII(C) (claim 2). EX1002, ¶225.

E. Claim 10

Hunt in view of Dietrich discloses and renders claim 10 obvious. §VI(H) (claim 9); §VII(C) (claim 2). EX1002, ¶226.

VIII. GROUND 5: CLAIMS 3, 7, AND 11 ARE OBVIOUS IN VIEW OF HUNT AND WALKER

A. Overview of the Prior Art References

1. Hunt

§V(A)(2). EX1002, ¶227.

2. Walker

Walker was filed January 21, 2004, and published on July 21, 2005. EX1014, cover page. Walker is prior art under 35 U.S.C. §§102(a), (b), and (e). EX1002, ¶228.

Walker is generally directed to an interactive television system through which an end user selects and receives streaming audiovisual content. EX1014, ¶101. Walker allows end users “to request playback control functions while viewing broadcast television programs on the user equipment.” EX1014, ¶10. A user schedules broadcast programming for recording and then subsequently views the recorded program by streaming at a later point in time. EX1014, ¶58. The user selects a program for recording through a program guide screen 138 that provides a table of broadcast programming that indicates the time each program is airing. EX1014, ¶¶95-101, Fig. 8. After selecting a program from program guide screen

138, the user schedules the program for recording by selecting option 176 on information screen 171. EX1014, ¶112, Fig. 11. Walker's program guide maintains an interactive list of programs that are scheduled to be recorded. EX1014, ¶138, Fig. 19a. When the user wishes to view a recorded program, the content streams to the user devices in real time. EX1014, ¶144. EX1002, ¶229.

Walker is analogous art to the '968 patent and was not considered during prosecution. EX1002, ¶230-231.

B. Motivation to Combine

A POSITA would have been motivated to modify the teachings of Hunt (§V(A)(2)) based on the teachings of Walker (§VIII(A)(2)) because Hunt teaches the delivery of streaming audiovisual programming to end users, and Walker provides an example interface for selecting a program for recording and subsequent streaming through an interactive program guide. A POSITA would have been motivated by the teachings of Walker to implement the Walker's system in Hunt to allow users to select broadcast programming for recording and subsequent streaming. Such a combination involves combining prior art elements (Walkers's program guide interface and functionality with Hunt's streaming platform) according to known methods to yield predictable results (allowing a user to have playback control functions over broadcast programs). EX1014, ¶¶1-9. Accordingly, a POSITA would have had a reasonable expectation of success in

making the proposed combination given the teachings of Hunt and Walker. Such a combination would have required minimal modifications to Hunt to implement Walker's recording system for broadcast programming, and thus would have been well within the skillset of a POSITA. The proposed combination would not have required undue experimentation and would have yielded the predictable result.

EX1002, ¶232.

C. Claim 3

Hunt in view of Walker discloses and renders obvious this claim. §VI(B) (claim 1). To the extent that Hunt does not explicitly disclose or suggest that the processor is configured to designate the part of the digital moving image *in accordance with a program schedule table* (program guide), Walker discloses this limitation. EX1014, ¶58, ¶¶95-101, ¶112, ¶144, Figs. 8, 11; §VI(B)(1) (limitation 1.pre). EX1002, ¶233-237.

Walker describes a recording system in which a user can schedule broadcast programming for recording and then subsequently view the recorded broadcast program by streaming the audiovisual content at a later point in time. EX1014, ¶58. The user selects a program for recording through a program guide screen 138 that provides a table of broadcast programming that indicates the time (annotated red) and day (annotated green) each program (annotated blue) is airing.

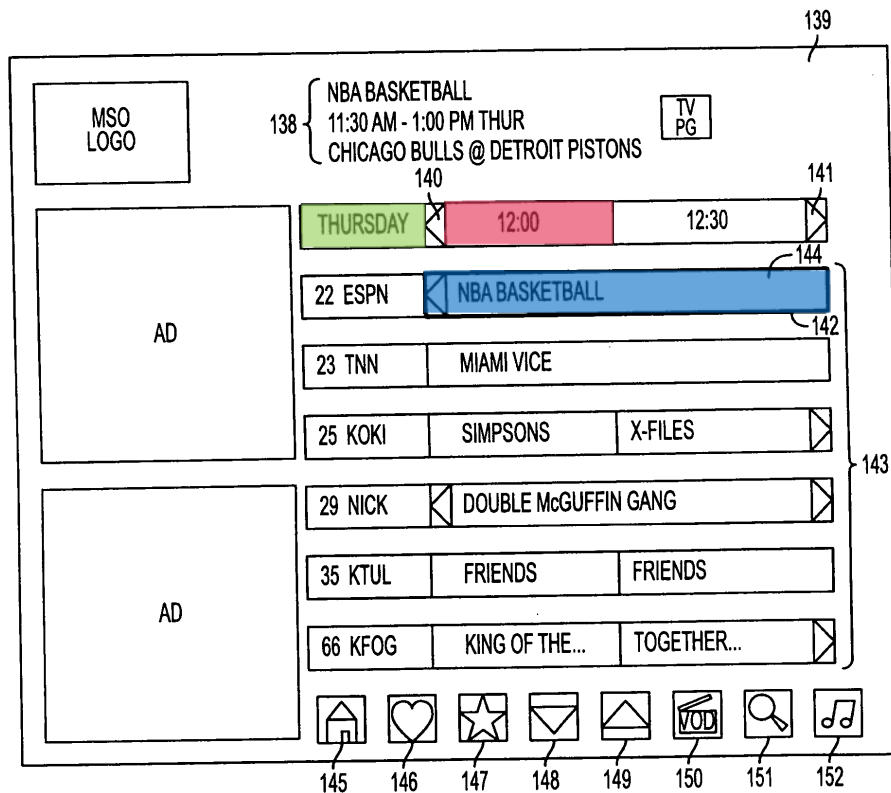


FIG. 8

EX1014, ¶¶95-101, Fig. 8. When the user selects a program from the program guide screen 138, the user is then led to an information screen 171. EX1014, ¶112, Fig. 11. Via information screen 171, the user schedules the program for recording by selecting option 176.

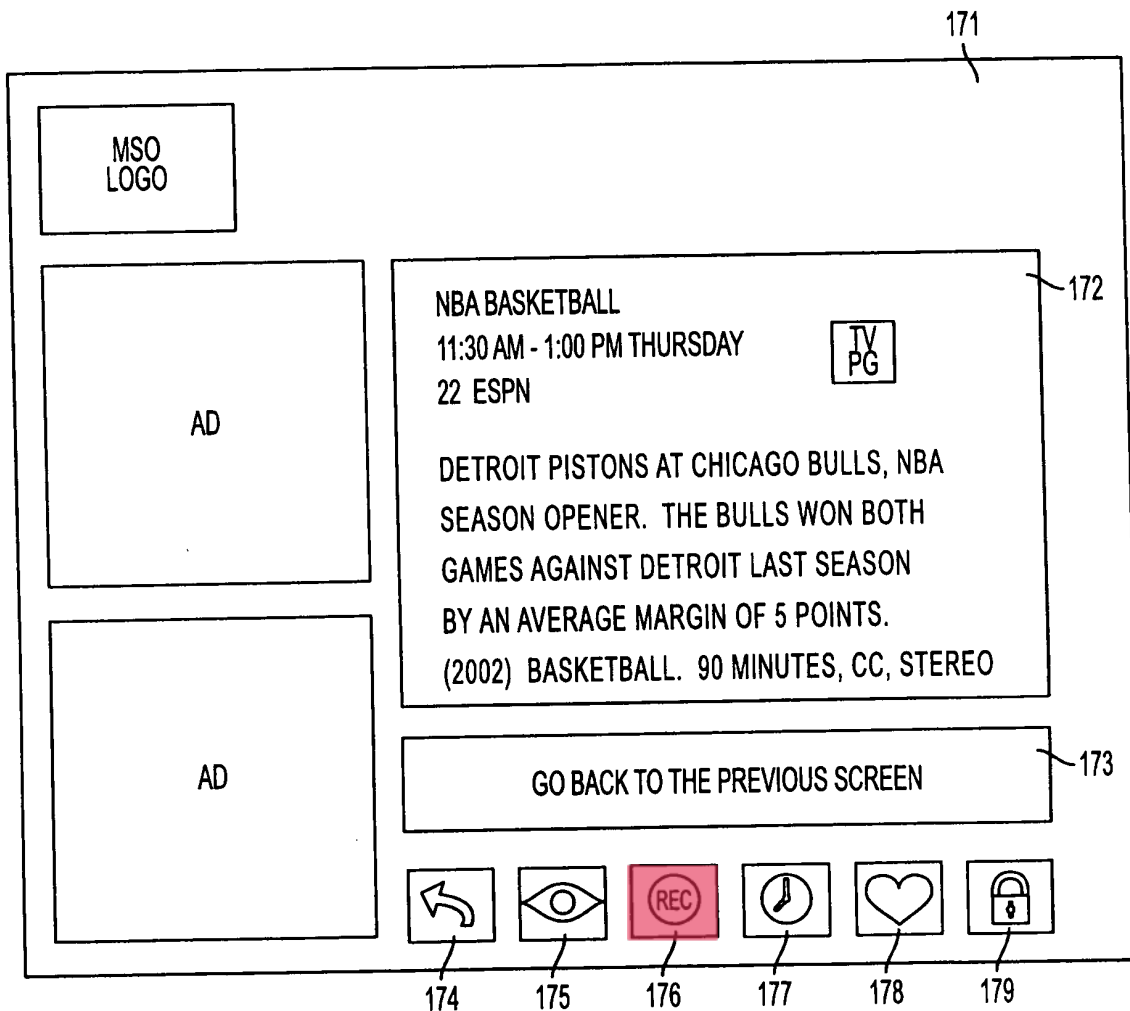


FIG. 11

EX1014, ¶112, Fig. 11. When the user in Walker desires to view a recorded program, they are able to view the program by streaming the video content from where it is stored to their device. EX1014, ¶144 (“[u]ser equipment 18 may receive such content in the form of a real-time video stream or a file download and the interactive television application may play back the received content using a display screen arrangement”). EX1002, ¶236.

A POSITA would be motivated by the teachings of Walker to modify Hunt's system to allow for recording and subsequent streaming of broadcast programming in addition to Hunt's pre-stored audiovisual content of Hunt. §VIII(B) (motivation to combine). Accordingly, Hunt in view of Walker yields a system in which a user selects part of content on a program guide to schedule a recording, which is subsequently streamed to the user device. EX1002, ¶237.

D. Claim 7

Hunt in view of Walker discloses and renders claim 7 obvious. §VI(E) (claim 5); §VIII(C) (claim 3). EX1002, ¶238.

E. Claim 11

Hunt in view of Walker discloses and renders claim 10 obvious. §VI(H) (claim 9); §VIII(C) (claim 3). EX1002, ¶239.

IX. DISCRETIONARY DENIAL IS NOT WARRANTED

A. 35 U.S.C. §314(a) Analysis

The *Fintiv* factors (enumerated below) weigh against discretionary denial. IPR2020-00019, Paper 11, at 5-6 (PTAB Mar. 20, 2020) (precedential). The “Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation,” dated June 21, 2022, (“Interim Guidance”) and recent board decisions applying these factors confirm discretionary denial is not warranted here.

1. Stay

Neither party has requested a stay in the corresponding District of Delaware (“Delaware”) litigation between the parties. At worst, this factor is neutral because the Board “will not attempt to predict” how the district court will proceed if a stay has not been requested by either party. *Sand Revolution II, LLC v. Continental Intermodal Group – Trucking LLC*, IPR2019-01393, Paper 24 at 7 (PTAB Jun. 16, 2020) (informative).

2. Trial Date

Under the Interim Guidance, factor two favors institution. “[W]hen considering the proximity of the district court’s trial date to the date when the PTAB final written decision will be due, the PTAB will consider the median time from filing to disposition of the civil trial for the district in which the parallel litigation resides.” Interim Guidance, 3. Here, the anticipated trial date, as computed in accordance with the Interim Guidance, is October 2026, 32.9 months from January 11, 2024. EX1010, 14. Additionally, the trial date in the scheduling order is June 22-26, 2026. EX1011. The deadline for a Final Written Decision will be around March 2026. Thus, this factor weighs against a discretionary denial based on both the computed anticipated trial date and the anticipated trial date in the scheduling order.

3. Parallel Proceeding

In *Sand Revolution II*, the parties had already “exchanged infringement and

invalidity contentions, and the district court [had] conducted a *Markman* hearing and entered a related Order.” *Sand Revolution II* at 10. Despite these facts, the Board found that the third *Fintiv* factor “weighs only marginally, if at all, in favor of exercising discretion to deny institution.” *Id.* If the Delaware litigation proceeds as scheduled, it will be at an earlier stage than that in *Sand Revolution II* (i.e., around the time final infringement contentions are due but before final invalidity contentions are due and before the claim construction briefing). Moreover, Petitioners are seeking review in a timely manner, one month before service of the initial infringement claim chart is due in the Delaware litigation. EX1011. Accordingly, this factor weighs only marginally, if at all, in favor of a discretionary denial.

4. Issue Overlap

The final written decision is anticipated to precede the earliest expected trial date by around six months and the computed anticipated trial date by around one year and three months. §IX(A)(2) (“Trial Date”). The issuance of a final written decision well before trial will ensure that issues decided during *inter partes* review will be different from the issues decided by the district court due to estoppel. Thus, this factor weighs in favor of institution.

5. Same Party

Because Petitioners and the Patent Owner are the parties in the Delaware

litigation, and because this Board is likely to reach the merits well before as the district court, this factor weighs against discretionary denial. *NVIDIA Corp. v. Invensas Corp.*, IPR2020-00603, Paper 11, at 23 (PTAB Sept. 3, 2020) (this factor weighs against discretionary denial where district court trial and IPR final written decision are expected “around the same time”). However, members of the Board have noted that *Fintiv* addresses only the scenario in which the petitioner is unrelated to a defendant in a parallel proceeding, finding this should weigh against denying institution, but that *Fintiv* “says nothing about situations in which the petitioner is the same as, or is related to, the district court defendant.” *Cisco Sys., Inc. v. Ramot at Tel Aviv Univ. Ltd.*, IPR2020-00122, Paper 15, at 11 (PTAB May 15, 2020) (APJ Crumbley, dissenting) (disfavoring a “defendant in the district court” is “contrary to the goal of providing district court litigants an alternative venue to resolve questions of patentability”).

6. Other Considerations

Other considerations weigh strongly against a discretionary denial. The challenged claims are clearly invalid, Petitioners have not previously challenged any related patents based on the references relied upon in this petition. Were the Board to deny institution, years of district court litigation would be required to obtain a finding of invalidity. Thus, this factor weighs against a discretionary denial.

In sum, two of the *Fintiv* factors weigh strongly against a discretionary denial, two of the *Fintiv* factors weigh only marginally in favor of a discretionary denial, and one is neutral. Thus, institution should be granted.

Even if the Board were to determine that *Fintiv* factors on balance weigh in favor of denial, institution should nonetheless be granted because this petition satisfies the compelling merits standards. Interim Guidance at 4; *Vizio, Inc. v. Maxell, Ltd.*, IPR2022-01458, Paper 8, at 62 (PTAB Apr. 11, 2023).¹

B. 35 U.S.C. §325(d) Analysis

Applying the two-part framework discussed in *Advanced Bionics, LLC v. Med-El Elektromedizinische Gerate GMBH*, IPR2019-01469, Paper 6, at 7-9 (PTAB Feb. 13, 2020), the Board should not exercise its §325(d) discretion to deny institution.

Neither of the challenges are substantially the same as those considered during prosecution. The primary challenge in this petition relies on a combination of Hunt, Lee, Dietrich, Walker, and the knowledge of a POSITA.

Discretionary denial is not warranted based Apple's recently filed IPR

¹ The Board's *Fintiv* framework should be overturned because it (1) exceeds the Director's authority, (2) is arbitrary and capricious, and (3) was adopted without notice-and-comment rulemaking.

because they rely on different prior art and Apple and Amazon have no significant relationship, they are unrelated parties to different litigations, and are not in privity. *See Ford Motor Co. v. Neo Wireless LLC*, IPR2023-00763, Paper 28 (PTAB Mar. 22, 2024).

If the challenges in this petition are found to be based on prior art that is the same as or cumulative to prior art considered by the examiner, the examiner has made a clear error in allowing the claims over such prior art. The challenges satisfy the compelling merits standard, and allowing the claims over such prior art therefore is clear error.

X. COMPLIANCE WITH FORMAL REQUIREMENTS

A. Mandatory Notices Under 37 C.F.R. §§42.8(b)(1)-(4)

1. Real Party-in-Interest

Amazon.com, Inc.; Amazon.com Services, Inc.; and Twitch Interactive, Inc. are the real parties-in-interest.

2. Related Matters

The '968 patent is subject to the following actions:

- *NL Giken Inc. v. Apple Inc.*, No. 1:24-cv-00013 (D. Del.).
- *NL Giken Inc. v. Amazon.com, Inc.*, No. 1:24-cv-00028 (D. Del.).
- *Apple Inc. v. NL Giken Inc.*, IPR2024-01277 (PTAB).

Based on a Patent Center search, U.S. Application Serial Nos. 18/643,903 and 18/643,775, which are in the same family as the '968 Patent, are currently pending

before the Office.

3. Lead and Backup Counsel

Lead Counsel	Backup Counsel
Jennifer Librach Nall Reg. No. 57,053 DLA Piper LLP (US) 303 Colorado Street Suite 3000 Austin, TX 78701 Phone: 512.457.7249 Fax: 512.721.2249 jennifer.nall@us.dlapiper.com	Jessica Hannah (<i>Pro Hac Vice</i> forthcoming) DLA Piper LLP (US) 555 Mission Street Suite 2400 San Francisco, CA 94105 Phone: 415.836.2570 Fax 415.659.7370 jessica.hannah@us.dlapiper.com Robert Buergi Reg. No. 58,125 DLA Piper LLP (US) 845 Texas Avenue Suite 3800 Houston, TX 77002 Phone: 713.425.8440 Fax: 713.300.6040 robert.buergi@us.dlapiper.com Joseph Wolfe Reg. No. 73,173 DLA Piper LLP (US) 1650 Market Street Suite 5000 Philadelphia, PA 19103 Phone: 215.656.3359 Fax: 215.606.2059 joseph.wolfe@us.dlapiper.com

4. Service Information

Service information for lead and backup counsel is provided in the

designation of lead and backup counsel above. Petitioner consents to electronic service to lead and backup counsel and to:

DLA-Amazon-NLGiken@us.dlapiper.com.

B. Proof of Service on the Patent Owner

In accordance with 37 C.F.R. §§42.6(e) and 42.105, as identified in the attached Certificate of Service, a copy of this petition in its entirety is being served electronically to the Patent Owner's attorney of record, as well as on counsel for Patent Owner in the district court litigation.

C. Power of Attorney

Powers of attorney are being filed with designation of counsel in accordance with 37 C.F.R. §41.10(b).

D. Standing

In accordance with 37 C.F.R. §42.104(a), Petitioner certifies that the '968 patent is available for *inter partes* review and that Petitioner is not barred or estopped from requesting an *inter partes* review challenging the patent claims on the grounds identified in this petition.

E. Fees

The undersigned authorizes the Director to charge the fee specified by 37 C.F.R. §42.15(a) and any additional fees that might be due in connection with this petition to Deposit Account No. 503266.

XI. CONCLUSION

The Board should find all claims of the '968 patent unpatentable for the reasons discussed in this petition.

Respectfully submitted,

/s/ Jennifer Librach Nall

Jennifer Librach Nall

Reg. No. 57,053

DLA Piper LLP (US)

303 Colorado Street

Suite 3000

Austin, TX 78701

Phone: + 1 512 457 7249

Fax: + 1 512 721 2249

jennifer.nall@us.dlapiper.com

*Attorney for Petitioners Amazon.com,
Inc., Amazon.com Services, Inc., and
Twitch Interactive, Inc.*

CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. §42.24(d), Petitioner certifies that this petition includes 13,974 words, as measured by Microsoft Word, exclusive of the table of contents, mandatory notices under §42.8, certificates of service, word count, claim listing, and exhibits.

Date: September 11, 2024

/s/ Jennifer Librach Nall

Jennifer Librach Nall

Reg. No. 57,053

DLA Piper LLP (US)

303 Colorado Street

Suite 3000

Austin, TX 78701

Phone: + 1 512 457 7249

Fax: + 1 512 721 2249

jennifer.nall@us.dlapiper.com

*Attorney for Petitioners Amazon.com,
Inc., Amazon.com Services, Inc., and
Twitch Interactive, Inc.*

CERTIFICATE OF SERVICE

The undersigned certifies pursuant to 37 C.F.R. §§42.6(e) and 42.105 that on September 11, 2024, a true and correct copy of the petition for *Inter Partes* Review of U.S. Patent No. 9,948,968 was served by emailing a copy of same (by agreement) to the following attorneys for the Patent Owner:

James Morris - James.Morris@WolfGreenfield.com

A courtesy copy was sent to the below counsel via electronic mail:

WGS-NLGikenv.Amazon@WolfGreenfield.com

Respectfully submitted,

/s/ Jennifer Librach Nall