

LG Electronics, Inc.
v.
Multimedia Technologies Pte. Ltd.

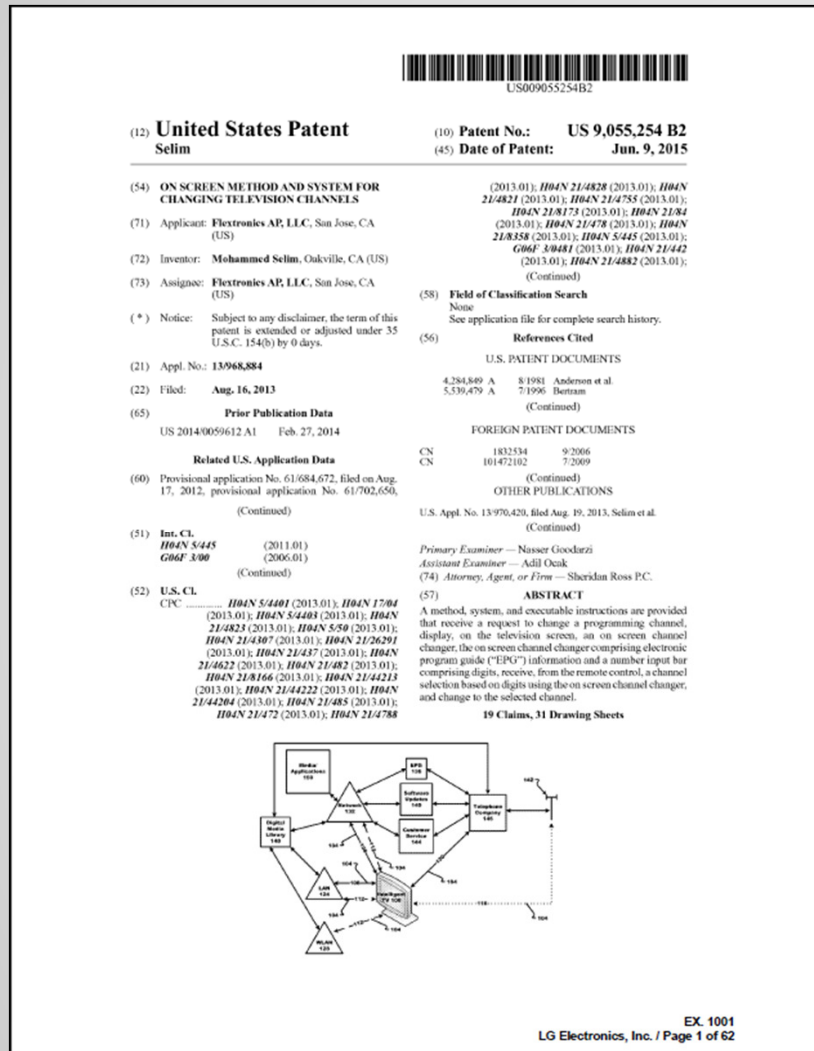
Patent Owner Demonstratives
IPR 2024-00353
U.S. Patent No. 9,055,254
March 10, 2025

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DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Multimedia Exhibit 2021
Slide 1 of 87

Background of '254 Patent



- **Issued: June 9, 2015**
- **Priority date: August 17, 2012**

Ex. 1001 ('254 Patent).

Grounds

Independent claims: Claims 1, 10

- **Ground 1 (§103): Claims 1-4, 8-10, 13-17 re Kim, WD-Manual, and Bae**
- **Ground 2 (§103): Claims 6, 12, 19 re Kim, WD-Manual, Bae, and Coburn**

Grounds	Claims	Basis
#1	1-4, 8-10, 13-17	35 U.S.C. § 103 over Kim, WD-Manual, and Bae
#2	6, 12, 19	35 U.S.C. § 103 over Kim, WD-Manual, Bae, and Coburn

Pet., 13; POR, 2.

'254 Patent: Claim 1

[1.0] A method, comprising:

[1.1] receiving, wirelessly by at least one of an infrared and radio frequency module of a television and from a remote control, a request to change a programming channel;

[1.2] displaying . . . an on screen channel changer, the displayed on screen channel changer comprising electronic program guide (“EPG”) information and a number input bar comprising digits, wherein the digits range from 0 to 9;

[1.3] receiving, by the application framework and from the remote control, a channel selection based on digits selected by a user using the remote control and the number input bar of the on screen channel changer, wherein the user selects the digits using non-numeric keys of the remote control; and

[1.4] changing, by the application framework, to the selected channel,

[1.5] wherein the remote control comprises:

[1.5.1] a media center button that, when selected, provides, by the television screen, displayed information regarding one or more of groupings of music, groupings of videos, groupings of photographs, and internal and external computational devices, the computational devices comprising one or more of personal computers. . . ;

[1.5.2] an application center button that, when selected, provides, by the television screen, displayed information regarding pre-installed and downloaded software applications,

[1.5.2.1] wherein the downloaded software applications comprise one or more of a web browser, settings control, and content search algorithms;

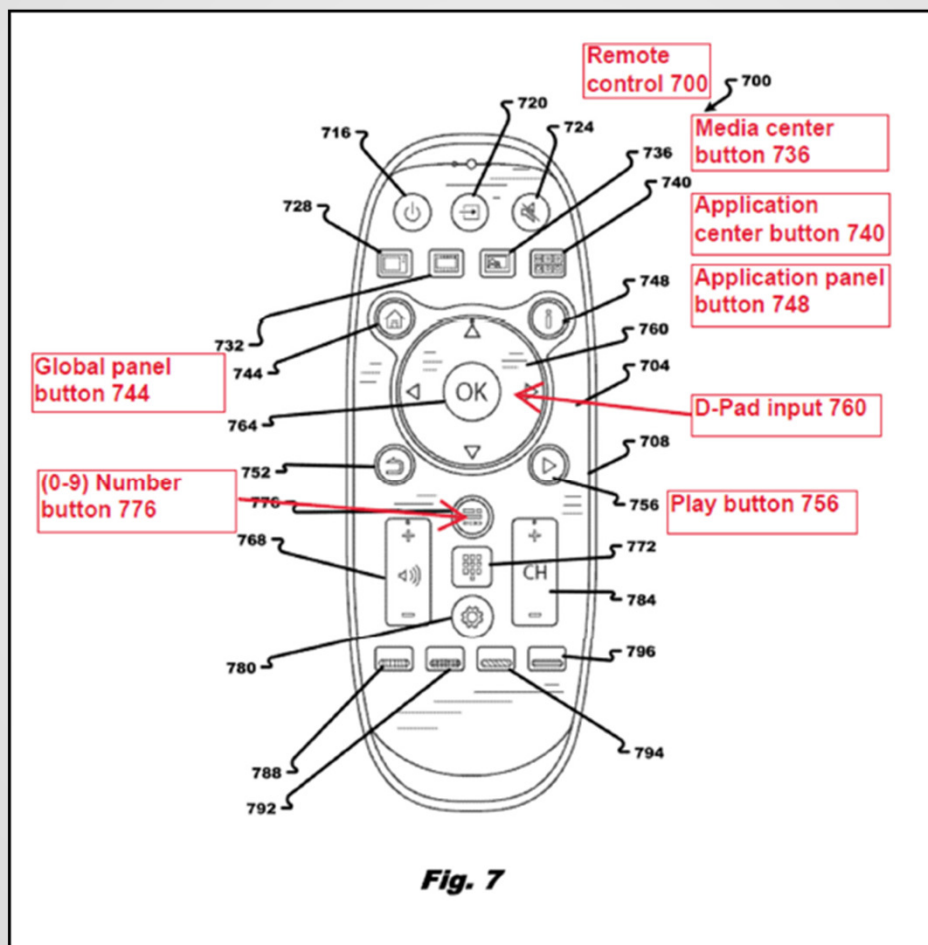
[1.5.3] an application panel button that, when selected, displays, by the television screen, an application panel, wherein the application panel comprises an information panel regarding a selected (pre-installed or previously downloaded) application icon; and

[1.5.4] a global panel button that, when selected, provides the user, via one or more panels or windows displayed by the television screen, with access to one or more of silos, notifications, a web browser system settings, and information associated therewith .

Ex. 1001 ('254 Patent), Claim 1.

'254 Patent Invention

On-Screen Channel Changer with (1) number input bar with selectable digits 0-9 and (2) mini-EPG with dynamically updated program listings:



POR, 3-4, '254 Patent, Fig. 7.

Definition of POSITA

Parties agree on the Definition of the POSITA as of August 2012:

For purposes of this response, the Patent Owner accepts the Petitioner's definition of the POSITA as one who "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, 10; Ex. 1003 (Lippman Decl.), ¶ 19. The Patent Owner and its expert Dr. Surati find that definition to be reasonable. Ex. 2008 (Surati Decl.), ¶¶ 40-44.

POR, 8-9.

Claim Construction

The Parties agree that no formal claim construction is required, except:

Patent Owner:

“Patent Owner and its expert, Dr. Rajeev Surati, have applied the ordinary and customary meaning of the claim terms as understood in the context of the '254 Patent, except for the term ‘pre-installed [software] applications . . . [which] is defined to mean [1] pre-installed applications that ‘[2] cannot be removed by the user or [3] manually updated.”

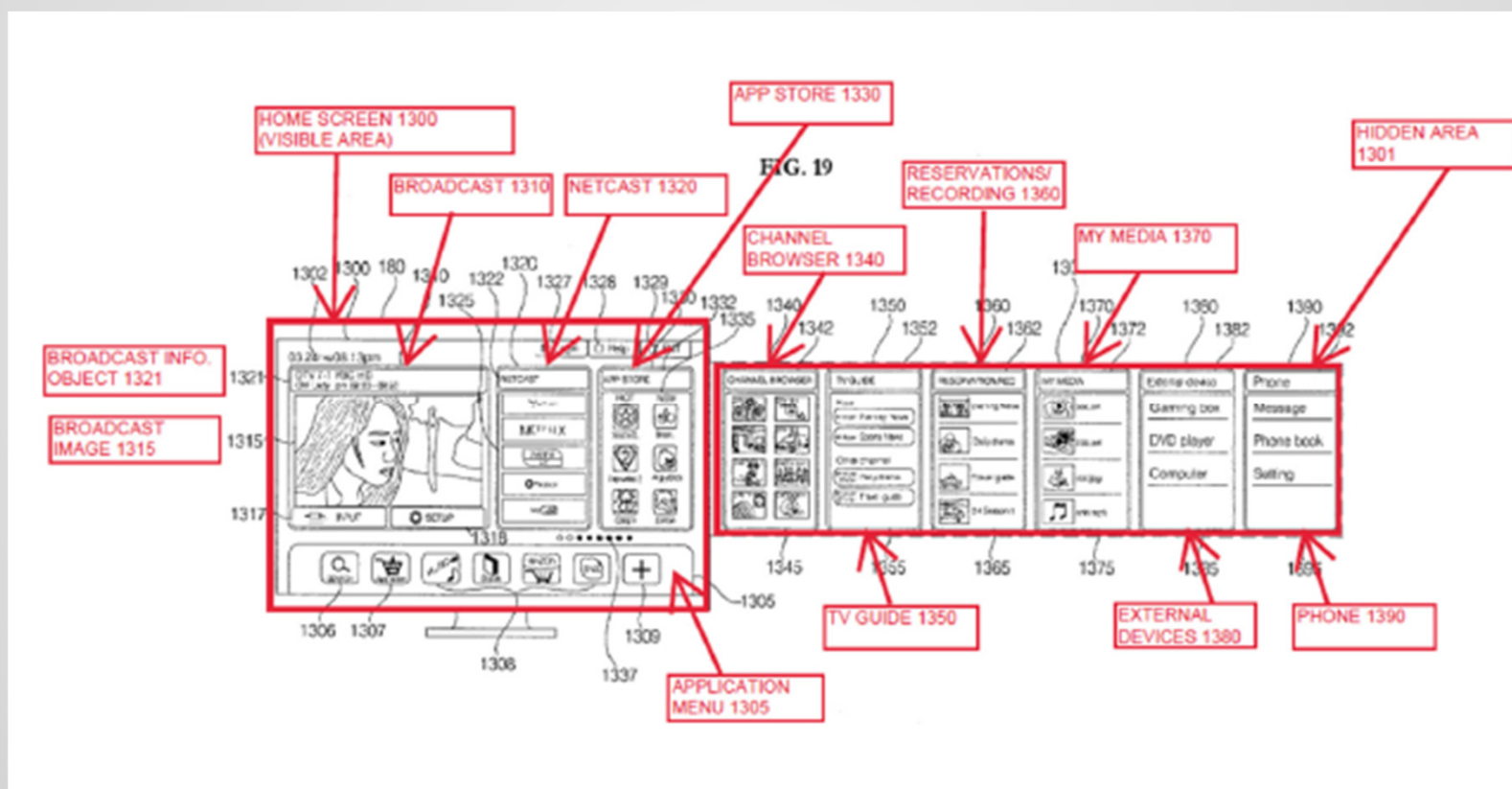
‘254 Patent distinguishes between such “pre-installed software applications” and “downloaded software applications.” POR, 9-10, '254 Patent, 24:18-21.

Petitioner:

Applies ordinary and customary meaning. Express constructions provided for “one or more” and “silo” are not material. Pet., 11-12

Kim (Ex. 1005)

- Home screen 1300 with graphical card objects 1310-1390.
- Card objects have text/thumbnail listings that can be selected to access program content.



POR, 11-12; Kim, Fig. 19.

WD-Manual (Ex. 1006)

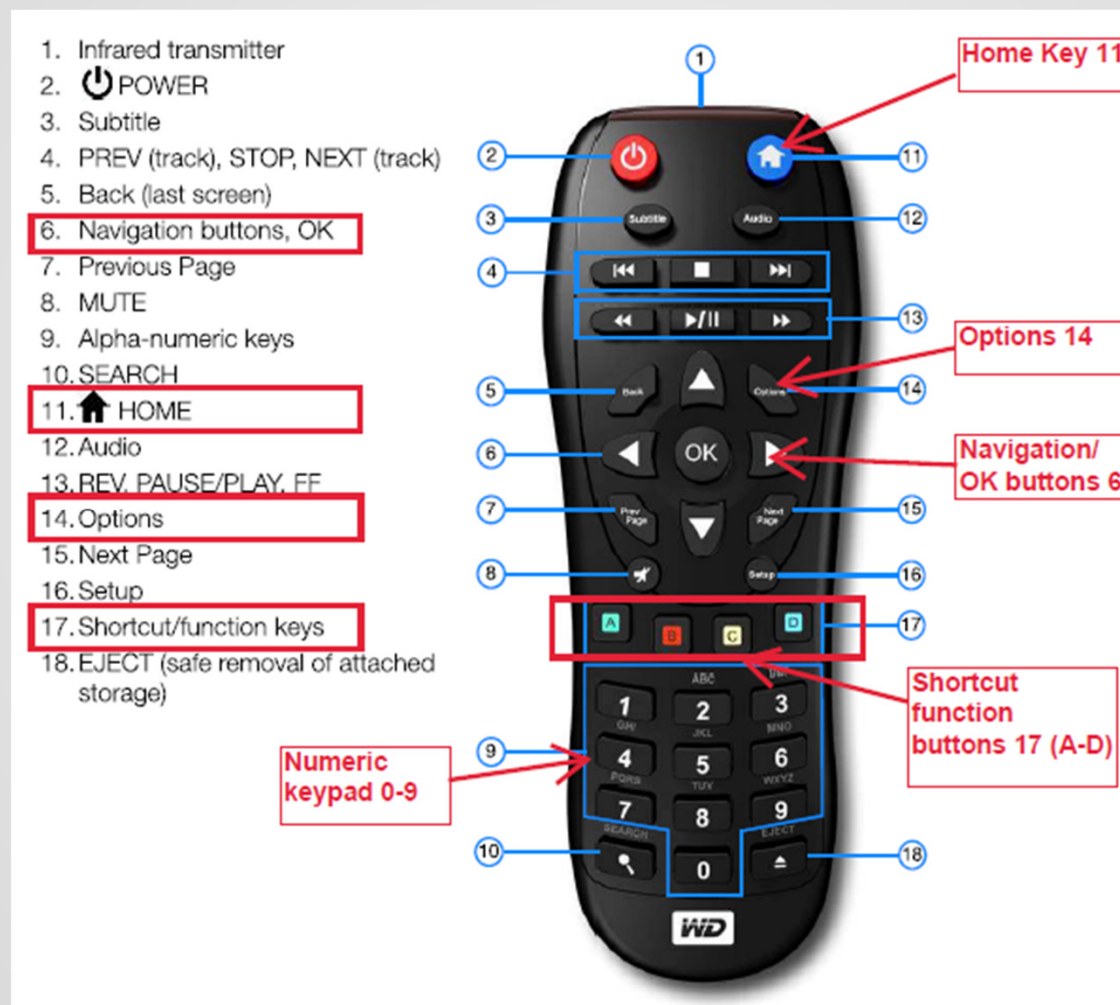
- WD TV Live Hub Media Center with (1) digital media player (set-top-box) with hard drive for storing/playing content, and (2) remote control.



POR, 12-13; WD-Manual, Cover Page.

WD-Manual

- Programmable remote control



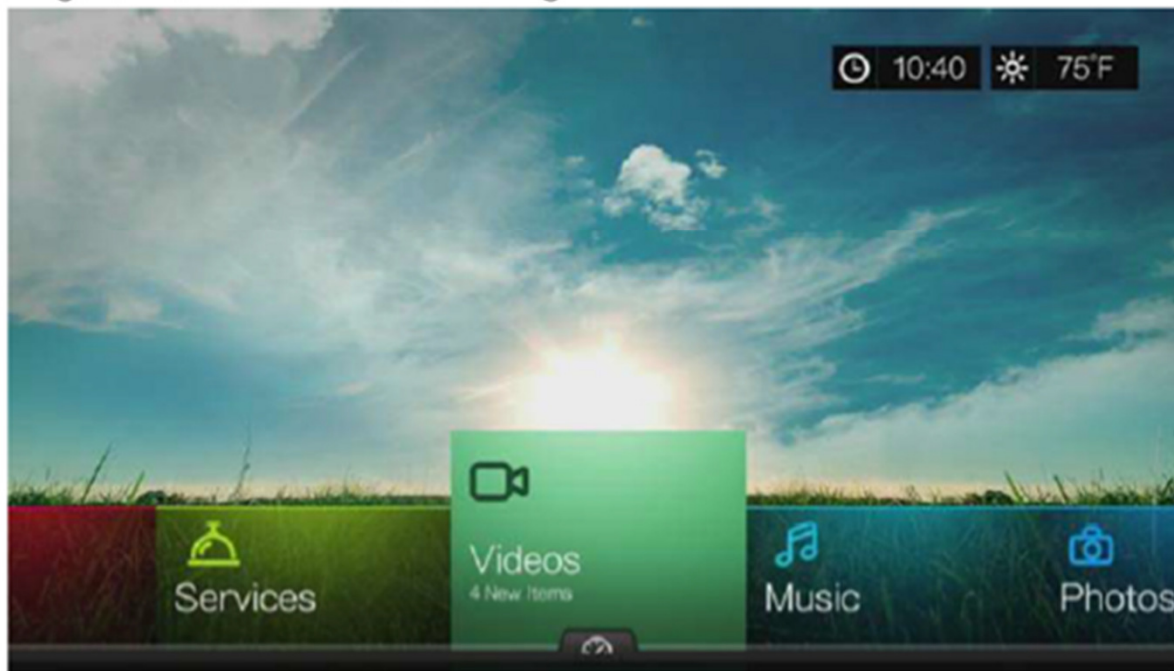
POR, 12; WD-Manual, 11.

WD-Manual

- Selection of home button to access Home screen with options for Services, Videos, Music, Photos.

Using the Media Center Menu

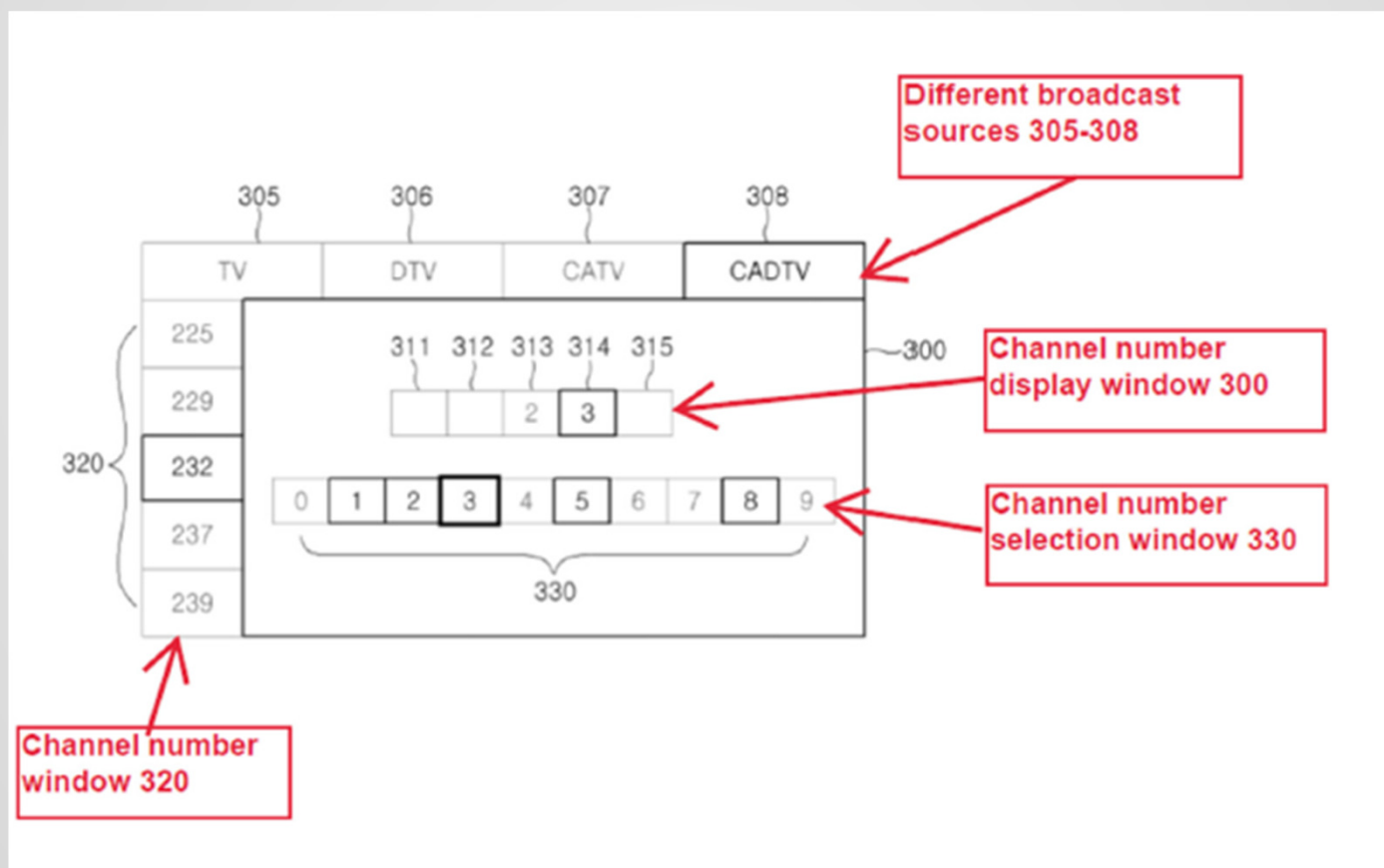
The Home screen displays when turn on your media center or press **HOME** on the remote control. The menu options in this screen let you browse your media library and configure the media center's settings.



POR, 13; WD-Manual, 28.

Bae (Ex. 1008)

- Channel selection using on-screen graphic objects, including channel number selection window 330 (select digits) and channel number display window 300 (display inputted digits):



POR, 14; Bae, Fig. 3.

WD-Manual Is Not a “Printed Publication”

Petitioner Does Not Establish that WD-Manual is a “Printed Publication”

A reference is publicly accessible only if it was [1] sufficiently disseminated or [2] otherwise available as being “searchable or indexed in a meaningful way” such that “persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate [the reference]” as of the relevant priority date. *Acceleration Bay, LLC v. Activision Blizzard Inc.*, 908 F.3d 765, 772-73 (Fed. Cir. 2018) (brackets added) (citing *In re Wyer*, 655 F.2d 221, 226 (CCPA 1981)).

Sur-reply, 1.

WD-Manual Is Not a “Printed Publication”

35 U.S.C. § 311(b): IPRs can be based “only on the basis of prior art consisting of patents or printed publications.”

- **Both Ground 1 and Ground 2 rely on the WD-Manual.**
- **Determination that WD-Manual is not printed publication prior art is dispositive.**
- **Petition did not even assert WD-Manual was a printed publication.**
- **Pet has not met its burden to establish WD-Manual as printed publication prior art.**
- **Evidence of record affirmatively demonstrates that WD-Manual is not a printed publication re the '254 Patent.**

POR, 15-16; Pet., 13-14.

WD-Manual Is Not a “Printed Publication”

Petition Does Not Assert WD-Manual is a “Printed Publication”

- Petition only alleges WD-Manual is “at least prior art under (pre-AIA) 35 U.S.C. § 102(a) and/or (b).”
Pet., 14.
- Pre-AIA § 102(a) and/or (b) includes 6 categories of prior art including: (1) publicly known, (2) publicly used, (3) in public use, (4) on-sale, (5) patented, and (6) **printed publication**.
- Assertion that WD-Manual is prior art under “§ 102(a) and/or (b)” is not assertion it is a “printed publication.”
- Initial Petition defines and cabins the bases for trial, including theories to establish reference as prior art. Foreseeable arguments are waived.

***SAS Institute v. Iancu* (2008) (Pet is “master of its complaint”); Trial Practice Guide, 73-74 (foreseeable arguments to establish “prima facie case of unpatentability” that are not made are waived).**

POR, 15-16; Sur-reply, 1-2.

WD-Manual Is Not a “Printed Publication”

Petition Does Not Assert WD-Manual is a “Printed Publication”

- **Assertion WD-Manual was “publicly available” is insufficient.** Pet., 13-14.
 - **The test is not whether the reference was “available” – it is public accessibility. *Acceleration Bay* (Fed. Cir. 2018) (mere “technical accessibility” is insufficient).**
- **Petition makes conclusory assertion WD-Manual was “publicly available” with general reference to Ex. 1012 (Internet Archives Dec.) and several collateral web page exhibits.**
 - **No citations to any pages in Internet Archives Dec. or to any pages in the referenced collateral exhibits.** See Pet., 13-14.
 - **No reasoning or analysis provided.** See Pet., 13-14.

POR, 16-18.

WD-Manual Is Not a “Printed Publication”

Petition Does Not Establish that WD-Manual is a “Printed Publication”

The entirety of the Petition’s argument for WD-Manual’s availability as prior art consists of four conclusory sentences. Pet., 13-14. Petitioner’s Reply does not dispute that the Petition failed to assert that WD-Manual was publicly accessible through either (1) actual dissemination or (2) that it was at a location that was “*meaningfully indexed*,” searchable, or otherwise organized so that an interested artisan could locate WD-Manual exercising reasonable diligence. *Samsung Electronics Co., Ltd. v. Infobridge Pte. Ltd.*, 929 F.3d 1361, 1369 (Fed. Cir. 2019) (citing *Acceleration Bay*) (org. italics). Reply, 8-11.

Sur-reply, 1-2.

WD-Manual Is Not a “Printed Publication”

Petition Does Not Establish that WD-Manual is a “Printed Publication”

The Petition was thus facially deficient, and the Petitioner waived any argument that WD-Manual was publicly accessible by virtue of dissemination or that it was reasonably locatable by interested artisans. *Intel. Bio-Systems, Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369 (Fed. Cir. 2016) “the initial petition [must] identify ‘with particularity’ the ‘evidence that supports the grounds for the challenge to each claim.’”) (emph added). *See Netflix, Inc. v. DivX, LLC*, 984 F.4th 1374, 1378-79 (Fed. Cir. 2023)) (all theories not presented in the initial petition are waived); *Yita LLC v. MacNeil IP LLC*, 69 F.4th 1356, 1366–67 (Fed. Cir. 2023) (argument not raised in initial petition declined “because it was presented too late ... in [the] reply brief”); *Hulu v. Sound View Innovations*, IPR2018-01039, Paper 29 (PTAB Dec. 10, 2019) (precedential), 2019 WL 7000067, at *5 (addressing public accessibility: “[T]he statute requires that the petition identify *with particularity* the grounds for institution and evidence supporting such grounds”).

Sur-reply, 2.

WD-Manual Is Not a “Printed Publication”

Petition Provides No Evidence Establishing WD-Manual as a “Printed Publication” Via Actual Dissemination

- **Petition makes no argument of public accessibility from actual dissemination.**
Pet., 13-14.
- **Petitioner waives any argument of public accessibility from actual dissemination.**
- **Even if considered, access of reference to handful of people is insufficient for actual dissemination. *In re Cronyn* (Fed. Cir. 1989) (three persons insufficient); *In re Bayer* (CCPA 1978) (three copies insufficient).**

POR, 18.

WD-Manual Is Not a “Printed Publication”

WD-Manual Not Publicly Accessible to Relevant Interested Persons

- **WD manual allegedly available on Internet on 12/3/2010 at URL**
www.wdc.com/wdproducts/library/UM/ENG/4779-705046.pdf
- **Fifth-level subdirectory in root website www.wdc.com**

POR, 19-20; Sur-reply, 3-4; Ex. 1012 (Internet Archives Dec., par. 1, 5, 7.

WD-Manual Is Not a “Printed Publication”

WD-Manual Not Publicly Accessible to Relevant Interested Persons

www.wdc.com/wdproducts/library/UM/ENG/4779-705046.pdf

To establish that WD-Manual was publicly accessible “via the www.wdc.com website,” as asserted (Reply, 10), Petitioner must establish: (1) evidence showing that a person interested in the art knew of the www.wdc.com website or could have reasonably found it; and (2) evidence that the www.wdc.com website was meaningfully indexed or catalogued or otherwise organized such that a person interested in the field of the ’254 Patent could have found WD-Manual on that website exercising reasonable diligence. *Infobridge*, 929 F.3d at 1369 (citing *Acceleration Bay*). *Infobridge* holds that this evidence is “critical.” *Id.* The Petitioner has failed to establish this critical evidence.

Sur-reply, 4.

WD-Manual Is Not a “Printed Publication”

WD-Manual Not Publicly Accessible to Relevant Interested Persons

www.wdc.com/wdproducts/library/UM/ENG/4779-705046.pdf

- Internet Archives Dec. (Ex. 1012) at best demonstrates “technical accessibility” on Internet. “Public accessibility requires more than technical accessibility.” *Infobridge* (Fed. Cir. 2019), *Acceleration Bay* (Fed. Cir. 2018).

AFFIDAVIT OF NATHANIEL E FRANK-WHITE

1. I am a **Records Request Processor** at the Internet Archive. I make this declaration of my own personal knowledge.

seconds (1997/01/26 at 04:58:28). The date indicated by an extended URL applies to a preserved instance of a file for a given URL, **but not necessarily to any other files linked therein**. Thus, in the case of a page constituted by a primary HTML file

Folder	URL
001	https://web.archive.org/web/20101203204251/http://www.wdc.com/wdproducts/library/UM/ENG/4779-705046.pdf

- Internet Archives Dec. does not prove public accessibility.

POR, 19-20; Sur-reply, 3-4; Ex. 1012 (Internet Archives Dec., par. 1, 5, 7.

WD-Manual Is Not a “Printed Publication”

WD-Manual Not Publicly Accessible to Relevant Interested Persons

www.wdc.com/wdproducts/library/UM/ENG/4779-705046.pdf

- No showing relevant persons interested in the field of user interfaces with EPGs could locate reference at URL with reasonable diligence.
- Petitioner does not dispute that declarant Mr. Nathaniel Frank-White is not a person of skill in the relevant field and was not qualified to provide opinion on public accessibility to relevant persons of interest.
- Petitioner does not dispute that Mr. Frank-White did not provide any opinion that relevant interested persons could locate the reference at the above URL exercising reasonable diligence.
- Petitioner provides no evidence that the relevant interested persons could locate the reference on Internet exercising reasonable diligence.

POR, 19-20; Sur-reply, 4-5.

WD-Manual Is Not a “Printed Publication”

WD-Manual Not Publicly Accessible to Relevant Interested Persons

www.wdc.com/wdproducts/library/UM/ENG/4779-705046.pdf

- No evidence from Mr. Frank-White or other evidence that www.wdc.com was known to relevant persons interested in field of '254 Patent or could have reasonably been found by relevant artisans.
- No evidence from Mr. Frank-White or other evidence that www.wdc.com was meaningfully indexed, catalogued, or otherwise searchable so that relevant artisans could locate the reference at fifth-level subdirectory of URL with reasonable diligence.
- For reference on a website, must provide “critical” evidence that (1) person of ordinary skill could have reasonably found the website, and (2) website was cataloged or otherwise organized such that person of skill could have found the reference on the website with reasonable diligence. *Infobridge* (Fed. Cir. 2019); *Acceleration Bay* (Fed. Cir. 2018).

POR, 19-20; Sur-reply, 4-5.

WD-Manual Is Not a “Printed Publication”

WD-Manual Not Publicly Accessible to Relevant Interested Persons

www.wdc.com/wdproducts/library/UM/ENG/4779-705046.pdf

- Reply asserts “any person interested in learning more about the WD TV Live Hub” could “browse” www.wdc.com to find WD-Manual is attorney argument without citation to evidence. See Reply, 10.
- Test is not whether a person could “browse” the site. Test is whether site is “*meaningfully*” indexed, cataloged, or otherwise searchable to enable an interested artisan to locate reference with reasonable diligence. *Infobridge* (Fed. Cir. 2019).
- Petitioner has provided no evidence on structure and layout of website.
- Petitioner has provided no evidence that WD-Manual at fifth-level subdirectory URL was publicly accessible to interested artisans.

POR, 19-20, Sur-reply, 6-7.

WD-Manual Is Not a “Printed Publication”

Petitioner’s Technical Expert Dr. Lippman Confirms WD-Manual Is Not a Printed Publication

- Dr. Lippman claims to have been a POSITA at time of invention.
- Dr. Lippman testified he had never heard of the www.wdc.com website, the WD-Manual reference, or the WD Product.
- Dr. Lippman never accessed the www.wdc.com website on the Internet, never accessed the WD-Manual at that site.
- Fact that Dr. Lippman never heard of the www.wdc.com website, the WD-Manual reference, or the WD Product until this IPR is strong evidence that WD-Manual was not publicly accessible.
- Petitioner’s choice not to submit a supplemental declaration on reply from Dr. Lippman or another expert on public accessibility confirms WD-Manual was not publicly accessible at time of invention.

Sur-reply, 7-8.

Collateral Documents

Mishmash of Collateral Documents Do Not Establish WD-Manual as Publicly Accessible at www.wdc.com/wdproducts/library/UM/ENG/4779-705046.pdf

- **Ex. 1020 – WD Press Release webpage announcing WD TV Live Hub product.**
- **Ex. 1022 – WD TV Live Hub webpage in different languages.**
- **Ex. 1023 – Photo Bay webpage with review of WD TV Live Hub product.**
- **Ex. 1024 – B&H webpage describing WD TV Live Hub product for sale.**

Sur-reply, 7-8.

Collateral Documents – Ex. 1020 Press Release

Ex. 1020 Press Release Does Not Establish WD-Manual as Publicly Accessible at www.wdc.com/wdproducts/library/UM/ENG/4779-705046.pdf

- Press release references WD TV Live Hub product as on sale.
- Press release can be a roadmap only if (1) it is publicly accessible, and (2) it identifies or otherwise provides a roadmap to the reference. *Blue Calypso* (Fed. Cir. 2016).
- Ex. 1020 does not reference WD-Manual. Thus, does not lead POSITA to WD-Manual at www.wdc.com/wdproducts/library/UM/ENG/4779-705046.pdf
- Also, press release not publicly accessible. Internet Archives Dec. shows technical accessibility, not public accessibility.
- Ex. 1020 does not refer to product page at www.wdc.com as alleged (Reply, 9). Only refers to www.westerndigital.com (investors), wdstore.com (sales), supportwdc.com/warranty (warranty issues).

Sur-reply, 8-9.

Collateral Documents – Ex. 1024 B&H Photo

Ex. 1024 B&H Photo Webpage Does Not Establish WD-Manual as Publicly Accessible at www.wdc.com/wdproducts/library/UM/ENG/4779-705046.pdf

- **Petitioner asserts B&H Photo webpage shows WD TV Live Hub product as on sale. Does not establish public accessibility of WD-Manual.**
- **B&H Photo webpage does not reference WD-Manual.**
- **No evidence B&H Photo webpage was publicly accessible. Internet Archives Dec. shows technical accessibility, not public accessibility.**
- **B&H Photo is not a roadmap because (1) not publicly accessible, and (2) no reference to WD-Manual.**
- **No evidence any single product sold. No evidence that product included WD-Manual. See Ex. 1023 (Photo Bay review) states “there’s no manual in the box.”**

Sur-reply, 10.

Collateral Documents – Ex. 1022 WD TV Live Hub

Ex. 1022 WD TV Live Hub Webpage Does Not Establish WD-Manual as Publicly Accessible at www.wdc.com/wdproducts/library/UM/ENG/4779-705046.pdf

- No evidence that a POSITA would have known of or could reasonably locate root website www.wdc.com. No evidence that www.wdc.com site was meaningfully indexed, cataloged or organized so that POSITA could locate WD-Manual or WD TV Live Hub webpage.
- No evidence that the WD TV Live Hub webpage at www.wdc.com/wdproducts/library/?id=254&type=25 was publicly available. See Ex. 1012 (Internet Archives Dec.), 20 (technical accessibility only, not public accessibility).
- No evidence that referenced “user manual” is WD-Manual.
- Thus, WD TV Live Hub webpage is not a roadmap to WD-Manual.

Sur-reply, 10-11.

Collateral Documents – Ex. 1023 Photo Bay

Ex. 1023 Photo Bay Webpage Does Not Establish WD-Manual as Publicly Accessible at www.wdc.com/wdproducts/library/UM/ENG/4779-705046.pdf

- **No evidence that Photo Bay webpage was known to interested artisans or could reasonably be located by interested artisans (i.e., not publicly accessible).**
- **Internet Archives, Ex. 1012 (Internet Archives Dec.), 5, at best establishes technical accessibility, not public accessibility.**
- **Thus, Photo Bay webpage is not a roadmap to WD-Manual. *Blue Calypso* (Fed. Cir. 2016).**

Sur-reply, 11-13.

Collateral Documents – Ex. 1023 Photo Bay

Ex. 1023 Photo Bay Webpage (cont'd)

- Petitioner's assertion that PO's expert testified that Photo Bay of Ex. 1023 was well-known provider of video hardware products is false. Reply, 10. PO's expert was referring to B&H Photo Video webpage of Ex. 1024, not Photo Bay webpage of Ex. 1023. See Ex. 1026, 22:1-10.

22

1	Q	Do you know what Exhibit 1024 is?	09:51:14
2		MR. SCHREINER: Objection. Vague.	09:51:23
3		THE WITNESS: Just one second.	09:51:31
4		MR. HUH: Stephen, vague is an improper	09:51:33
5		objection. Please stop making those kind of objections.	09:51:36
6		THE WITNESS: Just a second here.	09:51:46
7		So I believe it's the purchase page for the	09:51:53
8		Western Digital WTV Live Hub Network Media Event on	09:52:00
9		archive.org for B&H photo video, which is a well-known	09:52:06
10		provider of video/AV hardware products.	09:52:12

Sur-reply, 10-11; Ex. 1026, 22:1-10.

Collateral Documents – Ex. 1023 Photo Bay

Ex. 1023 Photo Bay Webpage (cont'd)

- No evidence supporting Petitioner's assertion that product reviewer Eric Reagan (Ex. 1023, 1) was "representative" of artisans interested in the field of user interfaces with EPGs.
- No evidence regarding how Mr. Reagan acquired obscure URL link to www.wdc.com/wdproducts/library/UM/ENG/4779-705046.pdf. Ex. 1023, 3.
- No evidence that Mr. Reagan found WD-Manual by searching or browsing www.wdc.com root site.
- A single person having possession of reference does not establish public accessibility. *In re Cronyn* (Fed. Cir. 1989) (copy available to four persons is insufficient); *In re Bayer* (CCPA 1978) (copy available to three persons is insufficient).
- Photo Bay webpage is not a roadmap that establishes WD-Manual as publicly accessible.

Sur-reply, 12-13.

Collateral Documents As a Whole

- Collateral documents do not establish that a POSITA would have known of the www.wdc.com root website or could reasonably locate it.
- Collateral documents do not establish that the root website was indexed, searchable, or otherwise organized such that that reference in a fifth-level subdirectory at www.wdc.com/wdproducts/library/UM/ENG/4779-705046.pdf could be located exercising reasonable diligence.
- Petitioner provides no evidence that www.wdc.com website was known or reasonably locatable by interested artisans.
- Petitioner does not even provide evidence on the structure and layout of the www.wdc.com website to explain how an interested artisan would locate WD-Manual reference.

Sur-reply, 12-13.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.2

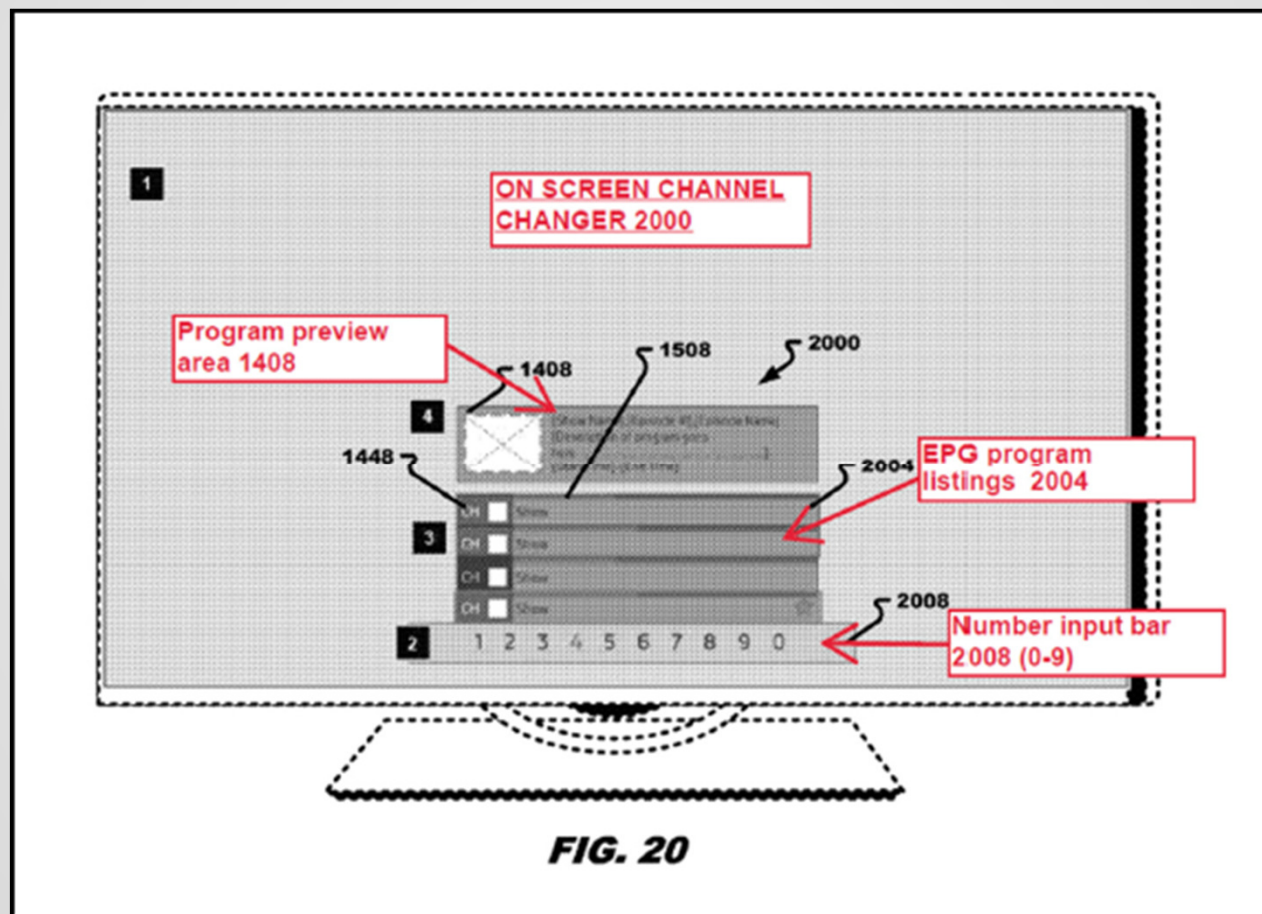
Kim, WD-Manual, and Bae fail to teach Limitation 1.2:

“Displaying . . . an on screen channel changer, the displayed on screen channel changer comprising electronic program guide (‘EPG’) information and a number input bar comprising digits, wherein the digits range from 0 to 9”.

Por, 24-25.

'254 Patent Invention

On-Screen Channel Changer 2000 with (1) number input bar 2008 and (2) mini-EPG 2004 with dynamically updated program listings 2004



POR, 25, '254 Patent, Fig. 20.

'254 Patent Invention

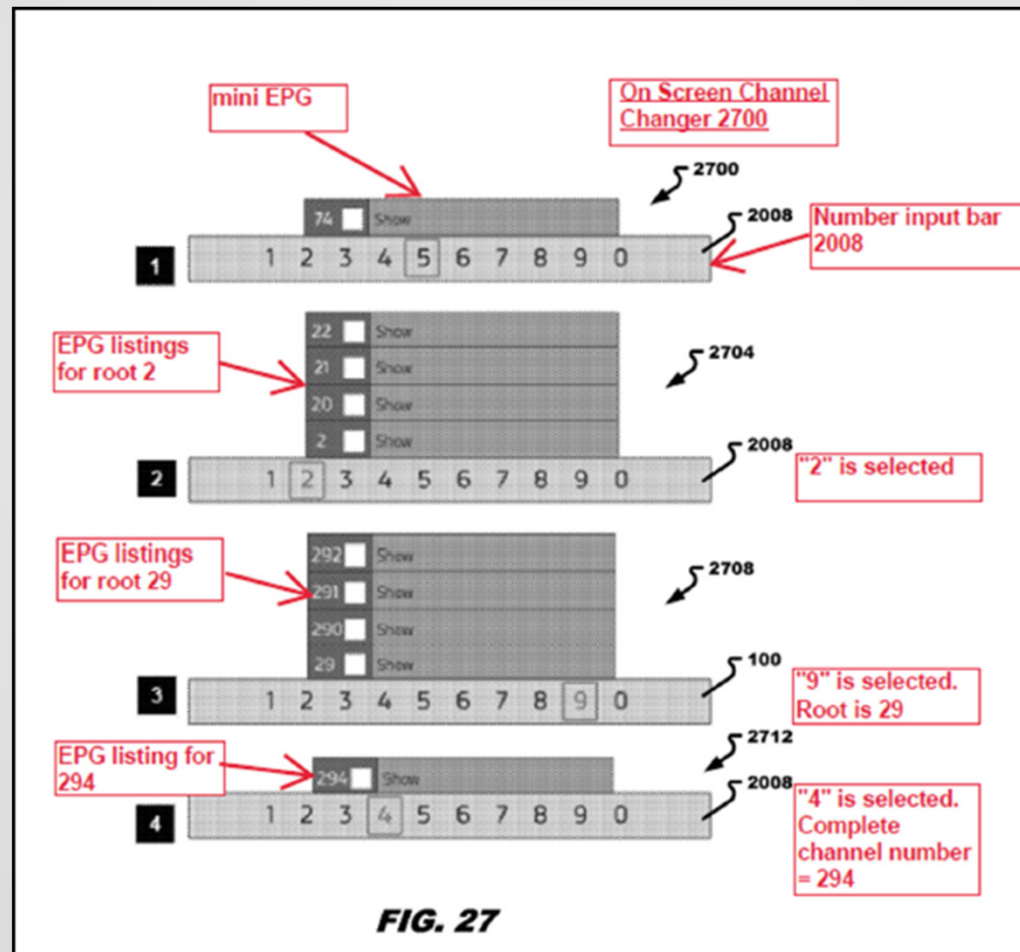
On-Screen Channel Changer (OSCC) 2008 with dynamic EPG 2004

The user can use non-numeric keys on a remote control to select digits 0-9 on the number input bar. As each digit is selected by the user, the EPG 2004 is updated to display program listings corresponding to the digits the user has entered so far. For example, after the user enters a highest-order digit (e.g., 2) the EPG will present program listings for channels corresponding to the root number 2XX. When the user next enters digit number 9 (e.g., the root value is 29X), the EPG will present program listings for channels corresponding to the root number 29X. At any time, the user can use the remote control to select an in-focus program listing on the EPG (e.g., using the OK or play button) to cause the channel to be changed and the program to be displayed. '254 Patent, 32:51-33:21, 36:12-64, Figs. 20, 26, 27. Surati Decl., ¶¶ 132-135.

POR, 26.

'254 Patent Invention

On Screen Channel Changer with number input bar 2008 and EPG 2700 are dynamically updated based on user selection of digits, i.e., based on the “root number” entered so far:



POR, 26; '254 Patent Fig. 27, Ex. 2008 (Surati Dec.),
par. 133-135.

Kim, WD-Manual, and Bae – Limitation 1.2

Petitioner's theory: “*On screen channel changer*” is Kim's home screen 1300 with Channel Browser 1340 and/or TV Guide 1350. Kim, Fig. 19, 22.

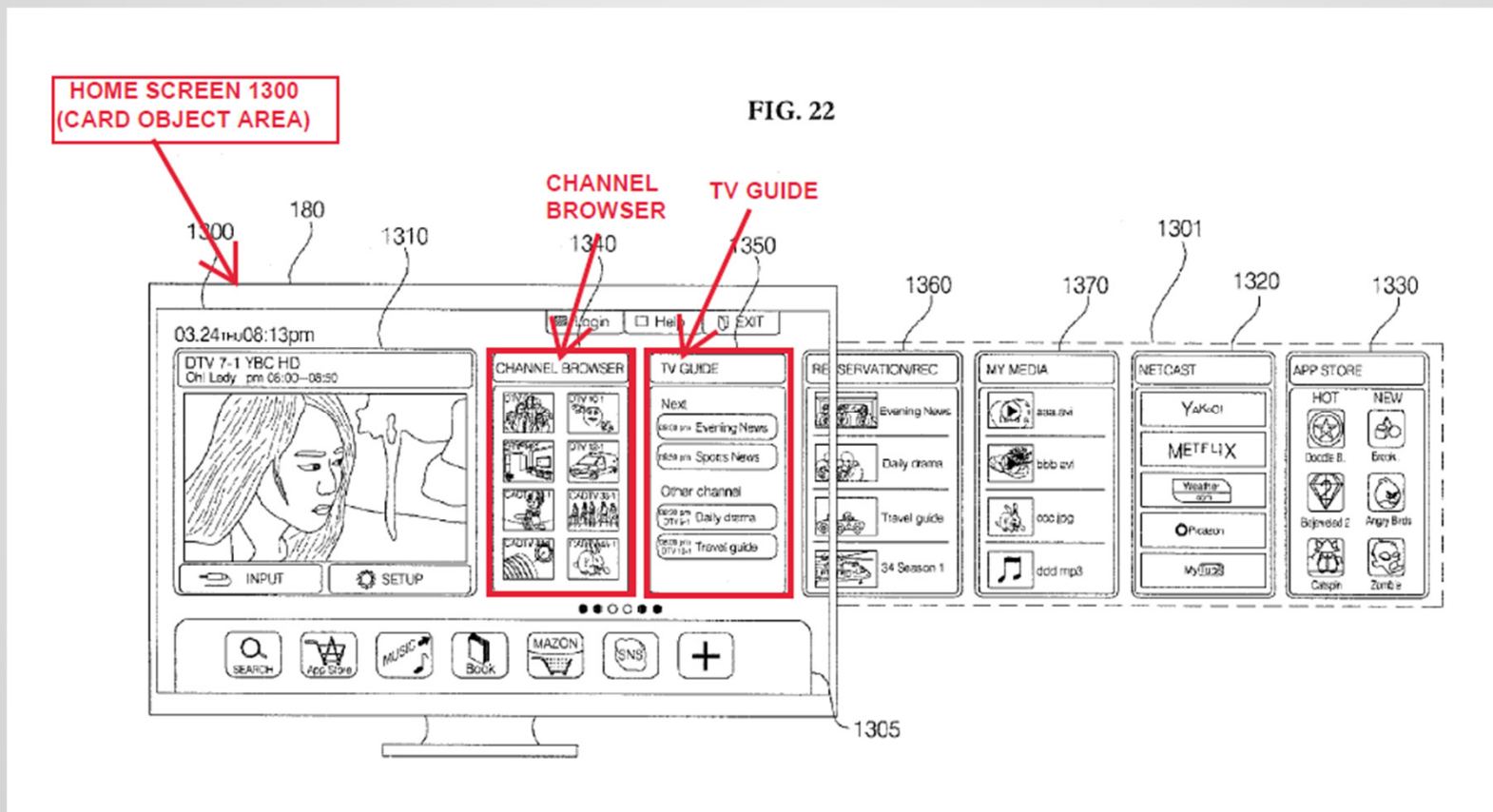
- Channel Browser 1340 functions as “*on screen channel changer*”
- TV Guide 1350 functions as “*on screen channel changer*”

78. Further, Kim teaches an on screen channel changer that displays electronic program guide information that allows a user to search for and switch to a desired program or channel via a remote control, such as a “a CHANNEL BROWSER card object 1340 which may provide a thumbnail list of broadcast channels [and] a TV GUIDE card object 1350 which may provide a program list.”

POR, 28-30; Ex. 1003 (Lippman Dec.), par. 78.

Kim, WD-Manual, and Bae – Limitation 1.2

Petitioner's theory: “*On screen channel changer*” is Kim's home screen 1300 with Channel Browser 1340 and/or TV Guide 1350.



POR, 28-30; Kim, Fig. 22.

Kim, WD-Manual, and Bae – Limitation 1.2

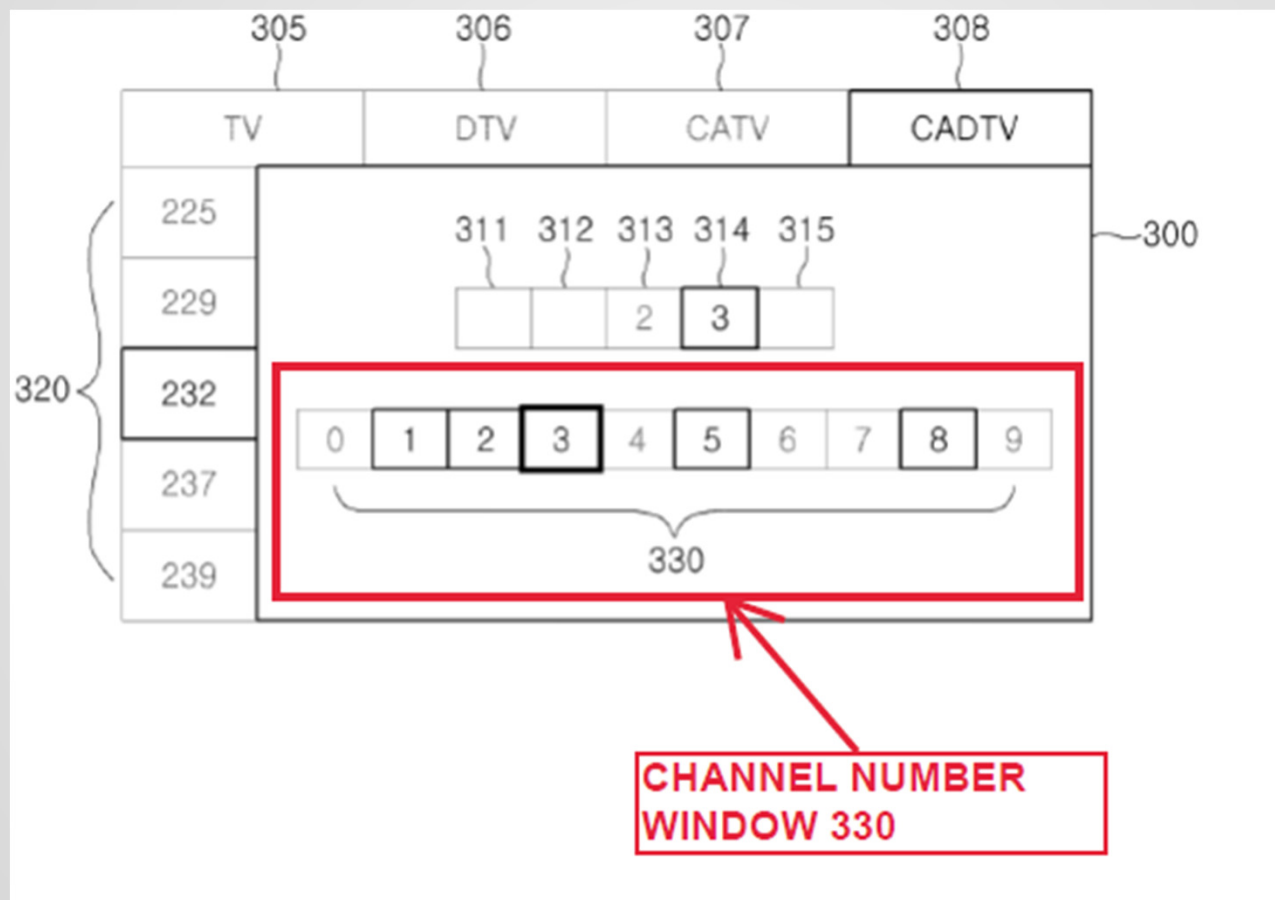
Petitioner's theory: “*On screen channel changer*” is Kim's home screen 1300 with Channel Browser 1340 and/or TV Guide 1350.

It is undisputed that a remote control can be used to select a program listing in the TV Guide card object or to select a thumbnail in the Channel Browser card object to cause the channel to be changed. “If a program is selected from the program list 1355 [in the TV Guide card object], a broadcast image of the selected program (e.g., currently being broadcast) ... may be displayed on the display 180.” Kim, [0206]-[0207]. Surati Decl., ¶¶ 144-145, 150-151.

POR, 31.

Kim, WD-Manual, and Bae – Limitation 1.2

Petitioner's theory: Modify “*on screen channel changer*” of Kim (Channel browser 1340 or TV Guide 1350) to include a “*number input bar*” that is channel number selection window 330 from Bae.

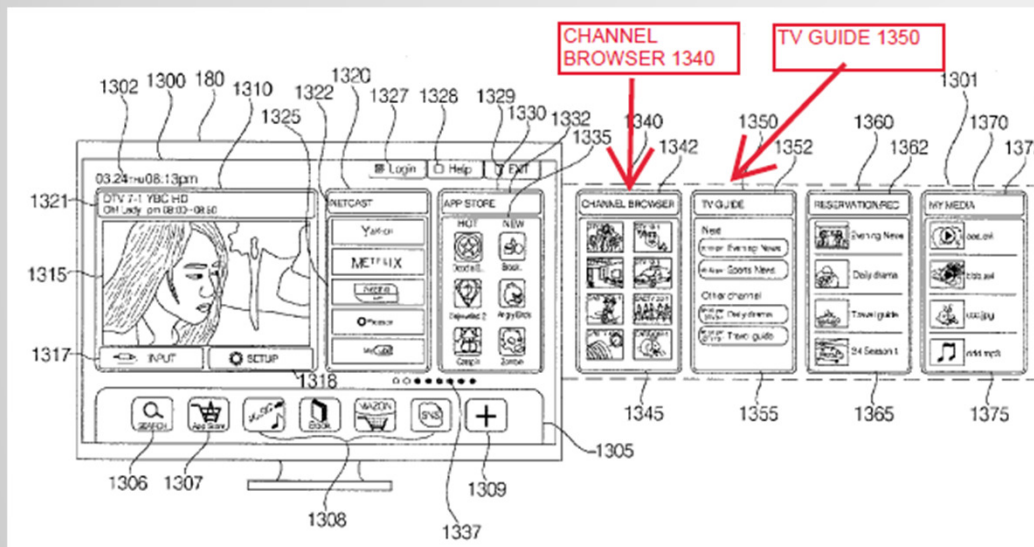


POR, 31-32; Bae, Fig. 3.

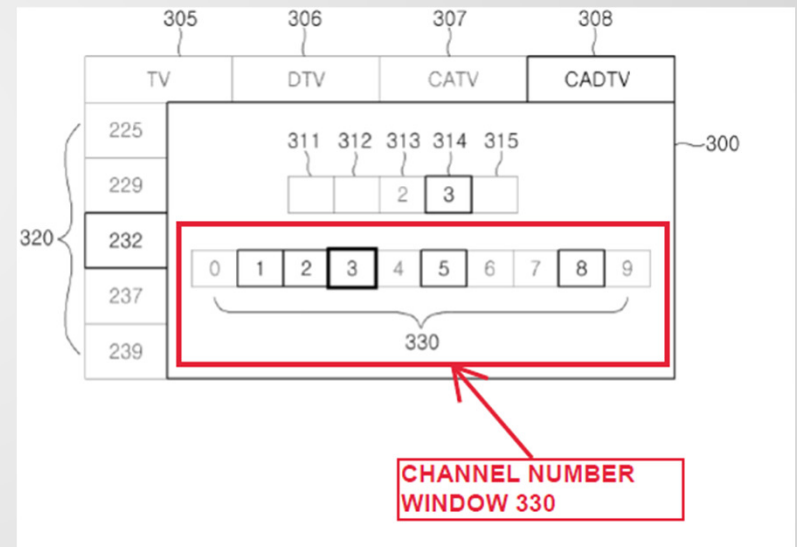
Kim, WD-Manual, and Bae – Limitation 1.2

Petitioner's theory: Modify “*on screen channel changer*” of Kim (Channel browser 1340 or TV Guide 1350) to include a “*number input bar*” that is channel number selection window 330 from Bae.

Kim



Bae



POR, 31-32; Kim, Fig 19; Bae, Fig. 3.

Kim, WD-Manual, and Bae – Limitation 1.2

Petitioner's theory: Modify “*on screen channel changer*” of Kim (Channel browser 1340 or TV Guide 1350) to include a “*number input bar*” that is channel number selection window 330 from Bae.

- **Petitioner proposes abstract combination of Kim and Bae, instead of proposing an operable combination.**
- **Petitioner fails to provide reasoned analysis explaining (1) how the teachings from the references are combined, and (2) how the proposed combination works to meet limitation 1.2.**
- **Petitioner never explains how Kim and Bae are combined, and how that combination works to meet limitation 1.2.**

POR, 32-33; Sur-reply, 13-14.

Kim, WD-Manual, and Bae – Limitation 1.2

Petitioner's theory: Petitioner never explains how Kim and Bae are combined, and how that combination works to meet limitation 1.2.

Petitioner combines references in the abstract, instead of demonstrating an operable embodiment.

The Petitioner's obviousness case must provide a reasoned analysis explaining **how the references are combined** and **how the proposed combination works** to meet the claim limitation. Surati Decl., ¶ 162. *Trivascular, Inc. v. Samuels*, 812 F.3d 1056, 1066 (Fed. Cir. 2016) (“explanation as to **how... the references would be combined** to produce the claimed invention”) (original italics); *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1368 (Fed. Cir. 2012) (must be an “explanation as to **how ... the references would be combined** to produce the claimed invention.”); *Power-One, Inc. v. Artesyn Techs., Inc.*, 599 F.3d 1343, 1351-52 (Fed. Cir. 2010) (obviousness requires some teaching of **how the references could be combined** to work together). See *Provisur Technologies, Inc. v. Weber, Inc.*, 50 F.4th 117, 124 (Fed. Cir. 2022) (reversal because the Board did not sufficiently explain its finding “on **how the two [references] would be combined**”); *Metalcraft of Mayville, Inc. v. The Toro Co.*, 848 F.3d 1358, 1367 (Fed. Cir. 2017) (no “**explanation as to how ... the references would be combined** to arrive at the claimed invention”); *Innogenetics, N.V. v. Abbott Laboratories*, 512

POR, 34; Sur-reply, 14.

Kim, WD-Manual, and Bae – Limitation 1.2

Petitioner's theory: Board has repeatedly held Petitioner must explain what the combination is and how the combination works.

The Board has repeatedly held that the Petitioner must explain how the references are combined and how the combination works to meet the limitation. *See, e.g., LG Electronics, Inc. v. Constellation Designs, LLC*, IPR2023-00228, Paper 10 (PTAB July 11, 2023) at *6, 2023 WL 5173678 (“lacks sufficient reasoning that would inform how [the proposed combination] would have resulted in the claim limitation,” citing *Pers. Web Techs.* 848 F.3d at 994); *Roku, Inc. v. Universal Electronics, Inc.*, IPR2019-01595, Paper 15 (PTAB May 13, 2021), at *6, 2021 WL 1933680 (“nowhere clearly explained, or cited evidence showing, how the combination of the two references was supposed to work,” citing *Pers. Web Techs.* 848 F.3d at 994) (orig. italics); *Ex parte King*, App. No. 2019-02542 (App. No. 14/706,587), (PTAB Mar. 11, 2020) at *3, 2020 WL 1286071 (obviousness must “clearly explain[] ... how the combination of the two references was supposed to work”); *Emerson Electric Co. v. Sipco, LLC*, IPR2019-00545, Paper 36 (PTAB Aug. 27, 2020) at *29-30, 2020 WL 5078566, *aff'd on appeal*, 2022 WL 1311708 (Fed.

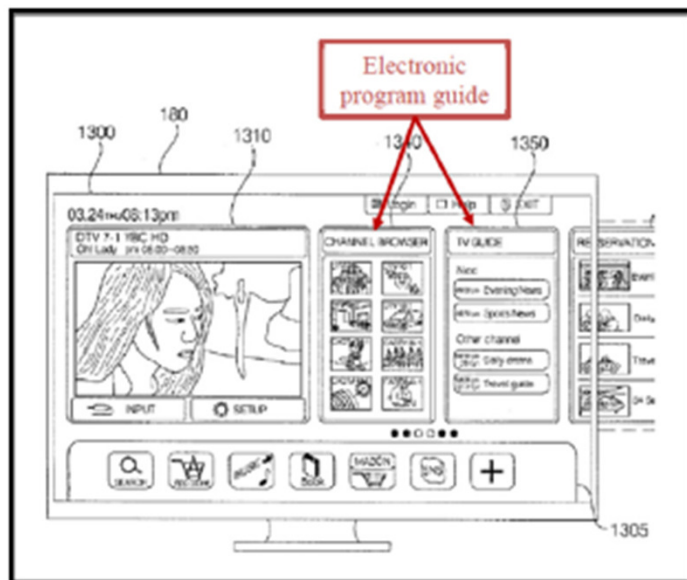
Cir. 2022) (failure to explain how the combination works to meet the limitation); *Apple, Inc. v. UUSI, LLC*, IPR2019-00359, Paper 27 (PTAB Aug. 4, 2020) at *35, 2020 WL 4542561 (“it was incumbent on Petitioner to explain how the [element from the first reference] would have been replaced with [the elements from the second reference], and how the circuit of the proposed combination would have worked,” citing *Pers. Web Techs.* 848 F.3d at 994); *Schlumberger Technology Corp. v. Integrated Drive Systems, LLC*, IPR2018-00604, Paper 8 (PTAB Sept. 5, 2018) at *4, 2018 WL 4232394 (“Petitioner must explain how the proposed combinations of prior art” work to meet the limitation); *Apple, Inc. v. UUSI, LLC*, IPR2019-00356, Paper 14 (PTAB Jul. 22, 2019) at *8-9, 2019 WL 3294136 (“it was incumbent on Petitioner to explain how [element from first reference] would have been combined with the [elements from the second reference],” citing *Pers. Web Techs.* 848 F.3d at 994); *Spring Spectrum L.P. v. Intellectual Ventures II, LLC*, IPR2018-01765, Paper 11 (PTAB May 6, 2019) at *9, 2019 WL 2004048 (same).

POR, 35-36.

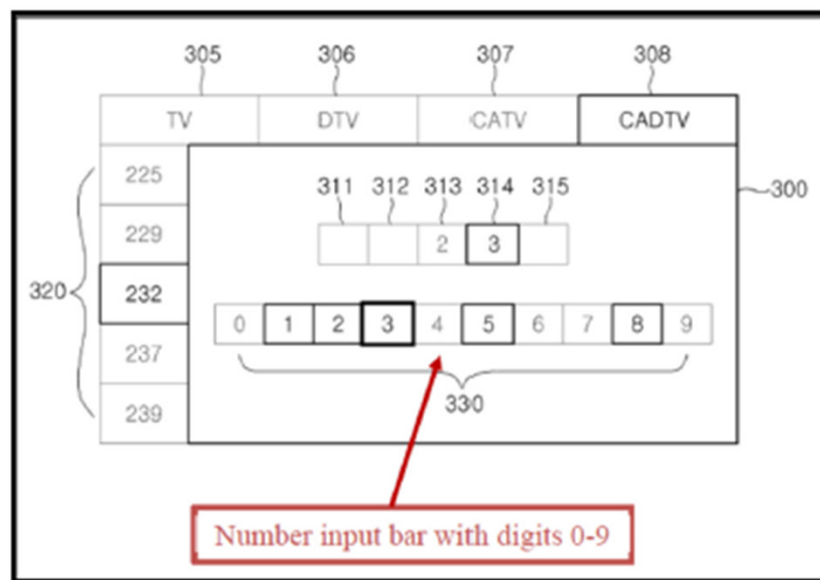
Kim, WD-Manual, and Bae – Limitation 1.2

Petitioner's theory: Combine Channel Browser 1340 or TV Guide 1350 with Channel number selection window 330 of Bae. But how?

Kim



Bae



See Pet., 23, 38 (Petitioner's annotation of Kim, Fig. 19 and Bae, Fig. 3). Surati

Decl., ¶ 159.

POR, 37.

Kim, WD-Manual, and Bae – Limitation 1.2

Petitioner's theory: Combine Channel Browser 1340 or TV Guide 1350 with Channel number selection window 330 of Bae. But how?

The Petitioner fails to explain how the features from the two user interfaces are combined and how the combined user interface works to meet the limitation of “displaying ... [an] on screen channel changer comprising electronic program guide (‘EPG’) information and a number input bar comprising digits.” *Kinetic Concepts, Inc.*, 688 F.3d at 1368. Specifically, the Petitioner never addresses how the cited features from Bae (channel number selection window) would be implemented in Kim according to the mappings to the Channel Browser and TV Guide card objects. The Petitioner provides no explanation of the combination other than the conclusory assertion that Kim would be modified to include a channel number selection window from Bae. Pet., 38-39; Lippman Decl., ¶¶ 123-124. Surati Decl., ¶ 160.

POR, 37.

Kim, WD-Manual, and Bae – Limitation 1.2

Patent Owner's expert: Channel selection window of Bae cannot be combined with Channel Browser 1340 or TV Guide 1350 of Kim, as explained by Dr. Surati:

162. The channel selection window, as taught by Bae, cannot be integrated with either the Channel Browser or the TV Guide card objects of Kim. As described previously, the Channel Browser functions to present thumbnails of broadcast channels that can be selected to change channels. The TV Guide functions to present program listings that can be selected to change channels. Neither card object of Kim could be modified to accommodate the channel selection window of Bae. Indeed, applying the channel selection window of Bae with either card object of Kim would result in an inoperative card object that would be contrary to the principle of Kim.

POR, 38-39; Ex. 2008 (Dr. Surati Dec.), 162.

Kim, WD-Manual, and Bae – Limitation 1.2

Patent Owner's expert: Dr. Surati provides unrebutted evidence at ¶¶ 152-162 of his declaration that:

- **Petitioner and its expert fail to identify how Kim and Bae would be combined.**
- **Petitioner and its expert fail to explain how the (unspecified) combination of Kim and Bae would operate to meet limitation 1.2.**
- **Bae's channel number selection window (alleged “*number input bar*”) cannot be integrated with Kim's Channel Browser/TV Guide user interface (alleged “*on screen channel changer*”).**
- **Combining Bae and Kim would result in an inoperable embodiment.**

Sur-reply, 14-15; Ex. 2008 (Dr. Surati Dec.), 152-164.

Kim, WD-Manual, and Bae – Limitation 1.2

Petitioner's theory: Not an improperly bodily incorporation attack because Petitioner proposes combining the user interface from Kim with the user interface from Bae. See Pet., 38:

As discussed above, Kim teaches a known method for displaying an on screen channel changer that allows a user to select a channel thumbnail/program listing and/or enter a search keyword. Adding Bae's number input bar to Kim's on screen channel changer would have predictably resulted in an on screen channel changer that additionally includes a number input bar allowing the user to directly enter a specific channel number. Ex.1003, ¶123.

POR, 39-40; Pet., 38.

Kim, WD-Manual, and Bae – Limitation 1.2

Petitioner's theory: Petitioner's expert is unable to explain how Kim and Bae are combined, nor how the combination would work.

- Petitioner's expert states: "Thus, Kim's card object area that displays either or both of a CHANNEL BROWSER card object and TV GUIDE card object teaches an **on screen channel changer**." He then states that "it would have well within the skillset of a POSITA to further **include** the **number input bar of Bae** into the on screen channel changer of Kim." Lippman Dec., ¶¶ 104, 123.
- Dr. Lippman never explains how the number input bar of Bae would be combined with the Channel Browser/TV Guide of Kim and how the (unspecified) combination would work.
- Petitioner does not dispute that in deposition its expert Dr. Lippman was unable to explain what the combination of Kim and Bae is, and how the combination works.

POR, 39-40, Sur-reply, 17.

Kim, WD-Manual, and Bae – Limitation 1.2

Petitioner's theory: In deposition, Dr. Lippman was unable to explain the Kim/Bae combination and was unable to explain how the combination works.

In your proposed combination of Kim and Bae, what does the channel browser 1340 look like?

ATTORNEY HUH: Objection. Form.

A. You would choose to display EPG information either the way Kim does or an altered way that Kim does using the teachings of Kim so that you would end up with an artful and usable user interface with Bae added to it.

Q. And as for the TV guide card object 1350, what would it look like pursuant to your proposed combination of Bae with Kim?

A. I don't think that I need to propose a specific graphic design. What I propose is the admixture of those two techniques for changing channel, one of them being Kim's, and the other -- which allows you to scroll and select and the other -- from EPG information, and the other direct selection by specifying a channel number.

BY ATTORNEY SCHREINER:

Q. You would agree it's fair that an expert should be able to explain the functionality of the proposed combination, right?

ATTORNEY HUH: Objection.

A. I think I just did explain the functionality of the combination.

POR, 41-42; Ex. 2010 (Dep. Trans. Lippman), 152:21-154:2.

Kim, WD-Manual, and Bae – Limitation 1.2

Petitioner's theory: In deposition, Petitioner's expert's best answer was that the proposed combination of Kim and Bae would be an "admixture" of the two references:

- **Assertion that the proposed combination of Kim and Bae is an "admixture" of the two references is inadequate. Ex 2010, 153:22-23 ("What I propose is the admixture of those two technologies"), 155:9-11 ("Again, I'm not proposing a graphic design, I'm proposing an admixture of the two technologies").**
- **Petitioner's expert is unable to explain (1) what the combination is and (2) how the combination works to meet limitation 1.2.**

POR, 42, Sur-reply, 17-18.

Kim, WD-Manual, and Bae – Limitation 1.2

Petitioner's response on Reply sheds no light:

- **Bae's number input bar (channel number selection window 330) would be "added" to be "within" Kim's home screen/card object area. See Reply, 12-13, 15.**
- **Combination would not work because Kim requires channel display window 310 (displays inputted digits) in addition to channel number selection window 330.**
- **Proposed combination is deficient because it includes channel number selection window 330 but not channel display window 310. See Reply, 13, 15.**
- **Proposed combination is not an operable embodiment.**

Sur-reply, 16.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.2

No motivation to modify Kim according to Bae:

- Disclosure in Kim of remote control without keypad does not provide motivation to add Bae's number input bar.
 - Kim already uses remote control without keypad to select thumbnails in Channel Browser or program listings in TV Guide to change channels without inputting channel digits.
- Design concept of Kim is providing user interface (Figs. 19, 22) enabling user to change channels by selecting graphical objects (e.g., object in Channel Browser or TV Guide) without having to select/input channel numbers. Kim, Fig. 13 (remote control without channel numbers), Fig. 19, Fig. 22.
- Proposed combination to include number input selection in modified Kim/Bae is counter to design principle of Kim. See Surati Dec., ¶¶ 161-162.

Sur-reply 18-19.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.2

No motivation to modify Kim according to Bae:

- No need to add Bae because Kim allegedly does not allow a user to “directly change to a specific channel.” Reply, 13.
- No dispute that Kim is implemented as a set-top-box (STB), and it was well-known that users could directly change channels of STBs. See Kim, Fig. 7. See Exs. 2011-2013, 2015, 2018, 2019 (STBs permit user to directly change channels). See POR, 45.
- A POSITA would thus understand that Kim’s user *could* directly change to a specific channel.
- Proposed combination to include number input selection in modified Kim/Bae is counter to design principle of Kim. See Surati Dec., ¶¶ 161-162.

Sur-reply, 18-19.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.2

No reasonable expectation of success:

- **Petitioner's expert cannot establish REOS because he cannot articulate what is the combination of Bae and Kim and how the combination works. POR, 48.**
- **Petitioner's expert's evidence on REOS is a conclusory single sentence. Lipman Dec., ¶ 83.**

83. A POSITA would have had a reasonable expectation of success in combining Bae's channel number input bar with Kim's on screen channel changer because such a combination predictably uses Bae's number input bar for its intended purpose of allowing a user to easily change channels on a television via a user interface, which is the desired functionality in Kim.

- **Patent Owner's expert's detailed analysis and evidence on REOS (Surati Dec., ¶¶ 160-164) should be credited over Petitioner's conclusory statement.**

Sur-reply, 19.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.2

Kim, WD-Manual, and Bae fail to teach Limitation 1.5.2:

A remote control including “an application center button that . . . displays information regarding pre-installed and downloaded software applications”

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.2

Claim construction:

“Pre-installed . . . software applications” means applications that [1] are pre-installed that [2] cannot be removed by a user, and [3] cannot be manually updated by a user.

The application center button 740, when selected, may provide information regarding pre-installed and downloaded applications. Unlike downloaded applications, pre-installed applications cannot be removed by the user or manually updated. Exemplary pre-installed applications include web browser, settings control, and content search algorithms. By way of illustration, the application center button 740 can provide a scrollable graphical grid of icons (each icon being associated with an application) currently available in the application center.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.2

Petitioner's argument: Shotgun. Claimed “*application center button . . . display[ing] information regarding pre-installed and downloaded software applications*” met by one of:

1. Reply proposes combinations of disparate embodiments/passages from Kim
2. WD-Manual Services menu displaying “Internet Services”
3. Kim’s “List of Applications” of Figure 6
4. Kim’s “Application Menu” of Figure 34
5. Kim’s “Application List View Menu” of Figure 16
6. Kim’s Application Layer 550 software architecture of Figure 12

POR, 49-50.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.2

Petitioner's argument on Reply: Proposed combinations of disparate passages/embodiments from Kim: Figs. 6 and 11-12. See Reply, 22-23.

- **Par. [0099] (Fig. 6) of refers to the display of a “list of applications that are available in the image display apparatus or downloadable from an external network.”** Kim, [0099], Fig. 6.
- **Does not teach the display of “*pre-installed*” software applications that are (1) pre-installed, (2) not removable, and (3) not manually updatable.** Sur-reply, 20.
- **Petitioner tries to couple Fig. 6/[0099] (TV system diagram) with Figs. 11-12/[0158] (software architecture) re “user-undeletable applications.” But Figs. 11-12/[0099] do not teach display of user-undeletable apps to user per 1.5.2.**

Sur-reply, 20-21.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.2

Proposed combinations of disparate passages/embodiments from Kim: Figs. 6 and 11-12 (cont'd):

- **Petitioner makes no argument for modifying Fig. 6/[0099] “List of Applications” to include user-undeletable apps per Figs. 11-12/[0158], let alone establish MtC and REOS. Reply, 22-23.**
- **Even if combined, fails to teach display of a pre-installed application (installed before user received device), let alone a pre-installed application that is not manually updatable by user.**

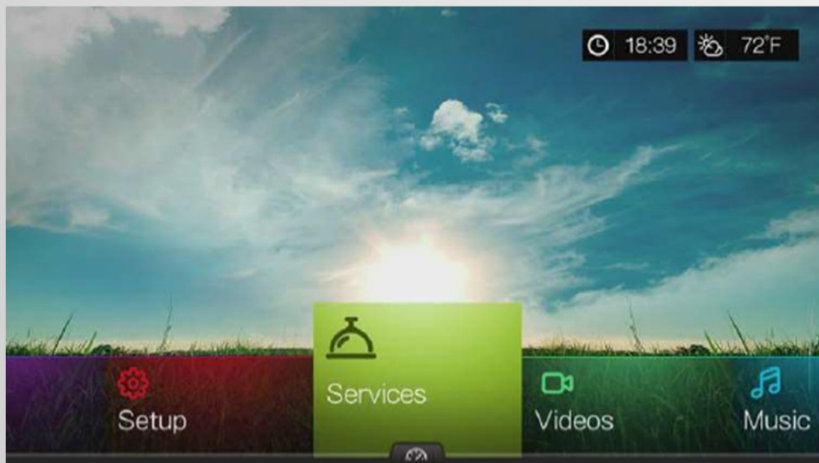
Sur-reply, 20-21.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.2

WD-Manual Services Menu Displaying “Internet Services”

While viewing Home Screen, select Services to navigate to “Internet Services Display”

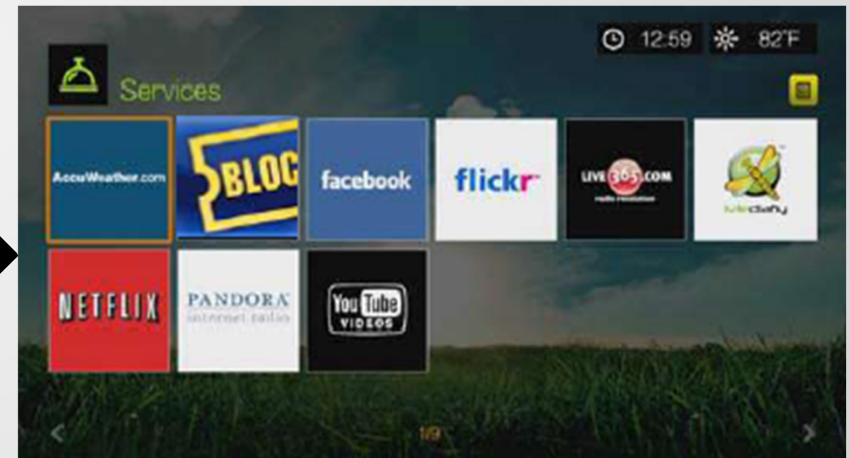
Home Screen



“OK”



Internet Services



POR, 49-50; WD-Manual, 76-77.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.2

WD-Manual Internet Services menu

- Reply concedes that Internet Services display does not teach claimed “*preinstalled and downloaded software applications*” of 1.5.2:

First, Multimedia mischaracterizes the Petition. The Petition does not rely on WD-Manual for teaching services that are either pre-installed or downloaded software applications. As discussed above, Kim provides this teaching.

Reply, 25.

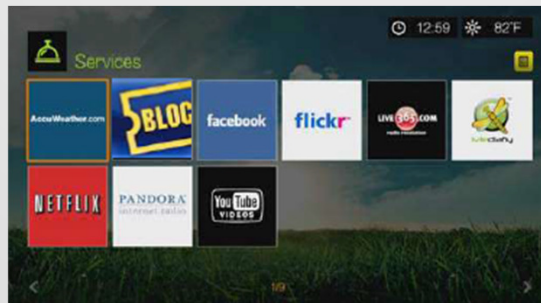
- Reply then does an about-face, asserting the claimed display of pre-installed/downloaded applications is met by Internet Services display.
 - Improper new theory not in Petition first presented on Reply should be disregarded.

Sur-reply, 22-23.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.2

WD-Manual Internet Services menu

- A POSITA would understand a “list of Internet services” does not teach “*pre-installed software applications*” or “*downloaded software applications*.”
- PO’s expert Dr. Surati explains POSITA would understand thumbnails as URLs to connect device browser to websites for Facebook, YouTube, etc. See Surati Decl., ¶¶ 188-194, 196.
- Pet’s expert Dr. Lippman’s conclusory assertion that “‘Services’ (e.g., Netflix, Facebook, Flickr, Pandora) are software applications” without reasoning or evidence should be given no weight. See Lippman Decl., ¶ 194.

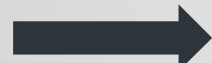


POR, 51; Sur-reply, 22-23.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.2

WD-Manual Internet Services menu

- Chapter 13 of WD-Manual for “Setup and Advanced Features” does not refer to downloaded software apps. WD-Manual, 127-143.
- Index refers to Netflix, Facebook, and Flickr services—but makes no reference to downloading software apps. WD-Manual, 160-164.

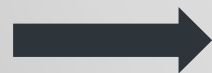
 Internet Services does not meet 1.5.2 because it does not display “*downloaded software applications*” or “*pre-installed [software applications]*.”

POR, 51-52.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.2

Figure 6 “List of Applications” in Kim

- Petitioner’s back-up argument for WD-Manual Internet Services display.
- Kim, [0099]: “Controller 170 may control display of applications or a list of applications that are available in the image display apparatus or downloadable from an external network.”
- Does not teach claimed “*pre-installed applications*” that are [1] pre-installed, [2] not removable by user, and [3] not manually updatable by user.
- Also does not teach “*application center button*” on remote control selectable to cause display per limitation 1.5.2.

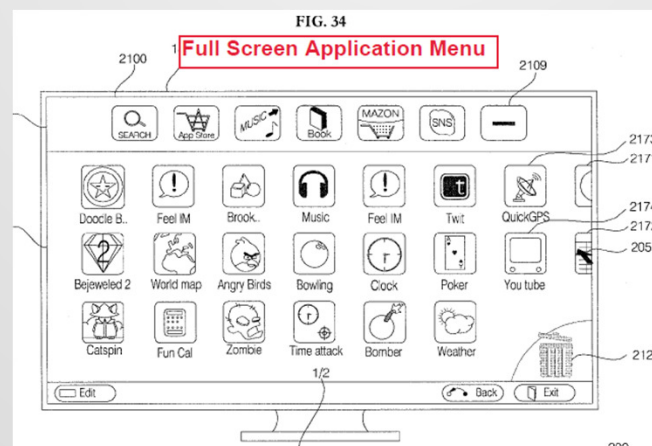
 Fig. 6 does not meet limitation 1.5.2 for “*application center button*” causing display of “*pre-installed and downloaded software applications*.”

POR, 53.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.2

Figure 34 “Full Screen Application Menu” in Kim

- Fig. 34 provides Full-Screen Application Menu 2150 in response to user selecting “+” 1309 in Fig. 19 Home Screen. Kim, [0257].
- Does not teach claimed “*pre-installed applications*” that are [1] pre-installed, [2] not removable by user, and [3] not manually updatable by user.
- Also does not teach “*application center button*” on remote control selectable to cause display per limitation 1.5.2. Instead, user selects “+” software button 1309 on Home Screen.

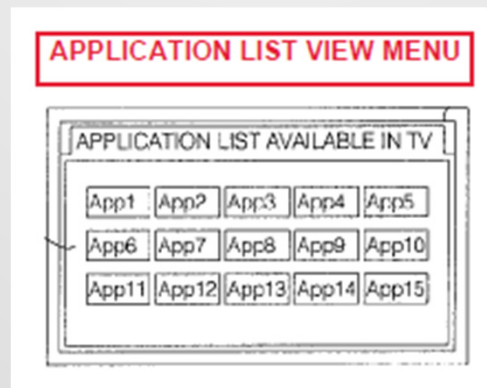


POR, 53, Kim, Fig. 34.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.2

Figure 16 “Application List View Menu” in Kim

- Fig. 16 provides “application list view menu” with “list of applications 660 stored in the image display apparatus” with “icons representing both applications available over the network as well as applications available locally.” Kim, [0184]-[0185].
- Does not teach “*pre-installed applications*” that are [1] pre-installed, [2] not removable by user, and [3] not manually updatable by user.
- Also does not teach “*application center button*” on remote control selectable to cause display per limitation 1.5.2. Kim, [0184].

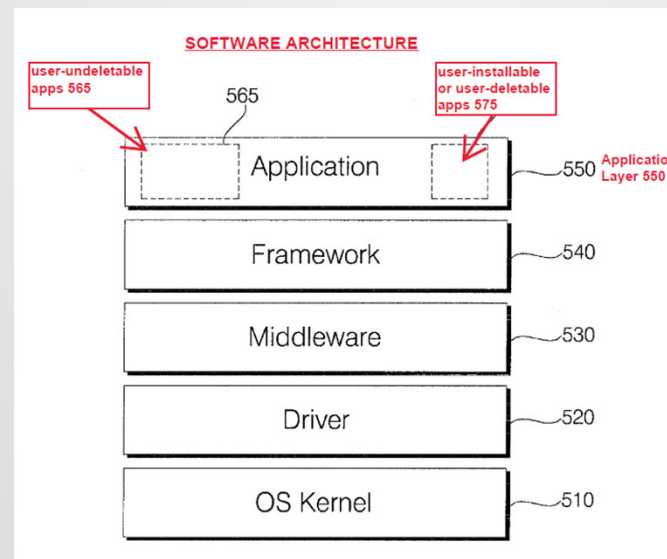


POR, 54-55; Kim, Fig. 16.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.2

Figure 12 Software Architecture in Kim

- Fig. 12 depicts software stack architecture of Kim. Kim, [0184]-[0185].
- Application layer 550 includes “user-undeletable” apps and “user-deletable apps” that are downloaded. Kim, [0163].
- Does not teach “*display[]*” of applications, nor apps that are pre-installed and that cannot be manually updated, nor an “*application center button*” that causes such display.



POR, 55-57; Kim, Fig. 12.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.2

Motivation to combine Kim and WD-Manual to Meet Limitation 1.5.2:

- **Petitioner asserts limitation 1.5.2 is met by combining Kim and WD-Manual:**
 - **By reprogramming the Function key D of the WD-Manual to invoke the Services menu and combining that with various embodiments in Kim (Figs. 6, 12, 16, 34).**
- **But purported reasons to combine are generic – not tied to the reprogramming of Function Key of WD-Manual to invoke Services menu, and not tied to combining with Figs. 6, 12, 16, 34. See Pet., 18-21.**
- **Generic observation that Kim and WD-Manual both involve set-top-boxes in television systems does not provide MtC for specific proposed combinations. Pet., 19-20.**

POR, 60-61.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.3

Kim, WD-Manual, and Bae fail to teach Limitation 1.5.3:

A remote control including “an application panel button that . . . displays . . . an application panel compris[ing] an information panel regarding a selected (pre-installed or previously downloaded) application icon”

POR, 61.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.3

“application panel button . . displays . . . an information panel regarding a selected (pre-installed or previously downloaded) application icon”

- **Kim and WD-Manual fail to teach display of pre-installed software applications and downloaded software applications per 1.5.3 for same reasons as limitation 1.5.2.**

POR, 61-62.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.3

Petitioner's miscellaneous arguments:

- 1. WD-Manual Internet Services menu allegedly with iTunes/Winamp**
- 2. WD-Manual Options button to set favorites (e.g., Facebook)**
- 3. WD-Manual Flickr individual photo jpeg file (e.g., Flickr)**
- 4. Kim App Store screen of Fig. 25 for third party site for purchase and download of apps**
- 5. Kim Application List Menu of Fig. 16**

POR, 61-69.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.3

1. WD-Manual Internet Services Menu re iTunes/Winamp:

- iTunes/Winamp is downloaded to user's separate computer ("your computer"), not to WD set-top-box. WD-Manual, 15,150.



- No thumbnail on Internet Services for iTunes/Winamp. WD-Manual, 77.
- Even if iTunes/Winamp was displayed on Internet Services menu (it is not), the selection of an iTunes/Winamp thumbnail would cause iTunes/Winamp website to be accessed; would not cause display of information in an "*information panel*" about a selected application icon per 1.5.3. Surati Decl., ¶¶ 227-228.
- iTunes/Winamp does not meet limitation 1.5.3. POR, 62.

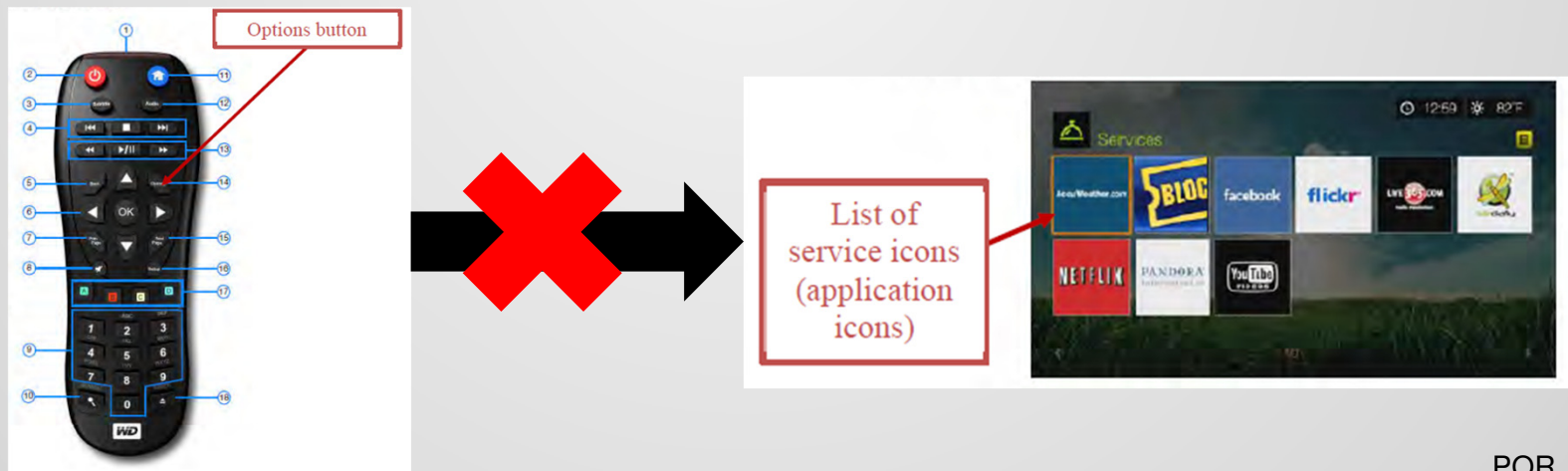
Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.3

2. WD-Manual Options button to set a favorite:

- Petitioner relies on Options button as accessing Internet Services menu of Kim. But the Options button provides access to “playback options” and “more service options,” not Internet Services menu.

See WD-Manual, 25.

- WD-Manual provides that Internet Services menu is accessed by user selecting Services graphic object on screen followed by “OK” button, not using Options button on remote control. See WD-Manual, 76-77.



POR, 63-65.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.3

2. WD-Manual Options button to set Facebook as favorite:

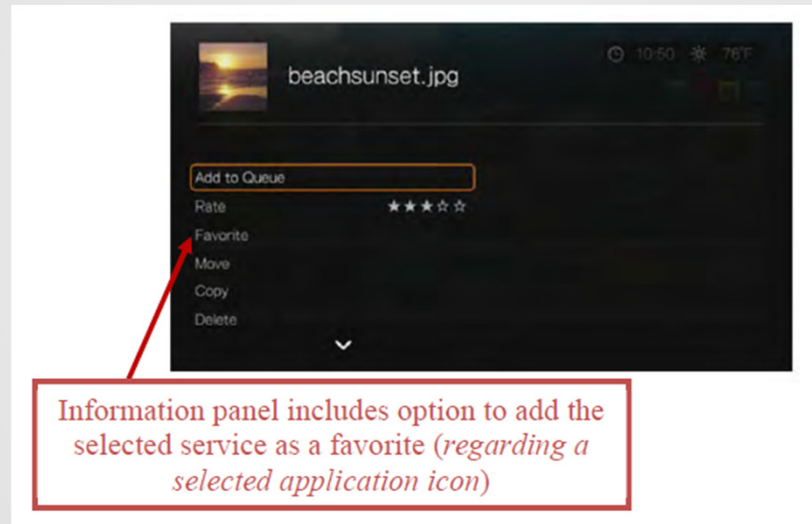
- Petitioner relies on Options button to set Facebook as favorite.
See WD-Manual, 77, 28.
- But Options button is used to make Facebook Internet service a favorite, not to “*display[] an information panel regarding a selected (pre-installed or previously downloaded) application icon.*”
- WD-Manual Options button/Facebook favorite does not meet limitation 1.5.3.

POR, 65-66; Sur-reply, 25.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.3

3. WD-Manual individual Flickr individual photo file (jpeg)

- Petitioner relies on display of photo file (jpeg) with option to designate beachsunset.jpg file as favorite. Pet., 81-82; WD-Manu

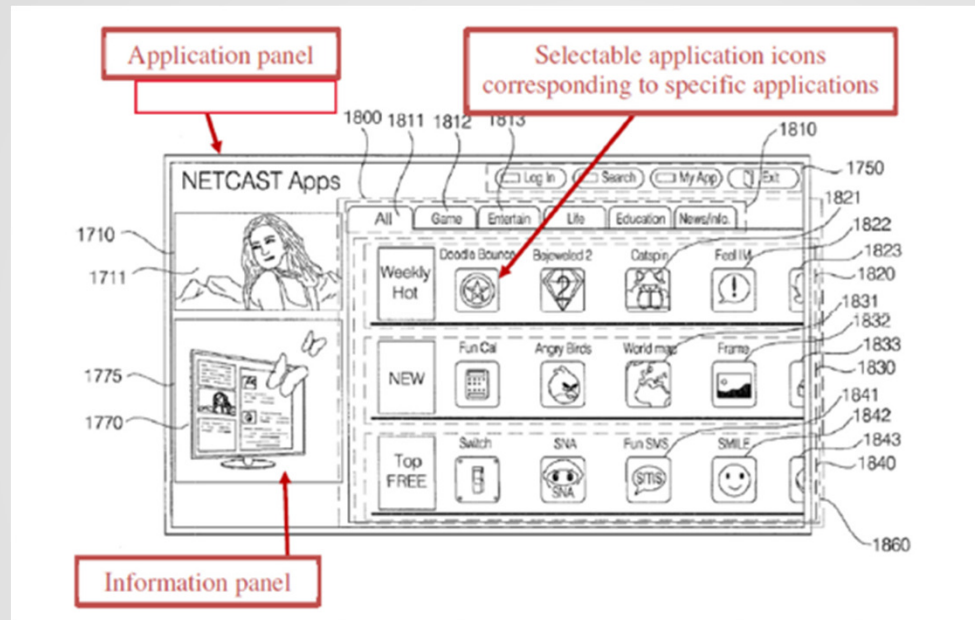


- Use of Options button allows user to set a photo file as favorite, not to display information about a selected icon for a pre-installed software application or previously downloaded software application per 1.5.3.

POR, 65-66, Sur-reply, 24-25.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.3

4. Kim's Application Store screen of Figure 25



See Pet., 86.

- But display is list of applications stored on third party website available for purchase, not pre-installed or downloaded apps stored on television apparatus per 1.5.3. Surati Decl., ¶¶ 229-234; Kim, [0202], [0234], [0238].

POR, 68-69; Sur-reply, 23-24.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.3

4. Kim's Application Store screen of Figure 25 (cont'd)

[0202] The card object 1330 may include a card object name 1332 (APP STORE) and an application list 1335. The application list 1335 may display a plurality of icons representing applications available on a server, for example, for download or purchase from the display apparatus 100. Application icons may be sorted into predetermined categories in the application list 1335. As shown in FIG. 19, applications may be sorted by popularity (HOT), by time (NEW), and/or another appropriate category group. Upon selection of an

[0238] FIG. 25 illustrates an example in which a category 1811 'ALL' with all applications is selected. The selected category 1811 may be displayed differently from other categories 1812 and 1813 in color, size, etc. One of the tabbed menus may be selected based on pre-stored settings or by a user input. For example, the category 1811 'All' may be set by default. In this case, when an app store (application market) is accessed, the application icons included in the category 'All' may be automatically sorted and displayed according to predetermined criteria, as illustrated in FIG. 25. Accordingly, when the tabbed menus are displayed, the category 'All' may

- **App Store displays applications available for purchase from third party server, not software applications stored on television apparatus per 1.5.3. Kim, [0202], [0238].**

Sur-reply, 23-24.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.3

4. Improper new argument on Reply, “Newly Added Applications”

[0236] Referring to FIG. 25, tabbed menus which may represent categories into which a plurality of applications are classified may be displayed in a first area 1800 of the display 180. The large number of available application may make identification of newly added applications difficult. Accordingly, the applications may be classified into various categories (e.g., game, news, sport, etc.) based on the type of application, as illustrated in FIG. 25, a user may search for a desired application more easily.

Reply., 32.

- No evidence from Petitioner’s expert regarding Kim’s “newly added applications.”
- POSITA would readily understand that newly added applications simply refers to new applications stored on the third party server available for download from application marketplace, not to new applications stored on television apparatus per 1.5.3.

Sur-reply, 24.

Ground 1: Kim, WD-Manual, and Bae – Limitation 1.5.3

5. Kim Application List Menu of Fig. 16

- **Application List View with “list of applications [] stored in the image display apparatus [] that may include both applications available over the network as well as applications available locally.”**
Kim, [0184]-[0185].
- **Does not teach pre-installed software applications or previously downloaded software applications per limitation 1.5.3.**

Sur-reply, 24.

Ground 1: Kim, WD-Manual, Bae, and Coburn – Cl. 6

Claim 6, limitation 6.1:

“wherein, as the user selects each digit, the application framework updates the EPG information to include only those programs and/or channels selectable from the selected digits”

Sur-reply, 25-26.

Ground 1: Kim, WD-Manual, Bae, and Coburn – Cl. 6

Petitioner's theory:

- **Petitioner's theory for Claim 1 based on Kim's Home Screen with card objects of Figures 19, 22. See Pet., 23, (Fig. 22), 91-92 (Fig. 19).**
- **Petitioner's theory for dependent Claim 6 is based on Search Window of Figure 38 of Kim.**
- **Petitioner's theory for dependent Claim 6 contradicts theory for Claim 1.**

Sur-reply, 25.

Ground 1: Kim, WD-Manual, Bae, and Coburn – Cl. 6

Petitioner's theory:

- For Claim 1, “*EPG Information*” = thumbnails in Channel Browser card object 1340 and program listings in TV Guide card object 1350. See Kim, Fig. 22.

“EPG information”: As discussed above, Kim’s CHANNEL BROWSER card object has “a thumbnail list of broadcast channels 1345” (Ex.1005, [0205]) and TV GUIDE card object has a “program list” (Ex.1005, [0207]).

Pet., 37.

- Petitioner makes no showing how—or even whether—thumbnails in Channel Browser or program listings in TV Guide would be updated based on user entering digits per limitation 6.1.
- Petitioner fails to establish that “*EPG information*” is updated in proposed 4-way combination per 6.1.

Sur-reply, 26.

Questions

Further Questions?