

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LG ELECTRONICS, INC., LG ELECTRONICS U.S.A., INC., and VIZIO, INC.
Petitioners,¹

v.

MULTIMEDIA TECHNOLOGIES PTE. LTD.,
Patent Owner.

Case IPR2024-00351
U.S. Patent No. 9,510,040

PATENT OWNER'S RESPONSE PURSUANT TO 37 C.F.R. § 42.120

¹ VIZIO, Inc. filed a petition in IPR2024-00694 and was joined as petitioner in this proceeding.

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Ex. 2003	Westlaw Litigation Analytics Report for Hon. Rodney Gilstrap, for 3/27/2023 to 3/27/2024
Ex. 2004	Docket Control Order, Multimedia Techs. Pte. Ltd. v. Vizio, Inc., No. 2:23-cv-00124 (E.D. Tex. Aug. 4, 2023), ECF No. 46
Ex. 2005	Report and Recommendation re: Motion to Dismiss, Multimedia Techs. Pte. Ltd. v. LG Elecs. Inc. et al., No. 2:22-cv-00494 (E.D. Tex. Mar. 1, 2024), ECF No. 61
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Ex. 2008	Defendant's Invalidity Contentions, Multimedia Techs. Pte. Ltd. v. Vizio, Inc., No. 2:23-cv-00124 (E.D. Tex. Sept. 28, 2023)
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Ex. 2011	Declaration of Rajeev Surati
Ex. 2012	C.V. of Rajeev Surati
Ex. 2013	U.S Pat. No. 8,863,219 (Brown)
Ex. 2014	U.S. Pat. Pub. 2011-0320476 (McRae)
Ex. 2015	Deposition of Dr. Andrew Lippman in IPR2024-00351 7/15/2024
Ex. 2016	Provisional App. No. 61/583,609 filed 1/6/2012 (Kim Provisional)

I. INTRODUCTION

U.S. Patent No. 9,510,040 (“the ’040 Patent”) is assigned to Multimedia Technologies Pte., Ltd. (“Multimedia” or “Patent Owner”). The ’040 Patent is directed to innovative user interfaces for accessing functions and content on televisions.

Petitioner LG Electronics, Inc. and LG Electronics U.S.A., Inc. (“LG” or “Petitioner”) filed a Petition² asserting two grounds of unpatentability against Claims 1-5, 11-15, and 21 (the “Challenged Claims”). Pet., Paper 1, 9-10. The independent claims are Claims 1, 11, and 21.

Each of Petitioner’s Grounds 1-2 fails to meet multiple limitations of the Challenged Claims. The Patent Owner demonstrates herein that the combination of

² Based on the Patent Owner’s count, the 105-page Petition is over the limit with a total of 14,292 words, including 285 words added to various figures. 37 C.F.R. § 42.24(a); Consolidated Trial Guide (Nov. 2019), 40. *See Ericsson Inc. v. Elect. and Telecom. Research Inst.*, Paper 8, IPR2020-00239 (PTAB Jan. 31, 2020), at *4 (“Based on our review of the Petitions, it appears that the Petitions circumvent the word count limits ... by including numerous images with excessive wording.”).

references in each ground fails to teach the limitations, and that there was no reason for a POSITA to combine the references as proposed by the Petitioner.

For the reasons set forth below, the Board should confirm each of the Challenged Claims as patentable.

II. THE GROUNDS AT ISSUE (GROUNDS 1-2)

The Petition challenges Claims 1-6, 11-16, and 21-22 of the '040 Patent as obvious under these grounds:

- Ground 1 challenging Claims 1-5, 11-15, and (relying on Kim, Lee-1, and Choi), and
- Ground 2 challenging Claims 2-3, 6, 12-13, 16, and 22 (relying on Kim, Lee-1, Choi, and Lee-2).

See Pet., 9-10.

III. THE '040 PATENT

A. Overview of the '040 Patent

The '040 addresses the need for improved user interfaces for complex computer-implemented television devices, such as Smart TVs and Intelligent TVs, which provide access to various functions and multiple different sources of content. '040 Patent, 2:11-31. Ex. 2011 [Dr. R. Surati Decl.], ¶¶ 46-47 (“Surati declaration” or “Surati Decl.”). The '040 Patent describes the use of multi-panel user interfaces having a plurality of panels enabling, for example, a user to view content being

played in one panel and view other content and/or functions (e.g., sources of content) in other panels. '040 Patent, 3:3-16. Surati Decl., ¶¶ 48-49.

Figure 15B illustrates an exemplary embodiment of a user interface with a global panel 1404 and active content area 1408. The global panel 1404 includes graphic objects representing a list of different content sources 1504A-1504F. As reflected by the indicator 1512 around the source/program “Live TV-801– CNXN,” a content source can be selected (made in-focus using the indicator box 1512) by the user:

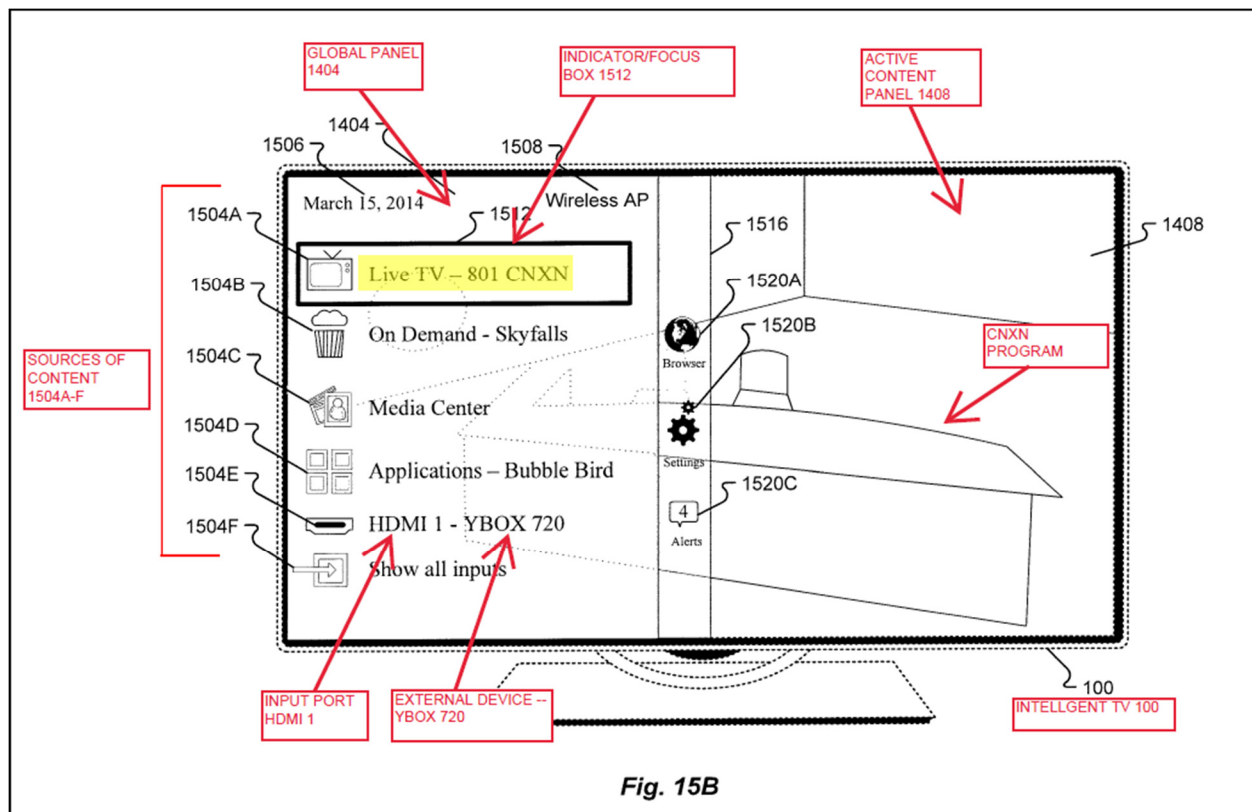
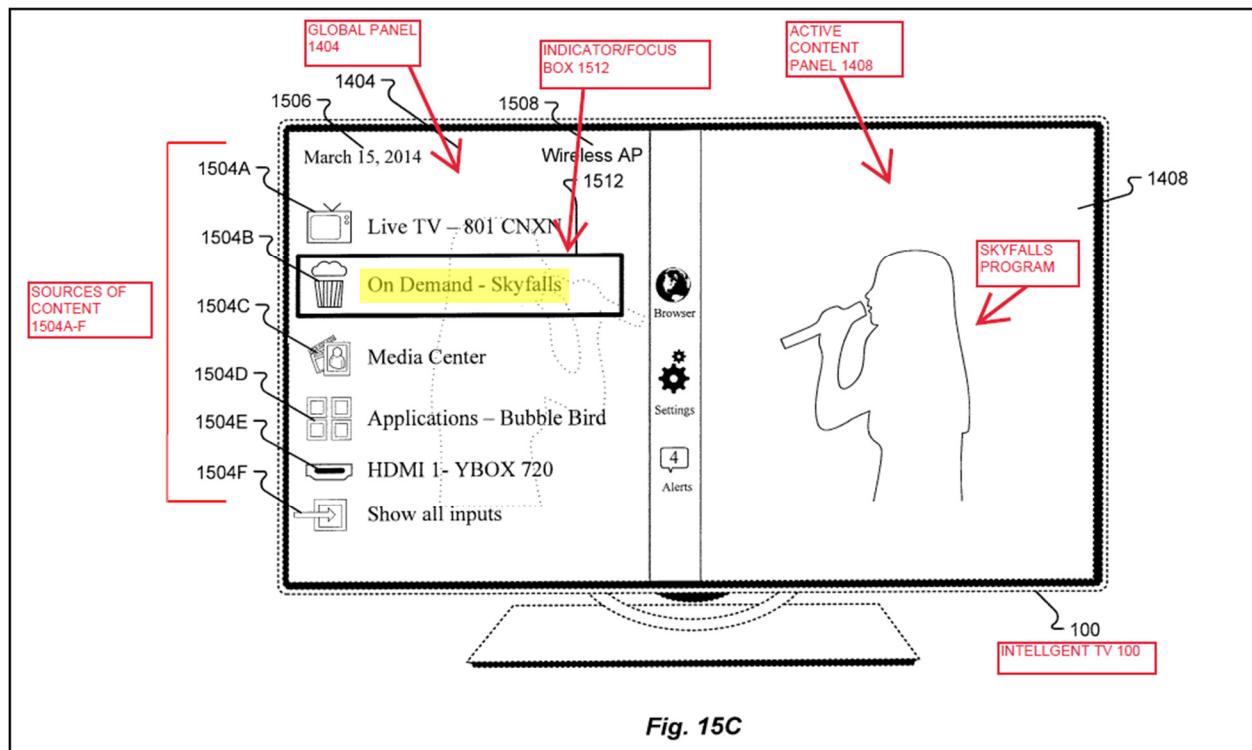


Fig. 15B

'040 Patent, Fig. 15B (annotated, highlighted), 30:41-46 (highlight using indicator box 1512), 32:29-59 (focus box), 35:19-20 (changing focus by selecting object); Surati Decl., ¶¶ 54-71.

In Figure 15B above, the content source “Live TV – 801 CNXN” 1504A on the left hand side is highlighted because it corresponds to the currently-displayed content of CNXN on the right hand side. Surati Decl., ¶ 67. In Figure 15C, the highlighted source changes to “On Demand – Skyfalls” 1504B because it corresponds to the new currently-displayed image of the program Skyfalls. '040 Patent, 30:65-67, 32:9-14 (“as the indicator 1512 is moved to a different source, the content or a preview of the content may be displayed in active content area 1408”); Surati Decl., ¶ 68. FIG. 15C illustrates an image or video associated with Skyfalls being displayed on the right hand side and the highlighted source “On Demand – Skyfalls” content source 1504B presented on the left hand side. Fig. 15B, 15C; Surati Decl., ¶¶ 63, 68.



'040 Patent, Fig. 15C (annotated).

The '040 Patent discloses that the sources of content 1504A-F may include Live TV, Video On Demand, Media Center, Applications, and electrical inputs for input ports (e.g., HDMI 1 and YBOX 720 in Figure 15B). '040 Patent, 30:27-39, Fig. 15B; Surati, Decl., ¶ 64. Figure 15B of the '040 Patent discloses a global panel 1404 user interface having a list of content sources including 1504E identifying a specific input port HDMI1 connected to a YBOX device. '040 Patent, 33:14-16, Fig. 15B; Surati Decl., ¶¶ 58-62.

B. The Claimed Invention

According to independent Claim 1, the invention provides a method for displaying content on a television, including, *inter alia*, [1.1] receiving an indication

of a selection from a user; [1.2] determining based on the received indication a global panel to display on the television; [1.3] retrieving from memory first content information for display in the global panel; [1.4] displaying the retrieved first content information in the global panel; [1.5], [1.7] wherein the global panel includes a list of sources of content including [i] a live television source, [ii] a video on demand source, [iii] a media center source, [iv] an applications source, and [v] and electrical input associated with the television; and [1.6] “wherein at least one of the sources is highlighted as being associated with the first content information” that is retrieved and displayed based on the user’s selection. ’040 Patent, 39:58-40:7 (Cl. 1).

IV. RELEVANT LEGAL STANDARDS

The objective standard for determining obviousness under 35 U.S.C. § 103, as set forth in *Graham v. John Deere Co.*, 383 U.S. 1 (1966), requires a factual determination to ascertain: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; and (3) the differences between the claimed subject matter and the prior art, and (4) any objective indicia of nonobviousness. Based on these factual inquiries, it must then be determined, as a matter of law, whether or not the claimed subject matter as a whole would have been obvious to one of ordinary skill in the art at the time the alleged invention was made. *Id.* at 17.

A finding of obviousness requires a showing that as of the date of the invention (a) the prior art teaches or suggests each of the limitations of the claim; (b)

there exists an apparent reason to combine and/or modify the prior art as proposed; and (c) a person of ordinary skill would have a reasonable expectation of success that the proposed combination and/or modification of the prior art would operate for its intended purpose. See *KSR Int’l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007); *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1361 (Fed. Cir. 2007); *Regents of Univ. of California v. Broad Institute, Inc.*, 903 F.3d 1286, 1291 (Fed. Cir. 2018).

V. LEVEL OF ORDINARY SKILL IN THE ART AND PRIORITY DATE

For purposes of this response, the Patent Owner accepts the Petitioner’s definition of the POSITA: A person of ordinary skill in the art as of the time of the invention “in August of 2012 would have had a bachelor’s degree in Electrical Engineering, Software Engineering, or Computer Engineering, or equivalent training, and approximately two years of experience working in the field of television systems and networking, human-computer interaction, or related technologies.” Pet, 8-9; Ex. 1003 [Dr. A. Lippman Decl.], ¶ 19 (“Lippman Decl.” or “Lippman declaration”). The Patent Owner and Dr. Surati find that definition to be reasonable. Surati Decl.], ¶¶ 43-44.

The parties agree that the priority date to be applied for the ’040 Patent is August 17, 2012. Pet., 8; Ex. 1003 [Lippman Decl.], ¶ 19; Ex. 2011 [Surati Decl.], ¶ 40.

VI. CLAIM CONSTRUCTION

In accordance with 37 C.F.R. § 42.100(b), the PTAB construes the claims according to the same claim construction standard that would be used to construe the claims in district court. The claims should be construed starting with the ordinary and customary meaning as understood by the person of ordinary skill in the art and considering the intrinsic evidence consisting of (1) the claim language, (2) the specification, and (3) the prosecution history. *David Netzer Consulting Eng’r LLC v. Shell Oil Co.*, 824 F.3d 989, 993-94 (Fed. Cir. 2016); *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-15 (Fed. Cir. 2005).

For purposes of the institution stage, the Board found that there was no need to provide express constructions of any claim terms. Instn. Dec., Paper 9, 12-13.

The Patent Owner has applied the ordinary and customary meaning of the claim terms in establishing the patentability of the claims of the ’040 Patent. This includes the ordinary and customary meaning of “*an electrical input associated with the television*” in limitation 1.7 and “*settings associated with the identified user*” in limitation 2.2, discussed in Section IX, *infra*. Ex. 2011 [Surati Decl.], ¶¶ 73-76.

VII. SUMMARY OF THE PRINCIPAL APPLIED REFERENCES

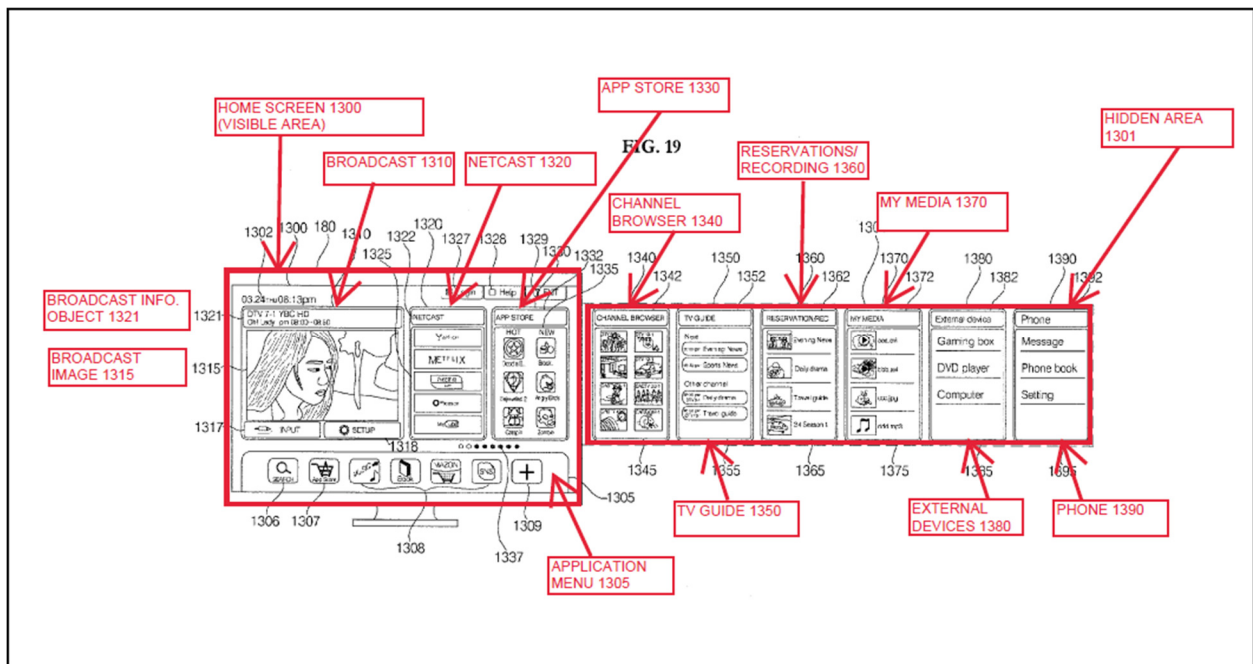
A. Kim (Ex. 1005)

Kim generally discloses an image display apparatus (e.g., television) having a user interface in the form of a “home screen” having a series of graphical “card

objects” representing different “source[s] or type[s]” of content. Kim, [0193], [0194]. The home screen may be displayed upon the user selecting a home key or providing a “go-to-home” input on the remote control device. Kim, [0192], [0094]. Surati Decl., ¶ 77.

The selectable card objects in Kim’s home screen include (1) a Broadcast object 1310 with a broadcast display area 1315 for displaying currently-tuned broadcast content; (2) a Netcast object 1320 with thumbnails for internet sources of content (CPs or Content Providers); (3) an App Store object 1330 with text and thumbnails for software applications available for download; (4) a Channel Browser object 1340 with thumbnails for different broadcast channels; (5) a TV Guide object 1350 for a program list of available programs; (6) a Reservations/recording object 1360 with text and thumbnails for a list of programs recorded or to be recorded; (7) a My Media object 1370 with text and thumbnails for files such as videos, photographs, and the like; (8) an External Device object 1380 with text identifying external devices connected to the television; (9) a Phone card object 1390 with text identifying information associated with a phone device such as a mobile phone. There is also an application menu 1305 having mandatory and optional applications 1308. Kim, [0094], [0098], [0195]-[0214]. Surati Decl., ¶ 78-91.

The home screen of Kim with the various card objects is depicted in Figure 19:

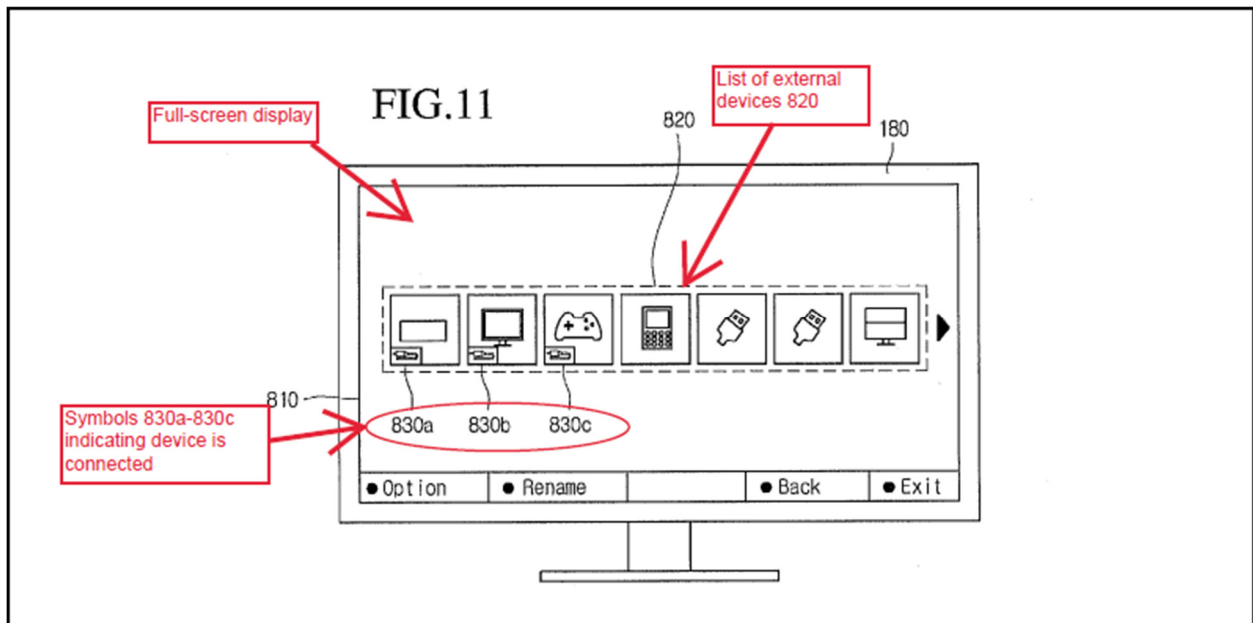


Kim, Fig. 19 (annotated).

The card objects in Kim can be selected to bring forth a full-screen display of the card object. Kim, [0098], Surati Decl., ¶ 81.

B. Choi (Ex. 1007)

Choi describes a method of displaying an external device list on a television. Choi, Abstract. Figure 11 of Choi depicts a full-screen external device list that includes a series of external devices 820 annotated with icons 830a-830c that indicate which external devices are connected to the image display apparatus (e.g., television). Choi, [0250], Fig. 11.

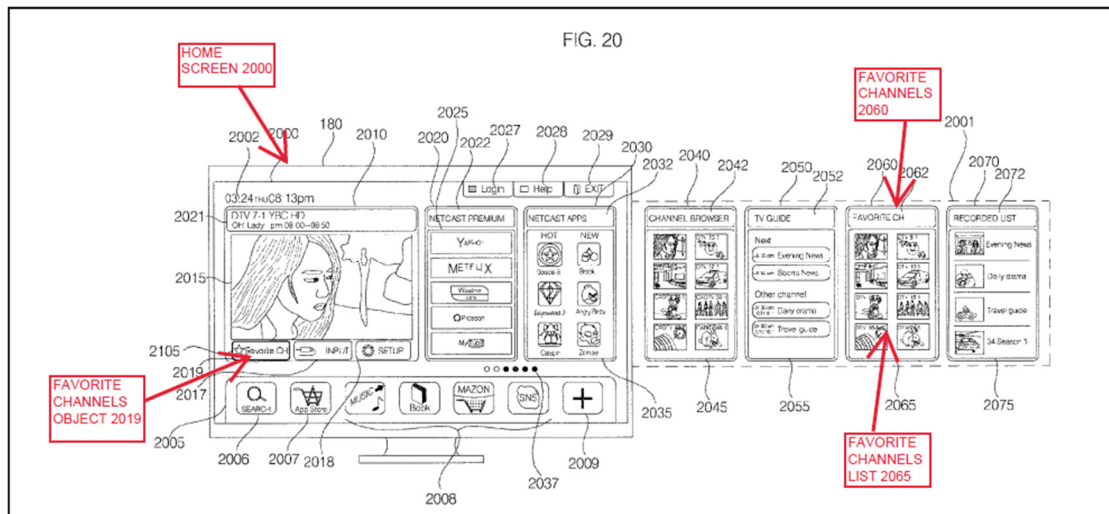


Choi, Fig. 11 (annotated), [0250]; Surati Decl., ¶¶ 105-108.

The symbols 830a-830c in Choi do not identify or indicate input ports to the television. Surati Decl., ¶ 109.

C. Lee-2 (Ex. 1010)

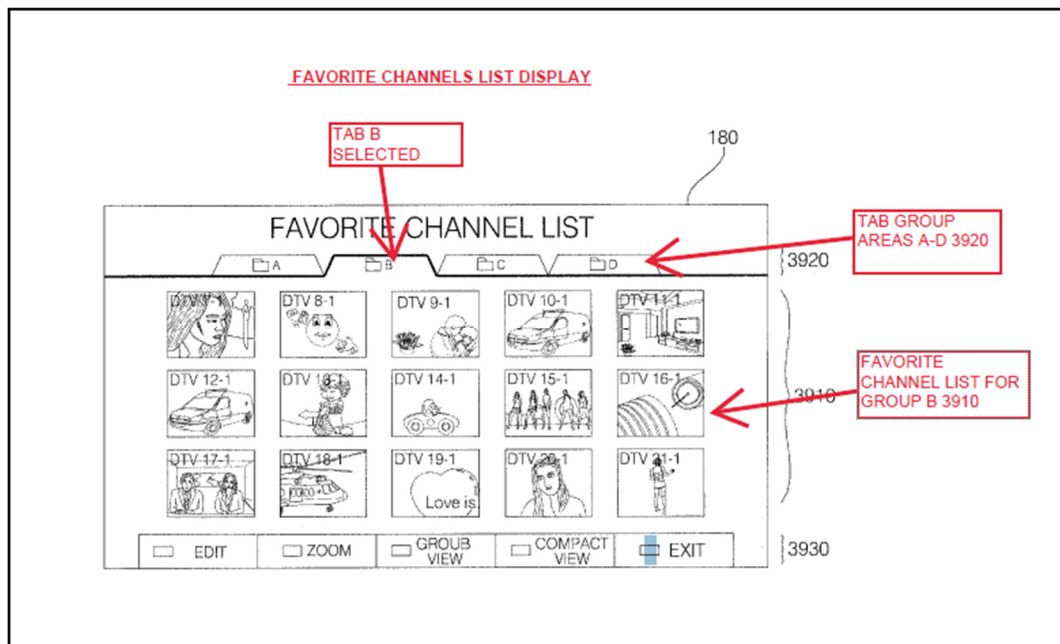
Lee-2 generally describes a home screen display including a Favorite Channels card object having a favorite channel list. Lee-2, Abstract. Figure 20 depicts a home screen display 2000 with various card objects 2010-2070, including a Favorite Channels card object 2060 with a favorite channels list 2065. The home screen also includes a favorite channels object 2019 that may be selected to cause the favorite channels list 2110 to be presented in a modified home screen display depicted in Figure 21B. Lee-2, 27:4-28:18, 29:27-29, Figs. 20, 21B; Surati Decl., ¶¶ 112-114. Figure 20 is presented below:



Lee-2, Fig. 20 (annotated).

Lee-2 discloses various other user interfaces involving the display of a favorite channel list. In Figure 32B, the Favorite Channels object is highlighted on a second display (Fig. 32B) because the user selected the favorite channel key on the prior display (Fig. 32A). ¶¶ 115-116; Lee-2, Figs. 32A-32B, 33A-33B, 39A-39B.

Lee-2 discloses a Favorite Channel List display that is presented upon the user selecting the favorite channel object 2019 on the prior home screen display, as illustrated below in Figure 39B:



Lee-2, Fig. 39 (annotated), 41:47-60; Surati Decl., ¶¶ 117-118.

D. Lee-1 (Ex. 1006)

Lee-1 discloses a thumbnail image generator where a thumbnail image may have been stored in memory. Lee-1, 12:65-67. Surati Decl., ¶¶ 110-111.

VIII. GROUNDS 1-2 FAIL FOR CHALLENGED CLAIMS 1-6, 11-16, AND 21-22 BECAUSE CHOI (EX. 1007) AND THE KIM PUBLISHED APPLICATION (EX. 1011) ARE NOT “PRINTED PUBLICATIONS” UNDER 35 U.S.C. § 311(B)

Grounds 1-2 fail because both rely on Choi (Ex. 1007), and Choi is not available as prior art in an IPR. IPRs may challenge claims “only on the basis of prior art consisting of patents or printed publications.” 35 U.S.C. § 311(b). Choi is neither. The Petition presumes that Choi qualifies as prior art under pre-AIA § 102(e)(1).

Choi is not a patent. Choi is not a printed publication under 35 U.S.C. § 311(b) because it was not published before the '040 Patent's priority date of August 17, 2012.

Documents are “printed publications” as of the date they become accessible to the public, and Choi first became public on its publication date of March 7, 2013 (Ex. 1007 [Choi], 1), which is after the August 17, 2012, priority date of the '040 Patent. *See Samsung Elecs. Co. v. Infobridge Pte. Ltd.*, 929 F.3d 1363, 1368, 1370 (Fed. Cir. 2019); Ex. 1003 [Lippman Decl.], ¶ 19; Pet., 8.

The pending appeal before the Federal Circuit in *Lynk Labs, Inc. v. Samsung Electronics Co., Ltd.* (App. No. 23-2346 from IPR2022-00149) addresses whether applications for patent published after the priority date are permissible “printed publications” in IPRs. The decision in that case could be dispositive of the same issue presented in this IPR.

Patent Owner respectfully requests that Choi be disqualified and the Challenged Claims be deemed patentable.

Additionally, Ground 1 relies on Ex. 1011 (Kim Published Application) (see Pet., 45), which was not published until July 11, 2013, which is after the August 17, 2012, priority date of the '040 Patent. For the same reasons as Choi, the Kim Published Application should be disqualified as prior art and all claims should be deemed patentable.

IX. CLAIMS 1-5, 11-15, AND 21 ARE PATENTABLE OVER KIM, LEE-1, AND CHOI (GROUND 1)

A. Independent Claims 1, 11, and 21 Are Patentable Over Kim, Lee-1, and Choi

The combination of Kim, Lee-1, and Choi fails to teach at least the following limitations of Claim 1:

- Limitation 1.6: “*wherein at least one of the sources is highlighted as being associated with the first content information*” that is retrieved and displayed in limitations 1.3-1.4.
- Limitations 1.5/1.7: “*wherein the global panel includes a list of sources of content ... wherein the sources include ... an electrical input associated with the television.*”

Surati Decl., ¶ 120.

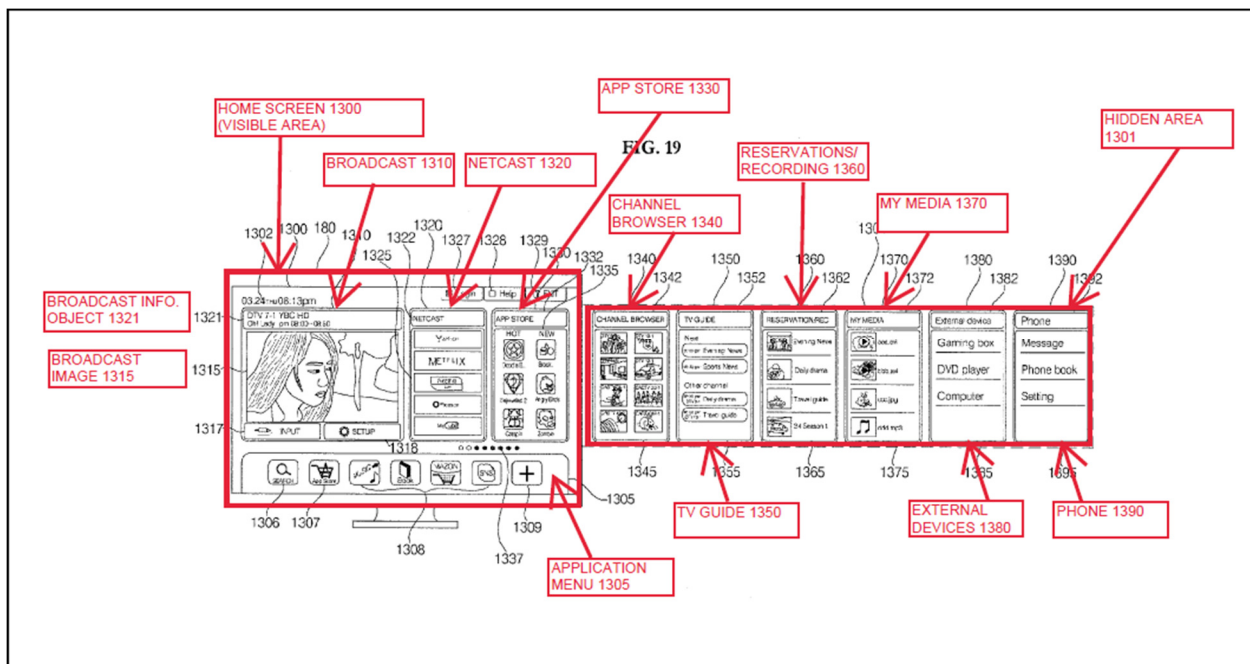
B. Kim, Lee-1, and Choi Fail to Teach Limitation 1.6 “Wherein at Least One of the Sources is Highlighted as Being Associated with the First Content Information” that was Retrieved and Displayed Pursuant to Limitations 1.3-1.4

1. Petitioner Applies Limitations 1.3-1.4 for “First Content Information” to Five Specifically-Identified Card Objects in Kim

Limitation 1.6 refers back to limitations 1.3-1.4 which provide that “*first content information*” is retrieved and displayed in the “*global panel.*” ’040 Patent, Cl. 1. The Petitioner and Dr. Lippman assert that the home screen of Kim’s Figure

19 is the claimed “*global panel*” in limitations 1.3-1.4 of Claim 1. Pet., 17, 23-27; Ex. 1003 [Lippman Decl.], ¶¶ 64, 81-86.

Kim’s home screen has a series of card objects including (1) Broadcast card object 1310 with broadcast image area 1315; (2) Netcast 1320; (3) App Store 1330; (4) Channel Browser 1340; (5) TV Guide 1350; (6) Reservations recordings 1360; (7) My Media 1370; (8) External devices 1380; (9) Phone card object 1390; and (10) Application menu 1305. Kim, [0193]-[0215]. Figure 19 illustrates the various card objects in the home screen:



Kim, Fig. 19 (annotated); Surati Decl., ¶¶ 121-123.

The Petitioner and its expert take the position that the claimed “*first content information*” is met by the descriptive text and/or thumbnails displayed within five specific card objects in Kim’s home screen: (A) App Store 1330, (B) Reservation

recordings 1360, (C) My Media 1370, (D) Channel Browser 1340, and (E) Broadcast 1310.³ Pet., 28-31; Lippman Decl., ¶¶ 89-101. By way of example, the Petitioner asserts that the text and thumbnails in application list 1335 in the App Store card object 1330 meet the “*first content information*” that is retrieved and displayed pursuant to limitations 1.3-1.4. Pet., 28; Lippman Decl., ¶¶ 90-91. Surati Decl., ¶¶ 123-124.

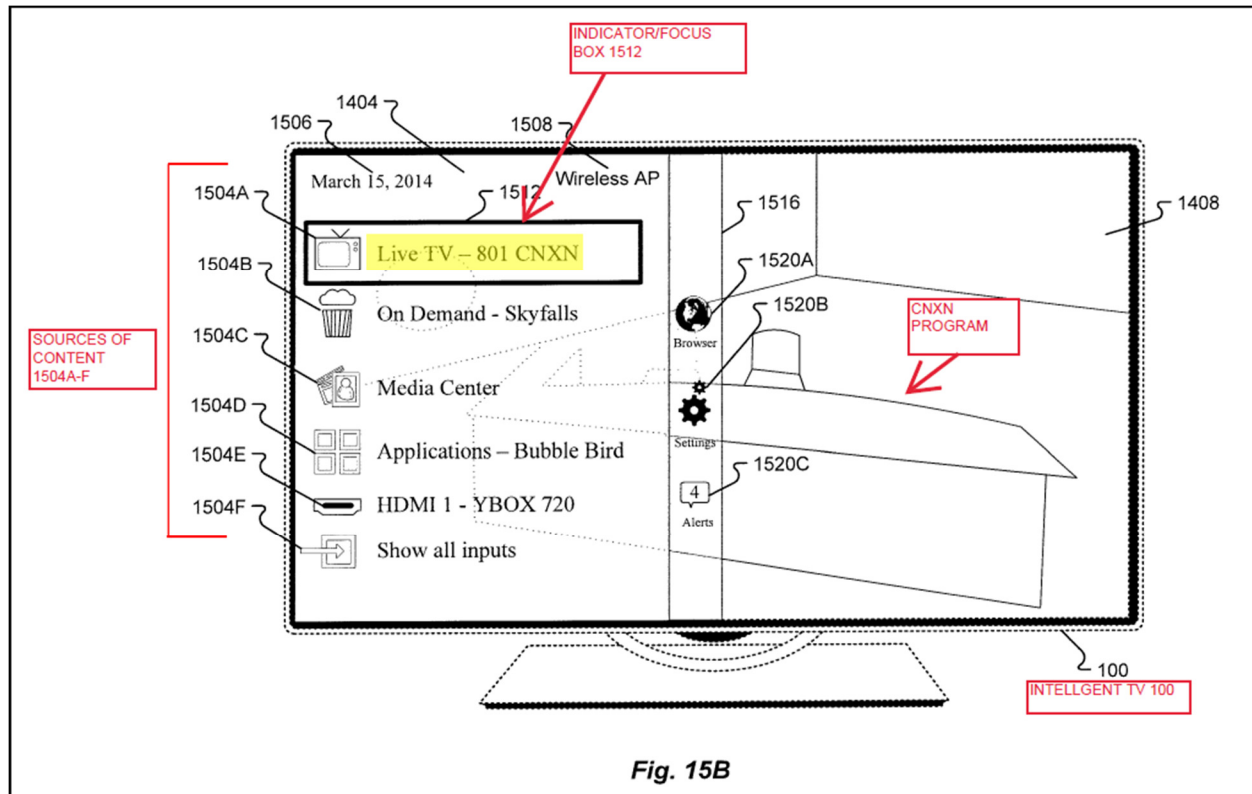
2. Kim, Lee-1, and Choi Do Not Meet Limitation 1.6 Providing that “At Least One of the Sources [of Content] Is Highlighted As Being Associated With the First Content Information.”

Limitation 1.6 requires that “*at least one of the sources [of content] is highlighted as being associated with the first content information.*” ’040 Patent, Cl. 1. In other words, one of the content sources listed in the global panel is highlighted because it is associated with the “*first content information*” that is retrieved and displayed in limitations 1.3-1.4.

The ’040 Patent discloses that a content source may be highlighted when it corresponds to information content that is being displayed. For example, Figure 15B

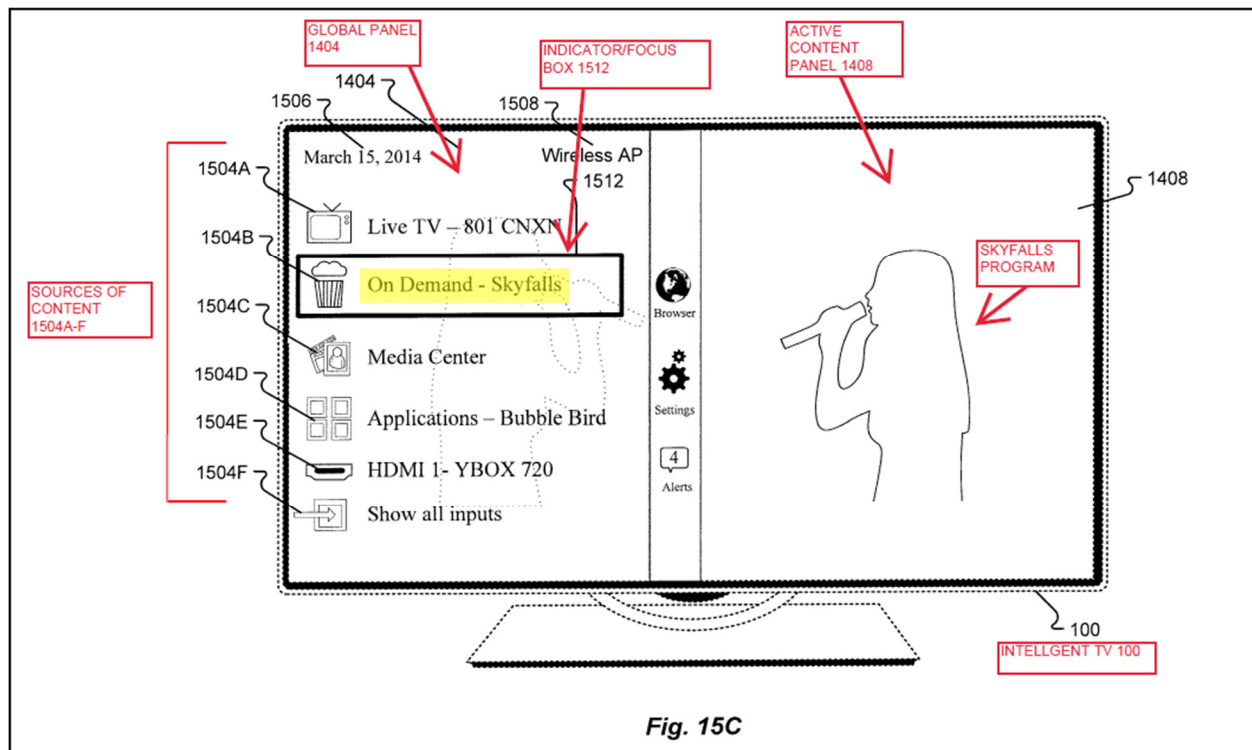
³ The five card objects identified by the Petitioner for limitations 1.3-1.4 are referred to herein as “the specifically-identified card objects” or “the five card objects.”

of the '040 Patent illustrates that the content source “Live TV-801” 1504A on the left hand side is highlighted with a box 1512 because it corresponds to the program “CNXN” that is being displayed on the right hand side:



'040 Patent, Fig. 15B (annotated), 30:65-67 (“currently displaying a Live TV view (specifically 801 CNXN).”); Surati Decl., ¶¶ 125-126.

In yet another example, Figure 15C illustrates that the “On Demand-Skyfalls” content source 1504B on the left hand side is highlighted because it corresponds to the program “Skyfalls” being displayed on the right hand side:

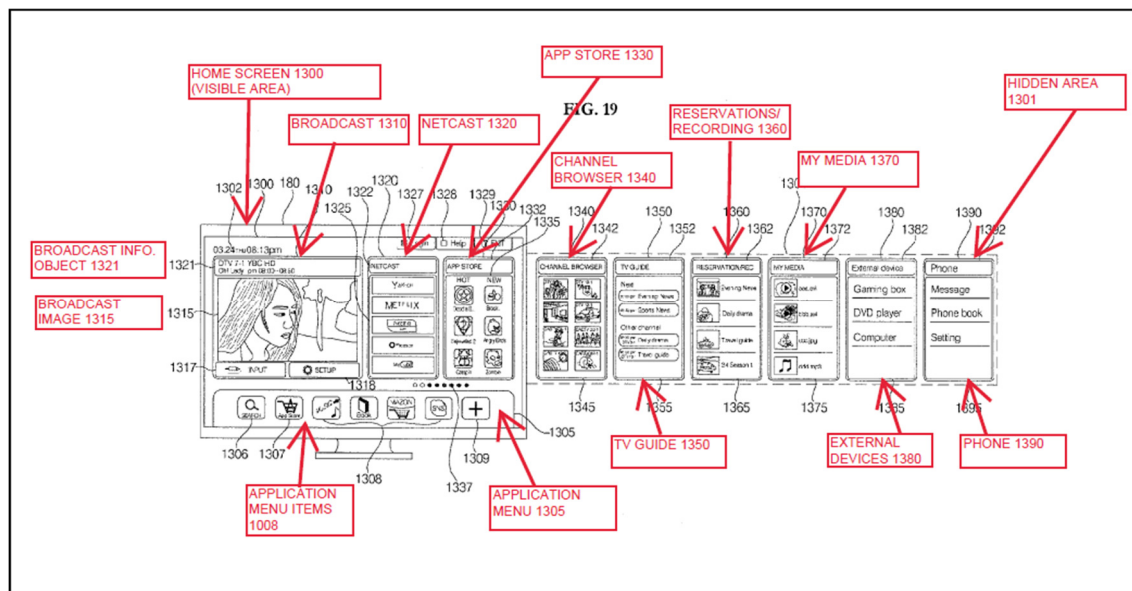


'040 Patent, Fig. 15C (annotated), 32:9-14; Surati Decl., ¶ 127.

a. Kim Does Not Teach or Suggest Limitation 1.6

As discussed above in Section IX.B.1, the Petitioner and its expert assert that the claimed “*first content information*” is the text/thumbnail information in the five card objects (alleged “*sources of content*”): (A) App Store 1330, (B) Reservation recordings 1360, (C) My Media 1370, (D) Channel Browser 1340, and (E) Broadcast 1310. Pet., 28-31; Lippman Decl., ¶¶ 89-101. However, Kim does not teach or suggest that any of the specifically-identified card objects 1330, 1340, 1360, 1370, and 1310 is highlighted because the text/thumbnail in that card object is being displayed.

On the contrary, a POSITA would readily understand from Kim that the five card objects (“*sources of content*”) and their text/thumbnails (“*first content information*”) are automatically displayed together when the user invokes the home screen. Kim, [0193]-[0215]. None of the five card objects are highlighted, as illustrated below in Figure 19:



information are highlighted?” A: “The cards in Figure 19 are not highlighted.”).
Surati Decl., ¶ 130.

The Petitioner has a back-up argument that Kim teaches limitation 1.6 because it discloses that “partially-displayed” card objects may have a color or tint to distinguish them from fully-displayed “active card objects.” Kim, [0228]. In that instance, the card is highlighted because it is partially-displayed, not because its information content (“*first content information*”) has been displayed, and, accordingly, limitation 1.6 is not satisfied. Surati Decl., ¶ 147.

Thus, Kim does not meet limitation 1.6 for highlighting a content source because it is associated with retrieved and displayed first content information. Surati Decl., ¶ 131.

b. The Proposed Modification to Kim Does Not Meet Limitation 1.6

Kim discloses one instance where an alleged “*source[] of content*” (card object) is highlighted, and it pertains to the Phone object 1390. Kim, [0211]. The Petitioner argues that Kim’s disclosure regarding the Phone card object 1390 meets limitation 1.6. Pet., 46-47.

Kim discloses that the Phone card object 1390 can be highlighted if the system detects an incoming phone call:

The [Phone] card object 1390 may display call-related information ...

Upon receipt of an incoming call at the portable phone, the ... card

object 1390 may be automatically displayed in the card object area of the display 180. **If the card object 1390 is already displayed** on the display 180, **it may be highlighted** or otherwise distinguished from the other card objects.

Kim, [0211] (emph. added). Surati Decl., ¶ 132. The Phone card object is not one of the five card objects the Petitioner identifies as a “*source of content*” providing “*first information content*” allegedly meeting limitations 1.3-1.4. For that reason alone, the Petitioner’s back-up theory based on the Phone card object does not meet limitation 1.6.

Further, the highlighting of the Phone card object 1390 is triggered by the receipt of an incoming call. Kim does not remotely suggest that the Phone card object 1390 is highlighted because its text information is displayed, so it does not meet the requirement of limitation 1.6 that the object is highlighted because the “*first information content*” has been displayed. Surati Decl., ¶¶ 132-133.

The Proposed Modification of Kim Does Not Meet Limitation 1.6

Even if one or more of the five specifically-identified card objects (“*sources of content*”) were modified based on the Phone card object (which a POSITA would not do), limitation 1.6 is not satisfied. The result of applying the teaching for the Phone card object is that one or more of the other five-specifically card objects (i.e., the (A) App Store 1330, (B) Reservation/recordings 1360, (C) My Media 1370, (D) Channel Browser 1340, and (E) Broadcast 1310) would be highlighted when an

incoming call is detected. For example, the App Store card object 1330 would be highlighted when an incoming call occurs. That does not meet limitation 1.6, which requires highlighting the card object (alleged “*source of content*”) based on the information in the card object (the alleged “*first content information*”) being retrieved and displayed pursuant to limitations 1.3-1.4. Surati Decl., ¶¶ 133, 136.

Accordingly, the proposed application of the teaching from Phone object 1390 does not meet the requirement under 1.6 that at least one of the specifically-identified card objects (alleged “*sources of content*”) is highlighted because its text/thumbnail (alleged “*first content information*”) has been retrieved and displayed. Surati Decl., ¶¶ 132-133.

A POSITA Would Not Have Reason to Modify Kim as Proposed

Further, a POSITA would not have reason to apply Kim’s teaching for the Phone object 1390 to the other card objects. The triggering event of an incoming call does not pertain to the other specifically-identified card objects, which do not relate to phone calls. For example, a POSITA would not have reason to highlight the App Store object 1330 in response to an incoming call. Indeed, it would confuse the user because it would distract from the Phone object that is receiving the call. For at least this reason, a POSITA would not modify Kim to highlight other cards based on the teaching that the Phone card may be highlighted when there is an incoming call. Surati Decl., ¶ 134.

The Petitioner argues that Kim’s teaching of highlighting the Phone card object 1390 “generally applies to Kim’s other card objects.” Pet., 46-47; Lippman Decl., ¶ 135. The Petitioner and its expert never provide a reason why a POSITA would apply the incoming-call highlighting of the Phone card object to the five other card objects. The Petitioner goes on to argue that a POSITA would modify at least one of the other five card objects to be highlighted “so it is distinguished from the other card objects.” Pet., 46-47. Neither the Petitioner nor its expert identifies or explains why another card object would need to be highlighted to distinguish it. Pet., 46-47; Lippman Decl., ¶ 135. See Surati Decl., ¶¶ 135-136. The Petitioner’s obviousness case fails because there is no apparent reason to modify Kim as proposed.

The Petitioner asserts that “in the circumstance where the APP STORE card object is already displayed ... it would have been obvious to a POSITA for the APP STORE card object 1330 to be highlighted so that it is distinguished from the other card objects and readily identified by the user.” Pet., 46-47. The expert’s conclusory testimony parrots the Petition *verbatim*. See Lippman Decl., ¶ 135. The reasoning is conclusory and circular. The Petition provides no reason and no evidence (because there is none) as to why the App Store card object or any of the other specifically-identified card objects would need highlighting to allow the user to identify that card object. Indeed, the Petitioner’s expert conceded in deposition that a user would easily

distinguish between the different card objects without highlighting them. Ex. 2015 [Dept. Tr. Dr. Lippman], 176:22-177:17. Surati Decl., ¶ 138.

Furthermore, even if one of the five specifically-identified card objects (e.g., the App Store object 1330) was highlighted to “distinguish it” from other card objects, that does not meet limitation 1.6’s requirement that the card object (alleged “*source of content*”) is highlighted because text/thumbnail information (alleged “*first content information*”) has been retrieved and displayed. Surati Decl., ¶ 137. The Petitioner’s reasoning is untethered to the claim limitation, which provides for highlighting the content source because it is “*associated with the [retrieved and displayed] first content information,*” as claimed. Lippman Decl., ¶ 139.

In deposition, the Petitioner’s expert could not explain why a POSITA would have reason to modify Kim to highlight any of the five specifically-identified card objects (“*sources of content*”). Ex. 2015 [Dep. Tr. Dr. Lippman], 206:25-207:16. The expert’s best explanation was that one of the card objects might be highlighted because the user selected the card object, not because the card object was displaying descriptive text and thumbnails (alleged “*first content information*”), as required by limitation 1.6. Surati Decl., ¶ 139.

In its decision on institution, the Board did not have an opportunity to address whether a POSITA would have a reason to apply the Phone card object teaching regarding incoming calls to the specifically-identified card objects (1330, 1340,

1360, 1370, 1310). See Instn. Dec., 29-30. For the reasons set forth above, a POSITA would not have reason to modify Kim as proposed. And even if the Phone card object teaching was applied to the specifically-identified card objects, those card objects would not be highlighted because their information content was being displayed, as required by limitation 1.6. Surati Decl., ¶ 139.

c. The Petitioner's Arguments Based on Lee-2 Fail to Fill the Gap in the Proposed Combination

The Petition also refers to Ex. 1010 (Lee-2) to support its argument for modifying Kim. Even if considered as background knowledge, Lee-2 does not fill the gap in Kim regarding limitation 1.6 for a source being highlighted because it is associated with the display of content that is retrieved and displayed pursuant to limitations 1.3-1.4.

In Lee-2, a Favorite Channels card object 2060 is highlighted in Figure 33B because it was **selected by user input of a local key** in the previous user interface in Figure 33A. Thus, the Favorite Channels card object is highlighted because it was selected via the local key, not because its information content 2065 (*"first information content"*) is displayed:

Referring to FIG. 33A, an image 3310 is displayed fullscreen on the display 180. **Upon input of a local key (not shown) or a favorite channel key ...** the home screen 2000 may be displayed as illustrated in FIG. 33B. **The home screen 2000 may include the FAVORITE**

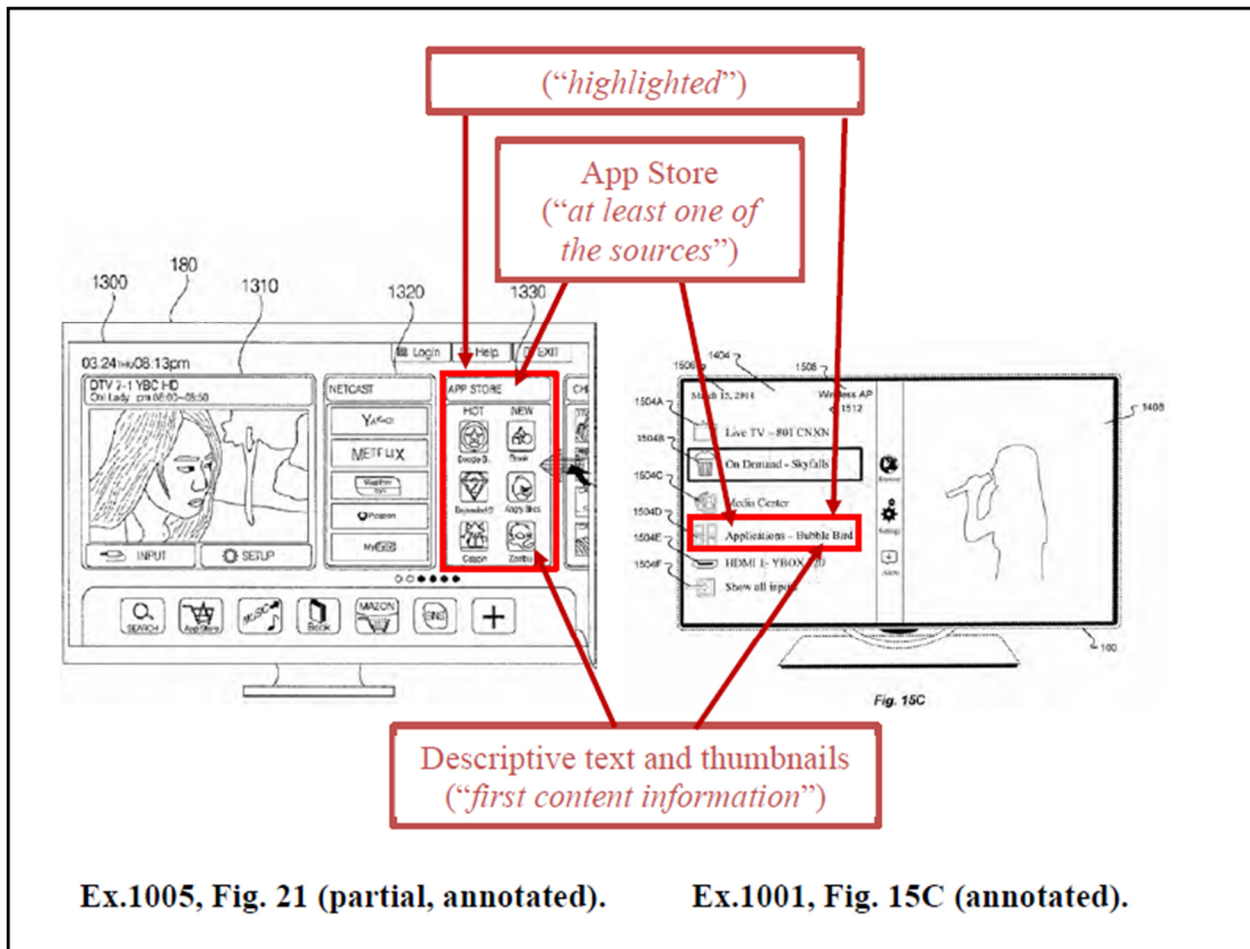
CH card object 2060. Particularly, the FAVORITE CH card object 2060 may be highlighted. Therefore, the user can readily view the FAVORITE CH card object 2060 including the favorite channel list 2065.

Lee-2, 38:3-11 (emph added).

The Petitioner's expert confirmed in deposition that Lee-2 teaches that the Favorite Channel object is highlighted because the user selects it with a favorite channel key, not because the favorite channel list information 2065 (alleged "*first content information*") is being displayed as required by limitation 1.6. Ex. 2015 [Dep. Tr. Dr. Lippman], 199:15-18 (Q: "And if it's highlighted, that's triggered by the user selecting the favorite channel using the key, right?" A: "Using a key, yeah."). Accordingly, the teaching from Lee-2 (purportedly reflecting background knowledge does not fill the gap in Kim of a card object being highlighted because the information content in it has been retrieved and displayed per limitation 1.6. Surati Decl., ¶ 142.

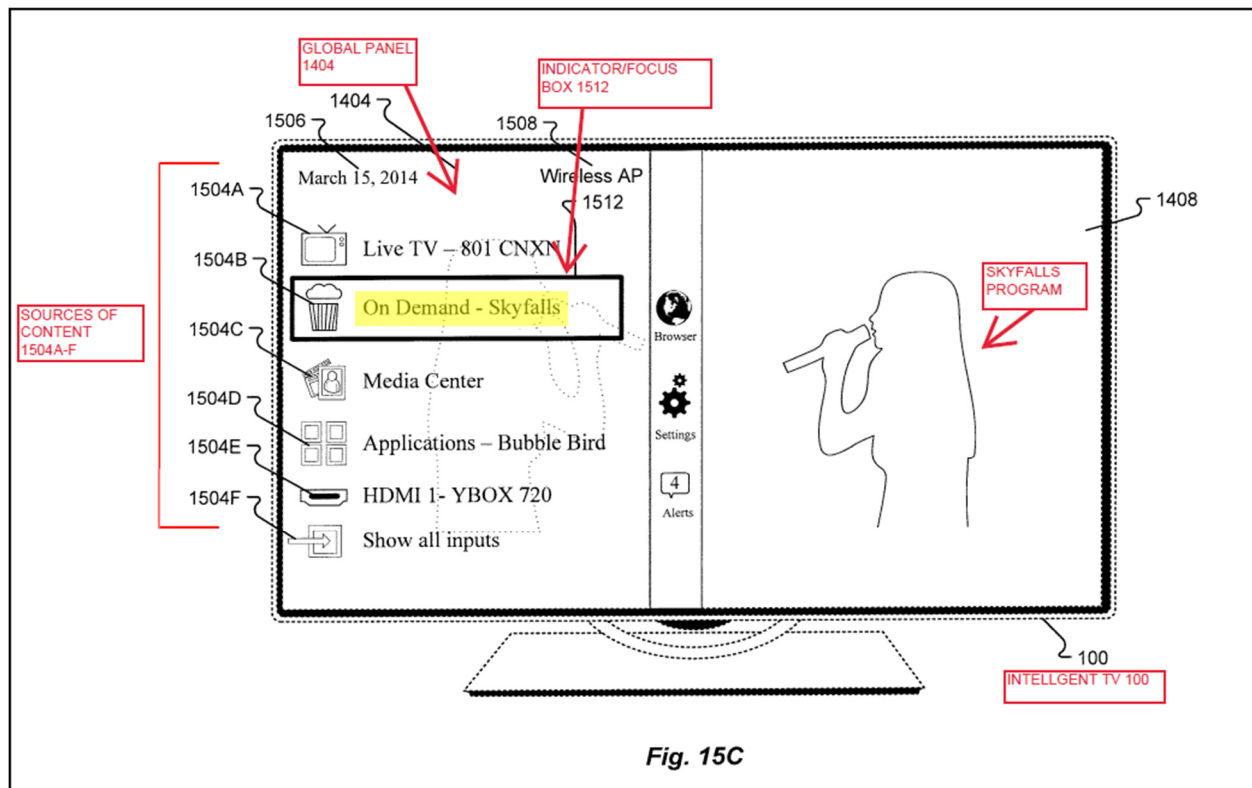
d. Figures 15B-15C of the '040 Patent Demonstrate Why Kim Does Not Meet Limitation 1.6

The Petitioner provides a side-by-side comparison of a modified Kim home screen having a highlighted App Store card 1330 and a modified Figure 15C of the '040 Patent. Pet., 48. When properly viewed, the comparison illustrates the distinction between Kim (alone or modified) and limitation 1.6:



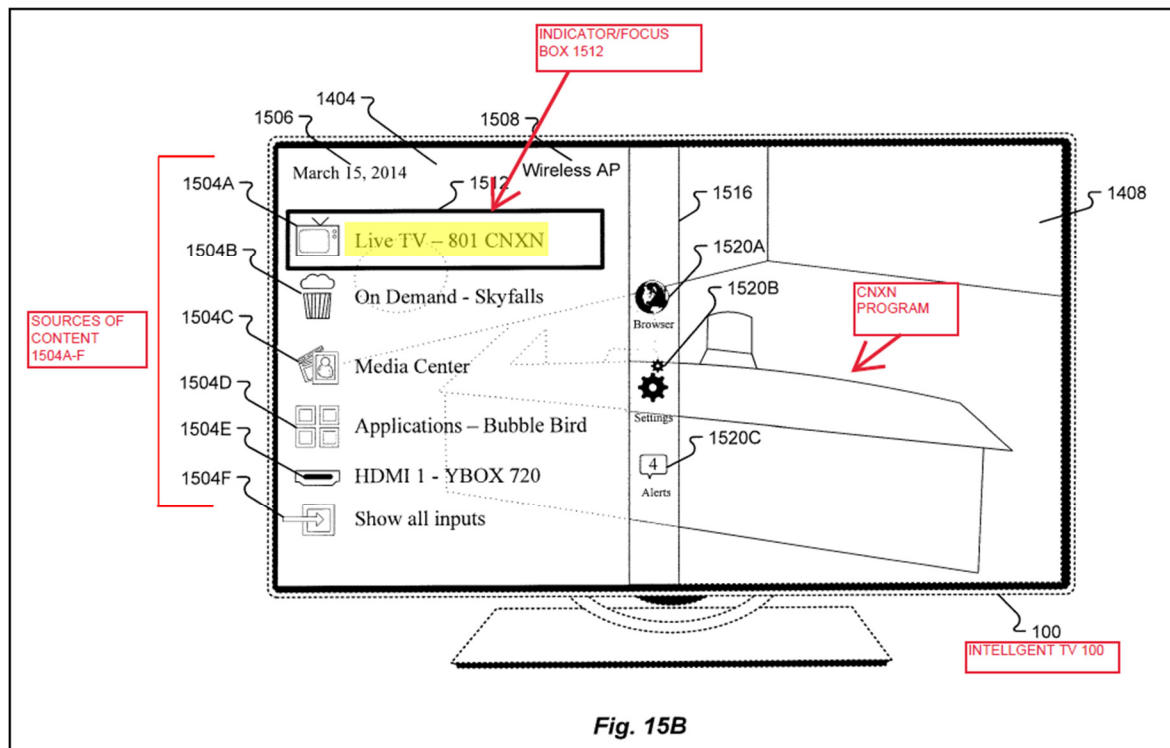
Pet., 48 (annotated Fig. 21 of Kim; annotated/modified Fig. 15C of '040 Patent).

Figure 15C of the '040 Patent does not disclose that the “Applications-Bubble Bird” source 1504E is highlighted, as indicated in the Petitioner’s reinterpretation. Figure 15C shows the “On Demand-Skyfalls” source 1504B on the left hand side being highlighted because that content source is associated with **the information content for the Skyfalls program that is displayed** in the right hand side:



'040 Patent, Fig. 15C (annotated); '040 Patent, 32:9-14. Surati Decl., ¶¶ 143-144.

As described previously, if a different content source is selected (e.g., “Live TV-801”), then it will be highlighted because new information content is being displayed (“CNXN” program). '040 Patent, 32:9-14 (“as the indicator 1512 is moved to a different source, the content or a preview of the content may be displayed”). FIG. 15B illustrates the source “Live TV-801” being highlighted because the “CNXN” program is being displayed:



'040 Patent, Fig. 15B (annotated); '040 Patent, 30:65-67. Surati Decl., ¶ 145.

Thus, as described and claimed in the '040 Patent, a source of content is highlighted because it is related to information content (“*first content information*”) from the source that is displayed, and the highlighted source of content will change when information content from a different source is displayed. This is in stark contrast to Kim, where the card object is not highlighted because information content inside the card object is displayed. See Surati Decl., ¶ 146.

Accordingly, Kim, alone or in combination as proposed, fails to meet limitation 1.6, and all claims should be found patentable.

C. Kim, Lee-1, and Choi Fail to Teach Limitations 1.5 and 1.7 “Wherein the Global Panel Includes a List of Sources of Content ... Wherein the Sources Include ... An Electrical Input Associated With the Television”

The combination of Kim, Lee-1, and Choi fails to teach limitations 1.5 and 1.7 providing that “*the global panel includes a list of sources of content ... wherein the sources include ... an electrical input associated with the television.*” ’040 Patent, Cl. 1.

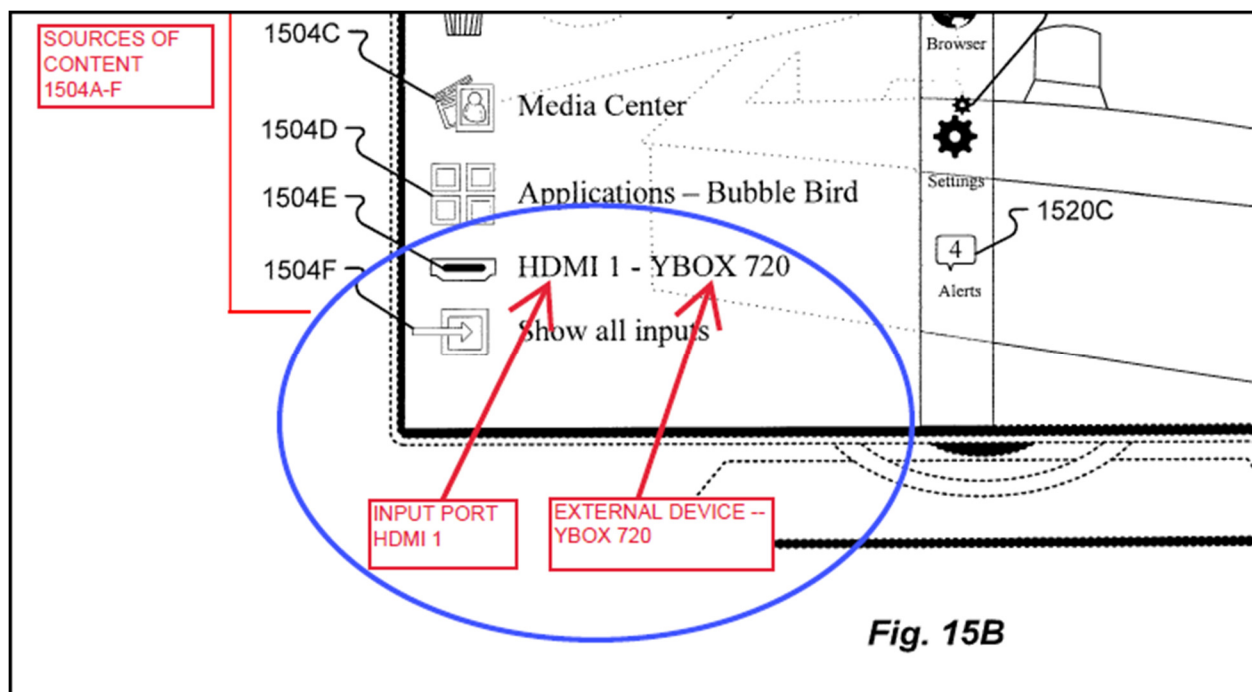
1. A “Source[] of Content” That Is “An Electrical Input Associated With the Television.”

A POSITA would understand the ordinary and customary meaning of limitations 1.5 and 1.7 as meaning that the global panel includes at least one input port that is a source of content for the television. It is well understood that televisions in the 2012 timeframe include electrically connected input ports for connecting external sources, a few examples being an HDMI port, a USB port, a DVI port, and so forth. See Ex. 2013, (Brown), 7:16-20, 12:66-13:6, Fig. 2 (television with port inputs including HDMI, USB, DVI, S-Video, etc.); Ex. 2014 (McRae), [0006]. Surati Decl., ¶ 150.

The specification of the ’040 Patent discloses various input ports that are electrical inputs to the television. ’040 Patent, 6:16-19 (“An input can be a device or devices (e.g., DVD, VCR, etc.) **electrically connected to the television through a port** (e.g., HDMI, video/audio inputs, etc.), 23:58-63 (“an input source button 720

(to select input source such as ... HDMI, component or COMP, audio/Video or A/V, digital or analog television or DTV/ATV ..."). The '040 Patent discloses that the system can also "determine which inputs (e.g., HDMI ports) are currently available for connecting to external devices." '040 Patent, 25:29-31. The '040 Patent elsewhere discloses ports providing electrical inputs to the television for external devices. '040 Patent, 17:51-58 ("Ethernet port, a Universal 55 Serial Bus (USB) port ... (IEEE) 1394 port, or other interface."). Surati Decl., ¶ 151.

Figure 15B of the '040 Patent discloses a global panel 1404 with a list of content sources including 1504E identifying a specific input port HDM 1 (blue) connected to the YBOX 720 external device:

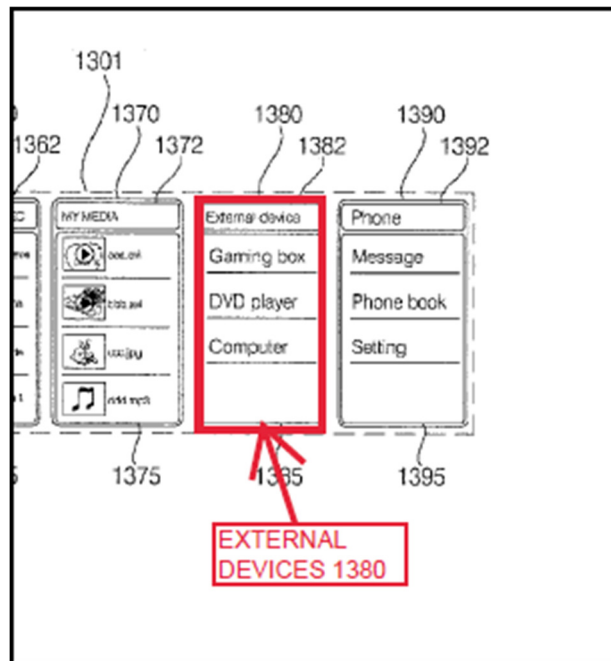


'040 Patent, Fig. 15B (excerpted; annotated); 33:14-16. Surati Decl., ¶ 152.

Figure 15B supports the claimed “*electrical input associated with the television*” by providing a display including a specific input port (HDMI 1) source that is an electrical input to the television. A POSITA would readily appreciate that the ordinary and customary meaning of the “*electrical input associated with the television*” in limitation 1.7 as referring to an input port. Surati Decl., ¶ 153.

2. Kim Modified by Choi Fails to Teach the Display of an Input Port

The Petitioner and its expert rely on Kim’s External devices card 1380 (Pet., 54-56; Lippman Decl., ¶¶ 157-162), but they concede that Kim’s External devices card only displays external devices that are connected to the television. It does not display input ports of the television. Kim, [0094] (“The card objects may further include at least one of a card object representing a list of connected external devices ...”), [0210] (“[External devices] card object 1380 may display a list of connected external devices and may contain ... a device list 1385 of external devices connected to the image display apparatus 100.”). The home screen of Figure 19 that is the basis of the Petitioner’s obviousness theory discloses external devices including a gaming box, DVD player, and Computer. There is no display of any input ports to the television:



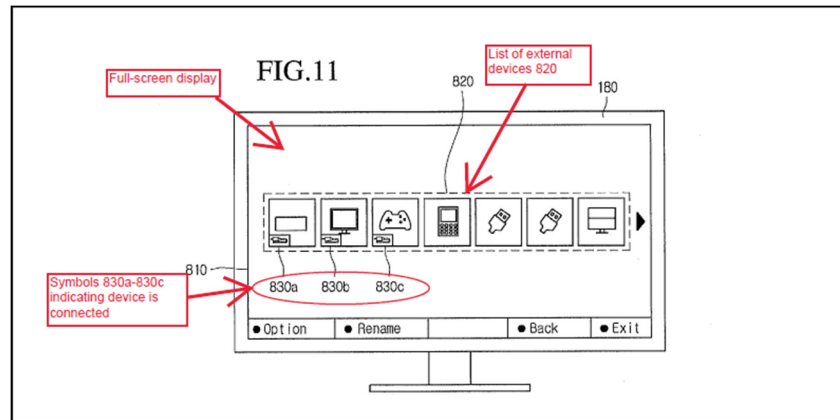
Kim, Fig. 19 (excerpted, annotated). Surati Decl., ¶ 154.

The Petitioner argues that a POSITA would modify Kim based on Choi. Pet., 54-55; Lippman Decl., ¶¶ 158-162. However, the proposed combination of Kim with Choi fails to meet limitation 1.7. Choi's symbols indicate which external devices are connected, not that an external device is connected to a particular input port:

As shown in FIG. 11, a plurality of external device icons 820 representing a plurality of external devices are displayed on the full screen 810 of the display unit 180. Moreover, the control unit 170 **determines which external device icons 820 are connected** to the image display device 100 in order to **display specific symbols 830a, 830b, and 830c on the external device icons that are being connected** to the image display device 100.

Choi, [0250] (emph. added). Surati Decl., ¶¶ 155-157.

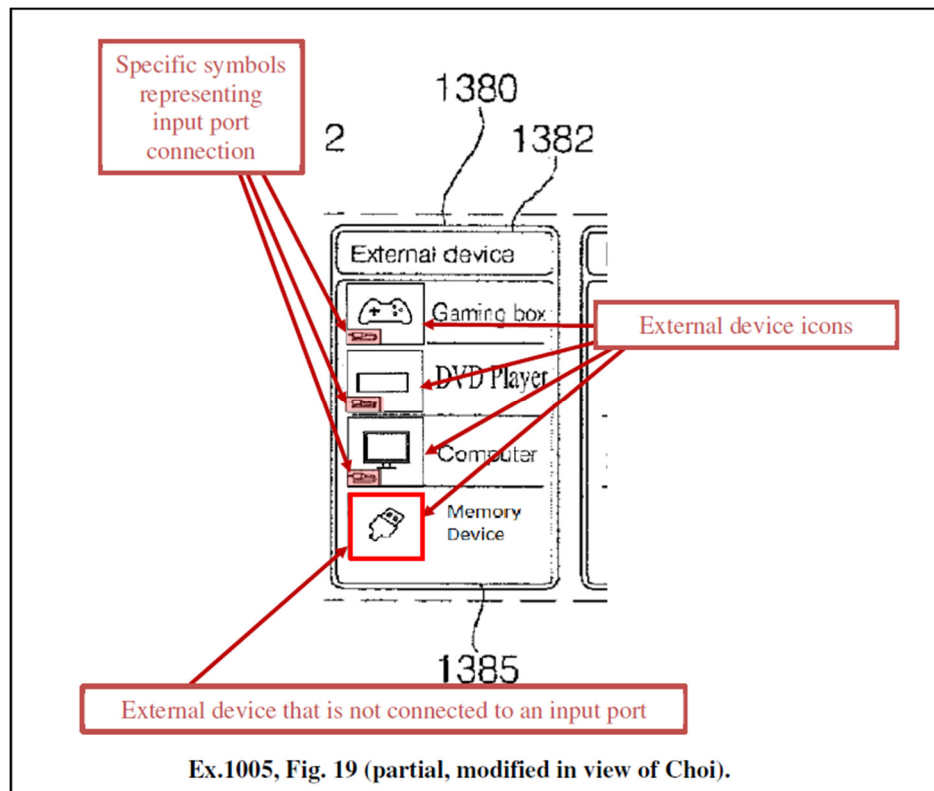
Choi's teaches that the symbols indicate that an external device is connected to the television ("connected to the image display device 100"), not that a specific input port is connected, is illustrated below:



Choi, Fig. 11 (annotated). Choi does not even mention input ports in its discussion of the display of external devices. Choi, [0250]. Accordingly, Choi does not fill the gap in Kim to meet limitation 1.7. Surati Decl., ¶¶ 156-157.

Indeed, a POSITA would understand Choi as teaching that the controller 170 “determines which external device icons 820 are connected,” not that it determines which **input ports** are connected. That is confirmed when Choi states that the result is that the user interface can “display specific symbols 830a, 830b, and 830c on the external device[s] ... **that are being connected.**” Choi, [0250] (emph. added), Fig. 11. Accordingly, Choi does not teach symbols that identify an input port to meet limitation 1.7, and it is not even capable of providing symbols identifying specific input ports. Surati Decl., ¶ 158.

The symbols from Choi as applied to Kim in the Petitioner's modified Figure 19 of Kim above are not "specific symbols representing input port connection[s]," as alleged in the Petition. Pet., 55 (see annotated Fig. 19):



Pet., 55 (Kim, Fig. 19, annotated by Petitioner). Surati Decl., ¶¶156, 158.

Each of the "specific symbols" in Petitioner's modified Figure 19 is identical and does not indicate a different input port. Choi confirms this by stating that the symbol can be any character or text for indicating which external devices are connected. Choi, [0250] (The specific symbol used in Figure 11 is just "one example of a method of distinguishing [external devices] from each other ..."). The symbol indicates a device is connected—it does not indicate an input port. Indeed, the

Petitioner's proposed combination of Kim and Choi reflects that the symbols (highlighted in pink) are identical and thus do not represent different input ports:

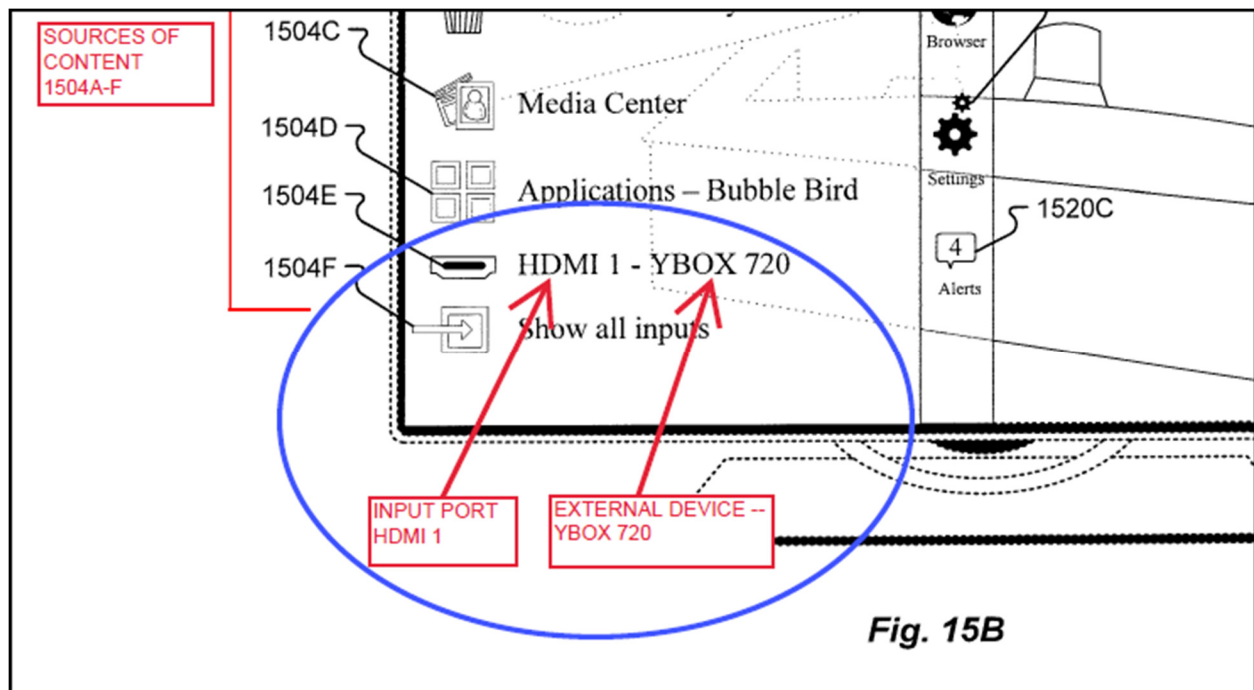


Pet., 55 (excerpt of Petitioner's annotated Fig. 19 of Kim). Surati Decl., ¶ 159.

In deposition, the Petitioner's expert conceded that each of the symbols in Kim is identical and does not designate specific input ports. Ex. 2015 [Dep. Tr. Dr. Lippman], 119:3-6 (Q: "The symbols that are shown in 830A through 830C, they're all the same. Correct? The symbols are all identical?" A: "Those little -- little ones yes."), 121:12-15 (Q: "[A]re the symbols 830A through 830C identified as being any particular type of input port?" A: "No, that indicates that something's connected."), 167:22-25: (Q: "Do they specify any particular input port?" A: "No, they don't.").

Accordingly, the proposed modification of Kim by Choi does not meet limitation 1.7 by designating an input port. Pet, 55; Lippman Decl., ¶ 159. Surati Decl., ¶ 162.

In contrast to Kim and Choi, the '040 Patent discloses that its processor can determine which input ports are connected. '040 Patent, 25:29-31 (“determine which inputs (e.g., HDMI ports) are currently available for connecting to external devices”). And the '040 Patent presents a user interface providing a list identifying a specific input port (e.g., “HDMI 1,” “HDMI 3”) that is an electrically connected source. '040 Patent, 31:14-16 (HDMI 1), 33:12-22 (HDMI 3). For example, the user interface in the '040 Patent displays source 1504E identifying a specific input port HDM 1 (**blue**) connected to the YBOX 720 external device:



'040 Patent, Fig. 15B (excerpted; annotated); 33:14-16. The disclosure of the display of an input port in the '040 Patent highlights the deficiency of Petitioner's modified Kim/Choi display that does not display an input port. Surati Decl., ¶ 162.

The Petitioner knows there is a gap between the proposed Kim/Choi combination and the claim. So the Petitioner provides another back-up argument: “To the extent argued that the claim requires the specific input port be referenced by name, e.g., ‘HDMI,’ such would have been obvious as analyzed at [1.5].” Pet., 55-56. But the referenced analysis for limitation 1.5 (Pet., 41-45) is not meaningfully different from the analysis for limitation 1.7. The annotated Figure 11 of Choi (Pet., 42) does not display “specific symbols representing input port connections” as alleged. For the same reasons described above, the symbols in Choi indicate a connected status, not an input port. Consequently, the combination of Choi and Kim is missing the requirement of limitation 1.7 of displaying an input port. Surati Decl., ¶¶ 163-164.

3. Kim Modified by Choi and Further Modified by the Non-Prior Art Kim Published Application Does Not Meet Limitation 1.7

The Petitioner proposes yet another modification to Kim’s External devices object 1390, which is that it would be displayed with a specific input port description, such as “HDMI-DVD Player.” Pet., 45 (citing Ex. 1011 (“Kim Published Application” or “Kim Application,” submitted as evidence of background knowledge in the art); Lippman Decl., ¶¶ 127-129. But the Petitioner’s expert explained in deposition that a POSITA would *not* be motivated to configure the External devices object 1380 display to add an input port because “the user wouldn’t

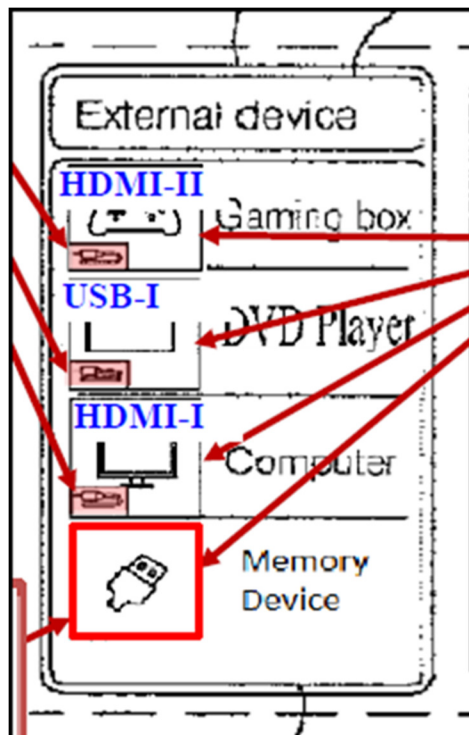
have to know that kind of technical information like whether it's a USB or component video or an HDMI connection.” Ex. 2015 [Dep. Tr. Dr. Lippman], 212:6-10. Based on Petitioner's expert's own testimony, a POSITA would not make the additional modification of adding an input port annotation like “HDMI” to Kim to meet limitation 1.7. Surati Decl., ¶ 165.

A POSITA would not make this second modification to Kim to include an identification of a specific input port for second reason: it is not feasible. Kim's controller 170 is only disclosed as being capable of detecting which external devices are connected, not detecting specific input ports, Kim, Fig. 6, [0094] (“a card object representing a list of connected external devices”), [0210] (“a device list 1385 of external devices connected to the image display apparatus 100”). Kim, [0210]. Similarly, Choi's controller 170 is only disclosed as being capable of detecting which devices are connected. Choi (“the control unit 170 determines which external device icons 820 are connected to the image display device 100”). Accordingly, a POSITA would not further modify Kim to add specific input ports onto the display because the processor does not have that functionality. And the mere fact that that an arrangement like the input port notations in the Kim Application “was known” in the prior art does not establish a motivation to modify the prior art system with the arrangement. *Virtek Vision Int'l ULC v. Assembly Guidance Systems, Inc.*, 97 4th

882, 886-888 (Fed. Cir. 2024) (“It does not suffice to simply be known. A reason to combine must exist.”). Surati Decl., ¶ 171.

There is a third reason why a POSITA would not make the proposed modification of adding an input port text identifier to Kim/Choi: The display would become cluttered and confusing for the user, as the Petitioner’s expert explained in deposition. The purpose of the user interface in both the ’040 Patent and Kim is to provide an **intuitive, friendly user interface** that enables the user to easily navigate the content sources and functions for enhanced television. ’040 Patent, 2:21-31; Kim, [0094].

But the further modified Kim/Choi display proposed by the Petitioner would appear as follows (additions in **blue**):



Kim, Fig. 19 (excerpted and annotated in red by Petitioner; annotated in blue by Patent Owner).⁴ A POSITA would not have reason to add an input port identifier like “HDMI-II” to the Kim/Choi display because it would become unnecessarily complex, and the result would run counter to the objective of Kim. *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984); *Ex Parte Derek J. Webb*, 2012 WL 417450 at *3-4 (BPAI: Feb. 7, 2012) (there is no motivation to combine “[i]f a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose”). *See McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1354 (Fed. Cir. 2001) (“references taken in combination would produce a ‘seemingly inoperative device’”). Surati Decl., ¶ 166. Further, the inquiry for obviousness is not whether a POSITA **could** make the proposed modification—it is whether a POSITA **would** make the proposed modification. *InTouch Techs., Inc. v. VGO Commc’ns, Inc.*, 751 F.3d 1327, 1352-54 (Fed. Cir. 2014). *See TQ Delta, LLC v. CISCO Systems, Inc.*, 942 F.3d 1352, 1359-60 (Fed. Cir. 2019) (focus is on whether a POSITA would have combined references in manner specified, not whether POSITA could have

⁴ This is not an issue of bodily combining references because the underlying display is proposed by the Petitioner. See Pet., 44 (presenting modified Fig. 19 of Kim).

combined the references). A POSITA would not have made the proposed modification.

Furthermore, the Petitioner makes **no showing** that the proposed modification to Kim/Choi based on the Kim Application (as evidence of background knowledge) would have a reasonable expectation of success. See Pet., 44-45; Ex. 1003 [Lippman Decl.], ¶¶ 129-131. The demonstration of a reasonable expectation of success is not a formality; it is a fundamental requirement for the obviousness case. *Endo Pharm., Inc. v. Actavis LLC*, 922 F.3d 1365, 1373 (Fed. Cir. 2019); *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1361 (Fed. Cir. 2007); *Juniper Networks, Inc. v. Correct Transmission, LLC*, Paper 26, IPR2021-00682 (PTAB Oct. 3, 2022), at *23 (“Petitioner leaps silently over the requirement to evidence a reasonable expectation of success to establish obviousness”). In this case, there would not be a reasonable expectation of success for the reasons explained above as to why a POSITA would not make the modification. See Surati Decl., ¶ 167.

In summary, the display of Kim further modified according to Choi and the Kim Application does not meet limitation 1.7.

4. The Kim Application Is Disqualified as Evidence of Background Knowledge Because It Is Not Prior Art

The Petitioner’s obviousness case relies on the Kim Application as evidence of background knowledge in the art. Pet., 45. The Kim Application must be prior art

to constitute evidence of background knowledge. *See Amgen, Inc. v. Sanofi*, 872 F.3d 1367, 1373 (Fed. Cir. 2017) (“evidence illuminating the state of the art subsequent to the priority date is not relevant”). The Kim Application is not prior art because its filing date of January 4, 2013, is after the August 17, 2012, priority date of the '040 Patent. Ex. 1011 [Kim Application], 1. See Section V, *supra*.

The burden is on the Petitioner to establish **in the petition** that the Kim Application is prior art. *See Dynamic Drinkware*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). The Federal Circuit has stated that “[i]t is of the utmost importance that petitioners in the IPR proceedings adhere to the requirement that **the initial petition** identify ‘with particularity’ the ‘evidence that supports the grounds for the challenge to each claim.’” *Intel. Bio-Systems, Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369 (Fed. Cir. 2016) (emph. added). *See SAS Institute Inc. v. Iancu*, 138 S.Ct. 1348 (2008) (“in an inter partes review the petitioner is master of its complaint”); *Axionics, Inc. v. Medtronic, Inc.*, 75 F.4th 1374, 1380 (Fed. Cir. 2023) (“the petitioner’s petition ... is supposed to guide the life of the litigation [in an IPR proceeding]”); 35 U.S.C. § 312 (petition must identify “with particularity . . . the grounds on which the challenge to each claim is based”); 37 C.F.R. § 42.104(b)(2), (b)(4).

There is no analysis or evidence in the Petition or in the Lippman declaration showing that the claims in the Kim Published Application are supported by

Provisional App. No. 61/583,609, as required by *Dynamic Drinkware*. Ex. 1011, 1 (60). Pet., 45; Lippman Decl.], ¶¶ 129-131. See Surati Decl., ¶ 168. The Petitioner has not established that the Kim Application is prior art, and thus it cannot constitute evidence of background knowledge at the time of the invention.

The Kim Application is not prior art because the provisional does not provide support for at least the following limitations of claim 1: (1) “a camera unit configured to sense and eye movement of a user holding the mobile terminal,” and (2) “a controller configured to receive indication signals from the mobile terminal indicating at least one of a grip pattern and an eye movement of the user holding the mobile terminal.” Independent Claim 16 has substantially identical requirements and is not supported in the provisional for at least the same reasons. *Compare* Ex. 1011 [Kim Application], 67 (Cl. 1) *with* Ex. 2016 [Kim Provisional Application 61/583,609]. *Dynamic Drinkware*, 800 F.3d at 1381. Surati Decl., ¶ 168.

Accordingly, the Kim Published Application is thus disqualified as evidence of background knowledge that the Petitioner can apply in its attempt to meet limitation 1.7. Claim 1 of the '040 Patent is patentable over the Kim/Choi/Lee-1/background knowledge (Kim Application) combination of Ground 1.

5. A POSITA Would Not Have Reason to Combine Kim With Choi to Meet Limitation 1.7

The combination of Kim with Choi also fails because a POSITA would not have a reason to modify Kim according to Choi. The Petitioner’s stated motivation is that the addition of Choi’s symbols to Kim would “include icons representing external devices with specific symbols that **distinguish connected devices from devices that are not connected.**” Pet., 54-55 (emph. added). However, Kim already displays the external devices that are **connected** to the television. Kim, [0094] (“representing a list of **connected** external devices ...”), [0210] (“a device list 1385 of external devices **connected** to the image display apparatus 100”) (all emph. added). The Petitioner’s expert agreed. Ex. 2015 [Dep. Tr. Dr. Lippman], 134:17-20 (Q: “But you don’t dispute that paragraph 94 in Kim states: Representing a list of connected external devices. That’s what Kim says, right?” A: “Right.”). Accordingly, because Kim already displays external devices that are connected, there is no reason to modify Kim by Choi to add symbols indicating that the devices are connected, as argued by the Petitioner as its rationale for the combination. Surati Decl., ¶ 169.

Furthermore, the Petitioner’s stated motivation of modifying Kim by Choi to “distinguish connected devices from devices that are not connected” (Pet., 54-55; Lippman Decl., ¶ 158) does not provide a reason to display symbols indicating which

input port is connected to meet limitation 1.7. Surati Decl., ¶ 170. In other words, the stated motivation does not correspond to the claim language.

D. Independent Claims 11 and 21 are Patentable

Independent Claims 11 and 21 recite substantially identical limitations as independent Claim 1. Claims 11 and 21 are patentable for at least the reasons set forth above for Claim 1.

E. Claims 2 and 12 are Patentable Over Kim, Lee-1, and Choi

Kim, Lee-1, and Choi fail to teach at least the following limitations of Claim 2:

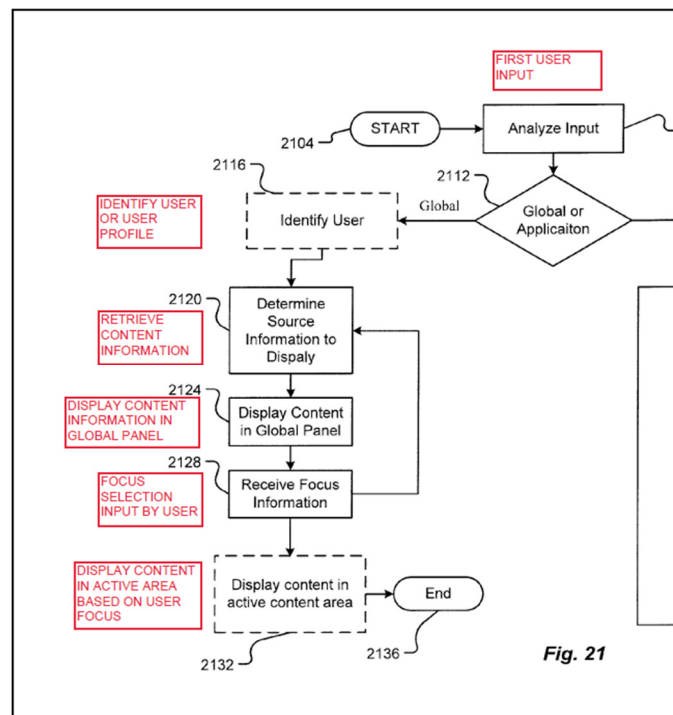
- Limitation 2.1: “*identifying a user associated with the received indication*”
- Limitation 2.2: “*retrieving one or more settings associated with the identified user*”
- Limitation 2.3: “*retrieving, from memory, content information associated with the identified user*”

Claim 12 has substantially similar limitations as Claim 2 and is patentable for at least the same reasons. Surati Decl., ¶¶ 173-174.

**1. Kim, Lee-1, and Choi Fail to Teach Limitation 2.1 for
“Identifying a User Associated With the Received
Indication”**

Limitation 2.1 provides for “*identifying a user associated with the received indication.*” The “*received indication*” refers to the user selection in limitation 1.1. Accordingly, the method provides that the user is identified based on the user input for the “*global panel.*”

The '040 Patent discloses that if the user makes a global panel selection the television apparatus identifies the user. '040 Patent, 36:48-52 (“[I]f it is determined that the analyzed communication is associated with displaying a global panel ... then ... the user, or a user profile associated with the user is identified”). Figure 21 of the '040 Patent discloses identifying the user making a global panel selection:



'040 Patent, Fig. 21 (annotated). Surati Decl., ¶¶ 176-177.

The Petitioner relies entirely on Kim for limitation 2.1. According to the Petitioner, the “received indication” is the user’s input of a “home key” button or a “go-to-home screen” button in Kim. Pet., 20, 22. Accordingly, limitation 2.1 is only met if Kim identifies a user based on the input of the home key/go-to-home screen button to invoke the home screen. Surati Decl., ¶ 177.

The Petitioner knows that Kim does not teach or suggest a user being identified based on the user’s selection of the home key button. So the Petitioner observes that a user may login to the App Store or a network to identify himself/herself using the login 1327 icon on the home screen of Figure 19 of Kim. Pet., 56-57; Lippman Decl., ¶¶ 165-166. However, this does not satisfy limitation 2.1 because in Kim the user login takes place as separate operation with additional user inputs after the user makes the “*received indication*” user input of the home key button to open the home screen. Thus, the user is not identified based on the “*received indication*” (home key input) as required by limitation 2.1. Kim’s disclosure confirms that the user login occurs after the user opens the home screen. Kim, [0192], Fig. 19. Specifically, Kim’s user login occurs via separate user inputs

by selecting the login object 1327 after the home screen is opened.⁵ Kim, [0203] (“A Login menu item 1327 ... may be displayed above the card objects 1320 and 1330 [and] [t]he user may login to the APP STORE or a network connected to the image display apparatus 100.”). Accordingly, limitation 2.1 is not satisfied by Kim’s disclosure of a user login after the home screen is selected and displayed. Surati Decl., ¶¶ 178-179.

The Petitioner and its expert make a “happenstance” argument that the user could first select the home page for display and then select the login item 1327 to login. Pet., 57-57; Lippman Decl., ¶ 168. As explained above, this does not meet the claim limitation because the user is not being identified based on the “*received indication*” (selection of the home screen). Instead, any user identification that occurs is based on separate user input operations taking place after the home screen is invoked. Surati Decl., ¶¶ 179-180.

Thus, limitation 2.1 is not met because Kim does not identify a user based on the “*received indication*” for the user selecting the home screen.

⁵ Kim discloses that the user login operation involves at least three user inputs after the user makes the input to invoke the home screen: (1) selection of login object 1327, (2) entry of username, and (3) entry of password. Pet., 57-58.

The Petitioner also references Kim’s disclosure for Figure 6 that “the network interface 130 may transmit data [to] electronic devices pre-registered with the image display apparatus 100.” Kim, [0081]; Pet., 57. A POSITA would not understand that passage as teaching or suggesting identifying a user based on the “*received indication*” (home screen selection) per limitation 2.1. Surati Decl., ¶ 181.

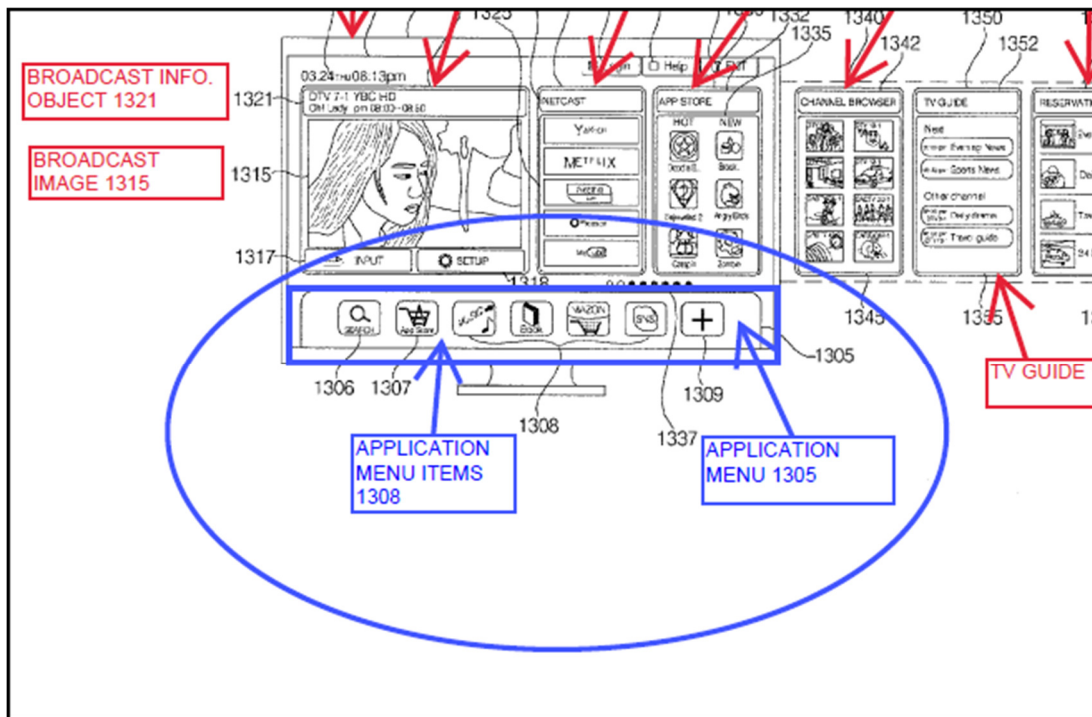
The passage simply teaches that the system can transfer data to users who have registered with the television 100. First, a POSITA would understand that sending data to registered users is not identifying a user, as claimed. Second, sending data to registered users does not occur in response to the user selection of a home screen, as required by the Petitioner’s application of the reference to limitation 2.1 and limitation 1.1. Third, a POSITA would understand that a user can register without providing identity information. Accordingly, the registration of users in Kim fails to meet limitation 2.1. Surati Decl., ¶ 182.

**2. Kim, Lee-1, and Choi Fail to Teach Limitation 2.2 for
“Retrieving One or More Settings Associated With the
Identified User”**

Limitation 2.2 provides for “*retrieving one or more settings associated with the identified user.*” The ’040 Patent describes user settings consistent with its ordinary and customary meaning as operational settings for a television, such as audio settings, picture settings, language/geography settings, and network settings. ’040 Patent, 21:39-41 (“information displayed about the settings of the audio or

video, or other settable characteristics of the Intelligent TV 100.”), 24:22-51. Surati Decl., ¶ 184.

The Petitioner argues that the claimed user settings are satisfied by Kim’s application menu 1305 from which the user can select various optional application items 1308. Pet., 58; Lippman Decl., ¶¶ 170-172. The application menu 1305 and optional applications 1308 are found in Kim’s home screen of Figure 19 (in **blue**):



Kim, Fig. 19 (excerpted; annotated).

Kim describes that the application menu 1305 includes “mandatory application menu items 1306, 1307, and 1309 (Search, App Store, and +) and optional application menu items 1308 (e.g., Music, Book, MAZON, and SNS).”

Kim, [0214]. Kim refers to the optional menu items 1308 as being “user-set application menu items 1308.” Kim, [0217]. Surati Decl., ¶¶ 185-186.

The Petitioner and its expert argue that the “user-set application menu items,” such as Music, Book, MAZON, and SNS, meet limitation 2.2 for “*retrieving one or more settings associated with the identified user.*” Pet., 58; Lippman Decl., ¶¶ 170-171. But limitation 2.2 requires retrieving user settings for the identified user based on the “*received indication,*” which according to the Petitioner’s theory on limitations 1.1-1.2 is the user inputting a home screen selection. Pet., 20, 23-24. The alleged user settings for limitation 2.2, the optional software applications 1308, are not retrieved in response to a user selecting the home page. Rather, those applications would only be retrieved upon the user selecting an application after the home screen is displayed. Kim, [0215] (“The plurality of application menu items may include predetermined menu items 1306 to 1309 which may be selected from all application menu items [1305] available on the display 180.”). Consequently, the alleged user settings (optional user-set software applications) are not retrieved based on the user making the home screen selection (alleged “*received indication*”) pursuant to limitation 2.2. Surati Decl., ¶ 187.

Additionally, a POSITA would not consider the user-set applications (or associated application thumbnails) to be user settings associated with an “*identified user.*” Kim refers to these applications as “user-set” applications because they are

optional and the user can set them, not because they are tied to a specific user. Kim, [0217]. The Petitioner and its expert make no showing that Kim's user-set applications or thumbnails are associated with an "*identified user*" according to limitation 2.2. Kim certainly does not teach or suggest that there are different user-set applications for different users. On the contrary, a POSITA would understand Kim as teaching that the user-set applications and any associated thumbnails are optional applications that are the same for all users of the television. Kim, [0215]. Kim does not teach or suggest that the user-set applications (and thumbnails) are tied to an "*identified user*" per limitation 2.2. Surati Decl., ¶ 188.

Further, a POSITA would not consider user applications or application thumbnails to be user settings within the ambit of limitation 2.2. A POSITA would understand that applications and application thumbnails are not operational settings for an enhanced television, such as audio settings, picture/video settings, language/geography settings, and network settings, as contemplated by limitation 2.2. Surati Decl., ¶ 189.

The Petitioner's expert's obviousness analysis on this limitation does not withstand scrutiny. The expert asserts that "[i]t would have been obvious to a POSITA, for controller to '*retrieve[]*' from memory 140 the user's settings for the application menu items 1308 ... so that the corresponding application thumbnails would be retrieved from memory 140 and displayed." Lippman Decl., ¶ 172. This

confusing analysis is deficient in two respects. First, it does not clearly identify the user settings. Second, the conclusory assertion that the user settings (allegedly, the user-set applications themselves) would have to be retrieved so that the thumbnails can be retrieved is illogical. A POSITA would understand that the thumbnails for the applications would be stored in memory and retrieved for display in application menu 1308 in Figure 19 of Kim. Kim, Fig. 19. There is no need to retrieve the applications or identify the applications in order to retrieve the thumbnails. Surati Decl., ¶ 190.

Accordingly, Claim 2 is patentable because the applied references fail to meet limitation 2.2.

**3. Kim, Lee-1, and Choi Fail to Teach Limitation 2.3 for
“Retrieving, From Memory, Content Information
Associated With the Identified User”**

Limitation 2.3 provides for “*retrieving, from memory, content information associated with the identified user.*” The ’040 Patent discloses that after the user is identified, content information is retrieved and displayed in the global panel. ’040 Patent, 36:48-58. The ordinary and customary understanding of the claim language is that content information specific to the identified user is retrieved.

The Petitioner and its expert assert that the thumbnails for the user-set applications 1308 in Figure 19 of Kim meet limitation 2.3. Pet., 59; Lippman Decl., ¶ 173. But Kim does not meet limitation 2.3. For the same reasons explained for

limitation 2.2, the thumbnails are not associated with “*the identified user*” because Kim does not teach or suggest that the user-set applications or associated thumbnails are specific to individual users. Surati Decl., ¶ 193.

F. Claims 3 and 13 are Patentable Over Kim, Lee-1, and Choi

Claims 3 and 13 are patentable for at least the same reasons as Claim 2. Surati Decl., ¶¶ 194-196.

G. Claims 4 and 14 Are Patentable Over Kim, Lee-1, and Choi

Claim 4 provides for a user input providing a “*second indication*,” “*determining, based on the second indication, a source of content information to be displayed in the global panel*,” “*retrieving ...[second] content information from the determined source*,” and “*displaying ... the [second] content information associated with the determined source*.” ’040 Patent, Cl. 4.⁶

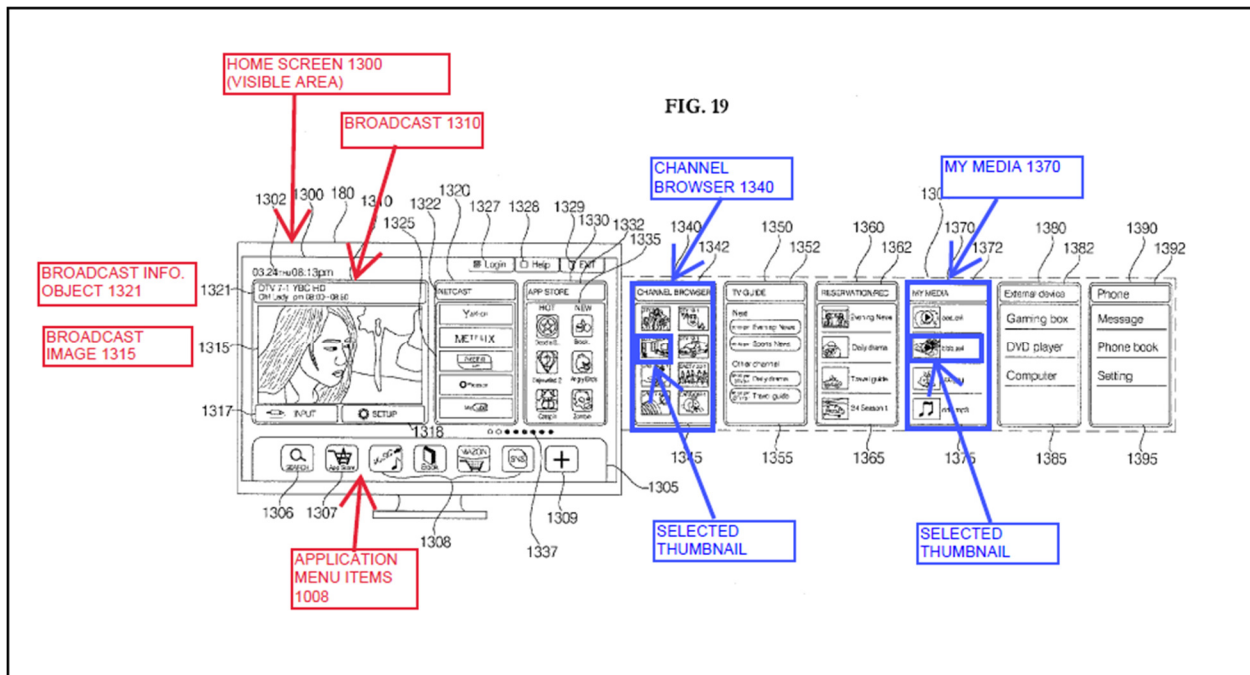
The Petitioner and its expert read Claim 4’s limitation 4.1 for “*receiving a second indication associated with a selection by the user*” onto the user’s selection of an item from either of two card objects in Kim’s home screen of Figure 19: (1) Channel Browser card object 1340, or (2) My Media card object 1370. Pet., 61-64;

⁶ Claim 14 has substantially similar limitations as Claim 4 and is patentable for at least the same reasons set forth herein.

Lippman Decl., ¶¶ 184-194. For example, the Petitioner relies on the user’s selection of a thumbnail in the Channel Browser card object 1340, which causes the selected program to be displayed as a full-screen image on display 180, as meeting limitation 4.1. Kim, [0206] (“Upon selection of a thumbnail image from the thumbnail list 1345, a broadcast program from the selected channel may be displayed on the display 180.”); [0293] (selection of a thumbnail on the third object “may cause the [content] to be retrieved for display on the display ... as a full screen image on the display.”). Surati Decl., ¶¶ 199-201.

1. Kim’s Channel Browser Does Not Meet Limitation 4.2

While it is not clearly stated (see Pet., 62-64), it appears that the Petitioner identifies the claimed “*second indication*” of limitation 4.1 as being a user selecting a thumbnail in the Channel Browser object 1340 or selecting a thumbnail in the My Media object 1370 in the home screen, as illustrated below (in **blue**):



Kim, Fig. 19 (annotated). Surati Decl., ¶ 201.

Limitation 4.2 provides for “determining, based on the second indication, a source of [second] content information to be displayed in the global panel.” The Petitioner argues that limitation 4.2 is met because the Channel Browser card object 1340 allegedly has a “link for connecting to a content provider” that may “include a URL configured to retrieve a multimedia content stored on the content server.” Pet., 64.

However, Kim does not teach or suggest that the Channel Browser card object has a **URL to retrieve content stored on a content server**. On the contrary, the Channel Browser is disclosed as **identifying a list of broadcast channels**. Kim, [0205] (“the [Channel Browser] card object 1340 may represent a list of broadcast

channels [and] may include a card object name 1342 (CHANNEL BROWSER) and a thumbnail list of broadcast channels 1345.”), [0206] (“Upon selection of a thumbnail image from the thumbnail list 1345, a broadcast program from the selected channel may be displayed on the display 180.”).

The Petitioner has improperly and incorrectly conflated the Channel Browser 1340 with the so-called “second card object” in Kim’s discussion of scrolling card objects at [0287]-[0294]. Kim, [0287]-[0294]. But that disclosure does not teach or suggest that the “second card object” having “at least one link for connecting to a content provider or to a storage device” (Kim, [0289]) is the Channel Browser 1340. See Kim, [0287]-[0294]. Indeed, the discussion in paragraphs [0287]-[0294] does not reference any of the card objects 1300-1390 found in Figure 19 of Kim. The Petitioner is incorrectly and improperly conflating disclosures in Kim. Surati Decl., ¶¶ 202-203.

Thus, the Petitioner’s argument is based on the incorrect premise that the Channel browser card object in Kim has a URL to retrieve multimedia content stored on the content server. See Pet., 64. That is not the case, and, accordingly, Kim does not teach or suggest limitation 4.2 for “*determining, based on the second indication, a source of content information to be displayed.*” Surati Decl., ¶ 204.

The Petitioner offers a back-up argument that “it would be obvious” to modify the Channel browser card object “to include a ‘link for connecting to a content

provider’ with ‘a URL configured to retrieve multimedia content stored on the content server’ so that the smart TV 100 would be able to determine the content source that provides content.” Pet., 65. However, a POSITA would not make the proposed modification to Channel Browser 1340 because, as explained above, the Channel Browser 1340 contains identification of available **broadcast channels**, not links to content stored on a content server. See Kim, [0205]-[0206]. Limitation 4.2 is not satisfied for this reason. The rationale of allowing the TV “to determine the content source that provides the content” does not apply because the Channel Browser already knows the content sources—they are the identified broadcast channels in the Channel Browser. Limitation 4.2 is not met for this additional reason. Surati Decl., ¶ 205.

2. Kim’s My Media Object Does Not Meet Limitation 4.2

The Petitioner’s alternative argument is based on the My Media card object 1370 allegedly being the “third card object” referenced in the discussion of scrolling card objects in paragraphs [0287]-[0294] of Kim. Pet., 65-67. However, nowhere in those passages does Kim teach or suggest that the “third card object” is the My Media card object. Those passages do not even mention the My Media card object. Thus, the Petitioner’s argument fails because it is based on an incorrect premise.

The Petition also references [0085] and [0196] of Kim, but neither discloses that selecting a thumbnail in the My Media object “*determines, based on the received*

second indication, a source of content information” per limitation 4.2. Pet., 66. The Petitioner argues that “it would have been obvious for the controller 170 to determine the corresponding content source” but does not provide reasoning for why that is the case. Pet., 66. Surati Decl., ¶ 206.

The Petitioner also asserts that selecting a thumbnail in My Media card 1370 would cause the associated video to be displayed in the Broadcast card object 1310 of Figure 19. Pet., 66. However, nowhere does Kim teach or suggest that information content from the My Media card 1370 can be played in the **broadcast** image 1315 window in the Broadcast card object 1310. On the contrary, the Broadcast card object 1310 only displays currently-tuned broadcast content from a channel. Kim, [0195] (“Referring again to FIG. 19, the card object 1310 may be named BROADCAST and may display a broadcast image [1315]”); [0197] (“BROADCAST card object 1310 may display a broadcast image 1315 received through the tuner 110”). Therefore, this argument fails because it is based on an incorrect premise. Surati Decl., ¶ 207.

Accordingly, the Petitioner’s assertion that selection of a thumbnail in the My Media card 1370 would cause video to be displayed in the Broadcast card object 1310 is not supported by Kim. Pet, 66. The passages in paragraphs [0090], [0082], and [0097] cited by the Petitioner (at 66) do not support the assertion whatsoever. Surati Decl., ¶ 208.

Limitation 4.2 provides for determining a source of content that is “*displayed in the global panel*.” The Petitioner’s position is that the “*global panel*” is Kim’s home screen. As demonstrated above, Kim does not teach or suggest that selecting a thumbnail in the My Media object 1370 results in content information being displayed the home screen of Kim, and accordingly, the proposed combination fails to meet limitation 4.2. Surati Decl., ¶ 209.

H. Claim 5 Is Patentable Over Kim, Lee-1, and Choi

Dependent Claim 5 is patentable over Kim, Lee-1, and Choi for at least the same reasons as independent Claim 1.

I. Claim 15 Is Patentable Over Kim, Lee-1, and Choi

Dependent Claim 15 is patentable over Kim, Lee-1, and Choi for at least the same reasons as independent Claim 1.

X. CLAIMS 2-3, 6, 12-13, AND 16 ARE PATENTABLE OVER KIM, LEE-1, CHOI, AND LEE-2 (GROUND 2)

A. Claims 2 and 12 Are Patentable Over Kim, Lee-1, Choi, and Lee-2

The combination of Kim, Lee-1, Choi, and Lee-2 fails to teach at least the following limitations of Claim 2:

- Limitation 2.1: “*identifying a user associated with the received indication*”

- Limitation 2.2: “*retrieving one or more settings associated with the identified user*”

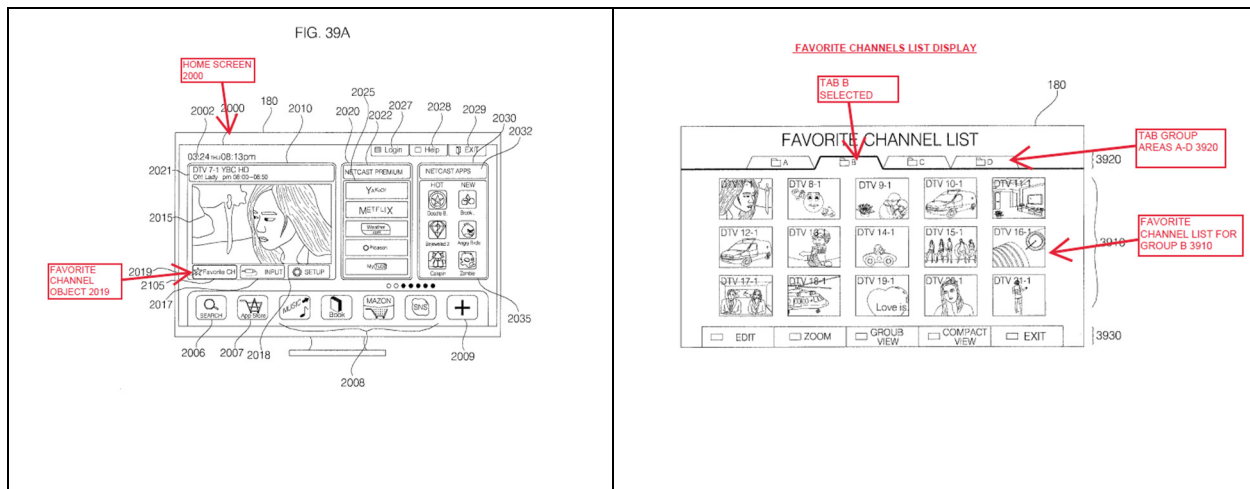
Surati Decl., ¶ 212.

Claim 12 has substantially similar limitations as Claim 2 and is patentable for at least the same reasons set forth herein.

1. Kim, Lee-1, Choi, and Lee-2 Fail to Teach Limitation 2.1 for “Identifying a User Associated With the Received Indication”

Limitation 2.1 provides for “*identifying a user associated with the received indication,*” where the “*received indication*” refers back to the input by a user in limitations 1.1-1.2. According to the Petitioner, the “*received indication*” is met by the user’s input of a “home key” button or a “go-to-home screen” button in Kim to invoke the home screen. Pet., 20, 22. Accordingly, limitation 2.1 is only met if the user is identified based on the input of the home key/go-to-home screen button. Surati Decl., ¶¶ 214-215.

For limitation 2.1, the Petitioner relies on Lee-2’s Favorite Channel List display of Figure 39B, which is presented in response to the user selecting the Favorite Chanel object 2019 on the home screen of Figure 39A:



Lee-2, Fig. 39A, Fig. 39B (annotated). The Petitioner relies on the display of the user B's favorite channels in Figure 39B (on the right) based upon the user's selection of the favorite channels object 2019 (on the left) as meeting “*identifying a user associated with the received indication*” of limitation 2.1. Pet., 78-79. Surati Decl., ¶ 216.

However, limitation 2.1 calls for identifying a user based on the “*received indication,*” which is the input of a home key button or go-to-home screen button to invoke the home screen, as alleged by the Petitioner for limitations 1.1-1.2. The B-user favorite channels in Figure 39B of Lee-2 are displayed in response to the user selection of favorite channel object 2019 on a home screen that is already displayed. Lee-2, 41:41-43 (“Referring to FIG. 39B, upon selection [in FIG. 39A] of the favorite channel object 2019, a favorite channel list screen including a favorite channel list is displayed fullscreen.”), 41:51-54. For that reason, the display of user

B's favorite channels does not teach or suggest "*identifying a user associated with the received indication*" of limitation 2.1. Surati Decl., ¶ 217.

The Petitioner makes another "happenstance" argument that "there are instances" where a user provides a first input for the initial home screen selection per limitation 1.1 and then makes a second input to select favorite channel object 2019 to produce another display with user B's favorite channels. Pet., 79. This simply confirms that the display of user B's favorite channels is not based on the first input where the home screen is selected by the user, as required by limitations 1.1 and 2.1. Surati Decl., ¶ 218.

The Petitioner's argument is also deficient because Figure 39B displays the favorite channels for four users A-D. The selection of tab B simply displays user B's favorite channels; it does not *identify* user B as required for limitation 2.1, nor does it identify the person who is operating the television. The user (whoever it is) can select any tab A-D to display the favorite channels for any of users A-D. The selection of those tabs by the user does not identify the user so as to meet limitation 2.1. Surati Decl., ¶ 219.

The Petitioner makes a final argument that it would be obvious for Kim to be modified so that the user making the first input to call up the home screen would be identified by Kim's image display apparatus 100. Pet., 79-80. However, Kim does not disclose anywhere that its image display apparatus 100 stores information about

a plurality of different users of the device, so there would be no need to identify the user invoking the home screen. Indeed, Kim's only reference to favorite channels is to a single list for the image display apparatus, not to multiple lists for different users. Kim, [0205] ("the thumbnail images may correspond to pre-stored user channels (e.g., favorite list)"). Thus, a POSITA would not have reason to modify Kim as proposed to meet limitation 2.1. Surati Decl., ¶ 220.

Additionally, the Petitioner does not provide any explanation or evidence as to how Kim's system could identify a user based on the user's input selection of a single button (home screen key or go-to-home screen key) to invoke the home screen. Lee-2 does not disclose how a user could be identified based on the selection of the home screen. The Petitioner has not established a reasonable expectation of success for the proposed modification of Kim to identify a user based on selection of a home screen button. *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1361 (Fed. Cir. 2007). Indeed, neither the Petitioner nor its expert even address the reasonable expectation of success for this proposed modification to Kim. See Pet., 79-80; Lippman Decl., ¶¶ 287-288. Surati Decl., ¶ 221.

Accordingly, Claim 2 is patentable because limitation 2.1 is not satisfied.

2. Kim, Lee-1, Choi, and Lee-2 Fail to Teach Limitation 2.2 for “Retrieving One or More Settings Associated With the Identified User”

Limitation 2.2 provides for “*retrieving one or more settings associated with the identified user.*” The ’040 Patent discloses user settings consistent with its ordinary and customer meaning as the operational settings for the television, including audio settings, picture settings, language/geography settings, and network settings. ’040 Patent, 21:39-41 (“information displayed about the settings of the audio or video, or other settable characteristics of the Intelligent TV 100.”). Surati Decl., ¶ 223.

The Petitioner identifies the channel setup menu 3930 in Figure 39B of Lee-2 as allegedly meeting limitation 2.2. Pet., 80-81. The Petitioner asserts that favorite channel setup inputs such as the “user’s favorite channel list and the number of displayed thumbnails” would be settings retrieved for the identified user. However, a POSITA would understand user settings as encompassing operational settings for the television, such as audio settings, picture settings, language/geography settings, and network settings. The Petitioner’s reference to favorite channel parameters does not teach or suggest the claimed user settings. For this reason, the proposed combination does not meet limitation 2.2. Surati Decl., ¶¶ 224-225.

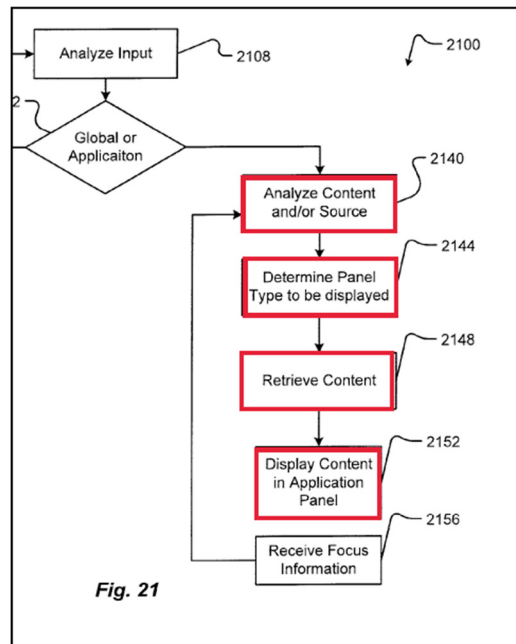
B. Claims 3 and 13 Are Patentable Over Kim, Lee-1, Choi, and Lee-2

Kim, Lee-1, Choi, and Lee-2 fail to render Claim 3 unpatentable for at least the reasons set forth for Claim 2 above for Ground 2. Claim 13 has substantially similar limitations as Claim 3 and is patentable for at least the same reasons.

C. Claims 6, 16, and 22 Are Patentable Over Kim, Lee-1, Choi, and Lee-2

Kim, Lee-1, Choi, and Lee-2 fail to render Claim 6 unpatentable as discussed below. Claims 16 and 22 have substantially similar limitations as Claim 6 and are patentable for at least the same reasons.

Claim 6 is supported by the disclosure associated with Figure 21 of the '040 Patent. Figure 21 discloses analyzing a source of content or content information currently-displayed on the television, selecting a panel type, retrieving content information based on the panel type, and displaying the retrieved content information based on the selected panel type:



'040 Patent, Fig. 21 (annotated), 36:66-37:8, Cl. 6. Surati Decl., ¶¶ 228-229.

1. Kim, Lee-1, Cho, and Lee-2 Fail to Teach Limitation 6.1 for “Identifying At Least One of a Content Source and a Content Information Currently Being Displayed Via a Television”

Limitation 6.1 provides for “*identifying at least one of a content source and a content information currently being displayed via a television.*” Based on that identification, a panel type will be selected, and second content information will be retrieved and displayed in the global panel. '040 Patent, Cl. 1, 6.

For limitation 6.1, the Petitioner relies on Figure 32B of Lee-2 as allegedly highlighting a thumbnail in the Favorite Channels object 2060 because it allegedly corresponds to the currently-viewed program in image 3210. However, Lee-2 does

not disclose that a thumbnail is highlighted. This is the entirety of the disclosure regarding Figures 32A-32B:

Referring to FIG. 32A, an image 3210 is displayed fullscreen on the display 180. Upon input of a local key (not shown) or a favorite channel key (not shown) of the remote controller, the FAVORITE CH card object 2060 may be displayed on the display 180 as illustrated in FIG. 32B. The FAVORITE CH card object 2060 may be displayed together with the image 3210 on the same screen. Therefore, the user can instantly be aware of the FAVORITE CH card object 2060 including the favorite channel list 2065.

Lee-2, 37:61-38:2. Surati Decl., ¶ 231.

The Petitioner implies that in Figure 32B the top left thumbnail is highlighted in the Favorite Channel object 2060. Lee-2 does not state that the thumbnail is highlighted. Even if it was highlighted, a POSITA would understand that it could be highlighted simply because the user selected the thumbnail to learn more about the channel associated with it, for example. For instance, a POSITA would understand that if the user recognized that a favorite channel thumbnail corresponded to a currently-viewed program, the user might select the thumbnail to get more information, which would cause the thumbnail to be highlighted. Surati Decl., ¶ 232.

The Petitioner and its expert provide no evidence that a thumbnail in Figure 32B is highlighted because Lee-2's image display apparatus detects a "currently watched channel (e.g., DTV 7-1) so that it may be included in the FAVORITE CH

card object 2060.” Pet., 84-85; Lippman Decl., ¶¶ 308-309. The Favorite Channel card object 2060 includes the favorite channel thumbnails **because they were set by the user**, not because they correspond to a currently-viewed program. Lee-2, 41:61-67 (user employs the channel setup menu to set his/her favorite channels). Indeed, Lee-2 teaches that “[a] channel that the user is watching **may** be included in the FAVORITE CH card object.” Lee-2, 63-67 (emph added). Accordingly, Lee-2 does not teach or suggest that the currently-viewed channel is detected or identified so that it can be highlighted in the Favorite Channels object 2060, as the Petitioner argues for limitation 6.1. Surati Decl., ¶ 233.

In summary, Lee-2 does not teach or suggest “*identifying at least one of a content source and a content information currently being displayed*” pursuant to limitation 6.1. Because the Petitioner relies entirely on Lee-2 for this limitation, the combination including Kim fails to meet limitation 6.1.

2. Kim, Lee-1, Cho, and Lee-2 Fail to Teach Limitation 6.2 for “Selecting a Panel Type Based on the Identified At Least One of [a] Content Source and Content Information Being Displayed via the Television”

Limitation 6.2 provides for “*selecting a panel type based on the identified at least one of [a] content source and content information being displayed via the television.*”

The Petitioner argues that the display of the Favorite Channel object 2060 meets this limitation. Pet., 86. However, the Favorite Channel object 2060 (alleged “*panel type*”) is selected based on the user selecting a favorite channel key or similar button. Lee-2, 37:62-67. Lee-2 does not teach or suggest that the Favorite Channel object is selected based on identifying a content source or content information for a currently-displayed program, as would be required for limitation 6.2. The figures and passages cited by the Petitioner disclose that a user is viewing a program (e.g., in Figure 32A or Figure 33A) and then selects the favorite channel key to bring up a different user interface having the program superimposed with the Favorite Channels object 2060 (e.g., in Figure 32B or Figure 33B). Lee-2, Figs. 32A-32B, 33A-33B. Surati Decl., ¶¶ 235-236. Limitation 6.2 is not satisfied by the proposed combination of Kim with Lee-2.

In other words, the alleged identification of the content source (e.g., channel) or content information (e.g., program name) does not cause the Favorite Channels object 2060 (alleged “*panel type*”) to be selected. The user’s selection of the favorite channel button causes it to be selected. Surati Decl., ¶ 237.

Accordingly, the applied references fail to meet Limitation 6.2 providing for “*selecting a panel type based on the identified at least one of [a] content source and content information being displayed via the television.*”

XI. CONCLUSION

For the foregoing reasons, the Challenged Claims should be confirmed as patentable.

Respectfully submitted,

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Date: August 26, 2024

CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITS

This Patent Owner Response (the “POR”) consists of 13,827 words, excluding table of contents, table of authorities, certificate of service, this certificate, or table of exhibits. The POR complies with the type-volume limitation of 14,000 words as mandated in 37 C.F.R. § 42.24. In preparing this certificate, counsel has relied on the word count of the word-processing system used to prepare the paper (Microsoft Word).

Respectfully submitted,

/Stephen T. Schreiner/

Date: August 26, 2024

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the following documents were served
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Respectfully submitted,

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