

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.: IPR2024-01161

**PETITION FOR INTER PARTES REVIEW OF
U.S. PATENT NO. 9,319,615
UNDER 35 U.S.C. §§311-319 AND 37 C.F.R. §§42.1-100, ET SEQ**

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1007	U.S. Patent No. 7,484,234 (“ Heaton ”).
1008	U.S. Patent App. Pub. No. 2002/0078442 (“ Reyes ”).
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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> , 1:24-cv-00028, Dkt. 32 (D. Del. Jun. 18, 2024) (Scheduling Order).
1012	Douglas Blanks Hindman & Kenneth Wiegand, <i>The Big Three’s Prime-Time Decline: A Technological and Social Context</i> , <i>Journal of Broadcasting & Electronic Media</i> , 119 (March 2008).
1013	<i>NL Giken Inc. v. Amazon.com, Inc.</i> , 1:24-cv-00028, Dkt. 19-2 (D. Del. Mar. 18, 2024) (Amended Complaint Exhibit G).
1014	Lisa Moskowitz, <i>AOL 4.0: You’ve got tips</i> , June 23, 1998, CNN.com, http://www.cnn.com/TECH/computing/9806/23/aol.tips.idg/index.html (last visited Aug. 12, 2024).
1015	U.S. Patent App. Pub. No. 2005/0021609 (“ Houghton ”).
1016	European Patent App. No. EP1120703 (“ Scott ”).
1017	U.S. Patent App. Pub. No. 2005/0130613 (“ Kutsuna ”).

CHART OF CLAIMS	
[1.pre]	A television set system comprising:
[1.a]	a television function unit;
[1.b]	a display arranged to display a broadcast program in accordance with the television function unit;
[1.c]	a receiver arranged to receive, without request or acknowledgement, information of one definite broadcast program which can be displayed on the display and is identified by a channel selection of another television set in another place; and
[1.d]	a manual controller arranged to change the display in response to a predetermined same manual operation from own motive of a viewer of the display on the basis of the information received by the receiver, the predetermined same manual operation from own motive having no influence on the channel selection of the another television set, but having influence solely on the change in the display of the own television set into the one definite broadcast program identified by the channel selection of the another television set with the information received by the receiver,
[1.e]	wherein the information includes information of a broadcast program which is currently not displayed on the display, but can be displayed by a channel change, and
[1.f]	wherein the manual controller is arranged to instantly carry out replacement of the currently displayed broadcast program with the one definite broadcast program identified by the channel selection of the another television set in response to the predetermined same manual operation, the same manual operation being universal regardless of the information and without any channel selecting operation,
[1.g]	whereby same experience as that of a viewer of the another television set is possible from own motive of the viewer by means of the manual controller.
[2]	The television set system according to claim 1, wherein the channel information of the another television set is converted into its own local channel number if it differs from that of the local channel number in an area where the another television set is located.
[3.pre]	The television set system according to claim 1, wherein the manual controller is a remote controller including:

[3.a] an operating part including a plurality of keys each of which are assigned to predetermined functions, respectively, the plurality of keys including a predetermined key for replacing the currently displayed broadcast program by the one definite broadcast program identified by the channel selection of the another television set; and
[3.b] a signal transmitter arranged to transmit a control signal to the television function unit in response to the operation of the predetermined key in the operating part.
[4.pre] A broadcast program viewing system for viewing a broadcast program same as that identified by a program selection of another broadcast program viewing system in another place to share same experience of viewing same broadcast program, comprising:
[4.a] a display arranged to display a broadcast program;
[4.b.i] a receiver arranged to receive, without request or acknowledgement, information of one definite broadcast program which can be displayed on the display and is identified by the program selection of the another broadcast program viewing system,
[4.b.ii] the information including information of a broadcast program which is not currently not displayed on the display, but can be displayed by a channel change; and
[4.c.i] wherein the manual controller is arranged to instantly carry out replacement of the currently displayed broadcast program with the one definite broadcast program identified by the program selection of the another broadcast program viewing system in response to the same manual operation at the predetermined operating portion, the same manual operation being universal regardless of the information and without any program selecting operation.
[4.c.i] wherein the manual controller is arranged to instantly carry out replacement of the currently displayed broadcast program with the one definite broadcast program identified by the program selection of the another broadcast program viewing system in response to the same manual operation at the predetermined operating portion, the same manual operation being universal regardless of the information and without any program selecting operation.
[5] The broadcast program viewing system according to claim 4, wherein the broadcast program is television program transmitted from a broadcast station, and wherein the program selection of the another broadcast program viewing system is a channel selection to identify a broadcast station.

[6] The broadcast program viewing system according to claim 4, wherein the broadcast program is television program data to be downloaded from a server station, and wherein the program selection of the another broadcast program viewing system is a code setting to download the selected broadcast program.

[7.pre] The broadcast program viewing system according to claim 4, wherein the manual controller is a remote controller including:

[7.a] an operating part including a plurality of operating portions each of which are assigned to predetermined functions, respectively, the plurality of operating portions including the predetermined operating portion; and

[7.b] a signal transmitter arranged to transmit a control signal to the display in response to the operation at the predetermined operating portion.

[8.pre] In a broadcast program viewing system for viewing a broadcast program same as that identified by a program selection of another broadcast program viewing system in another place in accordance with information of one definite broadcast program which can be viewed by the broadcast program viewing system and is identified by the program selection of the another broadcast program viewing system to share same experience of viewing same broadcast program, a remote controller comprising:

[8.a] a manual operating part including a plurality of manual operating portions each of which are assigned to predetermined functions, respectively, the plurality of operating portions including a predetermined operating portion to generate, in response to a same manual operation from own motive of a viewer, a control signal for carrying out replacement of a currently viewed broadcast program with the one definite broadcast program identified by the program selection of the another broadcast program viewing system, the same manual operation being universal regardless of the information and without any program selecting operation; and

[8.b.i] a signal transmitter arranged to wirelessly transmit the control signal in response to the same manual operation from own motive of the viewer at the predetermined operating portion to instantly carry out the replacement of the currently viewed broadcast program with the one definite broadcast program identified by the program selection of the another broadcast program viewing system

[8.b.ii] wherein the same manual operation from own motive having no influence on the program selection of the another broadcast program viewing system, but having influence solely on the replacement of the broadcast program of the own broadcast program viewing system into the one definite broadcast program

identified by the program selection of the another broadcast program viewing system in accordance with the information,
[8.c] wherein the information includes information of a broadcast program which is not currently viewed, but can be viewed by a channel change, the information being without request or acknowledgement from the another broadcast program viewing system.
[9] The remote controller according to claim 8 further comprising a display.
[10] The remote controller according to claim 9, wherein the manual operating portions of the manual operating part include a phone call key.
[11] The remote controller according to claim 10, wherein the manual operating portions of the manual operating part include ten key.
[12] The remote controller according to claim 11 further comprising a speaker.
[13] The remote controller according to claim 12 further comprising a microphone.
[14] The remote controller according to claim 13, wherein the manual operating portions of the manual operating part include a menu key.
[15] The remote controller according to claim 13, wherein the manual operating portions of the manual operating part include a scroll key.
[16] The remote controller according to claim 13, wherein the manual operating portions of the manual operating part include a push-down operation key.

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. 9,319,615 (the “’615 patent”) (EX1001). As shown below, the systems and methods described in the ’615 patent were known in the art.

II. STATEMENT OF PRECISE RELIEF REQUESTED

In accordance with 35 U.S.C. §311, Petitioner requests cancellation of claims 1-16 of the ’615 patent in view of the following grounds:

Ground	Claims	Statutory Basis	Prior Art
1	1-8	35 U.S.C. §103	Cooper in view of knowledge of a POSITA
2	1-16	35 U.S.C. §103	Cooper in view of Slotznick and the knowledge of a POSITA

III. THE ’615 PATENT

A. Overview of the ’615 Patent

The ’615 patent issued from U.S. Patent Application No. 14/145,935, filed January 1, 2014, and claims foreign priority to Japanese Application No. 2006-106109, filed April 7, 2006. Accordingly, the ’615 patent’s priority date is no earlier than April 7, 2006. EX1002, ¶42.

The ’615 patent relates to “a television system, television set with communication function and a remote controller for an appliance, such as a

television set.” EX1001, 1:16-18. One of the objects of the invention is “to provide a television set which can transmit information to the outside for various purposes.” EX1001, 1:50-52. For example, a “television display is automatically changed in response to the receipt of the information from a predetermined outside counterpart.” EX1001, 2:65-3:1. Information that can be sent between television sets includes information indicating the program or network each television is currently displaying. EX1001, 3:12-21. Based on this information, users can manually change what is currently displayed on their television set (*e.g.*, the channel, network, and program) to the programming their counterpart is watching. EX1001, 3:31-38 (“the television set is so designed that the controller is arranged to make it possible to replace the broadcast program displayed in accordance with the television function unit by another broadcast program identified by the channel selection of the other television set”). In this manner, the ’615 patent’s system allows users to share “the same experience or to check the broadcast program which the other family is watching.” *Id.* EX1002, ¶43.

B. Overview of the ’615 Patent’s File History

During prosecution, the Examiner issued Office Actions rejecting the pending claims under 35 U.S.C §102 and §103. EX1003, 190-202, 160-174, 142-153, 115-130, 64-76. In response, Applicant amended the claims, adding the following limitations:

- “the predetermined same manual operation from own motive having no influence on the channel selection of the another television set, but having influence solely on the change in the display of the own television set into the broadcast program identified by the channel selection of the another television set with the information received by the receiver.” EX1003, 142-153, 176-185.
- “the same manual operation being universal.” EX1003, 102-112.
- the receipt by the receiver of information of one definite broadcast program is performed “without request or acknowledgement.” EX1003, 54-60.

The Examiner then issued an Advisory Action on July 24, 2015. EX1003, 49-52.

The Examiner indicated that the amendment in response to the second final Office Action did not preclude or exclude the existing hand shake process between TVs.

Id. (“[t]he ‘hand shake’ is the process of receiving the control signal from another TV conveying the channel that is presently being viewed, to the receiver TV and is interpreted by the examiner as an existing process in the instant application claim language, and it is not clear that instant application has a way around it, or even if it can prevent it”). The Examiner made a suggested amendment to further prosecution. EX1003, 51 (“one TV without the request or acknowledgment from the other TV, sending its currently viewed channel to the other TV”). In response,

Applicant filed a request for continued examination to have the response to the second final Office Action entered. EX1003, 37-38. The Examiner issued a Notice of Allowance on December 10, 2015. EX1003, 20-21. EX1002, ¶44-45.

C. Person of Ordinary Skill in the Art

A person of ordinary skill in the art at the time of the alleged invention of the '615 patent (April 7, 2006) (“POSITA”) would have had a bachelor’s 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 industry experience. Additional education could substitute for professional experience, and industry experience could substitute for formal education. EX1002, ¶46.

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 embodiments within the indisputable scope of the claims, the Board need not construe the outer bounds of the claims. Any claim terms not listed below

should be given its plain meaning to a POSITA at the time of the '615 patent's supposed invention. EX1002, ¶47-54.

1. “a television function unit” (claims 1, 3)

The plain meaning of “television function unit” includes a unit that performs a function of a television as of the priority date. Such functions include receiving broadcast and/or cable television signals via a tuner, processing such signals, and tuning to a particular channel. *See, e.g.*, EX1001, 6:37-44 (conventional television set has a tuner), Fig. 1 (showing tuner), Abstract (channel change). EX1002, ¶48.

2. “remote controller” (claims 3, 7, 8)

The plain meaning of “remote controller” includes a device or mechanism for controlling something from a distance. EX1002, ¶49.

3. “without any channel selecting operation” (claim 1)

The phrase “without any channel selecting operation” includes an action occurring without the user performing a channel selection (*e.g.*, channel 1, channel 2, etc.). EX1001, 26:11-33. In other words, the replacement of the currently displayed broadcast program with the one definite broadcast program is performed by an operation that does not include the user manually selecting a channel (*e.g.*, channel 1, channel 2, etc.), but instead selecting a program (*e.g.*, *Friends*, *Cheers*, etc.). EX1002, ¶50.

4. “without any program selecting operation” (claims 4, 8)

The phrase “without any program selecting operation” includes an action

occurring without the user manually performing a program selection (*e.g.*, *Friends*, *Cheers*, etc.). EX1001, 26:11-33. EX1002, ¶51.

5. “the same manual operation being universal” (claims 1, 4, 8)

This term includes performing the same manual operation (*e.g.*, clicking on a link on the display using a remote) to replace the currently displayed broadcast program with a program identified by the another television set regardless of the program being watched by the another television set. EX1001, 11:62-12:9; EX1003, 108-110 (“[t]he amendment [‘the same manual operation being universal’] is supported by the original specification, paragraph [0097]”) (citing EX1001, 11:62-12:9). For example, if the another television set is watching *Friends*, the same manual operation (*e.g.*, clicking on a link) will replace the current displayed broadcast program with *Friends*. EX1001, 11:62-12:9; EX1002, ¶52.

6. “the predetermined same manual operation from own motive having no influence on the channel selection of the another television set” (claims 1, 4, 8)

“No influence on the channel selection of the another television set” includes not triggering an instantaneous channel change on the other television. This construction is supported by the embodiments in the specification. EX1001, Fig. 11, 11:50-12:9, 24:46-27:28. EX1002, ¶53.

7. **“a predetermined key for replacing the currently displayed broadcast program by the one definite broadcast program identified by the channel selection of the another television set”** (claim 3)

This limitation includes a key that is configured to interact with the TV system to cause at least the predefined operation of replacing the currently displayed broadcast program by the one definite broadcast program identified by the channel selection of the other television set. EX1001 26:34-39 (“if the predetermined key of the first remote controller 7, which has been once touched to change the channel into the broadcast program viewed on the other television set, is touched again, the channel returns to the broadcast program which was formerly viewed on the own television set”). EX1002, ¶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.* at 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 '615 patent (Exhibit G to the Complaint, EX1013) from the *NL Giken Inc. v. Amazon.com, Inc.* case referenced below. EX1002, ¶55.

IV. GROUND 1: CLAIMS 1-8 ARE OBVIOUS BASED ON COOPER AND THE KNOWLEDGE OF A POSITA

A. Overview of Cooper

U.S. Patent App. Pub. No. 2004/0231003 ("Cooper") was filed on June 21, 2004, and published on November 18, 2004. EX1004, cover page. Cooper is prior art under 35 U.S.C. §102(a), (b), and (e) (pre-AIA). EX1002, ¶56.

Cooper discloses communicating to a user the television programs and/or networks being watched by other users using an interface (*e.g.*, a buddy list) that presents a list of users alongside distinct identifiers indicating the program and/or network each user is watching. EX1004, Abstract; ¶60 ("In addition to showing whether users on the list are currently logged on to the server, the enhanced buddy-list shows the TV show or network 1110 each listed buddy 1108 is watching").

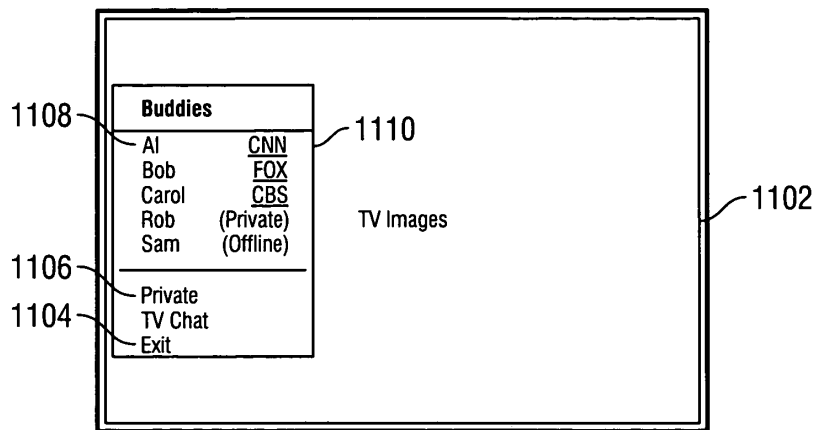


FIG. 11

EX1004, Fig. 11. The TV show and/or network 1110 each listed buddy 1108 is watching is displayed via a selectable link. EX1004, ¶60 (“TV show and/or network 1110 can be displayed as a link”). Cooper’s television is coupled to a set-top box that receives TV signals and supports network communication, granting users the ability to watch TV programming and engage with server-based content, such as buddy list 1110. EX1004, ¶¶38-42.

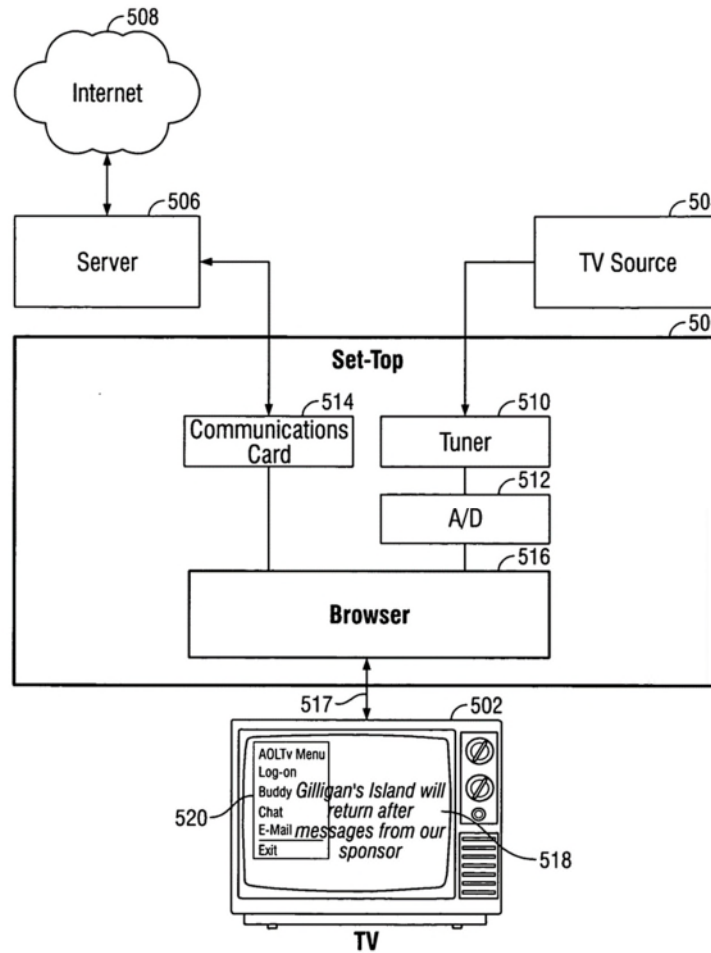
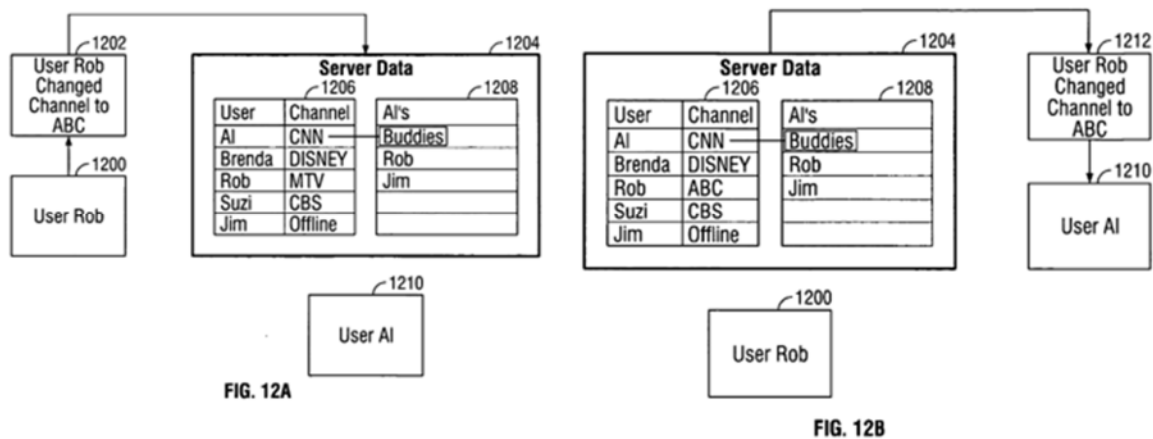


FIG. 5

EX1004, Fig. 5. EX1002, ¶57.

Cooper allows for users to receive up-to-date information regarding what their buddies are currently viewing. Server 506 maintains the server data 1204 that is “used to provide the enhanced buddy list functions.” EX1004, ¶61. The server data 1204 includes “a list 1206 of logged-in users and the TV shows and/or network that each user is currently watching.” *Id.* As users change channels, data 1202 is generated. For example, as shown in Figures 12A-B, when user “Rob”

changes his channel in a first location from MTV to ABC, or from *Cheers* to *Friends*, the data—ABC or *Friends*—is generated and sent to the server, which updates server data 1204 after it receives the data indicating that Rob changed what he is currently watching.



EX1004, Fig. 12A-B (user Rob 1200 and data 1202), ¶61 (“when a user changes channels, set-top box software transmits a message to the server including the name of the show and/or the network the user is presently viewing....the server 1204 updates the user list 1206 to reflect the new viewing information”). The server then sends the updated server data (message 1212) to a second user (*e.g.*, Al) that is friends or buddies with the first user (Rob). *Id.* (“server also transmits a message 1212 to each logged-in user that included the channel-changing user in his or her list”), ¶63 (“the server broadcasts 1410 the change to each logged-in user who included the channel changing user in their buddy list”), Fig. 14 (element 1410). Al is thus provided with an update to what Rob is watching via his buddy

list. If Al would like to view what Rob is watching or what any of Al's other buddies are watching, Al can select the link corresponding to the program in the buddy list 1110. EX1004, ¶60 ("By selecting the link, a user can watch the same show a friend is watching"), ¶50 ("user selection of a link 704 causes set-top box software to determine tuning information corresponding to the link ... [and] tunes ... the set-top box to the determined tuning channel"), Fig. 7 (element 704). EX1002, ¶58.

Furthermore, Cooper's television system is a "web TV" system where the set-top box includes computer components that allow users to watch TV and view web pages and graphics menus. *See, e.g.*, EX1004, ¶11, ¶40, ¶¶60-63. Thus, Cooper discloses use of an input/output device, such as a mouse, to interact with the system to watch TV and view web pages. EX1002, ¶59.

Cooper is analogous art to the '615 patent and was not considered during prosecution of the '615 patent. EX1002, ¶60-61.

B. Claim 1

Cooper discloses and renders this claim obvious. EX1002, ¶62-95.

1. [1.pre]

Cooper discloses *a television set system*—set-top box 500, television 502, input device (*e.g.*, mouse 103) collectively is a television set system. EX1004, ¶1, ¶3, ¶11, ¶¶38-40, Figs. 1, 5-6; EX1002, ¶63-64.

2. [1.a]

Cooper discloses *a television function unit* (collectively tuner 510 and analog-to-digital converter 512, shown in red). See, e.g., EX1004, ¶11, ¶¶38-39, Figs. 1, 5-6; §III(D)(1) (construction of *a television function unit*).

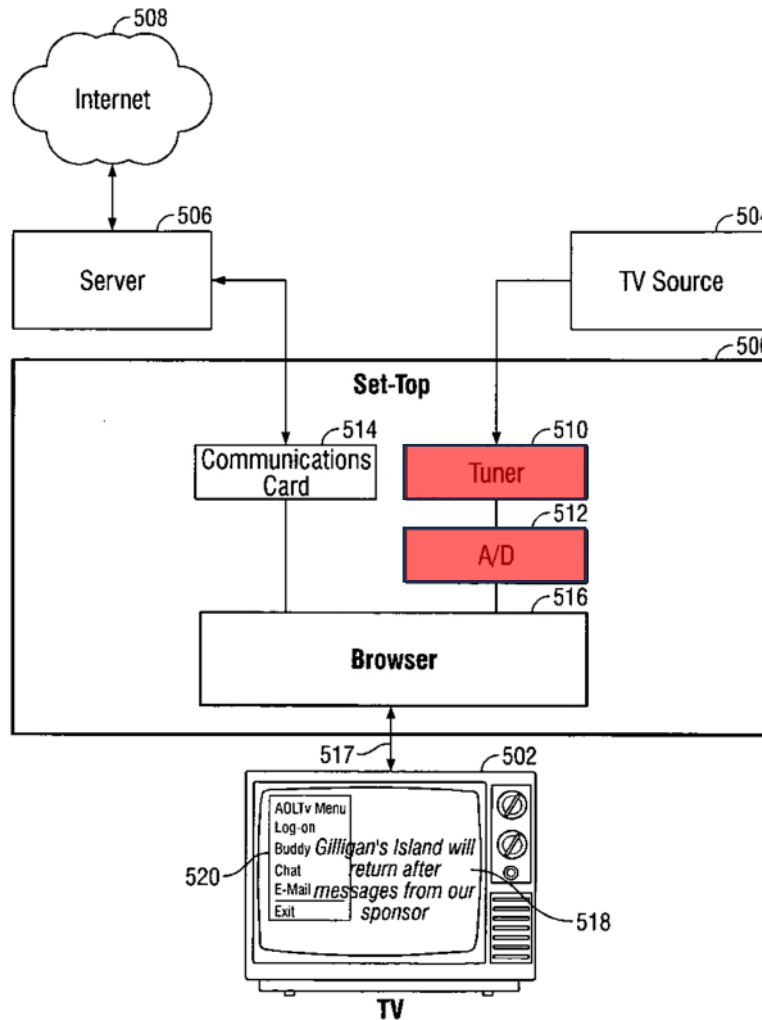


FIG. 5

EX1004, Fig. 5. Collectively, Cooper's tuner 510 and analog-to-digital converter 512 perform functions of a television, such as receiving broadcast and/or cable television signals via a tuner, processing such signals, and tuning to a particular

channel. *See, e.g.*, EX1004, ¶38 (“set-top box 500 receives TV signals from a TV source 504 such as cable, satellite, or conventional TV provider....box 500 includes a tuner 510 to select a TV channel for viewing....box 500 can include an analog-to-digital converter 512 to permit digital processing of the TV images regardless of the TV source”), Fig. 5 (illustrating that tuner 510 is the component of set-top box 500 that receives the TV signals from TV source 504), ¶11. Accordingly, Cooper discloses this limitation. EX1002, ¶65-66.

Additionally, a POSITA would have understood that conventional televisions, such as television 502, would include a tuner and analog-to-digital converter, substantially similar to tuner 502 and analog-to-digital converter 512. EX1002, ¶67.

3. [1.b]

Cooper discloses *a display* (display in television 502) *arranged to display a broadcast program (e.g., “TV show”) in accordance with the television function unit* (§IV(B)(2) (limitation 1.a)). *See, e.g.*, EX1004, ¶11, ¶14, ¶¶38-40, ¶¶44-45, Figs. 5, 10. EX1002, ¶68-69.

Cooper describes a set-top box 500 (including television function unit, shown in red, *see* §IV(B)(2) (limitation 1.a)) that outputs a broadcast program (*e.g.*, “TV show”) for viewing on the television’s display (shown in green). EX1004, ¶14.

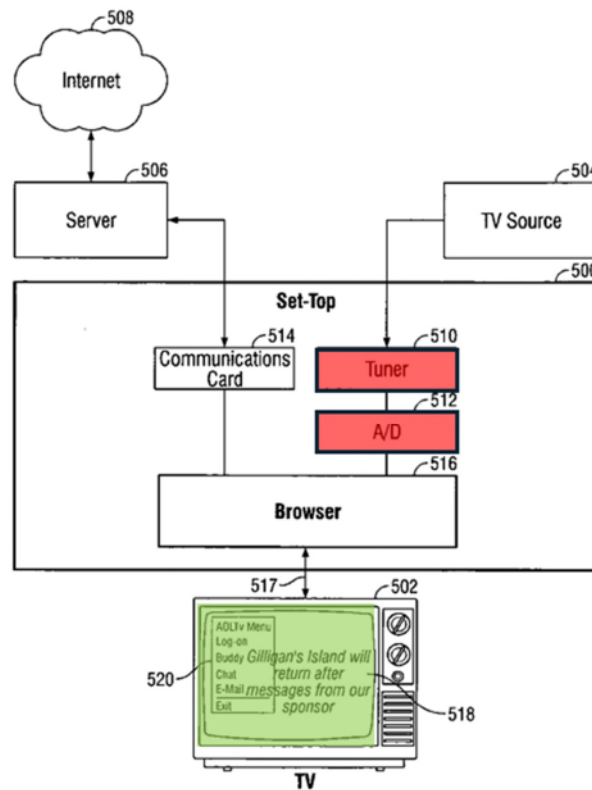


FIG. 5

3

EX1004, Fig. 5. Cooper discloses a set-top box receiving a broadcast program.

EX1004, ¶11 (“set-top box ... includes a TV tuner for receiving broadcast and/or cable TV signals”), ¶38 (“set-top box 500 receives TV signals”). Cooper discloses the TV display showing the broadcast program received by the set-top box.

EX1004, ¶40 (“box 500 constructs a display that can include information ... from the TV source 504 ... [and] ... sends the constructed display to a TV 502 or monitor”), ¶14 (“The user interface may also display television programming (e.g., a TV show).”). Thus, Cooper discloses this limitation. EX1002, ¶70-71.

Additionally, a POSITA would have understood that conventional

televisions, such as television 502, would include screen arranged to display broadcast programs from the internal tuner and/or analog-to-digital converter.

§IV(B)(2) (limitation 1.a). EX1002, ¶72.

4. [1.c]

Cooper discloses and renders this limitation obvious. EX1002, ¶73-80.

Cooper discloses *a receiver arranged to receive information* (set-top box 500 with tuner 510, shown in pink, and network communication card 514, shown in blue). *See, e.g.*, EX1004, ¶11, ¶¶39-50, ¶52, Figs. 5, 7.

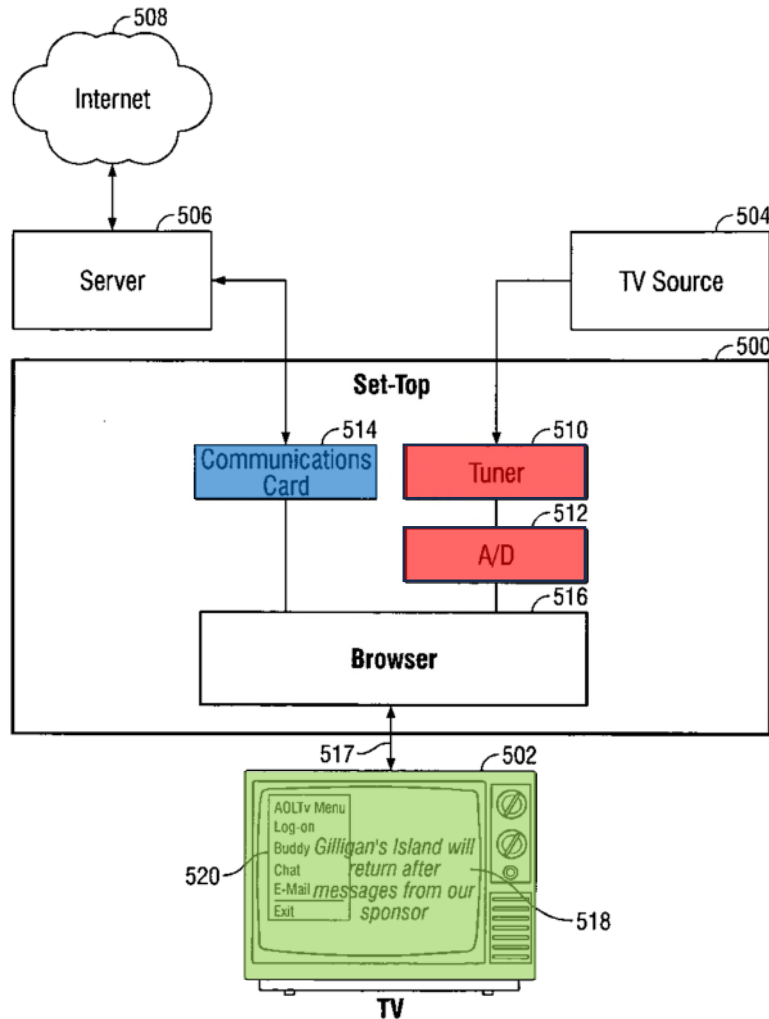


FIG. 5

EX1004, Fig. 5. Set-top box 500 is in communication with server 506, TV source 504, and TV set 502. EX1004, Fig. 5. “The box 500 includes a network communication card 514 to communicate with a network server 506 such as an ISP.” EX1004, ¶39. “The box 500 constructs a display that can include information received from the server 506.” EX1004, ¶40. EX1002, ¶74.

The receiver is arranged to receive *information* (data 1202/1212) of one definite broadcast program (show) which can be displayed on the display (display

in TV 502). See §IV(A); §IV(B)(3) (limitation 1.b); EX1004, ¶¶60-63, Figs. 11, 12A-B, 14. The enhanced buddy list 1208 shows the TV show and/or network 1110 each listed buddy 1108 is watching. EX1004, ¶¶60-61, Fig. 11; §IV(A). The “TV show and/or network 1110 can be displayed as a link.” EX1004, ¶60. The server (*e.g.*, server 506) maintains the server data 1204 which is “used to provide the enhanced buddy list functions.” EX1004, ¶61. The server data 1204 includes “a list 1206 of logged-in users and the TV shows and/or network that each user is currently watching.” *Id.* Data 1202 is generated when user “Rob” changes his channel in a first location and includes the information “ABC”—which is information of one definite broadcast program. EX1004, ¶61 (“when a user changes channels, set-top box software transmits a message to the server including the name of the show and/or the network the user is presently viewing.”). The server updates server data 1204 when the server receives data 1202 indicating that a user (Rob) changed what they are currently watching. EX1004, ¶61 (“when a user changes channels, set-top box software transmits a message to the server including the name of the show and/or network the user is presently viewing”); see *also* Fig. 12A (user Rob 1200 and data 1202). The server then sends the updated server data (message 1212) to a second user (User Al) that is friends or buddies with the first user (Rob). *Id.* (“server also transmits a message 1212 to each logged-in user that included the channel-changing user in his or her list”), ¶63

(“the server broadcasts 1410 the change to each logged-in user who included the channel changing user in their buddy list”), Fig. 14 (element 1410). The updated server data received by User A1, via A1’s set-top box, constitutes the “information of one definite broadcast program which can be displayed on the display,” as data 1202/1212 is used to update a user’s buddy list and the buddy list can display the show or network each users’ buddies are currently watching. EX1002, ¶75.

Cooper discloses that the links can be the specific program (*e.g.*, television show or movie) or the network each buddy is watching. For example, although Figures 11-12 show the buddy list including links that reference networks (*e.g.*, CNN, FOX, CBS), the viewing information in the buddy list can also take the form of the *specific show* each buddy is watching. EX1004, ¶60 (“the enhanced buddy-list shows the TV show or network 1110 each listed buddy 1108 is watching” and “the TV show and/or network 1110 can be displayed as a link”), ¶63 (“[v]iewers can turn off this feature if they do not want others to see the name of the TV show they are watching”). EX1002, ¶76.

The information of the one definite broadcast is *displayed on the display*. Cooper’s buddy list 1110 can be displayed over TV program 1102 displayed via TV 502. EX1004, ¶60 (“FIG. 11 shows a set-top box display that includes a TV program 1102 and a TV-enhanced buddy list 1110”).

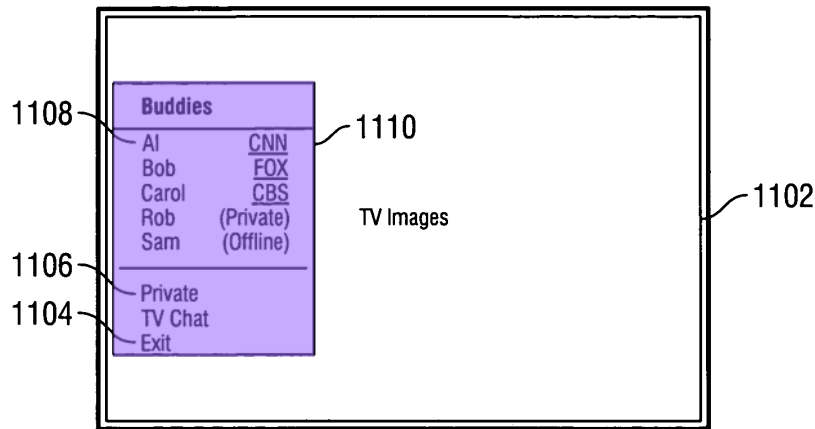
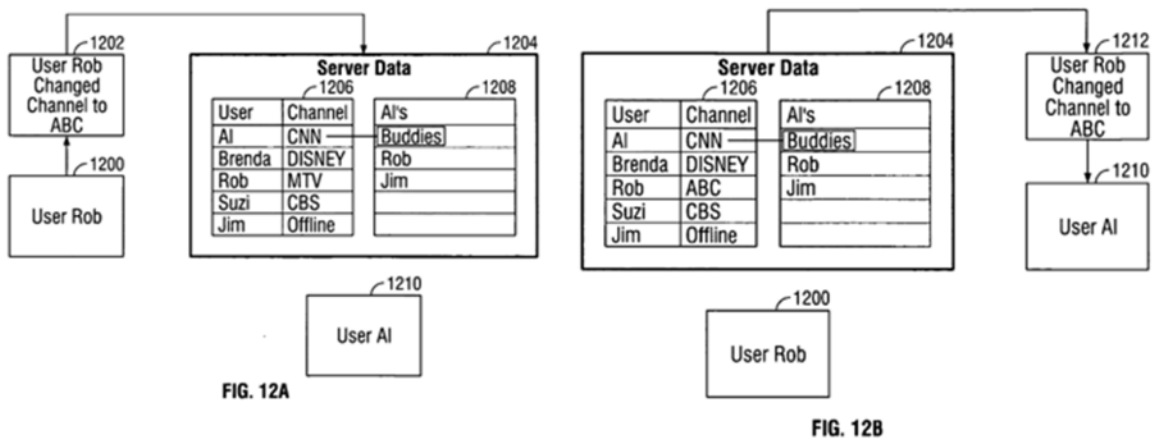


FIG. 11

EX1004, Fig. 11A (buddy list 1110 annotated purple). The buddy list 1110 can be updated such that it reflects the current show each buddy is watching.



EX1004, Figs. 12A-B, ¶61 (“the server 1204 updates the user list 1206 to reflect the new viewing information [and] ... transmits a message 1212 to each logged-in user that included the channel-changing user in his or her list”), ¶62 (“[t]he server responds by sending the set-top box TV viewing information for each member of the user’s buddy list”), ¶63 (“FIG. 14 shows a process for updating the buddy list

information initially transmitted” and “the server broadcasts 1410 the change to each logged-on user who included the channel changing user in their buddy list”). EX1002, ¶77.

The one definite broadcast program is *identified by a channel selection of another television in another place*. EX1004, Fig. 6. User Rob’s changing of channels triggered the message 1212 sent from server 506 to User Al. EX1004, ¶53, ¶61. A POSITA also would have understood that it was well-known for television users to change their television by channel selection. Cooper also discloses that users can be located in different places. EX1004, Fig. 6 (User A is in DC and User B is in Boston), ¶¶42-43 (“a set-top box 600a in Washington, D.C. sending a message 600 to a set-top box 600b in Boston via the server 506”). EX1002, ¶78.

Cooper discloses and renders obvious *without request or acknowledgement*. See, e.g., EX1004, ¶¶39-42, ¶¶44-50, Figs. 5-7. The limitation “without request or acknowledgement” is a qualifier for “receive ... information of one definite broadcast program ... identified by a channel selection of another television set in another place.” Accordingly, the limitation “without request or acknowledgement” is not a qualifier on other operations, such as an initial set up to establish a relationship between the claimed “television set system” and the “another television set in another place.” Any statement to the contrary would result in a

system that would allow any individual to tune into any other person's television set without consent. Furthermore, "without request or acknowledgement" also does not mean that no handshake process occurs between televisions. EX1003, 51, 55 ("[t]he 'hand shake' is the process of receiving the control signal from another TV conveying the channel that is presently being viewed, to the receiver TV and is interpreted by the examiner as an existing process in the instant application claim language, and it is not clear that instant application has a way around it, or even if it can prevent it"). With this understanding in mind, Cooper does not mention any "request or acknowledgement" with respect to receipt of a "message" or information 1202/1212 corresponding to what a buddy is watching. A POSITA would have understood and found it obvious that no "request or acknowledgement" is required to implement the buddy list updating process in Cooper. EX1002, ¶79-80.

5. [1.d]

Cooper discloses and renders this limitation obvious. EX1002, ¶81-86.

Cooper discloses *a manual controller* (mouse 103). EX1004, ¶3, ¶11.

Cooper discloses that a "set-top box essentially has the same basic components as the general purpose computer illustrated in FIG. 1, except that it also includes a TV tuner for receiving broadcast and/or cable TV signals." EX1004, ¶11.

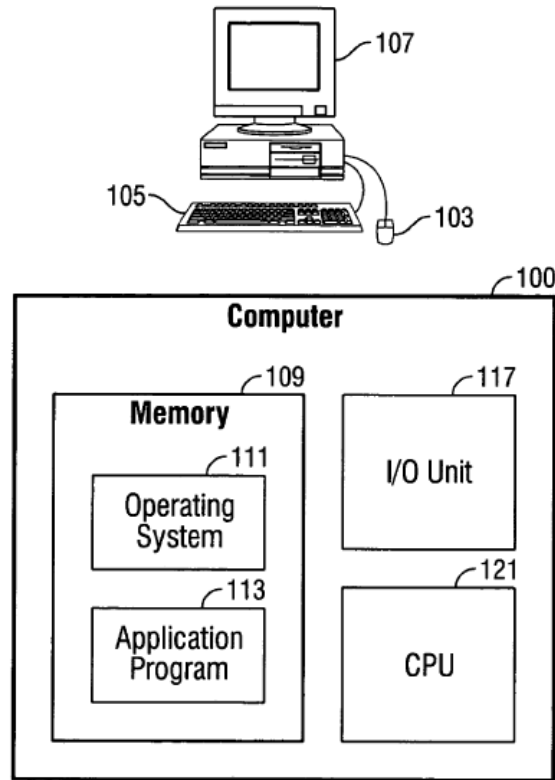


FIG. 1
(Prior Art)

EX1004, Fig. 1. Figure 1 illustrates a computer system that includes various input/output devices such as “mouse 103, keyboard 105”. EX1004, ¶3, Fig. 1. In this manner, the set-top box allows users “either to watch TV or to view web pages and otherwise ‘surf’ the Internet.” EX1004, ¶11. EX1002, ¶82.

Cooper discloses the manual controller is *arranged to change the display in response to a predetermined same manual operation* (selection of user Rob’s link with a mouse button) *from own motive of a viewer of the display on the basis of the information received by the receiver*. After the viewer’s display shows a message/link indicating a channel change occurred on another computer (see

§IV(B)(4) (limitation 1.c)), the viewer clicking on the link will cause the viewer's display to be updated to show the program/channel/network indicated in the message/link. EX1004, ¶60 (“[b]y selecting the link, a user can watch the same show a friend is watching”), ¶50 (“user selection of a link 704 causes set-top box software to determine tuning information corresponding to the link ... [and] tunes ... the set-top box to the determined tuning channel”), Fig. 7 (element 704, annotated green below).

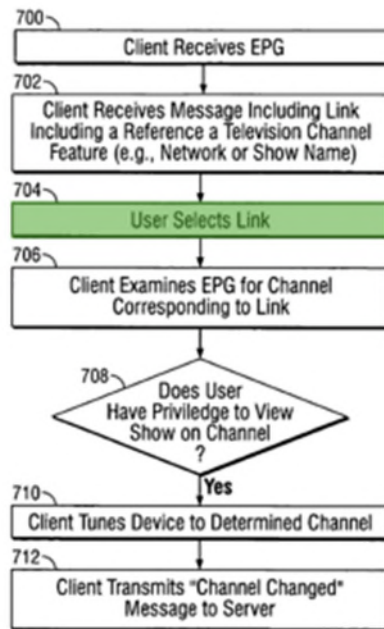
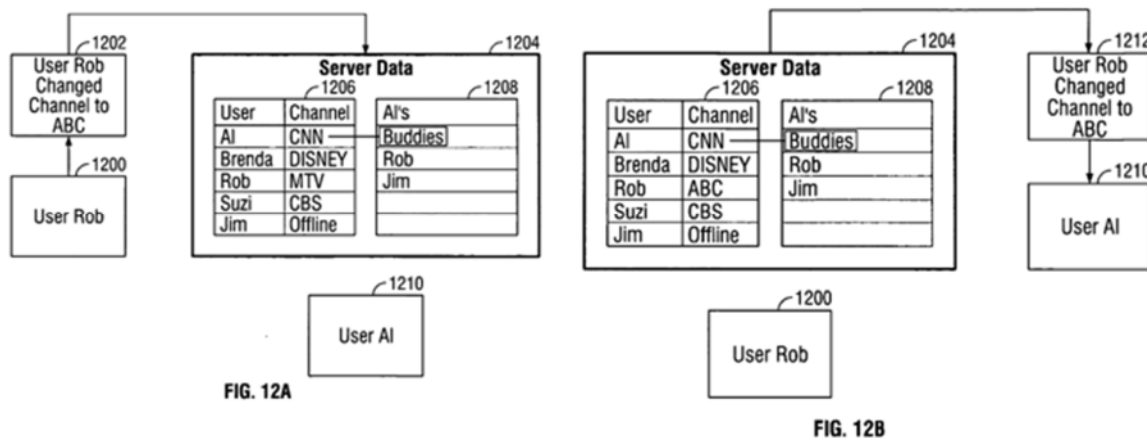


FIG. 7

EX1004, Fig. 7. A POSITA would have understood that each viewer in Cooper uses the manual controllers (*e.g.*, mouse 103) to choose to select the link (own motive of a viewer of the display) on the basis of the information received by the receiver. EX1003, 149-150; EX1002, ¶83.

Cooper discloses and renders obvious *same manual operation*. For example, Cooper discloses that Al's manual operation—clicking the mouse button on Rob's link—changes Al's TV to the program/channel/network corresponding to Rob's link depending on the information received by the receiver regarding what Rob is watching. EX1004, ¶¶60-61. When Rob changes program/network/channel from MTV to ABC, then the User Al's server is updated, and that same manual operation performed by User Al changes Al's TV's current viewing channel to ABC.



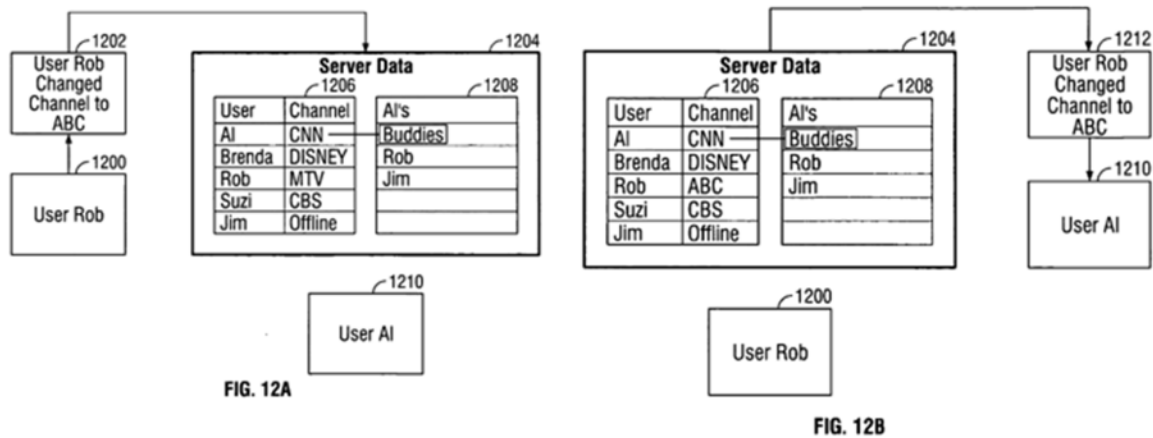
EX1004, Fig. 12A-B. Thus, Cooper discloses that the same manual operation (*i.e.*, a clicking of a link) will change Al's TV to the program/channel/network corresponding to the selected link on the basis of the information received by the receiver. EX1002, ¶84.

Cooper discloses and renders obvious *the predetermined same manual operation from own motive having no influence on the channel selection of the*

another television set, but having influence solely on the change in the display of the own television set into the one definite broadcast program identified by the channel selection of the another television set with the information received by the receiver. See §III(D)(6) (construction of influence limitation). None of the embodiments of Cooper mention that selection by a user of a buddy link to watch the same program as the buddy will have any “influence ... on another television set,” *i.e.*, the buddy’s television set, such as changing the buddy’s television to a different channel without any input from the buddy. A POSITA would have understood and found obvious that no such “influence” is required to implement Cooper. The sole “influence” disclosed in Cooper is to change the viewer’s television set to display the definite broadcast program from the link, as any change to the other television set would disrupt the other user’s viewing experience. EX1004, ¶29, ¶42, ¶48, ¶50, ¶56, ¶60, Fig. 7. Therefore, a POSITA would have understood that the change in display of the viewer’s television set would not trigger an automatic channel change for the other television set. Thus, the user’s selection of a buddy link influences only that user’s television set and not the television set of the buddy. EX1002, ¶85-86.

6. [1.e]

Cooper discloses and renders this limitation obvious. As shown in Figure 12A, user Rob is originally watching MTV and user Al is originally watching CNN.



EX1004, Fig. 12A-B. After Rob changes his channel to ABC, Al receives a notification that Rob's channel was changed. EX1004, ¶¶60-61, Fig. 12A-B. Cooper discloses the notification includes information about a definite broadcast program. See §IV(B)(4) (limitation 1.c). Al can then select the link in his buddy list corresponding to Rob's viewing of ABC, which will change Al's display from CNN to ABC. EX1004, ¶¶60-61, Fig. 12A-B. Thus, Cooper discloses and renders obvious this limitation. EX1002, ¶87-88.

7. [1.f]

Cooper discloses and renders this limitation obvious. EX1002, ¶89-93.

In Cooper, the viewer uses a mouse to click a link on the display, which

instantly changes the user's display to the linked broadcast program (§IV(B)(4) (limitation 1.c)). EX1004, ¶43 ("Unlike traditional links that cause a browser to load specified files or an Internet URL (Universal Resource Locator) when selected, the links 618 in the message 600 can change the channel of the set-top box."). A POSITA would have understood that clicking a link as disclosed in Cooper would instantly change or replace the current channel/network/program displayed on the user's TV with the one selected by the other user (on the another TV set). Like clicking the button on the remote control changes the display in the '615 patent, clicking Cooper's buddy link changes the channel/network/program that is displayed, and the user does not perform any channel selection operation. EX1002, ¶90.

The clicking of a mouse button to select a link on the display *is universal regardless of the information and without any channel selecting operation.* §III(D)(5) (construction of *universal*). A POSITA would have understood that use of a mouse to manually click a link is a "universal" manual operation that will trigger replacement of what the user is currently watching with the other user's channel/network/program corresponding to the link, regardless of the precise channel number of the other user's TV and without any channel selection operation. For example, if user Al clicks Rob's link in buddy list 1110, the same manual operation, *i.e.*, clicking the link, will perform the function of replacing

what Al is currently viewing with programming corresponding to the selected link.

Because the same manual operation of selecting the link will trigger the same function (replacement of the current programming) regardless of whether the link points to a specific TV show, a network, or network, the manual operation is “universal,” *i.e.*, the same link-clicking action. EX1002, ¶91.

The clicking of a mouse to select a link on a display is *without any channel selecting operation*. See §III(D)(3) (construction of *without any channel selecting operation*). Continuing with the above example, when user Al clicks Rob’s link (which displays the programming Rob is watching, *i.e.*, *Friends* or *Cheers*), user Al is not making a channel selecting operation but is instead performing a program selection operation. EX1002, ¶92-93.

8. [1.g]

Cooper discloses this limitation. See §IV(B)(5) (limitation 1.d); EX1004, ¶60 (“[b]y selecting the link, a user can watch the same show that a friend is watching”). EX1002, ¶94-95.

C. Claim 2¹

Cooper discloses and renders this claim obvious. See §IV(B) (claim 1). EX1002, ¶96-99.

¹ “[T]he channel information” lacks antecedent basis.

Cooper discloses that the *channel information of the another television set* (*e.g.*, NBC 10) of the another television set (Boston user) is converted into its own local channel number (*e.g.*, NBC 28 for the DC user) *if it differs from that of the local channel number in an area where the another television set is located.*

EX1004, ¶¶44-48, Fig. 6. Cooper acknowledges that networks may have different channels depending on the geographic location each user is located. *See, e.g.*, EX1004, ¶44 (“different geographic locations may offer a given TV network on different channels. For example, an NBC affiliate in Boston may be on channel ‘10’ while the D.C. NBC affiliate broadcasts on channel ‘28.’”). To account for this, set-top box 500 is able to identify the correct channel corresponding to the channel information included in the link. EX1004, ¶45 (“To account for these variations, set-top box software ... can determine a channel corresponding to a link based on a wide variety of channel features ... by using an electronic programming guide (EPG)”), ¶47 (“set-top box 500B can use the EPG information to select a channel corresponding to a particular link from the shows currently available from the TV source”), ¶48 (“message also includes a link 618 referring to the FOX network” and “[s]election of this link and the ensuing lookup of ‘FOX’ in the ‘channel name’ column of the EPG 602B tunes to the Boston set-top box 500B to channel ‘11’”), Fig. 6 (EPG 602a in DC shows FOX as being channel 29; EPG 602B in Boston shows FOX as being channel 11). Thus, Cooper discloses this

limitation. EX1002, ¶97-99.

D. Claim 3

Cooper discloses and renders this claim obvious. EX1002, ¶100-108.

1. [3.pre]

See §IV(B) (claim 1). Cooper further discloses and renders obvious that *the manual controller (e.g., mouse) is a remote controller*. See §IV(B)(5) (limitation 1.d). Cooper’s mouse is a remote controller because the mouse controls the set-top box at a distance. See §III(D)(2) (construction of “remote controller”); EX1004, ¶11 (“A set-top box essentially has the same basic components as the general purpose computer illustrated in FIG. 1”), Fig. 1 (mouse 103). A POSITA would have understood that wireless mice were well-known in the art. See, e.g., EX1006, Fig. 4. A POSITA would have found it obvious, would have had a reasonable expectation of success, it would have been within the skill of a POSITA, and that it would maintain all the disclosed functionality of Cooper to implement the mouse of Cooper as a wireless mouse to click links in the buddy list displayed on the TV via the set-top box. EX1002, ¶101-104.

2. [3.a]

Cooper discloses and renders obvious that the mouse includes *an operating part* (portion of mouse that includes buttons or switches) *which are assigned to predetermined functions, respectively (e.g., right click/left click)*. See §IV(B)(5) (limitation 1.d). A POSITA would have understood and found it obvious that a

mouse (wireless or non-wireless) has buttons with predetermined functionality, *i.e.*, a left click performs a selection operation while a right click opens a context menu. *See, e.g.*, EX1006, Fig. 4 (switches 14, 15), 3:19-21 (“the radio signal R comprises command signals generated in response to actuation of switches 14, 15”).

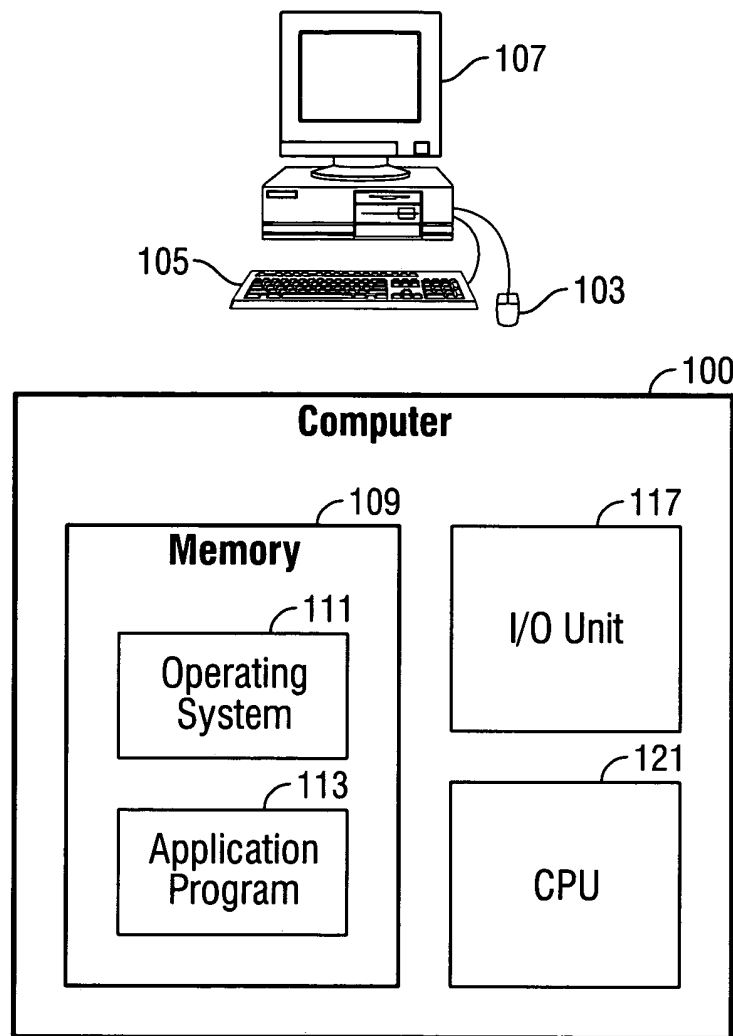


FIG. 1
(Prior Art)

EX1004, Fig. 1 (mouse 103 with two buttons), ¶11 (“set-top box ... has the same

basic components as the general purpose computer illustrated in FIG. 1”). A

POSITA would have found it obvious, would have had a reasonable expectation of success, it would have been within the skill of a POSITA, would have had a motivation to use a mouse in this traditional way, and that it would maintain all the disclosed functionality of Cooper to implement the mouse of Cooper to have a left mouse button to click links in the buddy list displayed on the TV via the set-top box. EX1002, ¶105.

The switches 14, 15 include a *predetermined key (e.g., left switch 14) for replacing the currently displayed broadcast program by the one definite broadcast program identified by the channel selection of the another television set*. As stated above, the operation of the left mouse button traditionally performs a selection operation. *See* §IV(D)(2). Additionally, as described above, selection of a link in a buddy list replaces what the user is currently viewing with the programming corresponding to the selected link. *See* §§IV(B)(5)-(7) (limitations 1.d-1.f). Because the left key is programmed to perform a selection operation, it was predetermined that the left switch 14 would perform the function of replacing the currently displayed program with the program of the other television when the user uses the left switch 14 to select the link. *See* §III(D)(7) (construction of this limitation). EX1002, ¶106-107.

3. [3.b]

Cooper discloses and renders obvious that the mouse includes *a signal transmitter arranged to transmit a control signal to the television function unit in response to the operation of the predetermined key in the operating part*. See §IV(D)(2) (limitation 3.a). A POSITA would have understood the plain meaning of “transmit” includes indirect transmission (*i.e.*, remote controller to set-top box to display). EX1001, Fig. 1, 6:38-42. A POSITA would have understood and found it obvious for Cooper’s mouse to include a signal transmitter to transmit a control signal in response to operation of one of its buttons, such as the predetermined key, otherwise the mouse would be inoperable. A POSITA would have understood and found it obvious for a wireless mouse to likewise include a signal transmitter for the same reasons. *See, e.g.*, EX1006, 3:9-12 (“The radio signal R is transmitted from the mouse 9 by means of a transmitting antenna 13 associated with transmitter circuitry 10 contained within the mouse 9.”). EX1002, ¶108.

E. Claim 4

Cooper discloses and renders this claim obvious. EX1002, ¶109-118.

1. [4.pre]

Cooper discloses the preamble. *See* §IV(B) (claim 1). The “broadcast program viewing system” corresponds to the “television set system” of claim 1 and the “another broadcast program viewing system” corresponds to the “another television set system” of claim 1. EX1002, ¶110.

2. [4.a]

Cooper discloses this limitation. *See* §IV(B)(3) (limitation 1.b). EX1002, ¶111.

3. [4.b.i]

Cooper discloses and renders obvious this limitation. *See* §IV(B)(4) (limitation 1.c). This limitation is substantially similar to limitation 1.c, however, rather than recite “is identified by the channel selection,” limitation 4.b.i recites “is identified by the program selection.” A POSITA would have understood that when a user stops changing their channel, they have made a program selection. Thus, when Rob changes his channel from MTV to ABC, Rob has made a program selection of whatever program is airing on ABC. EX1002, ¶112.

Additionally, Cooper discloses that set-top boxes receive electronic programming guides (EPGs), which is essentially “an electronic version of a TV guide.” EX1004, ¶46. As shown in Fig. 6 (reproduced below), the EPG includes show titles 610 (annotated red).

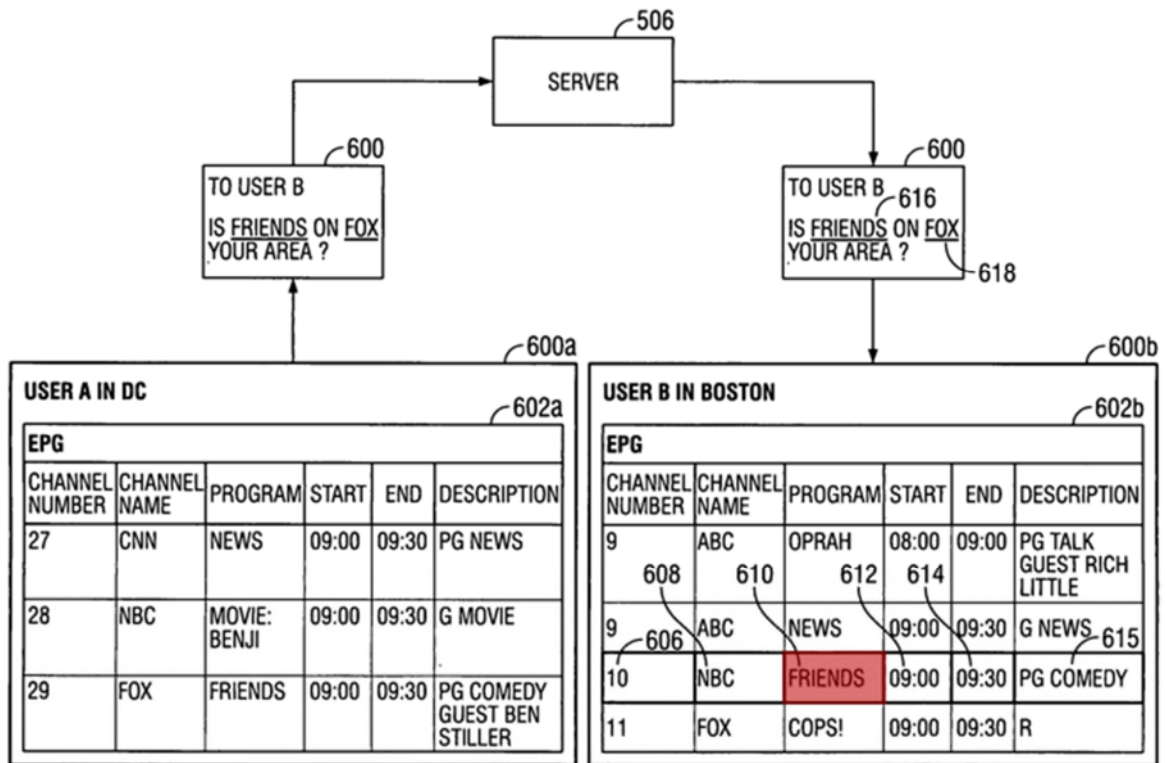


FIG. 6

EX1004, Fig. 6. Accordingly, User B in Boston makes a program selection by interacting with EPG 602b and selecting *Friends*. As discussed above, this program selection is provided to server 506 for updating each user's buddy list. A POSITA would have understood that it was well-known for users to use an EPG to select a television program. EX1002, ¶113.

4. [4.b.ii]

Cooper discloses and renders obvious this limitation. See §IV(B)(6) (limitation 1.e). EX1002, ¶114.

5. [4.c.i]

Cooper discloses and renders obvious this limitation. See §§IV(B)(5)-(7) (limitations 1.d-f). This limitation is substantially similar to limitations 1.d-1.f, but further requires the manual controller to have “a predetermined operating portion.” The mouse is a manual controller that has *a predetermined operating portion*. See §IV(D)(2) (limitation 3.a). EX1002, ¶115.

6. [4.c.ii]

Cooper discloses and renders obvious this limitation. See §§IV(B)(5)-(7) (limitations 1.d-f); §III(D)(4) (construction of *without any program selecting operation*). This limitation is substantially similar to limitations 1.d-1.f, but recites “without any program selecting operation” instead of “without any channel selecting operation.” As described above, Cooper discloses that the links in the buddy list can reference either the specific show or the specific network each buddy is watching. EX1004, ¶60 (“the enhanced buddy-list shows the TV show or network 1110 each listed buddy 1108 is watching” and “the TV show and/or network 1110 can be displayed as a link”), ¶63 (“[v]iewers can turn off this feature if they do not want others to see the name of the TV show they are watching”). Thus, when user Al clicks and selects user Rob’s link that indicates Rob is viewing “ABC,” Al is not making a program selection but is instead making a network selection. EX1002, ¶116.

The clicking of a mouse button to select a link on the display *is universal regardless of the information and without any channel selecting operation.*

§III(D)(5) (construction of *universal*). A POSITA would have understood that use of a mouse to manually click a link is a “universal” manual operation that will trigger *replacement* of what program/channel the user is currently watching with the identified another user’s program/channel, regardless of the channel change information and without any channel search and selecting operation. EX1002, ¶117.

F. Claim 5

Cooper discloses and renders obvious this claim. *See* §IV(E) (claim 4). EX1002, ¶118-122.

Cooper further discloses that *the broadcast program* (show AI is watching) *is television program transmitted from a broadcast station.* A POSITA would have understood that ABC, CBS, and NBC are well-known broadcasters of programs. *See, e.g.,* EX1012, 1 (“the Big Three broadcast television networks, ABC, CBS, and NBC”). Further, Cooper explicitly states that its TV tuner is able to receive broadcast signals or cable signals. *See, e.g.,* EX1004, ¶11 (“TV tuner for receiving broadcast and/or cable TV signals”). The buddy list reveals that users are watching broadcast stations. *See, e.g.,* EX1004, Fig. 12A (Suzi is watching broadcast station CBS). Thus, Cooper teaches the currently viewed program as a broadcast program

from a broadcast station. EX1002, ¶119-120.

Cooper also discloses that *the program selection of the another broadcast viewing system is a channel selection (e.g., Rob selecting the program on ABC by changing the channel from MTV to ABC) to identify a broadcast station (ABC)*. Rob's changing his TV channel from MTV to ABC triggered message 1202 from Rob's set-top box to server 1204, which resulted in message 1212 from server 1204 to Al's set-top box. See §§IV(B)(3)-(7) (limitations 1.b-f). A POSITA would have understood that ABC is a broadcast station. Thus, the channel selection of Rob identifies a broadcast station. EX1002, ¶121-122.

G. Claim 6

Cooper discloses and renders this claim obvious. See §IV(E) (claim 4). EX1002, ¶123-127.

Cooper discloses that the *broadcast program is a television program to be downloaded from a server station*. Cooper EX1004, ¶¶44-48, Fig. 6. Cooper discloses its set-top box system, a special-purpose computer, as part of a "web TV" system. EX1004, ¶11. Cooper also discloses that users of its integrated computer systems "can access electronic content or other resources either stored locally ... or remotely at one of more server systems 200." EX1004, ¶4, Fig. 2. Although Cooper does not explicitly state that one of its web TV functions is to download a television program, in my opinion, a POSITA would have understood that web TV

systems, such as Cooper's set-top box system, were well-known at the time of filing to allow users to select broadcast programming for download from servers (e.g., via streaming) for viewing. EX1004, ¶5 ("In practice, a server system 200 typically will not be a single monolithic entity, but rather will be a network of interconnected server computers" and "One such server system is "America Online [AOL] 4.0"), Fig. 5 (AOLTv); *see also, e.g.*, EX1009, ¶1 ("[t]his invention relates to ... interactive television systems that provide broadcast television programming and streaming media programming"), ¶10 ("interactive television systems are provided that allow a user to request playback control functions while viewing broadcast television programs on the user equipment"), ¶58 ("Video-on-demand content and video recorded using a network-based video recorder arrangement may be stored on server 56 or server 36 or at service provider 50 and may be provided to the user equipment when requested by users"), ¶76 ("user television equipment may be based on a WebTV box, a personal computer television (PC/TV), or any other suitable television equipment arrangement" and "[i]f desired, the functions of components such as set-top box 60, digital video recorder 66, a WebTV box, or PC/TV or the like may be integrated into a television or personal computer or other suitable device"), ¶87 ("[v]ideo recording functions may be provided by storing copies of television programs and other video content on a remote server ... or other network-based equipment such as equipment at a service provider such as

service provider 50”), ¶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”); EX1014 (AOL 4.0 allowed users to “search and navigate Web sites and AOL Channels in the same way, and you can move quickly from a Web page to an AOL Channel and back again.”). Thus, in my opinion, a POSITA would have found it obvious to implement Cooper such that the broadcast program is to be downloaded (e.g., streamed from a server). A POSITA could have done so using the streaming disclosed in Walker, or any other well-known streaming technique (e.g., America Online 4.0 EX1014), and by streaming the selected television program to the user when a user clicks on the link of the television program in the buddy list. See §§IV(E)(3)-(6) (limitations 4.b.i-4.c.ii). Doing so would have been within the skill of a POSITA, would have led to predictable results, would have had a reasonable expectation of success, and would have been fully compatible with Cooper. Motivation to do so arises from 1) a desire for the Cooper web TV system to have the typical functionality of streaming archived TV programming; 2) a desire to increase the programming available to a user; 3) a desire to enable the user to watch programming on demand. All such motivations would have been within the knowledge of a POSITA, as additionally confirmed by Walker. EX1009, ¶5 (streaming was accepted functionality). EX1002, ¶125.

Cooper renders obvious that *the program selection of the another broadcast program viewing system is a code setting to download the selected broadcast program*. In my opinion, “a code setting”² includes any encoded setting on the user’s computer used to download a program. A POSITA that was implementing the “web TV” disclosure of Cooper would have found it obvious for the remote user to download (*e.g.*, via streaming) the recorded broadcast program via a code setting when he or she selects a prerecorded broadcast program available for download, described above. EX1004, ¶11 (“a special purpose computer referred to as a ‘set-top box’ has been developed and used in connection with standard television (TV) sets for viewing web pages on the Internet Users of such ‘web TV’ systems can make dual usage of their TV sets—that is, either to watch TV or to view web pages and otherwise ‘surf’ the Internet.”), ¶5 (“America Online [AOL] 4.0.”). Also, AOL 4.0 allowed users to “search and navigate Web sites and AOL Channels in the same way, and you can move quickly from a Web page to an AOL Channel and back again.” EX1014. Users downloading programs via streaming from a media server was well-known at the time. *see, e.g.*, EX1014; EX1009, ¶1 (“[t]his invention relates to...interactive television systems that provide broadcast television programming and streaming media programming”), ¶10, ¶58

² This term is not a term of art and is not defined or explained in the specification.

(“Video-on-demand content and video recorded using a network-based video recorder arrangement may be stored on server 56 or server 36 or at service provider 50 and may be provided to the user equipment when requested by users”), ¶76 (“user television equipment may be based on a WebTV box, a personal computer television (PC/TV), or any other suitable television equipment arrangement” and “[i]f desired, the functions of components such as set-top box 60, digital video recorder 66, a WebTV box, or PC/TV or the like may be integrated into a television or personal computer or other suitable device”), ¶87, ¶144. A POSITA would have been motivated to implement Cooper such that a remote user downloaded (*e.g.*, streamed) a recorded broadcast program via a code setting such as a link that specified the streaming protocol, using any well-known streaming method or protocol at the time. Doing so would have been within the skill of a POSITA, would have led to predictable results, and would have had a reasonable expectation of success, and would have been fully compatible with Cooper. Motivation to do so includes the motivations identified above for the first half of this claim. Additional motivation includes using a generally accepted and user-friendly method of letting a user select a show for download such as a link. EX1002, ¶126-127.

H. Claim 7

Cooper discloses and renders obvious this claim. See §IV(D) (claim 3).

EX1002, ¶128-133.

1. [7.pre]

Cooper discloses and renders obvious the preamble. §IV(E) (claim 4); §IV(D)(1) (limitation 3.pre). EX1002, ¶129-130.

2. [7.a]

Cooper discloses and renders obvious this limitation. *See* §IV(D)(2) (limitation 3.a) (Cooper discloses the recited “operating portions” for the same reasons Cooper discloses the “keys” in limitation 3.a). EX1002, ¶131.

3. [7.b]

Cooper discloses and renders obvious this limitation. *See* §IV(D)(3) (limitation 3.b). A POSITA would have understood that the mouse transmits control signals that change the image on the display, *i.e.*, clicking the left mouse key on top of the hyperlink activates the hyperlink on the display. A POSITA would have understood the plain meaning of “transmit” includes indirect transmission (*i.e.*, remote controller to set-top box to display). EX1001, Fig. 1, 6:38-42. Thus, the mouse includes a signal transmitter that sends a control signal to the display (through the STB) because the control signal is propagated from the mouse to the display. *Id.* EX1002, ¶132-133.

I. Claim 8

Cooper discloses and renders obvious this claim. *See* §§IV(B), (D)-(E) (claims 1, 3-4). EX1002, ¶134-142.

1. [8.pre]

Cooper discloses the preamble. *See* §§IV(B)(1), (B)(4)-(5), (E)(1), (3)-(4), (D)(1), (H)(1) (limitations 1.pre, 1.c-d, 4.pre, 4.b.i-bii, 3.pre, 7.pre); *see also* §§IV(B), (D)-(E) (claims 1, 3-4). EX1002, ¶135-136.

2. [8.a]

Cooper discloses and renders obvious this limitation. *See* §§IV(B)(1), (5)-(7), (D)(2)-(3), (E)(5)-(6), (H)(2)-(3) (limitations 1.pre, 1.d-f, 3.a-b, 4.c.i-cii, 7.a-b); §III(D)(4)-(5) (constructions of *without any program selecting operation* and *universal*); *see also* §§IV(B), (D)-(E), (H) (claims 1, 3-4, 7). EX1002, ¶137.

3. [8.b.i]

Cooper discloses and renders obvious this limitation. *See* §§IV(B)(7), (D)(2)-(3), (E)(5)-(6), (H)(2)-(3) (limitations 1.f, 3.a-b, 4.c.i-cii, 7.a-b); *see also* §§IV(B), (D)-(E), (H) (claims 1, 3-4, 7). EX1002, ¶138.

4. [8.b.ii]

Cooper discloses and renders obvious this limitation. *See* §§IV(B)(5), (E)(5) (limitations 1.f, 4.c.i); *see also* §§IV(B), (E) (claims 1, 4). EX1002, ¶139.

5. [8.c]

Cooper discloses and renders obvious this limitation. *See* §§IV(B)(6), (E)(3) (limitations 1.e, 4.b.i); *see also* §§IV(B), (E) (claims 1, 4). EX1002, ¶140.

* * *

If Patent Owner argues the portions of Cooper 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 share and watch another user's broadcast program 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, ¶141.

If the Board finds that Cooper does not disclose any limitation of the challenged claims, such limitation would have nonetheless been obvious to a POSITA in light of Cooper and a POSITA's knowledge. Practicing any limitation of the challenged claims in light of Cooper 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 Cooper system, and would have been a mere design choice. Motivation to do so arises from at least common sense and the disclosures of Cooper set forth above. EX1002, ¶142.

V. GROUND 2: CLAIMS 1-16 ARE OBVIOUS BASED ON COOPER AND SLOTZNICK AND THE KNOWLEDGE OF A POSITA

A. Overview of the Prior Art References

1. Cooper

See §IV(A). EX1002, ¶143.

2. Slotznick

U.S. Patent Application Ser. No. 09/880,168 ("Slotznick") was filed on June

13, 2001, and published as US2001/0055951 on December 27, 2001. EX1005, cover page. Slotznick is prior art under 35 U.S.C. §102(a), (b), (e) (pre-AIA). EX1002, ¶144.

Slotznick describes a “TV Phone” input/output device that functions as both a wireless phone and a TV remote control for interacting with a television. EX1005, ¶13 (“[t]he present invention combines a wireless phone with a TV remote (referred to below as ‘TV Phone’ or a ‘television device’”).³ In addition to the conventional features associated with a wireless phone and TV remote, Slotznick’s TV phone can function like a mouse to interact with web elements shown on a user’s TV. EX1005, ¶35 (“TV phone can operate as a pointing device (*e.g.*, a 3D mouse) with respect to the display on a nearby TV which has the requisite devices for communicating with the TV Phone”), (“the TV Phone can be used as a pointing device to navigate the page and click on links”), (the selection of links “trigger ... the retrieval of a web page or other information”), ¶121 (“the TV phone acts as an input device (*e.g.*, a mouse ...)”), ¶133 (“user can input information to the WebTV device ... by clicking on hyperlinks”). EX1002, ¶145.

Slotznick is analogous art to the ’615 patent and was not considered during

³ A POSITA would have understood that Slotznick’s items 101 and 321 describe the same phone.

prosecution of the '615 patent. EX1002, ¶146-147

B. Motivation to Combine

A POSITA would have been motivated to combine the TV phone of Slotznick with Cooper because Cooper describes interacting with a television set system including a set-top box, using input/output devices that include a mouse, and Slotznick describes an input/output device that includes functions of a conventional mouse for interacting with a television set system potentially including a set-top box, as described above. *See* §V(A)(1)-(2). EX1002, ¶148.

Accordingly, a POSITA would have been motivated by the teachings of Slotznick to modify Cooper to substitute its input device with Slotznick's TV phone. Such a combination involves a simple substitution of one known element (Slotznick's TV Phone) for another (Cooper's conventional mouse) to obtain predictable results (e.g., controlling the STB with the TV Phone using a set of functionality that mirrors a traditional remote control, like being able to change a channel, adjust the volume, etc.). EX1005, ¶130 ("TV phone 321 also can be used as a remote control for the Television Receiver 303" and "TV remove control circuitry 334 [of TV phone 321] transfers its data to a wireless transmitter 335 which sends that data to a wireless receiver 315 in the Television Receiver 303," which data includes "data for changing a channel, increasing or decreasing volume of audio, powering the system on and off, or the like"), 130 ("wireless receiver 315

receives data ... in the same manner it receives data from a standard TV remote control device”). EX1002, ¶149.

Additionally, a POSITA would be motivated by the teachings described in Slotznick to substitute its input device with Slotznick’s TV Phone because such substitution is obvious to try. EX1005, ¶18 (“present invention allows a natural verbal and aural interactivity without breaking up the expected linearity of TV programming” and “without major telecommunications infrastructure upgrades”), 12 (the TV Phone provides a wireless means of interacting with the TV and removes the need for a solid surface in order to operate). EX1002, ¶150.

Accordingly, a POSITA would have had a reasonable expectation of success in making the proposed combination given the teachings of Cooper and Slotznick. Such a combination would have required minimal modifications to Cooper to use Slotznick’s remote, 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. Slotznick’s TV phone as a remote control would have been fully compatible with Cooper’s television set system. Moreover, changing remote controls for a given TV system would have been well known to a POSITA and was commonplace. For example, universal remote controls were commonplace. EX1002, ¶151.

If Patent Owner argues the portions of Cooper or Slotznick 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 share and watch another user's broadcast program 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, ¶152.

C. Claim 1

Cooper in view of Slotznick discloses and renders this claim obvious. *See* §IV(B) (claim 1). EX1002, ¶153-164.

1. [1.pre]

Cooper in view of Slotznick discloses and renders the preamble obvious. *See* §IV(B)(1) (limitation 1.pre). EX1002, ¶154.

2. [1.a]

Cooper in view of Slotznick discloses and renders this limitation obvious. *See* §IV(B)(2) (limitation 1.a). EX1002, ¶155.

3. [1.b]

Cooper in view of Slotznick discloses and renders this limitation obvious. *See* §IV(B)(3) (limitation 1.b). EX1002, ¶156.

4. [1.c]

Cooper in view of Slotznick discloses and renders this limitation obvious. *See* §IV(B)(4) (limitation 1.c). EX1002, ¶157.

5. [1.d]

Cooper in view of Slotznick discloses and renders this limitation obvious.
EX1002, ¶158-161.

Cooper in view of Slotznick discloses and renders obvious *a manual controller* (Slotznick's TV Phone 101) *arranged to change the display* (Cooper's TV 502) *in response to a predetermined same manual operation* (pushing a button on Slotznick's TV Phone 101 to select a link in the buddy list of Cooper) *from own motive of a viewer of the display on the basis of the information* (link) *received by the receiver* (network communication card 514). See §IV(B)(5) (limitation 1.d).
EX1002, ¶159.

As described above, Cooper discloses that its television system (*e.g.*, set-top box 500 and television 502) can be controlled by various input/output devices such as a mouse. See §IV(B)(5). Slotznick discloses an input/output device for TV systems in the form of TV Phone 101. EX1005, Fig. 1C (element 101), ¶121 ("the TV phone acts as an input device (*e.g.*, a mouse, pointing device) to a WebTV-type device connected to the display screen."). The TV phone 101 is controlled via manual inputs. EX1005, ¶59 ("the selection of a special or specified button initiates an enhanced function"; "the phrase, 'selection of a button' includes selecting a single button, selecting a plurality of specified buttons that must be pressed in a specific sequence"), ¶64 ("[t]he telephone device includes a button

which facilitates communication between the telephone device and the remotely located entity, and a wireless receiver”), Fig. 1C (element 115 is an example button on TV phone 101), ¶122 (describing the various buttons on TV phone 101). The TV phone 101 is operable to select a link shown on a TV. EX1005, ¶35 (“the TV phone can be used as a pointing device to navigate the page and click on links”), ¶133 (“[t]he user can input information to the WebTV device (*e.g.*, by clicking on hyperlinks or by typing e-mail) using the keyboard 365 or the TV remote 367”), ¶134 (“[i]nput to the remote control module in the TV phone 321 ... and the keypad in the TV phone 321 ... control the WebTV device in the same way as the TV remote 367 ... and keyboard 365”). Thus, at least one button from buttons 113, 115, 119, 121 is used to select a link displayed to the user. EX1005, Fig. 1A (“Person pushes a button ...such as the TV Phone button 113 ... [and the] phone automatically ... goes to the web site address emitted by the object or the device connected to the object.”), ¶35 (“the TV Phone can be used as a pointing device to navigate the page and click on links”), ¶121. EX1002, ¶160.

A POSITA would be motivated by the teachings of Slotznick to modify Cooper to substitute its input device with Slotznick’s TV phone. §V(B) (Motivation to combine). Accordingly, by Cooper in view of Slotznick yields a system in which a user changes the display in response to the user performing a predetermined operation on the TV phone (*i.e.*, pushing a button on the TV phone

to click a link in their buddy list). EX1002, ¶161.

6. [1.e]

Cooper in view of Slotznick discloses and renders this limitation obvious.

See §IV(B)(6) (limitation 1.e). EX1002, ¶162.

7. [1.f]

Cooper in view of Slotznick discloses and renders this limitation obvious.

See §IV(B)(7) (limitation 1.f). EX1002, ¶163.

8. [1.g]

Cooper in view of Slotznick discloses and renders this limitation obvious.

See §IV(B)(8) (limitation 1.g). EX1002, ¶164.

D. Claim 2

Cooper in view of Slotznick discloses and renders this claim obvious. See §IV(C) (claim 2); §V(C) (claim 1). EX1002, ¶¶165-166.

E. Claim 3

Cooper in view of Slotznick discloses and renders this claim obvious. See §IV(D) (claim 3). EX1002, ¶167-176.

1. [3.pre]

See §V(C) (claim 1). Cooper in view of Slotznick discloses and renders obvious that *the manual controller (e.g., TV phone) is a remote controller*. See §V(C)(5) (limitation 1.d). Slotznick's TV phone is a remote controller. EX1005, ¶13 (“[t]he present invention combines a wireless phone with a TV remote

(referred to below as a ‘TV Phone’ or a ‘telephone device’”), ¶32 (“[w]hen such a TV phone-enabled cell phone is in the presence of a TV phone set-top box ... these cell phones act as a TV phone and a TV remote”), ¶130 (“TV phone 321 also can be used as a remote control for Television Receiver 303”), ¶134 (“TV Phone 321 ... and the keypad in the TV Phone 321 ... control the WebTV device in the same way as the TV remote 367 ... and keyboard 365”), ¶12 (“[c]urrent technology for computer pointer devices no longer requires that a cable connect the pointer device (*e.g.*, mouse or track ball) to the computer ... current technology enables the pointer device to communicate with the computer in a wireless manner (*e.g.*, by using a Microsoft wireless mouse)”). EX1002, ¶168-169.

2. [3.a]

Cooper in view of Slotznick discloses and renders obvious that the remote controller includes *an operating part* (front portion of the TV phone) *including a plurality of keys* (buttons 113, 115, 119, 121) *each of which are assigned to predetermined functions, respectively*. EX1002, ¶170-174.

Slotznick’s TV phone 101 includes a front portion that includes elements for operating the TV phone 101. EX1005, ¶122 (“FIG. 1C shows the hand unit of a TV Phone 101”). The front portion includes a plurality of buttons 113, 115, 119, 121 each of which are assigned to predetermined functions. EX1005, ¶122 (“Some of its features are similar to those of a standard wireless telephone such as ... an

alphanumeric keypad 119, a control keypad with SEND and RECEIVE keys 121, a power on and off switch 107”; “[s]pecial features of the TV phone are ... a special TV Phone button 113 ... [and] a special TV Internet button 115”). Slotznick discloses the ability to preprogram a button to perform an “enhanced function.” EX1005, ¶59. EX1002, ¶171.

Cooper in view of Slotznick discloses *the plurality of keys including a predetermined key for replacing the currently displayed broadcast program by the one definite broadcast program identified by the channel selection of the another television set*. As established above for limitation 1.d, at least one button from buttons 113, 115, 119, 121 is used to select a link displayed to the user. §V(C)(5) (limitation 1.d). Additionally, as established above, selection of a link in a buddy list causes the user’s channel to change to the selected programming. §§IV(B)(5)-(7) (limitations 1.d-1.f). Because one of button 113, 115, 119, 121 is programmed to perform a selection operation, it is predetermined that one of button 113, 115, 119, 121 would replace the currently displayed program with the remote television’s program (the one definite broadcast program identified by the channel selection of the another television) when the user presses the button to select the link corresponding to the remote television’s program. EX1002, ¶172.

To the extent that Patent Owner argues that the predetermined key must be programmed to perform the replacement function, a POSITA would have

understood that preprogramming a TV remote button to perform enhanced functions, such as simultaneous viewing, was well-known in the art and obvious to try. *See, e.g.*, EX1005, ¶59; EX1017, Fig. 2 (item 34), [0013-15, 17-18, 134-143, 153-154, 193, 386]; EX1003, 88-95. EX1002, ¶173-174.

3. [3.b]

Cooper in view of Slotznick discloses and renders obvious that the TV phone includes *a signal transmitter* (wireless transmitter) *arranged to transmit a control signal* (a command to select the link) *to the television function unit in response to the operation of the predetermined key (§V(E)(2)) in the operating part.* *See* §V(C)(5) (limitation 1.d). Slotznick’s TV phone wirelessly transmits commands to the TV system via, for example, its wireless transmitter. EX1005, ¶12 (“[c]urrent technology for computer pointer devices no longer requires that a cable connect the pointer device (*e.g.*, mouse or track ball) to the computer ... current technology enables the pointer device to communicate with the computer in a wireless manner (*e.g.*, by using a Microsoft wireless mouse)”), ¶122 (“[s]pecial features of the TV phone are an antenna 103 for communicating with the TV or set-top box and a special TV phone button 113”), ¶130 (“TV phone 321 also can be used as a remote control for the Television Receiver 303”; “TV remote control circuitry 334 transfers its data to a wireless transmitter 335 [in the TV phone 321] which sends that data to a wireless receiver 315 in the Television

Receiver 303”), Fig. 3 (wireless transmitter 335 in TV phone 321). Thus, when a user pushes one of button 113, 115, 119, 121, or a pre-programmed button (*see* (§V(E)(2))) to select a link, a signal indicating the select command is wirelessly transmitted from TV phone 321 to the set-top box or TV via wireless receiver 315. EX1002, ¶175-176.

F. Claim 4

Cooper in view of Slotznick discloses and renders this claim obvious. *See* §IV(E) (claim 4), §V(C) (claim 1). EX1002, ¶177-183.

1. [4.pre]

Cooper in view of Slotznick discloses and renders obvious the preamble. *See* §V(C)(1), §V(C)(4) (limitations 1.pre and 1.c). EX1002, ¶178.

2. [4.a]

Cooper in view of Slotznick discloses and renders this limitation obvious. *See* §V(C)(3) (limitation 1.b). EX1002, ¶179.

3. [4.b.i]

Cooper in view of Slotznick discloses and renders this limitation obvious. *See* §V(C)(4) (limitation 1.c). EX1002, ¶180.

4. [4.b.ii]

Cooper in view of Slotznick discloses and renders this limitation obvious. *See* §V(C)(6) (limitation 1.e). EX1002, ¶181.

5. [4.c.i]

Cooper in view of Slotznick discloses and renders this limitation obvious. See §IV(E)(5), §V(C)(5)-(7), §V(D)(2) (limitations 1.d-f, 3.a, 4.c.i); §III(D)(4) (construction of *without any program selecting operation*). EX1002, ¶182.

6. [4.c.ii]

Cooper in view of Slotznick discloses and renders this limitation obvious. See §IV(E)(6), §V(C)(5)-(7) (limitations 1.d-f, 4.c.ii); §III(D)(4) (construction of *without any program selecting operation*). EX1002, ¶183.

G. Claim 5

Cooper in view of Slotznick discloses and renders this claim obvious. See §IV(F) (claim 5). EX1002, ¶184.

H. Claim 6

Cooper in view of Slotznick discloses and renders this claim obvious. See §IV(G) (claim 6). EX1002, ¶185.

I. Claim 7

Cooper in view of Slotznick discloses and renders this claim obvious. See §V(E)-(F) (claims 3-4). EX1002, ¶186-189.

1. [7.pre]

Cooper in view of Slotznick discloses and renders the preamble obvious. See §IV(E)(1) (limitation 4.pre); §V(F) (claim 4). EX1002, ¶187.

2. [7.a]

Cooper in view of Slotznick discloses and renders this limitation obvious.

See §V(E)(2) (limitation 3.b). EX1002, ¶188.

3. [7.b]

Cooper in view of Slotznick discloses and renders this limitation obvious.

See §IV(H)(3), §V(E)(3) (limitations 7.b, 3c). EX1002, ¶189.

J. Claim 8

Cooper in view of Slotznick discloses and renders this claim obvious. See §V(C), (E)-(F) (claims 1, 3-4). EX1002, ¶¶190-195.

1. [8.pre]

Cooper in view of Slotznick discloses and renders this preamble obvious.

See §§V(C)(1), (C)(4)-(5), (E)(1), (F)(1), (F)(3)-(4), (I)(1) (limitations 1.pre, 1.c-d, 3.pre, 4.pre, 4.b.i-bii, 7.pre); *see also* §§V(C), (E)-(F), (I) (claims 1, 3-4, 7).

EX1002, ¶191.

2. [8.a]

Cooper in view of Slotznick discloses and renders this limitation obvious.

See §§V(C)(1), (5)-(7), (E)(2)-(3), (F)(5) (limitations 1.pre, 1.d-f, 3.b-c, 4.c); *see also* §§(V)(C), (E), (F) (claims 1, 3-4, 7). EX1002, ¶192.

3. [8.b.i]

Cooper in view of Slotznick discloses and renders this limitation obvious.

See §§V(C)(7), (E)(2)-(3), (F)(5)-(6), (I)(2)-(3) (limitations 1.f, 3.a-b, 4.c.i-cii, 7.a-

b); *see also* §§V(C), (E), (F), (I) (claims 1, 3-4, 7). EX1002, ¶193.

4. [8.b.ii]

Cooper in view of Slotznick discloses and renders this limitation obvious. *See* §§V(C)(7), (F)(5) (limitations 1.f, 4.c.i); *see also* §§V(C), (F) (claims 1, 3, 4). EX1002, ¶194.

5. [8.c]

Cooper in view of Slotznick discloses and renders this limitation obvious. *See* §§V(C)(6), (F)(3) (limitations 1.e, 4.b.i); *see also* §§V(C), (F) (claims 1, 4). EX1002, ¶195.

K. Claim 9

Cooper in view of Slotznick discloses and renders this claim obvious. *See* §V(J) (claim 8). Slotznick discloses that the remote controller includes *a display* (LCD panel 111). *See, e.g.*, EX1005, ¶122 (“Some of its [TV Phone 101] features are similar to those of a standard wireless telephone such as ... an LCD panel 111”), ¶147 (“[t]he data may be displayed on a small LCD screen 111 on the TV phone”), ¶153 (“shown the phone number in the LCD screen 111 (or other display screen) of the TV Phone 321”), Fig. 1C (element 111). EX1002, ¶¶196-199.

L. Claim 10

Cooper in view of Slotznick discloses and renders this claim obvious. *See* §V(K) (claim 9). Slotznick discloses *the manual operating portions* (buttons 113, 115, 119, 121, 329) *of the manual operating part* (front of TV phone 101) *include*

a *phone call key* (special button 329 and button 113). Slotznick's TV phone 321 includes a special button 329 that is pressed to make a phone call. EX1005, ¶145 ("pressing the special button 329 causes the autodialer 327 to make the phone call"). Slotznick's TV phone 101 also includes a "button 113" that places a phone call. EX1005, ¶122, Fig. 1A (the phone "dials the telephone number" upon pushing button 113); *see also* EX1005, ¶13 ("the viewer clicks a button on the TV Phone and the call is automatically placed"). EX1002, ¶¶200-203.

M. Claim 11

Cooper in view of Slotznick discloses and renders this claim obvious. *See* §V(L) (claim 10). Slotznick discloses *the manual operating portions* (buttons 113, 115, 119, 121, 329) *of the manual operating part* (front of TV phone 101) *include ten key* (the ten numeric keys of alphanumeric keypad 119). *See, e.g.,* EX1005, ¶122 ("[s]ome of its [the TV Phone 101] features are similar to those of a standard wireless telephone such as ... an alphanumeric keypad 119"), Fig. 1C (element 119, showing ten keys numbered 0 through 9). In the context of the '615 patent, ten key 78 includes the keys numbered 0 to 9. EX1001, Fig. 18, 38:42-46. EX1002, ¶204-207.

N. Claim 12

Cooper in view of Slotznick discloses and renders this claim obvious. *See* §V(M) (claim 11). Slotznick discloses the *remote controller* (TV phone) includes a

speaker (speaker 109). *See, e.g.*, EX1005, ¶122 (“[s]ome of its [the TV Phone 101] features are similar to those of a standard wireless telephone such as ... a speaker 109”), Fig. 1C (element 119), ¶147 (“data may be ... delivered to the user via a voice or audio interface using a speaker 109”). EX1002, ¶208-210.

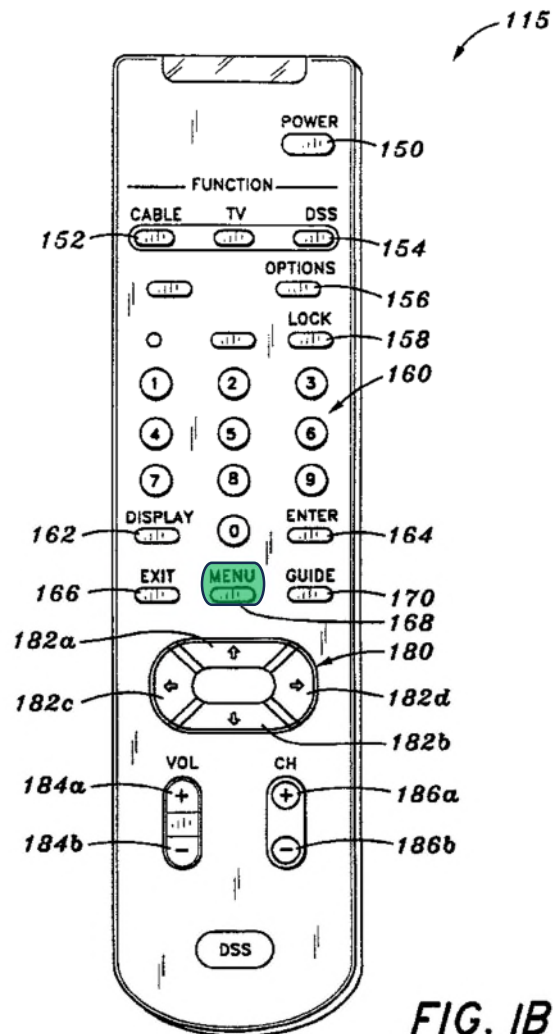
O. Claim 13

Cooper in view of Slotznick discloses and renders this claim obvious. *See* §V(N) (claim 12). Slotznick discloses the *remote controller* (TV phone) includes a *microphone* (microphone 117/323). *See, e.g.*, EX1005, ¶122 (“[s]ome of its [the TV Phone 101] features are similar to those of a standard wireless telephone such as microphone 117”), Fig. 1C (element 117), ¶129 (“the user may talk through the microphone 323 of the TV phone 321”), ¶132 (“commands and data entries can be accomplished by speaking into the microphone 332”). EX1002, ¶211-214.

P. Claim 14

Cooper in view of Slotznick discloses and renders this claim obvious. *See* §V(O) (claim 13). Cooper in view of Slotznick discloses and renders obvious that *the manual operating portions* (buttons) *of the manual operating part* (front of TV Phone) *include a menu key*. Slotznick discloses that the TV phone is a remote control for the television. *See* §V(C)(5) (limitation 1.d). Slotznick’s TV phone also includes buttons for controlling the TV. *See* §V(C)(5) (limitation 1.d), §V(E)(3) (limitation 3.b). Although Slotznick does not explicitly state that one of its buttons

is a menu key, a POSITA would have known that a menu button was a well-known and standard button on remote controls.



EX1008, Fig. 1B (menu key 168, annotated green), ¶124 (“MENU key 168”). A POSITA would have included a menu key in the TV phone by including a button with a predefined menu function, or by programming one of the existing keys (there are three at the bottom of Fig. 1C) that are blank to be the menu key. Doing

so would have been within the skill of a POSITA, would have led to predictable results, would have had a reasonable expectation of success. Doing so would have been fully compatible with the TV Phone. Motivation to do so arises from Slotznick's disclosure that it has all the common functions of a TV remote, which commonly included menu keys, as established above. Additional motivation arises from Reyes's disclosure of menu key 168. Additional motivation arises from the knowledge of a POSITA, who would have known that TVs and STBs often had menus, such as for settings and options, that a user would need to access. More motivation arises from Cooper's disclosure in Fig. 5 of an "AOLTv Menu." EX1004, Fig.5; EX1015, ¶84. A menu key would be desirable to let the user access this menu with a key press. EX1002, ¶215-219.

Q. Claim 15

Cooper in view of Slotznick discloses and renders this claim obvious. See §V(O) (claim 13). Cooper in view of Slotznick discloses and renders obvious that *the manual operating portions (buttons) of the manual operating part (front of TV Phone) include a scroll key*. Slotznick discloses that the TV phone is a remote control for the television. See §V(C)(5) (limitation 1.d). Slotznick's TV phone also includes buttons for controlling the TV. See §V(C)(5) (limitation 1.d), §V(E)(3) (limitation 3.b). Although Slotznick does not explicitly state that one of its buttons is a scroll key, a POSITA would have known that a scroll button is a standard

button on remote controls. See EX1008, ¶ 24 (“scroll buttons 182a-d”).

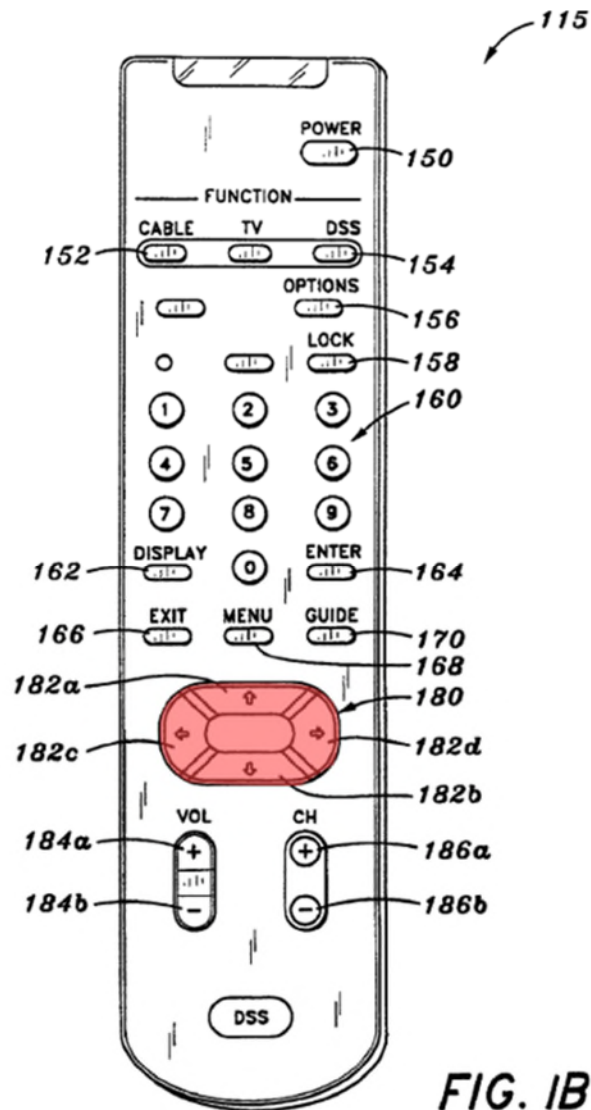


FIG. 1B

EX1008, Fig. 1B (shown below with buttons 182a-d, annotated red).

In my opinion, a POSITA would have been motivated to incorporate the remote control scroll buttons of Reyes or Heaton with the remote control of Slotznick because all of them describe remote control devices with design variations, for interacting with a television set system.

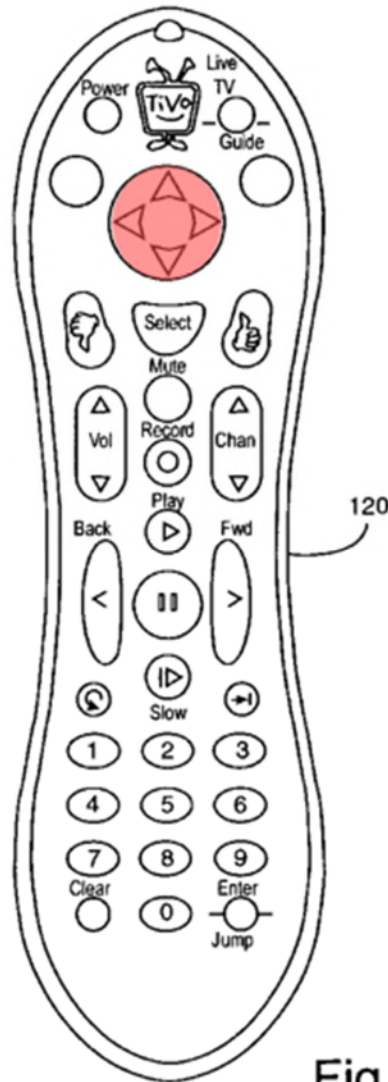


Fig. 7

EX1007, Fig. 7 (showing similar keys, annotated red). A POSITA would have included a scroll key in the TV phone by including a button with a predefined scroll function, or by programming one of the existing keys (including the up/down button shown in Fig. 1C) to be the scroll key. Doing so would have been within the skill of a POSITA, would have led to predictable results, would have had a reasonable expectation of success. Doing so would have been fully compatible with the TV Phone. Motivation to do so arises from Slotznick's disclosure that it

has all the common functions of a TV remote, which commonly included scroll keys, as established above. Additional motivation arises from the knowledge of a POSITA, who would have known that TVs and STBs often had menus, such as for settings and options, that a user would need to access. A scroll key would be desirable to let the user to scroll through EPGs (which Cooper discloses) using a button. Similar motivation comes from Houghton, which discloses scrolling through an EPG. EX1015, ¶13. Additional motivation comes from Scott, which discloses using up and down keys on a remote to scroll a web page. EX1016, ¶¶92-94. EX1002, ¶220-223.

R. Claim 16

Cooper in view of Slotznick discloses and renders this claim obvious. See §V(O) (claim 13). Cooper in view of Slotznick discloses and renders obvious that *the manual operating portions (buttons) of the manual operating part (front of TV Phone) include a push-down operation key*. Slotznick discloses that the TV phone is used as a remote control for the television. See §V(C)(5) (limitation 1.d). Slotznick discloses that a user “pushes” the keys of the TV phone. Figs. 1A-B. A POSITA would have understood that one operates the TV phone keys by pushing them down. See, e.g., Fig. 1C. Additionally, Slotznick discloses a push-down arrow key (annotated yellow below).

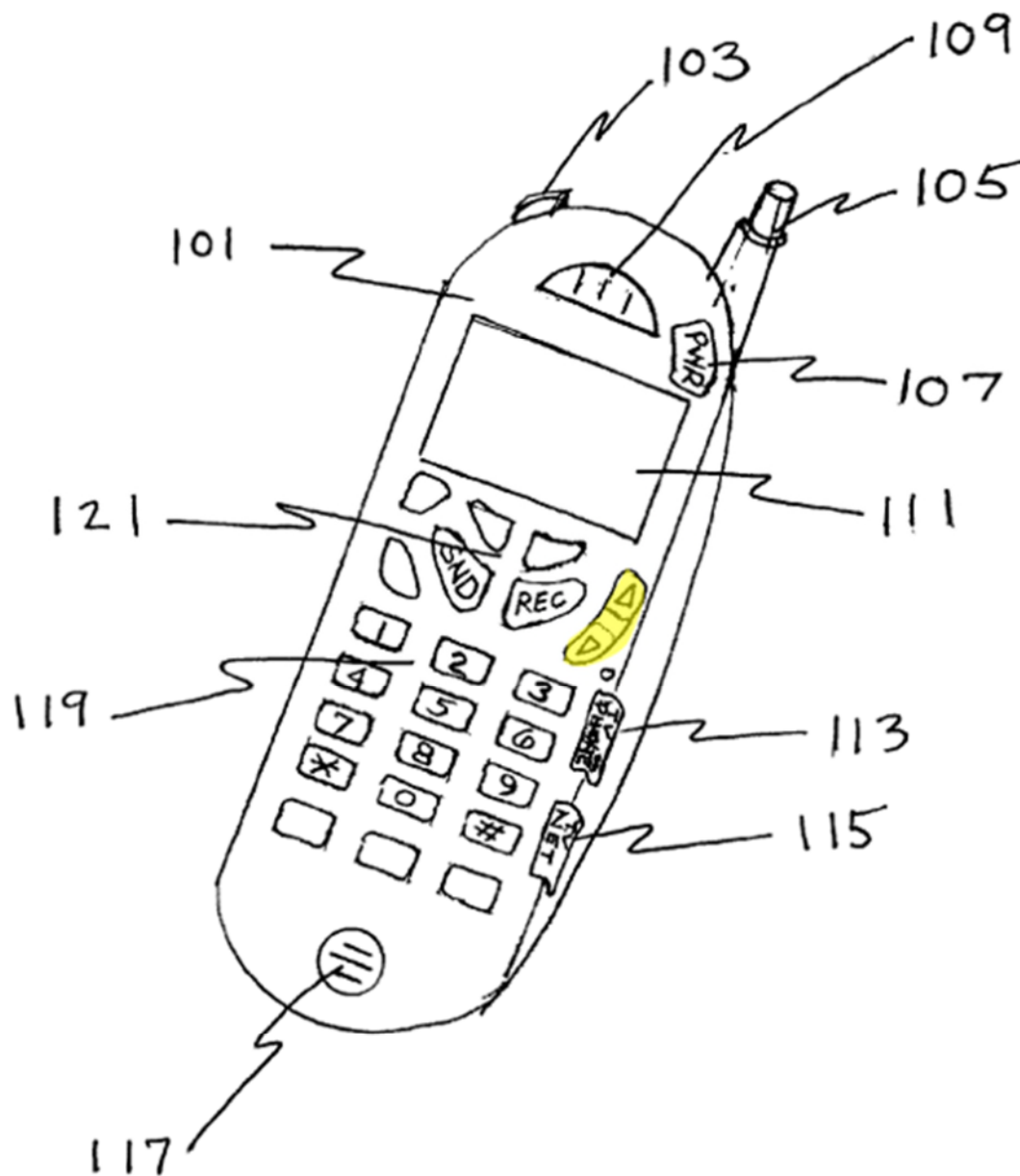


Fig. 1C

EX1005, Fig. 1C. EX1002, ¶224-227.

VI. 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, 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 (June 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 around 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 February 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 a similar stage. Moreover, Petitioners seek review in a timely manner, roughly two months 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. §VI(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 around the same time as the district court, this factor weighs slightly against discretionary denial. See *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) (noting that 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, and the '615 patent has never been challenged in a post-issuance proceeding. 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).⁴

B. 35 U.S.C. §325(b) Analysis

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

⁴ The Board's *Fintiv* framework should be overturned because it (1) exceeds the Director's authority, (2) is arbitrary and capricious, (3) and was adopted without notice-and-comment rulemaking.

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 Cooper, Slotznick, and the knowledge of a POSITA.

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.

VII. 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 '615 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.).

3. Lead and Backup Counsel

Lead Counsel	Backup Counsel
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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 '615 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. DA50-3266.

VIII. CONCLUSION

The Board should find all claims of the '615 patent unpatentable for the reasons discussed in this petition.

Respectfully submitted,

/s/ Jennifer Librach Nall

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U.S. Patent No. 9,319,615
Petition for *Inter Partes* Review

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Twitch Interactive, Inc.*

CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. §42.24(d), Petitioner certifies that this petition includes 13,652 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: August 13, 2024

/s/ Jennifer Librach Nall

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*Attorney for Petitioner, 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 August 13, 2024, a true and correct copy of the Petition for *Inter Partes* Review of U.S. Patent No. 9,319,615 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,

Date: August 13, 2024

/s/ Jennifer Librach Nall

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