

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

COMCAST CABLE COMMUNICATIONS, LLC,
Petitioner,

v.

ROVI GUIDES, INC.,
Patent Owner.

Case IPR2017-00943
Patent 8,566,871 B2

Before KARL D. EASTHOM, BARBARA A. BENOIT, and
STACY B. MARGOLIES, *Administrative Patent Judges*.

MARGOLIES, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

In this *inter partes* review, instituted pursuant to 35 U.S.C. § 314, Comcast Cable Communications, LLC (“Petitioner”) challenges the patentability of claims 1–33 of U.S. Patent No. 8,566,871 B2 (Ex. 1101, “the ’871 patent”), owned by Rovi Guides, Inc. (“Patent Owner”). We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons discussed below, Petitioner has not shown by a preponderance of the evidence that claims 1–33 of the ’871 patent are unpatentable.

A. *Procedural History*

Petitioner filed a Petition for *inter partes* review of claims 1–33 of the ’871 patent. Paper 2 (“Pet.”). Patent Owner filed a Preliminary Response. Paper 7 (“Prelim. Resp.”). On October 13, 2017, we instituted an *inter partes* review of claims 1–33 of the ’871 patent on the following grounds:

References	Basis	Challenged Claims
Humpleman ¹ and LaJoie ²	35 U.S.C. § 103(a) ³	1–33
Humpleman and Alexander ⁴	35 U.S.C. § 103(a)	1–8, 10, 12–19, 21, 23–30, and 32
Humpleman, Alexander, and LaJoie	35 U.S.C. § 103(a)	9, 11, 20, 22, 31, and 33
Humpleman and Knudson ⁵	35 U.S.C. § 103(a)	1–8, 10, 12–19, 21, 23–30, and 32
Humpleman, Knudson, and LaJoie	35 U.S.C. § 103(a)	9, 11, 20, 22, 31, and 33

Paper 9 (“Inst. Dec.”), 35.

Subsequent to institution, Patent Owner filed a Patent Owner Response (Paper 15, “PO Resp.”), to which Petitioner filed a Reply (Paper 18, “Reply”). Petitioner relies on the Declaration of Dr. Vernon Thomas Rhyne, III (Ex. 1122) and the Second Declaration of Vernon Thomas Rhyne, III (Ex. 1133, “Second Rhyne Declaration”). Patent Owner relies on the Declaration of Edward J. Delp III, Ph.D. (Ex. 2103).

Patent Owner filed a Motion to Supplement Record (Paper 30, “MTS”), to which Petitioner filed an Opposition (Paper 32, “MTS Opp.”).

¹ U.S. Patent No. 6,288,716 B1, filed June 24, 1998, issued Sept. 11, 2001 (Ex. 1117).

² U.S. Patent No. 6,772,443 B1, filed Nov. 3, 1998, issued Aug. 3, 2004 (Ex. 1120)

³ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 287–88 (2011), revised 35 U.S.C. § 103, effective March 16, 2013. Because the challenged patent was filed before March 16, 2013, we refer to the pre-AIA version of § 103 in this Decision.

⁴ PCT Publication No. WO 99/04561, published Jan. 28, 1999 (Ex. 1121)

⁵ U.S. Patent Application Publication No. US 2005/0240968 A1, filed June 8, 2005, issued Oct. 27, 2005 (Ex. 1124).

An oral hearing was held on July 25, 2018, and a transcript of the hearing has been entered into the record. Paper 33 (“Tr.”).

B. Related Matters

The parties identify the following pending matters, which may affect, or be affected by, a decision in this proceeding: (1) *Rovi Guides, Inc. v. Comcast Corporation*, 1:16-cv-09826 (S.D.N.Y.); (2) *Comcast Corporation v. Rovi Corporation*, 1:16-cv-03852 (S.D.N.Y.); and (3) *In the Matter of Certain Digital Video Receivers and Hardware and Software Components Thereof*, ITC Inv. No. 337-TA-1001. Pet. 1–2; Paper 3, 2; *see* 37 C.F.R. § 42.8(b)(2). Claims 1–33 of the ’871 patent also are at issue in IPR2017-00942, for which a final written decision is being issued concurrently with this Decision.

C. The ’871 Patent

The ’871 patent is titled “Multiple Interactive Electronic Program Guide System and Methods.” Ex. 1101, [54]. The ’871 patent describes as background that electronic interactive program guides (“IPGs”) “require[] a set-top box or a computer,” and “in a household with several [television] sets, several set-top boxes are needed.” *Id.* at 1:43–45. In addition, according to the ’871 patent, “different users with different [television] watching tastes and habits do not have the flexibility of customizing an IPG to their needs.” *Id.* at 1:47–49. The ’871 patent explains that “there is a need for a multiple IPG system in a single set-top box or a single computer wherein the IPGs share some data and are capable of notifying users of any competing and conflicting resources.” *Id.* at 1:53–56.

The ’871 patent describes a multiple IPG system that “provides different [television] programming and different IPGs to several different

users respectively.” *Id.* at 1:62–64. The ’871 patent discloses that “[e]ach IPG can be configured to allow users to tailor the program guides by selecting which channels to display in the guides and which channels the respective IPG device tunes to when the user channel surfs.” *Id.* at 4:48–51. For example, according to the ’871 patent, a user can deselect channels that the user seldom watches, and those deselected channels are not displayed on the guide and are skipped over when the user presses channels up or down. *Id.* at 4:51–54, 4:63–65.

Figure 1C of the ’871 patent, shown below, illustrates a block diagram of the software architecture:

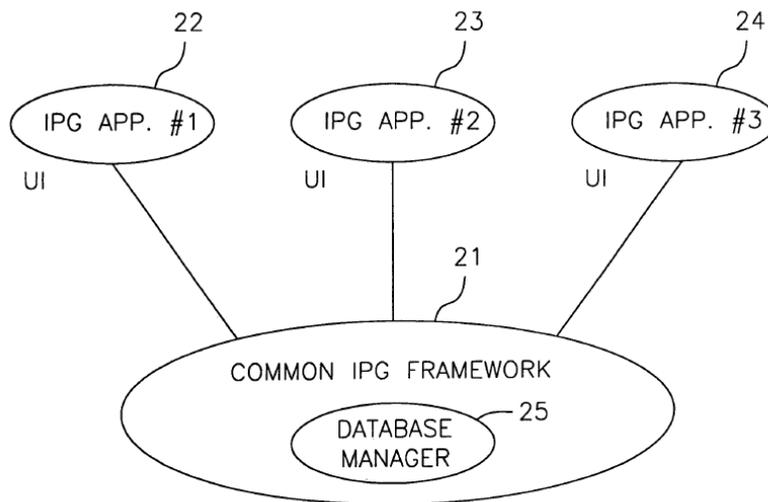


FIG. 1C

Id. at 7:53–54. As illustrated in Figure 1C above, IPG data is stored and organized in common IPG framework 21, and the IPG data is shared between three IPG applications 22, 23, and 24. *Id.* at 7:54–56. Common IPG framework 21 includes database manager 25, which responds to requests from IPG applications 22, 23, and 24. *Id.* at 7:56–59.

The '871 patent discloses that data for the multiple IPGs is stored in system RAM 8 (shown in Figure 1B). *Id.* at 7:26–28. According to the '871 patent, “[p]referably, common data to all IPGs is stored in a segment of the RAM that is accessible by all the IPGs” and “[d]ata specific to each IPG based on a particular user or a particular [television] set is stored in other segments of the RAM 8 and is accessible by respective IPGs.” *Id.* at 7:28–32.

The '871 patent also discloses a “scheduled events list,” an example of which is illustrated in Figure 31 below. *Id.* at 8:6–7.

Scheduled Events List				
EVENT		SCHEDULE	TIME	DUR.
Purchase \$	Sphere	Wed Sep 16	10:00 pm	2:30
Purchase \$	Wag the Dog	Thu Sep 17	12:00 pm	2:00

This show is on ch. 152, VCD02

FIG. 31

Figure 31 above illustrates a scheduled events list, which includes “an aggregate list for all individual recordings and series recordings, future [Pay-

Per-View (“PPV”)] purchases, and scheduled tunes.” *Id.* at 8:4–6. According to the ’871 patent, “[t]he scheduled events list is shared by all the users.” *Id.* at 8:12–13. The ’871 patent discloses that “[i]f a user cancels a scheduled purchase, the purchase is no longer displayed in any of the guides or any of the scheduled events lists.” *Id.* at 8:26–28. The ’871 patent also discloses that “all the competing and conflicting requests for limited resources, such as VCR scheduled recordings, are brought to the users’ attention and displayed or prompted by the system.” *Id.* at 5:50–53; *see also id.* at 2:5–7 (same). For example, “[i]n case of a conflict, the program in conflict is highlighted in this screen.” *Id.* at 8:34–35. Also, “a new pop up (prompt) screen may appear notifying the user about the conflict.” *Id.* at 8:35–37.

An example prompt is shown in Figure 32 below.

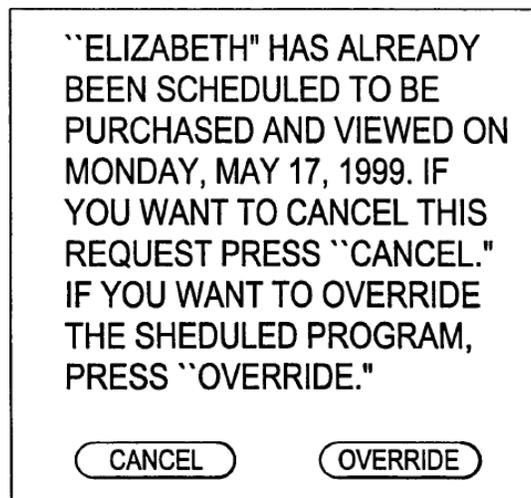


FIG. 32

Figure 32 above shows “an example of a prompt window for notifying a second user who is requesting a PPV purchase that has already been scheduled.” *Id.* at 8:38–40. The ’871 patent explains as follows:

In this example, unknown to the second user, a first user had requested to purchase “Elizabeth” as a PPV program to be viewed at a first time schedule. The system notifies the second user about the conflict and asks the second user if he/she wants to override the first user’s scheduled event. Only a user with higher password level than that of a first user can override the first user’s request for a conflicting resource. If the second user has a higher priority password, he/she can re-schedule the telecast time of “Elizabeth.”

Id. at 8:40–48. The ’871 patent also discloses that “if a first user schedules recording of a first program and a second user attempts to schedule recording of a second program that will be telecast at the same time, the system prompts the second user and displays the recording schedules stored by all the users.” *Id.* at 5:60–64.

D. Illustrative Claims

Among the challenged claims (claims 1–33), claims 1, 12, and 23 are independent. Claims 1, 2, and 4 are illustrative of the subject matter of the challenged claims and read as follows:

1. A method for displaying first and second interactive electronic program guides that are accessible from a plurality of user television equipment devices located in a household, the method comprising:

receiving, from the first interactive electronic program guide, a first event of a first type scheduled with the first interactive electronic program guide;

receiving, from the second interactive electronic program guide, a second event of a second type scheduled with the second interactive electronic program guide;

storing the received first and second events in a memory accessible to the first and second interactive electronic program guides; and

generating a list of scheduled events of the first and second types by aggregating the first and second scheduled events received from the first and second interactive electronic program guides, wherein the list of scheduled events is accessible for display from any of the first and the second interactive electronic program guides in the household.

2. The method defined in claim 1, further comprising allowing a user to select a program for recording from a given interactive electronic program guide in the household.

4. The method defined in claim 2, further comprising alerting the user when the selected program for recording has already been selected to be recorded with a different interactive electronic program guide that is in the household.

Id. at 25:43–65, 26:4–7.

II. DISCUSSION

A. *Principles of Law*

To prevail in its challenge to Patent Owner’s patent claims, Petitioner must demonstrate by a preponderance of the evidence that the claims are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). “In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). The burden of persuasion never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d

1316, 1326–27 (Fed. Cir. 2008)) (discussing the burden of proof in *inter partes* review).

A claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time of the invention to a person having ordinary skill in the art. *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including the following: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). “A determination of whether a patent claim is invalid as obvious under § 103 requires consideration of all four *Graham* factors, and it is error to reach a conclusion of obviousness until all those factors are considered.” *Apple Inc. v. Samsung Elecs. Co.*, 839 F.3d 1034, 1048 (Fed. Cir. 2016) (en banc) (citations omitted). “This requirement is in recognition of the fact that each of the *Graham* factors helps inform the ultimate obviousness determination.” *Id.*

B. Level of Ordinary Skill in the Art

In determining whether an invention would have been obvious at the time it was made, 35 U.S.C. § 103 requires us to resolve the level of ordinary skill in the pertinent art at the time of the invention. *Graham*, 383 U.S. at 17. “The importance of resolving the level of ordinary skill in the art lies in the necessity of maintaining objectivity in the obviousness inquiry.” *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 718 (Fed. Cir. 1991). The person of ordinary skill in the art is a hypothetical person who is presumed

to have known the relevant art at the time of the invention. *In re GPAC, Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995). Factors that may be considered in determining the level of ordinary skill in the art include, but are not limited to, the types of problems encountered in the art, the sophistication of the technology, and educational level of active workers in the field. *Id.* In a given case, one or more factors may predominate. *Id.* Generally, it is easier to establish obviousness under a higher level of ordinary skill in the art. *Innovention Toys, LLC v. MGA Entm't, Inc.*, 637 F.3d 1314, 1323 (Fed. Cir. 2011) (“A less sophisticated level of skill generally favors a determination of nonobviousness . . . while a higher level of skill favors the reverse.”).

Petitioner, relying on the testimony of its declarant, Dr. Rhyne, asserts that one of ordinary skill in the art would have had “at least a bachelor’s degree in electrical engineering, computer engineering, or computer science, and at least two years of experience or familiarity with electronic program guides, television video signal processing, graphical user interfaces, and associated computer software.” Pet. 11 (citing Ex. 1122 ¶ 26). Petitioner also asserts that, alternatively, a person of ordinary skill “would have had equivalent experience either in industry or research, such as designing, developing, evaluating, testing, or implementing the technologies listed above.” *Id.* at 11–12 (citing Ex. 1122 ¶ 26).

Patent Owner, relying on the testimony of its declarant, Dr. Delp, asserts that one of ordinary skill at the time of the invention would have had “a bachelor’s degree in electrical engineering, computer engineering, or computer science, and two to three years of experience relating to electronic content delivery, such as experience with cable or satellite television systems, set-top boxes, multimedia systems or electronic program guides, or

any equivalent knowledge, training and/or experience.” PO Resp. 11 (citing, e.g., Ex. 2103 ¶ 18). Patent Owner additionally asserts that “[a]dditional graduate education could substitute for professional experience, or significant experience could substitute for formal education.” *Id.* (citing, e.g., Ex. 2103 ¶ 18).

We do not ascertain a meaningful difference between the declarants’ proposals as applied to this case and the parties do not argue that any issue in the case turns on such a difference. *See* Tr. 17:21–18:4, 77:21–78:7. We determine that the level of ordinary skill proposed by Petitioner and Dr. Rhyne is consistent with the challenged patent and the asserted prior art and we therefore adopt that level for the purposes of the analysis below.

C. Claim Construction

In an *inter partes* review, we construe claim terms in an unexpired patent according to their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (upholding the use of the broadest reasonable interpretation standard). Consistent with the broadest reasonable construction, claim terms are presumed to have their ordinary and customary meaning as understood by a person of ordinary skill in the art in the context of the entire patent disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). An inventor may provide a meaning for a term that differs from its ordinary meaning by defining the term in the specification with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

In the Petition, Petitioner proposes constructions for “user television equipment devices,” “interactive electronic program guide,” “first and second” interactive electronic program guides, “event,” and “first type” and “second type” of event. Pet. 9–11. In response, Patent Owner proposes different constructions from that of Petitioner for “interactive electronic program guide” and “first and second” interactive electronic program guides and argues that the remaining terms do not need to be construed. PO Resp. 27–38. In its Reply, Petitioner also proposes that “alerting” should be given its plain and ordinary meaning, citing a dictionary definition in support. Reply 6 (citing Ex. 1136).

We determine that no claim term requires express construction to resolve the issues raised by the patentability grounds addressed below.

D. Asserted Obviousness over Humpleman and LaJoie

Petitioner contends that claims 1–33 are unpatentable under 35 U.S.C. § 103(a) as obvious over Humpleman and LaJoie. Pet. 8, 18–41.

We have reviewed Petitioner’s and Patent Owner’s arguments and evidence of record. For the reasons that follow, we determine that Petitioner has not shown by a preponderance of the evidence that claims 1–33 are unpatentable under 35 U.S.C. § 103(a) as obvious over Humpleman and LaJoie.

1. Summary of Humpleman

Humpleman is a United States patent titled “Browser Based Command and Control Home Network.” Ex. 1117, [54]. Humpleman discloses a home network that “provide[s] users with a plurality of graphical user interfaces (‘GUIs’) for commanding and controlling each home device[.]” *Id.* at 4:36–40.

Figure 1, below, illustrates Humpleman's home network:

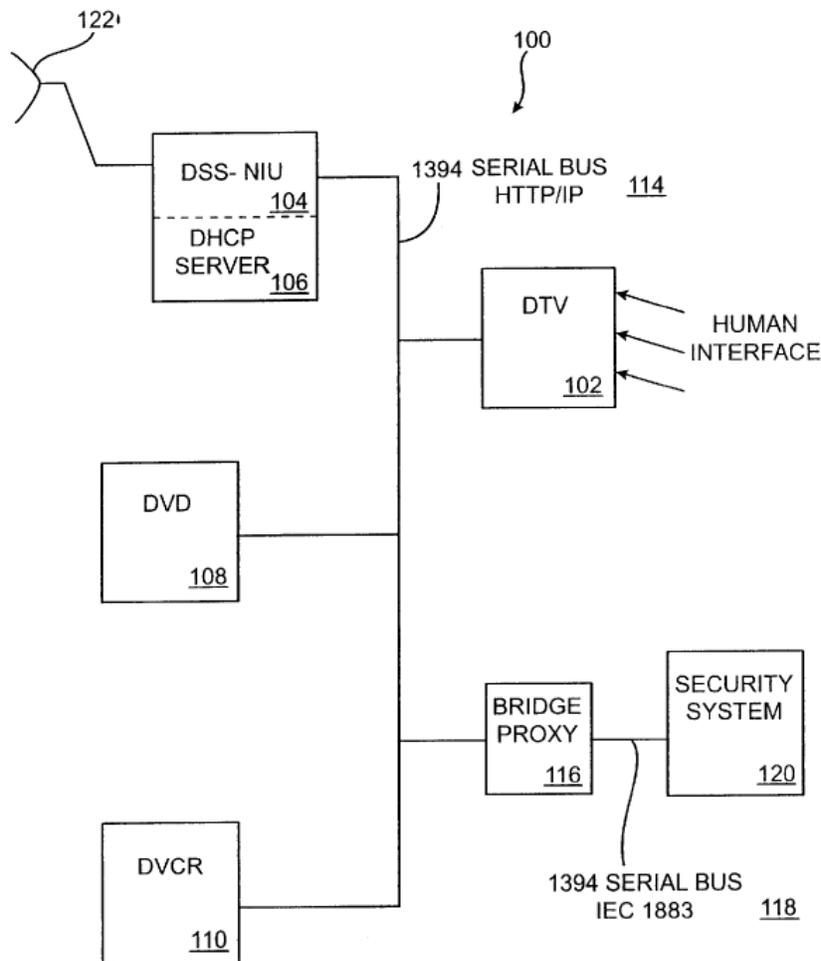


FIG. 1

Id. at 4:42–44. As illustrated in Figure 1 above, home network 100 includes 1394 serial bus 114, which electrically connects multiple home devices on the home network. *Id.* at 4:44–46. The home devices include digital video device (DVD) 108, digital video cassette recorder (DVCR) 110, and digital television (DTV) 102. *Id.* at 6:3–9. Humpleman discloses that DTV 102 “can provide the human interface for the home network 100 as it comprises a screen for displaying HTML pages.” *Id.* at 6:13–17. Humpleman also states

that other devices having a display capability, such as a personal computer, can provide the human interface. *Id.* at 6:17–22.

Humpleman discloses that each home device is associated with one or more HTML files which define the control and command functions associated with the particular device. *Id.* at 6:61–64. Humpleman states that “[b]ecause each home device supplies its own GUI through its own HTML files to the browser based DTV 102, the browser based DTV 102 can provide a command and control interface for a home device without having to know any specific details about the particular device.” *Id.* at 7:14–18.

Figure 3A of Humpleman, below, depicts an embodiment “in which a browser based DTV 202 (client) renders the characteristics of a home device 204 (server) over a home network”:

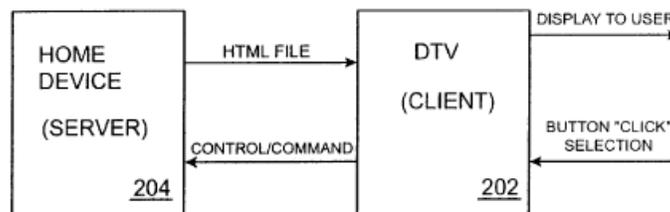


FIG. 3A

Id. at 7:27–31. According to Humpleman, and as illustrated in Figure 3A above, “[o]nce the information contained in a device’s HTML file is graphically displayed on the DTV 202, the user can control the home device 204 from the DTV 202 by selecting icons that have associated hyperlinks to start the control programs displayed on the DTV’s screen and/or entering data to the DTV 202.” *Id.* at 7:41–46.

Humpleman also describes a session manager, which “provides the primary interface between a user and a home network.” *Id.* at 14:27–28.

According to Humpleman, the session manager “generates a session page that provides an interface which allows users to command and control the home devices that are connected to the home network.” *Id.* at 14:28–33.

Figure 10, below, illustrates an example of a session page:

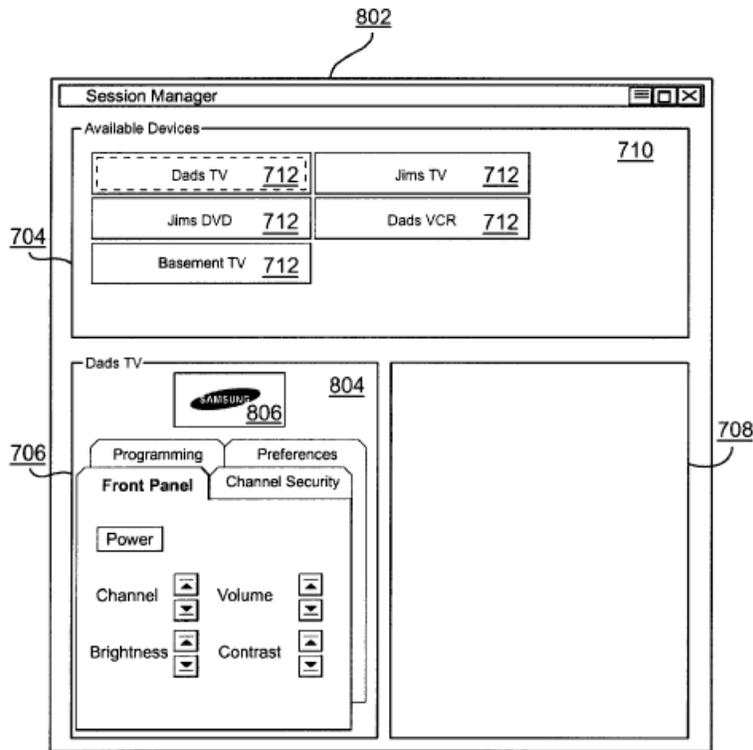


FIG. 10

Id. at 15:64–66. As illustrated in Figure 10 above, when the user selects device button 712 for Dad’s TV, “the session manager displays the top-level home page 804 for the respective home device in a frame 706 of the session page 802.” *Id.* at 15:64–67.

Humpleman also discloses that, “[t]o provide a user with a list of available multi-media material (e.g., audio and video programs, TV programs, and CDs), one or more home network program guides are

associated with a home network.” *Id.* at 22:51–54. Humpleman discloses that the home network uses Electronic Programming Guide (EPG) information from digital satellite services to build a home network HTML program guide. *Id.* at 22:59–23:1. Humpleman states that “[t]he HTML program guide can be displayed on any browser based home device (e.g., a DTV or a PC).” *Id.* at 23:15–17.

Humpleman also discloses that “each home device maintains an HTML program guide file that contains a list of the material currently available on the respective home device.” *Id.* at 23:33–36. For example, according to Humpleman, “a DVD may contain certain movies, a PC may contain specific files (e.g., games, picture images), a DVCR may contain a particular movie, and a CD player may contain specific CDs.” *Id.* at 23:30–33. Humpleman discloses that, “[u]sing a browser based home device, a user can display the available material on a particular home device by rendering the particular home device’s HTML program guide file.” *Id.* at 23:36–39.

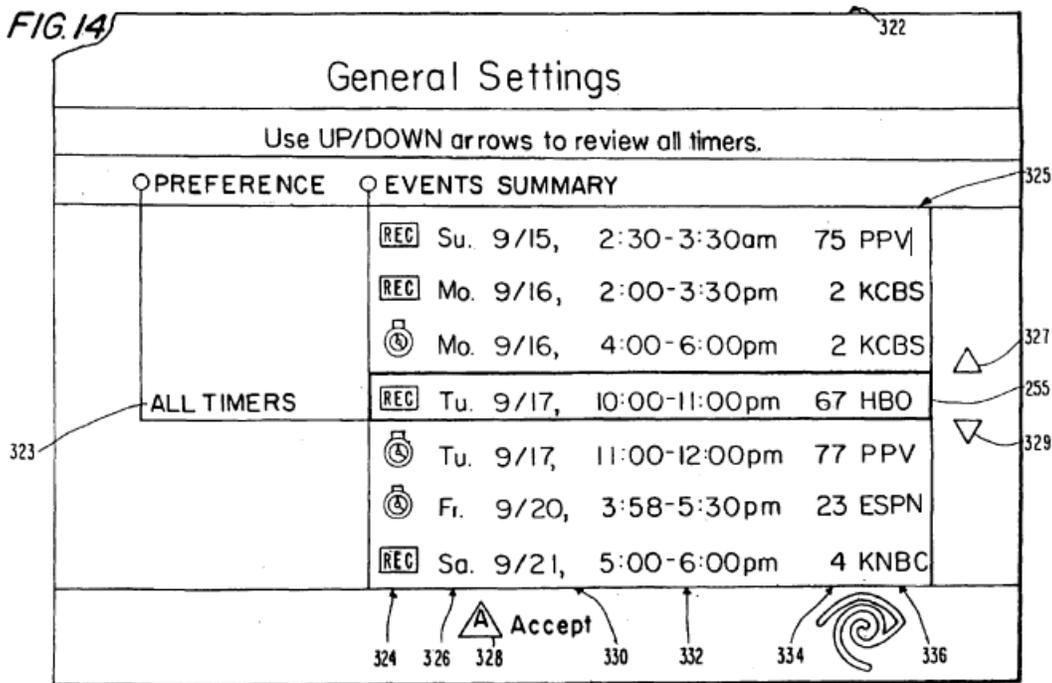
2. *Summary of LaJoie*

LaJoie is a U.S. patent titled “Interactive Program Guide for Designating Information on an Interactive Program Guide Display.” Ex. 1120, [54]. LaJoie describes the operation of application software for a set-top terminal. *Id.* at 12:61–62, 14:66–15:1.

LaJoie discloses an interactive program guide that “facilitates rapid navigation to programs selected by a subscriber.” *Id.* at 7:3–5. According to LaJoie, “[o]nce the subscriber has found a desired program in the interactive program guide, the subscriber can, by pressing a single key, switch to the program if it is currently being transmitted, set a timer to remind the

subscriber of its scheduled transmission, or record the program, either now if currently transmitted or at its scheduled transmission time.” *Id.* at 7:5–11.

Figure 10 of LaJoie illustrates a screen display of a General Settings menu, and Figure 14, below, illustrates a screen display of the all timers setting of the General Settings menu. *Id.* at 8:55–57, 20:22–24, 22:61–62.



As illustrated in Figure 14 above, selecting the all timers setting within the General Settings menu generates a list (325 in the above figure) “of type 324, day 326, date 330, time 332, channel number 334, and channel call sign 336 for each active timer in set-top terminal 6 to be displayed.” *Id.* at 22:61–66.

3. Analysis

Petitioner relies on Humpleman for teaching a home network with a server providing program guides and control screens on multiple

DTVs/clients to allow a user to control other devices, such as a DVCR, on the network. Pet. 18. Petitioner relies on LaJoie for teaching an interactive program guide that allows a user to set VCR timers and reminder timers. *Id.* at 18–19. Petitioner asserts that a person of ordinary skill in the art “would have been motivated to implement LaJoie’s ALL TIMERS list as taught by LaJoie (FIG. 14) within Humpleman’s home network to inform users of timers that have already been set by other users.” *Id.* at 20 (citing Ex. 1122 ¶ 175). Petitioner explains that “[a]lthough Humpleman teaches that a DVCR saves a first state (e.g., a timer to record a program) and a DTV saves a second state (e.g., a timer to select a program) (Exhibit-1117, 15:7–10), Humpleman does not expressly disclose a combined list with both states/timers.” *Id.*

With respect to the “generating a list of scheduled events” limitation of claim 1, Petitioner asserts that LaJoie discloses generating a list of all timers that have been set, including timers of different types (recording timers and reminder timers). *Id.* at 24. Petitioner further asserts that “[i]n Humpleman-LaJoie, the server would have generated a combined list, like LaJoie’s, of timers of different types . . . by aggregating the recording/VCR and reminder timers.” *Id.* at 25. Petitioner adds the following:

[B]ased on Humpleman’s teachings (Exhibit-1117, 7:27–46, 8:55–9:5) that the server stores HTML files accessible to clients and timers, as well as, serves multiple clients simultaneously, the combined list of timers (“list of scheduled events”) in Humpleman-LaJoie would have been accessible for display from the first and second instances of the [interactive program guide] on respective first and second DTVs in the household.

Pet. 25–26.

Patent Owner asserts, among other arguments, that Petitioner has not shown that the combination of Humpleman and LaJoie teaches the “generating a list of scheduled events” limitation. PO Resp. 38–44.

We agree with Patent Owner that Petitioner has not shown that the combination of Humpleman and LaJoie teaches the claimed generating step. Humpleman discloses that “the session manager may cause the DVCR 754 to save a first state, e.g., ‘timer record’, and the DTV to save a second state, e.g., ‘timer select a program’.” Ex. 1117, 15:8–10. Humpleman also discloses that “[a] clock later triggers the saved states into action.” *Id.* at 15:10–11. Humpleman thus teaches that a DVCR can save a timer to record a program and a DTV can save a timer to select a program. *Id.* Petitioner does not rely on Humpleman for disclosing aggregating those timers into a combined list (Pet. 24–26) and in fact acknowledges that Humpleman has no such disclosure (Pet. 20 (“Humpleman does not expressly disclose a combined list with both states/timers.”)). Dr. Rhyne likewise acknowledges that Humpleman does not disclose aggregating the timers into a combined list or displaying such a list to users. Ex. 1122 ¶ 174 (“Humpleman does not appear to disclose displaying to the users of the devices on the home network a list of all timers set to record and/or select a program.”). Thus, Petitioner does not show that Humpleman teaches generating an aggregated list of events received from first and second sets of control screens on first and second DTVs/clients, respectively.

LaJoie discloses a list of all timers for reminder and recording events received from a *single* interactive program guide. Ex. 1120, Fig. 14, 22:61–23:14. Petitioner does not rely on LaJoie for teaching that the scheduled

events on the aggregated list are received from first and second interactive program guides. Pet. 24–26.

Thus, Petitioner has not shown that either reference teaches generating a list of scheduled events received from first and second interactive program guides like the one disclosed in LaJoie or from first and second sets of control screens (or any other interfaces) on first and second DTVs/clients as disclosed in Humpleman.

Petitioner appears to rely on Dr. Rhyne’s testimony to make this showing. Pet. 25 (citing Ex. 1122 ¶¶ 206–211). Dr. Rhyne’s testimony, however, is conclusory and not sufficiently supported by the references themselves or other contemporaneous evidence.

Dr. Rhyne first states that Humpleman discloses that (i) DTVs on the home network present user interfaces used to control other devices, (ii) each device contains interface data that defines a user interface for controlling that device from other devices, (iii) each device on the home network can maintain its own program guide file listing the material currently available at the device, and (iv) the devices supply their respective user interfaces to the DTVs connected to the home network for display. Ex. 1122 ¶ 206 (citing Ex. 1117, 6:10–17, 4:25–41, 23:33–36, 7:4–18). None of these disclosures in Humpleman are of generating a list of scheduled events, let alone a list of scheduled events requested from multiple devices on the network. For example, the program guide file that each device can maintain is a list of the multi-media material “currently available” on the device—such as movies on a DVD—and not a list of scheduled events such as upcoming program recordings. Ex. 1117, 23:28–36. Moreover, none of the user interfaces are described as including a list of scheduled events. *Id.* at 4:25–41, 6:10–17,

7:4–18. Dr. Rhyne appears to recognize this deficiency in Humpleman by stating that “Patent Owner may argue that Humpleman does not specifically disclose ‘generating a list of scheduled events. . . .’” Ex. 1122 ¶ 207. Dr. Rhyne thus relies on LaJoie for disclosing “generating a list of scheduled events.” Ex. 1122 ¶¶ 207, 208.

Dr. Rhyne states that “LaJoie discloses an [interactive program guide] that provides a list of all active timers that have been set at the set-top terminal.” *Id.* ¶ 208. Dr. Rhyne does not point to any teaching in LaJoie of generating a list of scheduled events “by aggregating the first and second scheduled events *received from the first and second interactive electronic program guides,*” as required by claim 1. *Id.* Dr. Rhyne’s testimony regarding this claim requirement is as follows:

A [person having ordinary skill in the art] would therefore have modified Humpleman with the teachings of LaJoie *to create a program guide file listing the currently set timers stored at the combination TV/VCR.* That is, a [person having ordinary skill in the art] would understand the Humpleman-LaJoie combination to include a server that would have generated a combined list, like LaJoie’s, of timers of different types (“generating a list of scheduled events of the first and second types”) by aggregating the recording/VCR and reminder timers (“first and second scheduled events received from the first and second [interactive electronic program guides]”).

Id. ¶ 209 (emphasis added). Dr. Rhyne’s testimony is conclusory without persuasive evidentiary support. As explained above, Humpleman does not teach “a program guide file listing the currently set timers,” the timers received either from a single device on the network or from multiple devices on the network. *See* 1117, 15:8–10 (describing that each device saves its own state for a timer), 23:28–36 (describing a program guide file that lists

materials currently available on the device). Dr. Rhyne does not explain how the references in combination teach what neither discloses alone: aggregating a list of timers from two interactive program guides. The cited testimony above does not cite any evidentiary support and does not provide any explanation. Paragraphs 210 and 211 of Dr. Rhyne’s declaration also do not address the requirement of claim 1 of aggregating the first and second scheduled events *received from the first and second interactive electronic program guides*. Paragraph 210 addresses the “accessible” requirement of the limitation and paragraph 211 is a conclusion sentence.

Even considering Dr. Rhyne’s testimony regarding the rationale to combine Humpleman with LaJoie (Ex. 1122 ¶¶ 173–189)—which Petitioner does not cite in support of its showing for the claim limitation—Petitioner’s evidence is not persuasive. Dr. Rhyne cites to disclosures in Humpleman regarding the multi-media material or content available on each device and generating a list of such content. Ex. 1122 ¶¶ 178–180, 185, 187 (collectively citing Ex. 1117, 17:42–49, 23:33–36, 23:40–49, 23:51–59); *see also* Ex. 1117, 23:28–33 (describing examples of multi-media “material” available on the devices). Dr. Rhyne also cites to a sentence in Humpleman of a device storing the state of its own timer, but that sentence does not disclose that timers to record or select programs are aggregated into a shared list. Ex. 1122 ¶¶ 177, 182 (each paragraph citing Ex. 1117, 15:7–10); Ex. 1117, 15:7–10. Finally, Dr. Rhyne cites to general disclosures of a device’s functionality or capabilities being available or communicated in the network, but again these disclosures provide no teaching of generating a list of timers in the network. *See* Ex. 1122 ¶¶ 178 (citing Ex. 1117, 20:25–30), 181 (citing Ex. 1117, 19:60–20:4). There is no disclosure in Humpleman

regarding aggregating a list of scheduled events, such as recording events, and Dr. Rhyne does not point to any such disclosure. Nor does Dr. Rhyne rely on LaJoie for disclosing receiving events from multiple interactive program guides. *See* Ex. 1122 ¶¶ 173–189. Dr. Rhyne’s testimony regarding the rationale for combining the references thus does not provide persuasive support for an argument that Humpleman (or LaJoie) teaches aggregating a list of *scheduled events* received from multiple interfaces.

In sum, Petitioner does not provide sufficient evidence or persuasive argument for showing that the combination of Humpleman and LaJoie teaches “generating a list of scheduled events of the first and second types by aggregating the first and second scheduled events received from the first and second interactive electronic program guides,” as required by claim 1. Petitioner relies on the same evidence and arguments for independent claim 12, which recites the same limitation in the context of a system with a processor configured to perform the function, and independent claim 23, which recites non-transitory machine-readable media comprising machine-readable instructions encoded thereon for performing the function. Pet. 26–29; Ex. 1122 ¶¶ 217, 227. Moreover, in its analysis of the patentability of dependent claims 2–11, 13–22, and 24–33, Petitioner does not rely on any additional evidence or argument in support of its contentions regarding the “generating” limitation of the corresponding independent claims. Pet. 29–49.

For the above reasons, Petitioner has not shown by a preponderance of the evidence that claims 1–33 are unpatentable under 35 U.S.C. § 103(a) as obvious over Humpleman and LaJoie.

E. Asserted Obviousness over Humpleman and Alexander (and LaJoie)

Petitioner contends that claims 1–8, 10, 12–19, 21, 23–30, and 32 of the '871 patent are unpatentable under 35 U.S.C. § 103(a) as obvious over Humpleman and Alexander and that claims 9, 11, 20, 22, 31, and 33 are unpatentable as obvious over Humpleman, Alexander, and LaJoie. Pet. 8, 41–67.

We have reviewed Petitioner's and Patent Owner's arguments and evidence of record. For the reasons that follow, we determine that Petitioner has not shown by a preponderance of the evidence that claims 1–3, 5–8, 10, 12–14, 16–19, 21, 23–25, 27–30, and 32 are unpatentable under 35 U.S.C. § 103(a) as obvious over Humpleman and Alexander or that claims 9, 11, 20, 22, 31, and 33 are unpatentable as obvious over Humpleman, Alexander, and LaJoie.

1. Summary of Alexander

Alexander is a PCT application publication titled "Systems and Methods for Displaying and Recording Control Interfaces." Ex. 1121, [54]. Alexander discloses an electronic program guide ("EPG") with "[i]mproved interaction capabilities with the EPG," "[i]mproved viewer control of video recording of future-scheduled programming," "[i]mproved features to the EPG display and navigation," and "[u]tilization of viewer profile information to customize various aspects of the EPG." *Id.* at [57], 3:35–4:10.⁶

⁶ Following the citation convention used in the Petition, page citations for Alexander are to the page numbers added by Petitioner.

A sample screen display of the improved interactive electronic program guide is illustrated in Figure 1 below. *Id.* at 4:16.

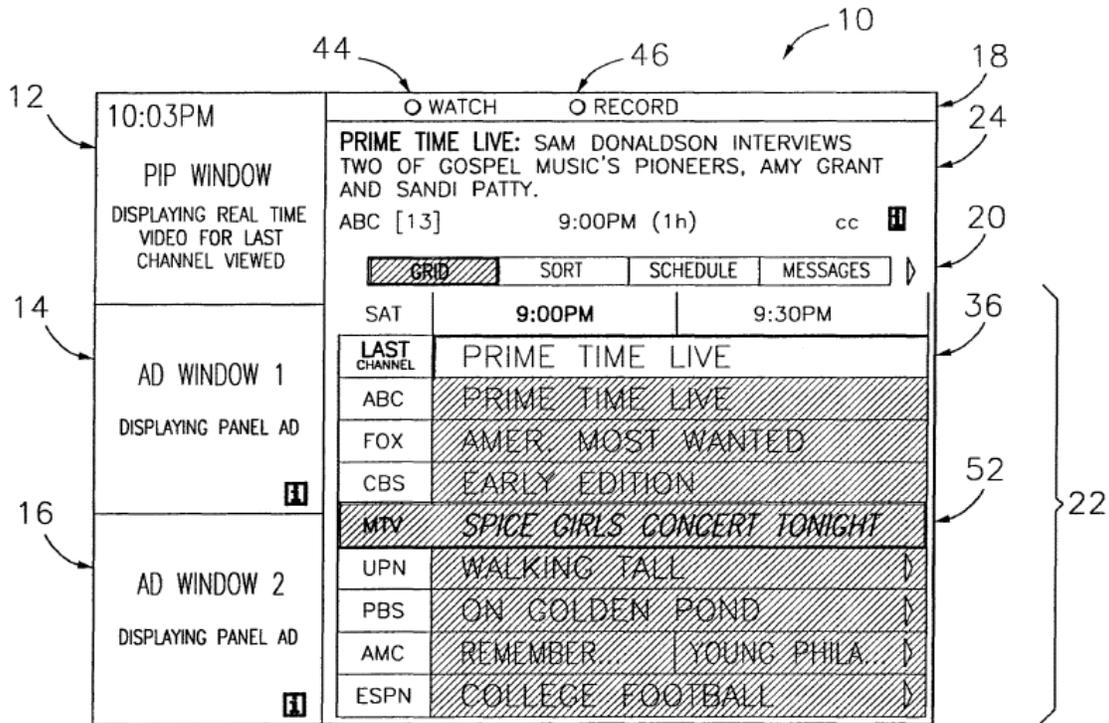


FIG. 1

As illustrated in Figure 1 above, television screen display 10 includes picture-in-picture (PIP) window 12, ad windows 14 and 16, action key bar 18, navigation bar 20, grid guide 22, and information box 24. *Id.* at 5:8–17, 19:17–19. Alexander discloses that “[i]n grid guide 22[,] the viewer moves cursor 36 to highlight one of the nine tiles in which channel and title are displayed by pressing arrow keys 28 and 30” on the remote control (illustrated in Figure 20). *Id.* at 7:11–14; *see also id.* at 5:18–27 (describing keys of the remote control for user interaction with the display).

Alexander discloses a record selection function in which “the viewer instructs the EPG what programs to add to the Record List, which is the list of programs and related programming scheduling information, for programs

that the viewer want[s] to have recorded.” *Id.* at 11:17–20. Alexander explains that the viewer can press the Record key on the remote control or alternatively press the Record action button on the EPG display. *Id.* at 11:23–25. Alexander discloses that once a viewer selects a program for recording, the viewer can select a record-scheduling option of Once, Daily, Weekly, or Regularly. *Id.* at 16:23–25.

Alexander also discloses a watch scheduling function, which allows a user to select program titles, scheduled for delivery at future times, to watch. *Id.* at 14:11–12; *see also id.* at 11:28–30 (“In the Watch Scheduling Function, also referred to as the Watch Function, the viewer instructs the EPG what programs to add to the Watch List, which is the list of programs and related programming scheduling information, for programs that the viewer want[s] to watch.”). Alexander explains that the viewer can enter the watch function by pressing the Watch key on the remote control or alternatively pressing the Watch action button on the EPG display. *Id.* at 11:33–35. According to Alexander, “the Watch Function automatically turns the television on, if it is not already on, and automatically tunes the television to the channel scheduled to deliver the designated program, if the television is not already tuned to that channel.” *Id.* at 14:14–17. Alexander discloses that “[t]his feature provides the viewer with the opportunity to watch a program of special interest at the scheduled time even if the viewer has forgotten about the scheduled delivery.” *Id.* at 14:17–19.

Figure 6 of Alexander, below, illustrates the watch/record schedule screen of the EPG. *Id.* at 14:7.

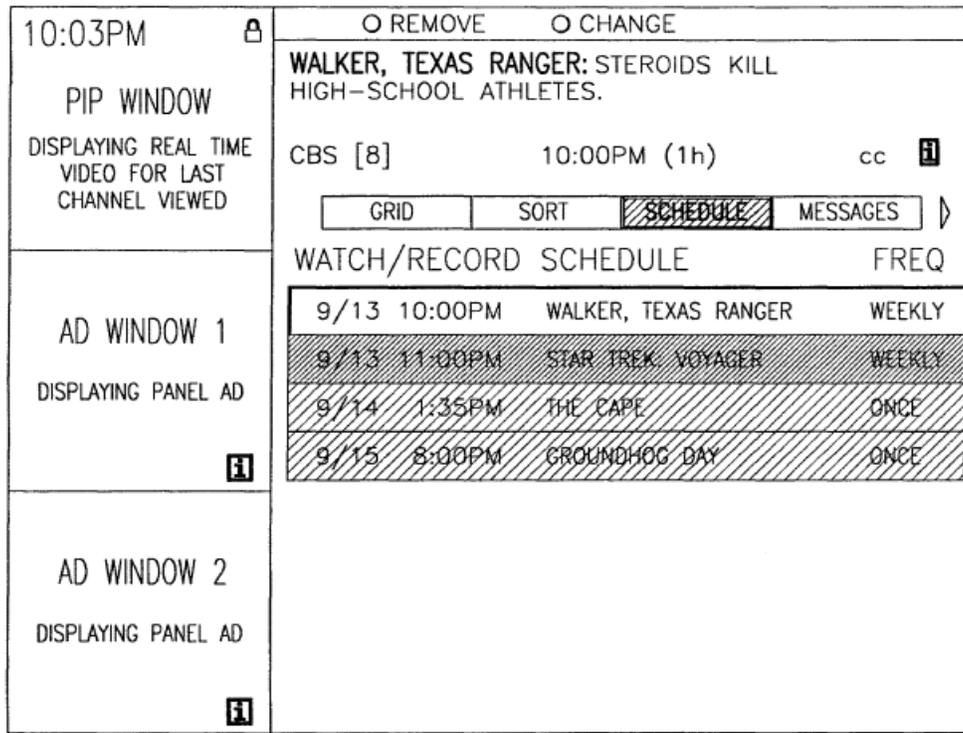


FIG. 6

Figure 6 above illustrates a list of television programs on a watch/record schedule, including the frequency with which the scheduled watch/record occurs. *Id.* at Fig. 6.

2. Analysis

As with the Humpleman-LaJoie ground discussed above, for the Humpleman-Alexander ground, Petitioner relies on Humpleman for teaching a home network with a server providing program guides and control screens on multiple DTVs/clients to allow a user to control other devices, such as a DVCR, on the network. Pet. 41. Petitioner asserts that “although Humpleman teaches a first state/timer to record a program and a second state/timer to select a program (Exhibit-1117, 15:7–10), Humpleman does not expressly disclose a combined list with both states/timers.” *Id.* at 43.

Petitioner relies on Alexander for teaching an interactive program guide for scheduling one-time/individual recordings and recurring/series recordings and for teaching a single list (Watch/Record Schedule) which lists both one-time individual recordings and recurring/series recordings. *Id.* at 41, 43. Petitioner asserts that a person of ordinary skill in the art “would have been modified Humpleman with Alexander’s disclosure of selecting a desired recording frequency when setting a time to record a [television] program in order to improve the home network.” *Id.* at 43. Petitioner further asserts that a person of ordinary skill in the art would have been motivated to “modify Humpleman with Alexander’s Watch/Record Schedule functionality” to “[h]av[e] the ability to display one-time/individual recordings and recurring/series recordings on a single list.” *Id.* at 43–44 (citing Ex. 1122 ¶¶ 268–289, 302).

With respect to the “generating a list of scheduled events” limitation of claim 1, Petitioner asserts that Alexander discloses scheduling both one-time/individual and recurring/series recordings and a Watch/Record Schedule (illustrated in Figure 6) that lists both. *Id.* at 47–48. Petitioner further asserts the following:

In Humpleman-Alexander, the server would have generated a combined list, like Alexander’s Watch/Record Schedule, of settings for scheduling one-time/individual and recurring/series program recordings (“generating a list of scheduled events of the first and second types”) by aggregating the first setting (for the one-time/individual recording of the first program) and the second setting (for the recurring/series recording of the second program) received from the first and second instances of the IPG (“first and second scheduled events received from the first and second [IPGs]”).

Id. at 48–49 (citing Ex. 1122 ¶¶ 301–303).

Petitioner also asserts the following regarding the accessibility aspect of the limitation:

[B]ased on Humpleman's teachings (Exhibit-1117, 7:27–46, 8:55–9:5) that the server stores HTML files accessible to clients and timers, as well as, serves multiple clients simultaneously, the combined list of settings for scheduling one-time/individual and recurring/series program recordings (“list of scheduled events”) in the Humpleman-Alexander combination would have been accessible for display from the first and second instances of the IPG on respective first and second DTVs in the household (“accessible for display from any of the first and the second [IPGs] in the household”).

Id. at 49 (citing Ex. 1122 ¶¶ 300–302).

Patent Owner asserts, among other arguments, that Petitioner has not shown that the combination of Humpleman and Alexander teaches the “generating a list of scheduled events” limitation. PO Resp. 38–44.

We agree with Patent Owner that Petitioner has not shown that the combination of Humpleman and Alexander teaches the claimed generating step. Humpleman discloses that “the session manager may cause the DVCR 754 to save a first state, e.g., ‘timer record’, and the DTV to save a second state, e.g., ‘timer select a program’.” Ex. 1117, 15:8–10. Humpleman also discloses that “[a] clock later triggers the saved states into action.” *Id.* at 15:10–11. Humpleman thus teaches that a DVCR can save a timer to record a program and a DTV can save a timer to select a program. *Id.* Petitioner does not rely on Humpleman for disclosing aggregating those timers into a combined list (Pet. 47–49) and in fact acknowledges that Humpleman has no such disclosure (Pet. 43 (“Humpleman does not expressly disclose a combined list with both states/timers.”)). Dr. Rhyne likewise acknowledges that Humpleman does not disclose aggregating the timers into a combined

list. Ex. 1122 ¶ 263 (“Humbleman does not expressly disclose a combined list with both states/timers.”). Thus, Petitioner does not show that Humbleman teaches generating an aggregated list of events received from first and second sets of control screens on first and second DTVs/clients, respectively.

Alexander discloses a Watch/Record Schedule that lists one-time and recurring recording events received from a *single* interactive program guide. Ex. 1121, Fig. 6, 11:16–32, 14:7–8. Petitioner does not rely on Alexander for teaching that the scheduled events on the aggregated list are received from first and second interactive program guides. Pet. 47–49.

Thus, Petitioner has not shown that either reference teaches generating a list of scheduled events received from first and second interactive program guides like the one disclosed in Alexander or from first and second sets of control screens (or any other interfaces) on first and second DTVs/clients as disclosed in Humbleman.

Petitioner appears to rely on Dr. Rhyne’s testimony to make this showing. Pet. 48–49 (citing Ex. 1122 ¶¶ 301–303). Dr. Rhyne’s testimony, however, is conclusory and not sufficiently supported by the references themselves or other contemporaneous evidence.

Dr. Rhyne first states that “Alexander discloses scheduling both one-time/individual recordings and recurring/series recordings . . . and a WATCH/RECORD SCHEDULE (FIG. 6, below) that lists both.” Ex. 1122 ¶ 301 (citing Ex. 1121, 11:17–32, 14:7–8, 15:33–37, 16:23–25). Dr. Rhyne does not point to any teaching in Alexander of generating a list of scheduled events “by aggregating the first and second scheduled events *received from*

the first and second interactive electronic program guides,” as required by claim 1. *Id.*

Dr. Rhyne’s testimony regarding this claim requirement is as follows (which is repeated nearly verbatim in the Petition):

In the Humpleman-Alexander combination, the server would have generated a combined list, like Alexander’s WATCH/RECORD SCHEDULE, of settings for scheduling one-time/individual and recurring/series program recordings (“generating a list of scheduled events of the first and second types”) by aggregating the first setting (for the one-time/individual recording of the first program) and the second setting (for the recurring/series recording of the second program) received from the first and second instances of the IPG (“first and second scheduled events received from the first and second [IPGs]”).

Id. ¶ 301. Dr. Rhyne’s testimony is conclusory without persuasive evidentiary support. As explained above, Humpleman does not teach “a program guide file listing the currently set timers,” the timers received either from a single device on the network or from multiple devices on the network. *See* 1117, 15:8–10 (describing that each device saves its own state for a timer), 23:28–36 (describing a program guide file that lists materials currently available on the device). Dr. Rhyne does not explain how the references in combination teach what neither discloses alone: aggregating a list of timers from two interactive program guides. The cited testimony above does not cite any evidentiary support and does not provide any explanation.

The remaining cited testimony from paragraphs 301 and 302 of Dr. Rhyne’s declaration also does not address the requirement of claim 1 of aggregating the first and second scheduled events *received from the first and*

second interactive electronic program guides. The last sentence of paragraph 301 addresses the “accessible” requirement of the claim limitation and paragraph 302 is a conclusion sentence.

Even considering Dr. Rhyne’s testimony regarding the rationale to combine Humpleman with Alexander (Ex. 1122 ¶¶ 274–288)—which Petitioner does not cite in support of its showing for the claim limitation—Petitioner’s evidence is not persuasive. Dr. Rhyne cites to disclosures in Humpleman regarding the multi-media material or content available on each device and generating a list of such content. Ex. 1122 ¶ 283 (citing Ex. 1117, 17:42–49, 23:33–36, 23:40–59); *see also* Ex. 1117, 23:28–33 (describing examples of multi-media “material” available on the devices). Dr. Rhyne also cites to a sentence in Humpleman of a device storing the state of its own timer, but that sentence does not disclose that timers to record or select programs are aggregated into a shared list. Ex. 1122 ¶¶ 274, 284, 285 (each paragraph citing Ex. 1117, 15:7–10); Ex. 1117, 15:7–10. There is no disclosure in Humpleman regarding aggregating a list of scheduled events, such as recording events, and Dr. Rhyne does not point to any such disclosure. Nor does Dr. Rhyne rely on Alexander for disclosing receiving events from multiple interactive program guides. *See* Ex. 1122 ¶¶ 274–288. Dr. Rhyne’s testimony regarding the rationale for combining the references thus does not provide persuasive support for an argument that Humpleman (or Alexander) teaches aggregating a list of *scheduled events* received from multiple interfaces.

In sum, Petitioner does not provide sufficient evidence or persuasive argument for showing that the combination of Humpleman and Alexander teaches “generating a list of scheduled events of the first and second types

by aggregating the first and second scheduled events received from the first and second interactive electronic program guides,” as required by claim 1. Petitioner relies on the same evidence and arguments for independent claim 12, which recites the same limitation in the context of a system with a processor configured to perform the function, and independent claim 23, which recites non-transitory machine-readable media comprising machine-readable instructions encoded thereon for performing the function. Pet. 49–52; Ex. 1122 ¶¶ 307, 314. Moreover, in its analysis of the patentability of dependent claims 2–11, 13–22, and 24–33, Petitioner does not rely on any additional evidence or argument in support of its contentions regarding the “generating” limitation of the corresponding independent claims. Pet. 52–67.

For the above reasons, Petitioner has not shown by a preponderance of the evidence that claims 1–8, 10, 12–19, 21, 23–30, and 32 are unpatentable under 35 U.S.C. § 103(a) as obvious over Humpleman and Alexander or that claims 9, 11, 20, 22, 31, and 33 are unpatentable as obvious over Humpleman, Alexander, and LaJoie.

F. Asserted Obviousness over Humpleman and Knudson (and LaJoie)

Petitioner contends that claims 1–8, 10, 12–19, 21, 23–30, and 32 of the ’871 patent are unpatentable under 35 U.S.C. § 103(a) as obvious over Humpleman and Knudson and that claims 9, 11, 20, 22, 31, and 33 are unpatentable as obvious over Humpleman, Knudson, and LaJoie. Pet. 8, 67–92.

We have reviewed Petitioner’s and Patent Owner’s arguments and evidence of record. For the reasons that follow, we determine that Petitioner has not shown by a preponderance of the evidence that claims 1–8, 10, 12–

19, 21, 23–30, and 32 are unpatentable as obvious over Humpleman and Knudson or that claims 9, 11, 20, 22, 31, and 33 are unpatentable as obvious over Humpleman, Knudson, and LaJoie.

1. Summary of Knudson

Knudson is a U.S. patent application publication titled “Series Recording Options Using an Interactive Television Program Guide.” Ex. 1124, [54]. Knudson is prior art to the ’871 patent under 35 U.S.C. § 102(e),⁷ which Patent Owner does not dispute (*see, e.g.*, PO Resp. 24–26).

Knudson discloses an interactive television program guide system that allows a user to set a reminder or schedule a recording for a single episode or each episode of a program series. *Id.* at Abstract.

Figure 4, below, illustrates an example of program listings grid 50 that may be displayed by the interactive program guide. *Id.* ¶ 50.

⁷ Petitioner contends that Knudson “has priority to June 11, 1998”—the filing date of a provisional application to which Knudson claims priority—and is prior art to the ’871 patent under 35 U.S.C. § 102(e). Pet. 16. Petitioner asserts that claim 255 of Knudson is supported by disclosures in the provisional application. *Id.* at 16 n.3. We agree with Petitioner’s contentions set forth in footnote 3 on page 16 of the Petition, including that claim 255 is supported by the cited passages on page 1 of the Knudson provisional application (page 3 of Exhibit 1125). *See* Ex. 1125, 3; Ex. 1126, 4–5.

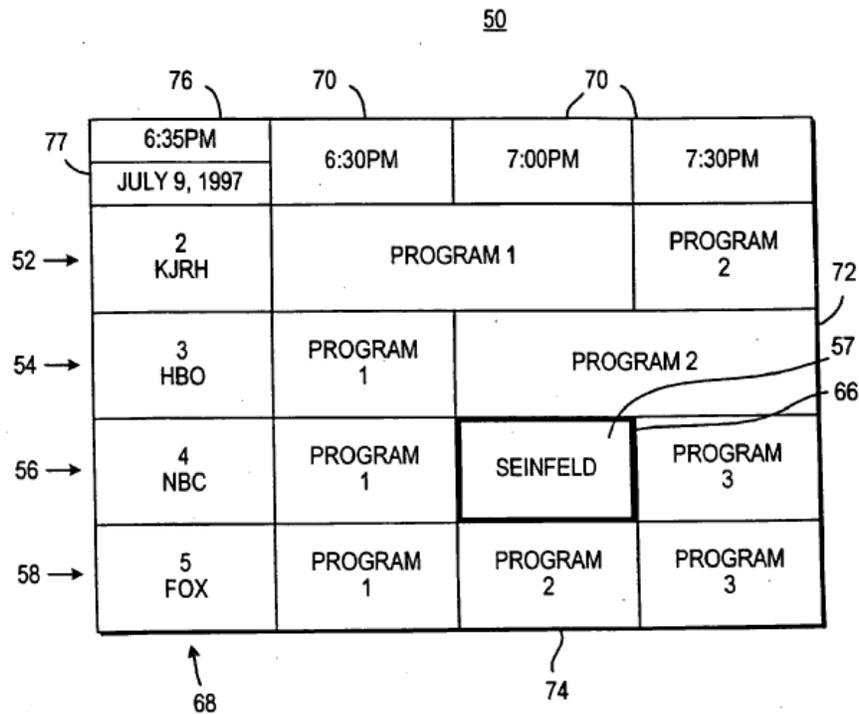


FIG. 4

As illustrated above, program listings grid 50 includes program listings in rows for particular channels at particular times, including highlight region 66 to highlight current grid cell. *Id.* ¶¶ 50–51. Knudson discloses that “[t]he user can position highlight region 66 using arrow keys” on a remote control. *Id.* ¶ 52.

Knudson discloses that “[i]f the user wishes to set a reminder or schedule a recording for a program, the user may position highlight region 66 on the appropriate program listing” and press the “enter” button on the remote control. *Id.* ¶ 54. According to Knudson, “[i]f the ‘enter’ button on remote control 40 is pressed, the user may be presented with a remind/record screen such as remind/record screen 70 of [Figure] 6.” *Id.* Figure 6 is shown below.

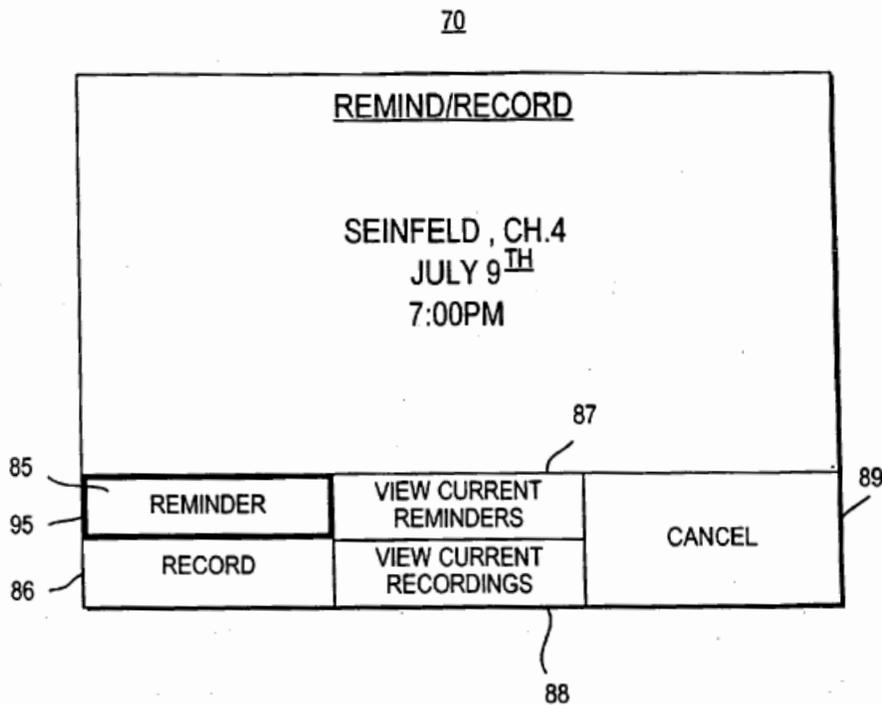


FIG. 6

As illustrated in Figure 6 above, remind/record screen 70 “present[s] the user with the program title as well as the date and time the program is scheduled to air.” *Id.* ¶ 55. The remind/record screen also includes reminder option 85, record option 86, view current reminders option 87, view current recordings option 88, and cancel option 89. *Id.*

Knudson discloses that “[i]f the user wishes to set a reminder to remind the user when a given program is to be broadcast, the user may position highlight region 95 of [Figure] 6 onto reminder option 85 and press an ‘enter’ button (or other similar button) on remote control 40.” *Id.* ¶ 56. According to Knudson, once the user presses the enter button, the user is presented with the reminder screen shown in Figure 7 (below). *Id.* ¶ 57.

90

91 SEINFELD (0:30), CH.4, 7:00PM JULY 9, 1997

92 REMINDER OPTIONS

95 SCHEDULE REMINDER FOR:
 THIS EPISODE
 ENTIRE SERIES

104 PROGRAM CHANNELS:
 THIS CHANNEL
 SELECTED CHANNELS
 ALL CHANNELS

107 HOW SOON BEFORE EVENT DO YOU WANT TO BE REMINDED?
 3 MINUTES (1-15) OTHER

108 PROGRAM DAYS:
 THIS DAY
 SELECTED DAYS
 ALL DAYS

108 PROGRAM TYPE:
 FIRST-RUN
 RERUN
 ALL NETWORK
 SYNDICATED
 UNVIEWED ONLY

94 OK CANCEL RECORD VIEW CURRENT REMINDERS

97 96 98

FIG. 7

As illustrated in Figure 7 above, “reminder screen 90 contains various user-selectable options that the user may complete when setting reminder messages to remind the user when selected television programming is to be broadcast.” *Id.* ¶ 57.

Similar to the reminder option on the remind/record screen of Figure 6, a user who “wishes to record a program episode or series . . . may position highlight region 95 of [Figure] 6 onto record option 86 and press an enter or other similar button on remote control 40.” *Id.* ¶ 84. If the enter button is pressed, the user is presented with the record screen of Figure 11, which is similar to reminder screen of Figure 7 above. *Id.* at Figs. 7, 11, ¶ 84.

Knudson further discloses that “the program guide allows the user to resolve conflicts as soon as conflicts are detected.” *Id.* ¶ 98. Figure 14, below, illustrates an example. *Id.*

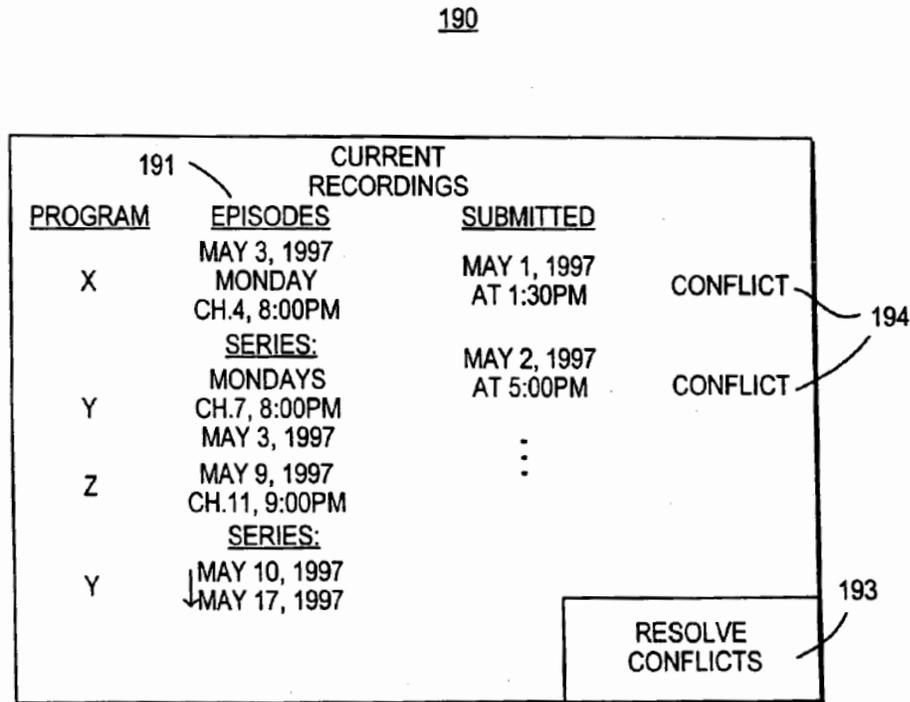


FIG. 14

As illustrated in Figure 14 above, current recordings screen 190 lists the user’s scheduled recordings for programs x, y, and z. *Id.* Also as illustrated above, programs x and z are single broadcasts while program y is a program series. *Id.* According to Knudson, and as shown in “EPISODES” column 191, “an episode of program Y is scheduled to air on the same day and at the same time (i.e., May 3, 1997 at 8:00 PM) as program X.” *Id.* Knudson disclose that “current recordings screen 190 may display a conflicting recordings message such as conflicting recordings message 194 (i.e., “CONFLICT”) of [Figure] 14.” *Id.* Knudson adds that “[p]rogram

conflicts may also be displayed using other suitable techniques, such as displaying the conflicting programs with a unique color or icon, etc.” *Id.*

2. Analysis

As with the Humpleman-LaJoie ground discussed above, for the Humpleman-Knudson ground, Petitioner relies on Humpleman for teaching a home network with a server providing program guides and control screens on multiple DTVs/clients to allow a user to control other devices, such as a DVCR, on the network. Pet. 67. Petitioner relies on Knudson for teaching an interactive program guide with series reminder and series recording abilities. *Id.* Petitioner asserts that a person of ordinary skill in the art “would have been modified Humpleman with Knudson to yield a home network of interconnected devices in which users would have set timers to record and/or select programs for the purpose of providing a consolidate list of the recording timers and selection timers that have been set at the devices of the network.” *Id.* at 68–69 (citing Ex. 1122 ¶¶ 354–367).

With respect to the “generating a list of scheduled events” limitation of claim 1, Petitioner asserts that Knudson discloses displaying currently set recordings and currently set reminders on the same program guide screen. *Id.* at 72 (citing Ex. 1124 ¶ 107). Petitioner further asserts the following:

In Humpleman-Knudson, the server would have generated a combined list (as taught by Knudson) of settings for recordings and reminders (“generating a list of scheduled events of the first and second types”) by aggregating the recording and reminder settings (“first and second scheduled events received from the first and second [IPGs]”).

Id. at 72–73 (citing Ex. 1122 ¶¶ 383–385).

Petitioner also asserts the following regarding the accessibility aspect of the limitation:

[B]ased on Humpleman’s teachings (Exhibit-1117, 7:27–46, 8:55–9:5) that the server stores HTML files accessible to clients and timers, as well as[] serves multiple clients simultaneously, the combined list of settings for recordings and reminders (“list of scheduled events”) in Humpleman-Knudson would have been accessible for display from the first and second instances of the IPG on respective first and second DTVs in the household (“accessible for display from any of the first and the second [IPGs] in the household”).

Id. at 73.

Patent Owner asserts, among other arguments, that Petitioner has not shown that the combination of Humpleman and Knudson teaches the “generating a list of scheduled events” limitation. PO Resp. 38–44.

We agree with Patent Owner that Petitioner has not shown that the combination of Humpleman and Knudson teaches the claimed generating step. Humpleman discloses that “the session manager may cause the DVCR 754 to save a first state, e.g., ‘timer record’, and the DTV to save a second state, e.g., ‘timer select a program’.” Ex. 1117, 15:8–10. Humpleman also discloses that “[a] clock later triggers the saved states into action.” *Id.* at 15:10–11. Humpleman thus teaches that a DVCR can save a timer to record a program and a DTV can save a timer to select a program. *Id.* Petitioner does not rely on Humpleman for disclosing aggregating those timers into a combined list (Pet. 72–73) and in fact acknowledges—in connection with the Humpleman-LaJoie and Humpleman-Alexander grounds—that Humpleman has no such disclosure (Pet. 20 (“Humpleman does not expressly disclose a combined list with both states/timers.”), 43 (same)). Thus, Petitioner does not show that Humpleman teaches generating an aggregated list of events received from first and second sets of control screens on first and second DTVs/clients, respectively.

Knudson discloses generating a consolidated list of currently set reminders and currently scheduled recordings received from a *single* interactive program guide. Ex. 1124, Figs. 4, 6, 7, 10–12, ¶¶ 54–57, 84, 88, 107. Petitioner does not rely on Knudson for teaching that the scheduled events on the aggregated list are received from first and second interactive program guides. Pet. 72–73.

Thus, Petitioner has not shown that either reference teaches generating a list of scheduled events received from first and second interactive program guides like the one disclosed in Knudson or from first and second sets of control screens (or any other interfaces) on first and second DTVs/clients as disclosed in Humpleman.

Petitioner appears to rely on Dr. Rhyne’s testimony to make this showing. Pet. 72–73 (citing Ex. 1122 ¶¶ 383–385). Dr. Rhyne’s testimony, however, is conclusory and not sufficiently supported by the references themselves or other contemporaneous evidence.

Dr. Rhyne states—without a cite to any evidence—that “[i]n the Humpleman-Knudson combination, the server would have generated a combined list (as taught by Knudson) of settings for recordings and reminders (‘generating a list of scheduled events of the first and second types’) by aggregating the first recording and reminder settings (‘first and second scheduled events received from the first and second [IPGs]’).” Ex. 1122 ¶ 383. This statement is identical to the one in the Petition, which cites Dr. Rhyne’s testimony for support. Dr. Rhyne’s testimony is conclusory without persuasive evidentiary support. As explained above, Humpleman does not teach “a program guide file listing the currently set timers,” the timers received either from a single device on the network or

from multiple devices on the network. *See* 1117, 15:8–10 (describing that each device saves its own state for a timer), 23:28–36 (describing a program guide file that lists materials currently available on the device). Dr. Rhyne does not explain how the references in combination teach what neither discloses alone: aggregating a list of timers from two interactive program guides. The cited testimony above does not cite any evidentiary support and does not provide any explanation.

The remaining cited testimony from paragraphs 383 and 384 of Dr. Rhyne’s declaration also does not address the requirement of claim 1 of aggregating the first and second scheduled events *received from the first and second interactive electronic program guides*. The last sentence of paragraph 383 addresses the “accessible” requirement of the claim limitation and paragraph 384 is a conclusion sentence.

Even considering Dr. Rhyne’s testimony regarding the rationale to combine Humpleman with Knudson (Ex. 1122 ¶¶ 353–366)—which Petitioner does not cite in support of its showing for the claim limitation—Petitioner’s evidence is not persuasive. Dr. Rhyne cites to disclosures in Humpleman regarding the multi-media material or content available on each device and generating a list of such content. Ex. 1122 ¶¶ 359, 360, 363, 364 (collectively citing Ex. 1117, 17:42–49, 23:33–36, 23:40–59); *see also* Ex. 1117, 23:28–33 (describing examples of multi-media “material” available on the devices). Dr. Rhyne also cites to a sentence in Humpleman of a device storing the state of its own timer, but that sentence does not disclose that timers to record or select programs are aggregated into a shared list. Ex. 1122 ¶¶ 353, 356, 358, 362, 363 (each paragraph citing Ex. 1117, 15:7–10); Ex. 1117, 15:7–10. Finally, Dr. Rhyne cites to general disclosures of a

device's functionality or capabilities being available or communicated in the network, but again these disclosures provide no teaching of generating a list of timers in the network. *See* Ex. 1122 ¶¶ 359 (citing Ex. 1117, 20:25–30), 361 (citing Ex. 1117, 19:60–20:4). There is no disclosure in Humpleman regarding aggregating a list of scheduled events, such as recording events, and Dr. Rhyne does not point to any such disclosure. Nor does Dr. Rhyne rely on Knudson for disclosing receiving events from multiple interactive program guides. *See* Ex. 1122 ¶¶ 353–366. Dr. Rhyne's testimony regarding the rationale for combining the references thus does not provide persuasive support for an argument that Humpleman (or Knudson) teaches aggregating a list of *scheduled events* received from multiple interfaces.

In sum, Petitioner does not provide sufficient evidence or persuasive argument for showing that the combination of Humpleman and Knudson teaches “generating a list of scheduled events of the first and second types by aggregating the first and second scheduled events received from the first and second interactive electronic program guides,” as required by claim 1. Petitioner relies on the same evidence and arguments for independent claim 12, which recites the same limitation in the context of a system with a processor configured to perform the function, and independent claim 23, which recites non-transitory machine-readable media comprising machine-readable instructions encoded thereon for performing the function. Pet. 73–76; Ex. 1122 ¶¶ 389, 397. Moreover, in its analysis of the patentability of dependent claims 2–11, 13–22, and 24–33, Petitioner does not rely on any additional evidence or argument in support of its contentions regarding the “generating” limitation of the corresponding independent claims. Pet. 76–92.

For the above reasons, Petitioner has not shown by a preponderance of the evidence that claims 1–8, 10, 12–19, 21, 23–30, and 32 are unpatentable under 35 U.S.C. § 103(a) as obvious over Humpleman and Knudson or that claims 9, 11, 20, 22, 31, and 33 are unpatentable as obvious over Humpleman, Alexander, and Knudson.

III. PATENT OWNER’S MOTION TO SUPPLEMENT

Patent Owner moves to supplement the record with an excerpt from the transcript of a *Markman* hearing held on July 26, 2018 before the International Trade Commission (“ITC”) in Investigation No. 337-TA-1103. MTS 1–5. Petitioner opposes, arguing that the ITC evidence is irrelevant because it relates to different terms in a different patent in a different court applying a different standard and that admission of the evidence would be prejudicial to Petitioner. MTS Opp. 1–5.

Patent Owner’s motion to supplement the record is denied. The *Markman* hearing addressed a patent (U.S. Patent No. 7,827,585) that is unrelated to the challenged patent here. *See* MTS Opp. 2. Moreover, because we do not reach the issue of whether Humpleman discloses an interactive electronic program guide, we need not construe the term or consider an argument made regarding an alleged similar term appearing in a different, unrelated patent.

IV. CONCLUSION

For the above reasons, Petitioner has *not* demonstrated by a preponderance of the evidence that (i) claims 1–33 of the ’871 patent are unpatentable under 35 U.S.C. § 103(a) as obvious over Humpleman and LaJoie; (ii) claims 1–8, 10, 12–19, 21, 23–30, and 32 are unpatentable as obvious over Humpleman and Alexander; (iii) claims 9, 11, 20, 22, 31, and

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33 are unpatentable as obvious over Humpleman, Alexander, and LaJoie; (iv) claims 1–8, 10, 12–19, 21, 23–30, and 32 are unpatentable as obvious over Humpleman and Knudson; or (iv) claims 9, 11, 20, 22, 31, and 33 are unpatentable as obvious over Humpleman, Knudson, and LaJoie.

V. ORDER

Accordingly, it is

ORDERED that claims 1–33 of U.S. Patent No. 8,566,871 B2 are *not* shown by Petitioner to be unpatentable;

ORDERED that Patent Owner’s motion to supplement is denied; and

FURTHER ORDERED that, because this is a final written decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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