UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LG ELECTRONICS, INC., LG ELECTRONICS U.S.A., INC.,
Petitioners

v.

MULTIMEDIA TECHNOLOGIES PTE. LTD.,
Patent Owner.

IPR2025-00300
Patent No. 9,578,384 B2

PETITION FOR INTER PARTES REVIEW
UNDER 35 U.S.C. § 312 AND 37 C.F.R. § 42.104

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EXHIBIT LIST

Exhibit No.	Description
Ex.1001	U.S. Patent No. 9,578,384 to Selim, *et al*.
Ex.1002	Prosecution History of U.S. Patent No. 9,578,384
Ex.1003	Declaration of Henry Houh
Ex.1004	C*urriculum vitae* of Henry Houh
Ex.1005	YouTube Video File entitled, "Connected TV: Vizio LED HDTV with VIA Apps Part 1 of 2," available at https://www.youtube.com/watch?v=MnjqA2IQHG8, posted on January 20, 2011, segmented video exhibit created for this proceeding on February 13, 2024, submitted in mpeg format ("TechnoBuffalo1") TechnoBuffalo1 – Segment 1 of 6

Exhibit No.	Description
Ex.1006	YouTube Video File entitled, "Connected TV: Vizio LED HDTV with VIA Apps Part 1 of 2," available at https://www.youtube.com/watch?v=MnjqA2IQHG8, posted on January 20, 2011, segmented video exhibit created for this proceeding on February 13, 2024, submitted in mpeg format ("TechnoBuffalo1") TechnoBuffalo1 – Segment 2 of 6
Ex.1007	YouTube Video File entitled, "Connected TV: Vizio LED HDTV with VIA Apps Part 1 of 2," available at https://www.youtube.com/watch?v=MnjqA2IQHG8, posted on January 20, 2011, segmented video exhibit created for this proceeding on February 13, 2024, submitted in mpeg format ("TechnoBuffalo1") TechnoBuffalo1 – Segment 3 of 6

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Ex.1008	YouTube Video File entitled, "Connected TV: Vizio LED HDTV with VIA Apps Part 1 of 2," available at https://www.youtube.com/watch?v=MnjqA2IQHG8, posted on January 20, 2011, segmented video exhibit created for this proceeding on February 13, 2024, submitted in mpeg format ("TechnoBuffalo1") TechnoBuffalo1 – Segment 4 of 6
Ex.1009	YouTube Video File entitled, "Connected TV: Vizio LED HDTV with VIA Apps Part 1 of 2," available at https://www.youtube.com/watch?v=MnjqA2IQHG8, posted on January 20, 2011, segmented video exhibit created for this proceeding on February 13, 2024, submitted in mpeg format ("TechnoBuffalo1") TechnoBuffalo1 – Segment 5 of 6

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Ex.1010	YouTube Video File entitled, "Connected TV: Vizio LED HDTV with VIA Apps Part 1 of 2," available at https://www.youtube.com/watch?v=MnjqA2IQHG8, posted on January 20, 2011, segmented video exhibit created for this proceeding on February 13, 2024, submitted in mpeg format ("TechnoBuffalo1") TechnoBuffalo1 – Segment 6 of 6
Ex.1011	YouTube Video File entitled, "Connected TV: Vizio LED HDTV with VIA Apps Part 2 of 2," available at https://www.youtube.com/watch?v=S9oVDVDHVBM, posted on January 19, 2011, segmented video exhibit created for this proceeding on February 13, 2024, submitted in mpeg format ("TechnoBuffalo2") TechnoBuffalo2 – Segment 1 of 7

Exhibit No.	Description
Ex.1012	YouTube Video File entitled, "Connected TV: Vizio LED HDTV with VIA Apps Part 2 of 2," available at https://www.youtube.com/watch?v=S9oVDVDHVBM, posted on January 19, 2011, segmented video exhibit created for this proceeding on February 13, 2024, submitted in mpeg format ("TechnoBuffalo2") TechnoBuffalo2 – Segment 2 of 7
Ex.1013	YouTube Video File entitled, "Connected TV: Vizio LED HDTV with VIA Apps Part 2 of 2," available at https://www.youtube.com/watch?v=S9oVDVDHVBM, posted on January 19, 2011, segmented video exhibit created for this proceeding on February 13, 2024, submitted in mpeg format ("TechnoBuffalo2") TechnoBuffalo2 – Segment 3 of 7

Exhibit No.	Description
Ex.1014	YouTube Video File entitled, "Connected TV: Vizio LED HDTV with VIA Apps Part 2 of 2," available at https://www.youtube.com/watch?v=S9oVDVDHVBM, posted on January 19, 2011, segmented video exhibit created for this proceeding on February 13, 2024, submitted in mpeg format ("TechnoBuffalo2") TechnoBuffalo2 – Segment 4 of 7
Ex.1015	YouTube Video File entitled, "Connected TV: Vizio LED HDTV with VIA Apps Part 2 of 2," available at https://www.youtube.com/watch?v=S9oVDVDHVBM, posted on January 19, 2011, segmented video exhibit created for this proceeding on February 13, 2024, submitted in mpeg format ("TechnoBuffalo2") TechnoBuffalo2 – Segment 5 of 7

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Ex.1016	YouTube Video File entitled, "Connected TV: Vizio LED HDTV with VIA Apps Part 2 of 2," available at https://www.youtube.com/watch?v=S9oVDVDHVBM, posted on January 19, 2011, segmented video exhibit created for this proceeding on February 13, 2024, submitted in mpeg format ("TechnoBuffalo2") TechnoBuffalo2 – Segment 6 of 7
Ex.1017	YouTube Video File entitled, "Connected TV: Vizio LED HDTV with VIA Apps Part 2 of 2," available at https://www.youtube.com/watch?v=S9oVDVDHVBM, posted on January 19, 2011, segmented video exhibit created for this proceeding on February 13, 2024, submitted in mpeg format ("TechnoBuffalo2") TechnoBuffalo2 – Segment 7 of 7

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Ex.1018	YouTube Video File entitled, "Apple TV Netflix Walkthrough," available at https://www.youtube.com/watch?v=rglW9JQVMjQ, posted on April 16, 2012, video exhibit created for this proceeding on February 13, 2024, submitted in mpeg format ("MissingRemote")
Ex.1019	U.S. Patent Publication No. US 2012/0054794 to Kim *et al*.
Ex.1020	U.S. Patent No. 8,365,235 to Hunt *et al*.
Ex.1021	U.S. Patent No. 7,634,793 to Hunleth *et al*.
Ex.1022	U.S. Patent Publication No. US 2012/0054679 to Ma *et al*.
Ex.1023	MMT's Infringement Contentions, Appendix E, served on July 20, 2023 by Patent Owner in the District Court matter, *Multimedia Technologies PTE Ltd., v. VIZIO Inc.*, No. 2:23-cv-00124-JRG-RSP (E.D. Tex.)
Ex.1024	*MerchSource, LLC v. DODOcase VR, Inc*., PGR2018-00019, Exhibit 1029
Ex.1025	Declaration of Noah Kravitz
Ex.1026	Declaration of Andrew Van Til
Ex.1027	Executed Summons from *Multimedia Technologies PTE, LTD v. VIZIO, Inc*., Case No. 2:23-CV-124

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Ex.1028	"The Rise of Video On Demand (VOD) Streaming," by Aura Lyu, dated April 7, 2023, available at https://www.yololiv.com/blog/the-rise-of-video-on-demand-vod-streaming/
Ex.1029	"RealAudio" topic in Britannica online, available at https://www.britannica.com/topic/RealAudio
Ex.1030	"The Story of WebTV, the Smart TV of the 90s," by Ernie Smith, published by Vice.com, dated September 16, 2016, available at https://www.vice.com/en/article/4xaqe9/why-webtvs-remote-controlled-internet-failed-to-take-off
Ex.1031	"The Consumer Electronics Hall of Fame: TIVO," by Brian Santo, published by IEEE Spectrum, dated November 7, 2019, available at https://spectrum.ieee.org/the-consumer-electronics-hall-of-fame-tivo

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Ex.1032	"MythTV Invades Realm of Cable and TiVo," by Chris Barylick, published by the Washington Post, dated March 25, 2006, available at https://www.washingtonpost.com/archive/business/2006/03/26/mythtv-invades-realm-of-cable-and-tivo/0d8393bb-6ae5-4f90-8657-e111f5fb9257/
Ex.1033	"The Wait Is Over! Windows XP Media Center Edition Ushers in New Era of Entertainment on the PC," dated October 28, 2002, available at https://news.microsoft.com/2002/10/28/the-wait-is-over-windows-xp-media-center-edition-ushers-in-new-era-of-entertainment-on-the-pc/
Ex.1034	"A History of the GUI," by Jeremy Reimer, dated May 4, 2005, published by Ars Technica, available at https://arstechnica.com/features/2005/05/gui/
Ex.1035	Webpage printout from Toastytech.com, available at http://toastytech.com/guis/win952.html

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Ex.1036	"IOS: A Visual History," by Verge Staff, dated September 16, 2013, available at https://www.theverge.com/2011/12/13/2612736/ios-history-iphone-ipad
Ex.1037	"Apple TV (1st generation)," published by Apple Wiki, available at https://apple.fandom.com/wiki/Apple_TV_(1st_generation)
Ex.1038	U.S. Patent No. 5,905,521 to Gatto *et al*.
Ex.1039	"WebTV May Not Be for Everyone, but It's a Step in the Right Direction," by Lawrence J. Magid, dated September 30, 1996, published by the LA Times, available at https://www.latimes.com/archives/la-xpm-1996-09-30-fi-49004-story.html
Ex.1040	"Holiday Buyer's Guide 2007, Part 2; HP MediaSmart TV" by Sina Mohammadi, dated November 12, 2007, published by tom's Hardware, available at https://www.tomshardware.com/reviews/holiday-buyers-guide-2007,1723-9.html

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Ex.1041	"Netflix and Vizio to stream films to high-def TVs, dated January 7, 2009, published by Reuters, available at https://www.reuters.com/article/us-netflix-vizio/netflix-and-vizio-to-stream-films-to-high-def-tvs-idUSTRE5066WV20090108
Ex.1042	"Vizio's Wireless TV Connects to the Web Through New 'Widget Stream,'" by Jose Fermoso, dated January 8, 2009, published by Wired, available at https://www.wired.com/2009/01/vizios-connects/
Ex.1043	"LG to release first HDTVs that instantly stream movies from Netflix," by Darren Murph, dated January 4, 2009, published by engadget, available at https://www.engadget.com/2009-01-05-lg-to-release-first-hdtvs-that-instantly-stream-movies-from-netf.html
Ex.1044	"How to use Netflix on your Apple TV," available at https://help.netflix.com/en/node/23887
Ex.1045	"Google TV: Everything You Need To Know," by Jay Yarow, dated May 21, 2010, published by Business Insider, available at https://www.businessinsider.com/what-is-google-tv-2010-5

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Ex.1046	"Sony Outs The First HDTV Powered By Google TV," by Matt Burns, dated October 12, 2010, published by TechCrunch, available at https://techcrunch.com/2010/10/12/sony-google-tv/
Ex.1047	"MythTV on Design," by David Shanske, published by Gadget Wisdom, dated November 3, 2009, available at https://www.gadgetwisdom.com/2009/11/03/mythtv-on-design/
Ex.1048	"Java and XSLT," by Eric M. Burke, dated 2001 (relevant excerpt from book)
Ex.1049	"The Developer's Guide to Social Programming," by Mark D. Hawker, dated 2011 (relevant excerpt from book)
Ex.1050	VIZIO's Motion to Dismiss for Improper Venue Under Rule 12(b)(3), *Multimedia Technologies PTE Ltd., v. VIZIO Inc.*, No. 2:23-cv-00124-JRG-RSP (E.D. Tex.), Dkt. 20, Public version.
Ex.1051	Multimedia Technologies' Response in Opposition to VIZIO's Motion to Dismiss for Improper Venue Under Rule 12(b)(3), *Multimedia Technologies PTE Ltd., v. VIZIO Inc.*, No. 2:23-cv-00124-JRG-RSP (E.D. Tex.), Dkt. 32, Public version.

LISTING OF CHALLENGED CLAIMS

Limitation	
[1.0]	1. A method for providing video-on-demand (VOD) in an intelligent television, the method comprising:
[1.1]	receiving, by a processor of the intelligent television, a first selection for a VOD content;
[1.2]	in response to the first selection, providing, by the processor, a master view of the VOD content, wherein the master view presents two or more collections of the VOD content organized by a characteristic of the VOD content;
[1.3]	receiving, by the processor, a second selection for a VOD content;
[1.4]	in response to the second selection, providing, by the processor, a collection view of VOD content, wherein the collection view presents two or more items of the VOD content having the characteristic;
[1.5]	receiving, by the processor, a third selection for a VOD content;

Limitation	
[1.6]	in response to the third selection, providing, by the processor, either a detail view or a digest view of VOD content, wherein the detail view presents information about a selected item of the VOD content, and wherein the digest view presents information about a set of the VOD content that are associated with a series, wherein providing either a detail view or a digest view of the VOD content comprises:
[1.7]	determining, by the processor, if the selection in the collection view is for a series or one of a movie or single show; if the selection in the collection view is for a series, providing, by the processor, the digest view; and if the selection in the collection view is for one of a movie or single show, providing, by the processor, a detail view,
[1.8]	wherein a navigation to view VOD content is an ordered set of user interfaces, and wherein the order includes a master view at a top level, a collection view at a second level, either a digest view or detail view at a third level, and a player view at a fourth and bottom level.
[2.0]	An intelligent television system comprising:

Limitation	
[2.1]	a memory operable to store video-on-demand (VOD) content; a processor in communication with the memory, the processor operable to: execute a user interface application operable to:
[2.2]	receive a first selection for a VOD content; in response to the first selection, provide a master view of the VOD content, wherein the master view presents two or more collections of the VOD content organized by a characteristic of the VOD content;
[2.3]	receive a second selection for a VOD content; in response to the second selection, provide a collection view of the VOD content, wherein the collection view presents two or more items of the VOD content having the characteristic;

Limitation	
[2.4]	receive a third selection for a VOD content; in response to the third selection, provide either a detail view or a digest view of VOD content, wherein the detail view presents information about a selected item of the VOD content, and wherein the digest view presents information about a set of the VOD content that are associated with a series; wherein providing either a detail view or a digest view of the VOD content comprises determine if the selection in the collection view is for a series or one of a movie or single show;
[2.5]	if the selection in the collection view is for a series, provide the digest view, wherein the digest view provides a listing of two or more episodes associated with the series;
[2.6]	if the selection in the collection view is for one of a movie or single show, provide a detail view;

Limitation	
[2.7]	receiving a fourth selection of an episode in the digest view; and in response to the fourth selection, providing a player to present the episode to the user; receiving a fifth selection of a user interface device to play the movie or single show; and in response to the fifth selection, providing a player to present the movie or single show to the user;
[2.8]	wherein a navigation to view VOD content is an ordered set of user interfaces, and wherein the order includes a master view at a top level, a collection view at a second level, either a digest view or detail view at a third level, and a player view at a fourth and bottom level.
[3.0]	3. The method as defined in claim 1, wherein the digest view provides a listing of two or more episodes associated with the series.
[4.0]	4. The method as defined in claim 3, further comprising: receiving a fourth selection of an episode in the digest view; and in response to the fourth selection, providing a player to present the episode to the user.

Limitation	
[5.0]	5. The method as defined in claim 4, further comprising: receiving a fifth selection of a user interface device to play the movie or single show; and in response to the fifth selection, providing a player to present the movie or single show to the user.
[6.0]	6. The method as defined in claim 1, wherein a master view includes at least two user-selectable devices to view a collection view based on one of two or more criteria.
[7.0]	7. The method as defined in claim 6, wherein the master view includes a navigation bar to select between types of content.
[8.0]	8. The method as defined in claim 7, wherein the types of content include showcase content, movies content, television series content, or variety content.
[9.0]	9. The method as defined in claim 8, wherein the master layout includes user-selectable devices for viewing a collection of content based on special topics, newest content, top watched content, recommended content, or favorites content.

Limitation	
[10.0]	10. The intelligent television system as defined in claim 2, wherein a master view includes at least two user-selectable devices to view a collection view based on one of two or more criteria, wherein the master view includes a navigation bar to select between types of content, wherein the types of content include showcase content, movies content, television series content, or variety content, and wherein the master layout includes user-selectable devices for viewing a collection of content based on special topics, newest content, top watched content, recommended content, or favorites content.
[11.0]	11. A non-transitory computer readable medium having stored thereon processor executable instructions that cause a computing system to execute a method, the instructions comprising:

Limitation	
[11.1]	instructions to receive a first selection for a video on demand (VOD) content; in response to the first selection, instructions to provide a master view of the VOD content, wherein the master view presents two or more collections of the VOD content organized by a characteristic of the VOD content;
[11.2]	instructions to receive a second selection for a VOD content; in response to the second selection, instructions to provide a collection view of VOD content, wherein the collection view presents two or more items of the VOD content having the characteristic;
[11.3]	instructions to receive a third selection for VOD content; and in response to the third selection, instructions to provide either a detail view or a digest view of VOD content, wherein the detail view presents information about a selected item of the VOD content, and wherein the digest view presents information about a set of the VOD content that are associated with a series;

Limitation	
[11.4]	wherein providing either a detail view or a digest view of the VOD content comprises; determine if the selection in the collection view is for a series or one of a movie or single show; if the selection in the collection view is for a series, provide the digest view, wherein the digest view provides a listing of two or more episodes associated with the series; if the selection in the collection view is for one of a movie or single show, provide a detail view;
[11.5]	receiving a fourth selection of an episode in the digest view; and in response to the fourth selection, providing a player to present the episode to the user; receiving a fifth selection of a user interface device to play the movie or single show; and in response to the fifth selection, providing a player to present the movie or single show to the user;
[11.6]	wherein a navigation to view VOD content is an ordered set of user interfaces, and wherein the order includes a master view at a top level, a collection view at a second level, either a digest view or detail view at a third level, and a player view at a fourth and bottom level.

Limitation	
[12.0]	12. The computer readable medium as defined in claim 11, wherein a master view includes at least two user-selectable devices to view a collection view based on one of two or more criteria, wherein the master view includes a navigation bar to select between types of content, wherein the types of content include showcase content, movies content, television series content, or variety content, and wherein the master layout includes user-selectable devices for viewing a collection of content based on special topics, newest content, top watched content, recommended content, or favorites content.

LG Electronics, Inc. and LG Electronics U.S.A. Inc., (collectively "LGE" or "Petitioners") petition for IPR of claims 1-12 ("Challenged Claims") of U.S. Patent No. 9,578,384 ("'384 Patent").[1]

I. IPR REQUIREMENTS

A. Standing

Petitioner certifies that the '385 patent is eligible for IPR and that Petitioner is not barred or estopped from requesting IPR. 37 C.F.R. § 42.104(a). A petition for *inter partes* review is not subject to the one-year statutory time bar if the petition is accompanied by a request for joinder. 35 U.S.C. § 315(b); 37 C.F.R. § 42.122(b).

B. Challenge and Relief Requested[2]

Petitioners request institution on the '384 Patent's Challenged Claims and cancellation of those claims as unpatentable under pre-AIA 35 U.S.C. § 103 as follows:[3]

Ground	Claims	Basis
1	1-12	§103 – Kim in view of the TechBuffalo Videos, MissingRemote, Hunt, and Hunleth

[1] Petitioners cite to exhibits' original numbers. Emphasis in quotes added unless otherwise indicated.

[2] For the presented combinations, Petitioners rely on the teachings and not physical incorporation of elements. *In re Mouttet*, 686 F.3d 1322, 1332 (Fed. Cir. 2012); *In re Etter*, 756 F.2d 852, 859 (Fed. Cir. 1985).

[3] The relied upon references are prior art under both pre- and post-AIA. *See* §III.A.

Ground	Claims	Basis
2	1-12	§103 – Kim in view of Ma, Hunt, and Hunleth

As explained below, these references qualify as prior art to the '384 Patent's earliest claimed priority date (August 17, 2012; "Critical Date"). Petitioners do not concede that the '384 Patent is entitled to the claimed priority.

II. THE '384 PATENT

A. Summary

The '384 Patent is directed to televisions that "provide various interfaces for providing video-on-demand (VOD)." EX-1001, Abstract. It discloses a hierarchy of user interfaces (UIs) for navigating VOD content consisting of a "top tier interface" called a "master view" that "allows the user to select a type of collection shown" and, below that, a "collection view" that displays VOD content. *Id*., 44:9-13, 45:40-42. Once VOD content is selected from the collection view, it is determined if the received selection is standalone content (*e.g*., movie) or a series to determine whether a digest view or a detail view should be provided next. *Id*., 44:58-62.

If standalone content is selected, a "detail view" is provided. *Id*., 44:63-66. If the selection is associated with a series, a "digest view" is provided. *Id.*, 44:62-63. A digest view differs from a detail view in that a digest view provides the ability to select an episode in a series. *Id*., 45:5-8.

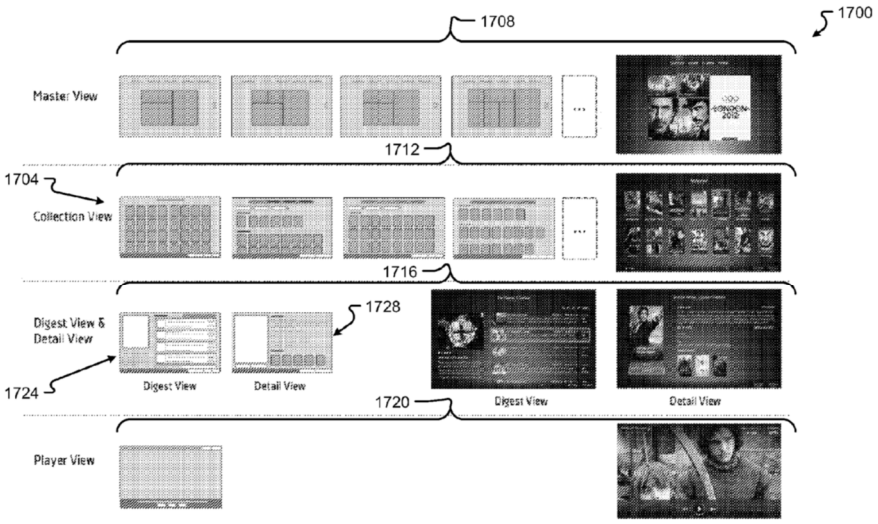


Fig. 17

EX-1001, Fig. 17.

B. Prosecution History

The '384 Patent was filed on September 8, 2015 and is, through a series of abandoned applications, a continuation of the applications leading to U.S. Patent Nos. 9,185,325 and 9,167,187. It claims priority to multiple provisional applications, the earliest dated August 17, 2012.

In the only Office Action, the Examiner rejected multiple claims, but stated claims 23-27, 30-31, and 35-36 would be allowable if written in independent form. Applicants made the suggested amendment and a Notice of Allowability issued. EX-1002, 229-230, 268, 558.

III. THE PRIOR ART

A. References Are Prior Art Under Both Pre- or Post-AIA

In the underlying litigation, Patent Owner asserts the '384 Patent is entitled to an August 17, 2012 priority date (*i.e.*, pre-AIA). EX-1023, 5. However, the '384

Patent is a continuation of a non-provisional application dated August 19, 2013 and claims priority to multiple provisional applications dated between August 17, 2012 through March 25, 2013. The MPEP states, "[i]f a patent application (1) contains or contained at any time a claim to a claimed invention having an effective filing date as defined in 35 U.S.C. 100(i) that is on or after March 16, 2013 … then AIA 35 U.S.C. 102 and 103 apply to the application, (i.e., the application is an AIA application).". MPEP 2159.02 (9th ed. Rev. 07.2022).

Regardless of whether pre- or post-AIA governs, the relied upon prior art satisfies both regimes and the patentability analysis is the same. *Unified Patents, LLC v. Dolby Lab. Licensing Corp.*, IPR2021-00275, Paper 21, 11 (PTAB June 17, 2021) ("[O]ur unpatentability analysis remains the same under either the pre- or post-AIA versions of 35 U.S.C. §§ 102 and 103.").

B. YouTube Videos Are Printed Publications

Videos can constitute printed publications in IPRs under § 311. *Medtronic, Inc. v. Barry*, 891 F.3d 1368, 1379-83 (Fed. Cir. 2018) (vacating Board's finding that a video was not sufficiently accessible to constitute a printed publication); *MerchSource, LLC v. DODOcase VR, Inc.*, PGR2018-00020, Paper 11, *18-19 (PTAB Aug. 22, 2018) (finding YouTube video to be a printed publication); *Acco Brands Corp. v. Think Prod., Inc.*, IPR2015-01167, Paper 40, *23-24 (PTAB Oct. 11, 2016) (finding Internet video a printed publication).

Further, in a prior PGR proceeding involving prior art YouTube videos, YouTube submitted a declaration in response to a subpoena attesting (1) "YouTube operates a popular website … that allows people from all over the world to post videos of their choosing and to view videos created and uploaded by other YouTube users" and "anyone with an Internet connection can view them," and (2) "[w]hen a video is uploaded to YouTube, if the uploader sets the video to public, the video may quickly become publicly available to access and view, and publicly searchable (usually within a few minutes), based on, among other things, the video's title, description and tags (keywords)." EX-1024, ¶¶2-3; *see also MAZ Encryption Techs., LLC v. Blackberry Ltd.*, 347 F. Supp. 3d 283, 293 (N.D. Tex. 2018) ("The contents of the case records … are just the type of records that the Court may take judicial notice of.").

C. Prior Art References

i. The Netflix References

a. TechnoBuffalo Videos (Netflix on VIZIO TV)

On January 19-20, 2011, TechnoBuffalo, a consumer technology website, published to the company's YouTube channel[4] a two-part review of a VIZIO

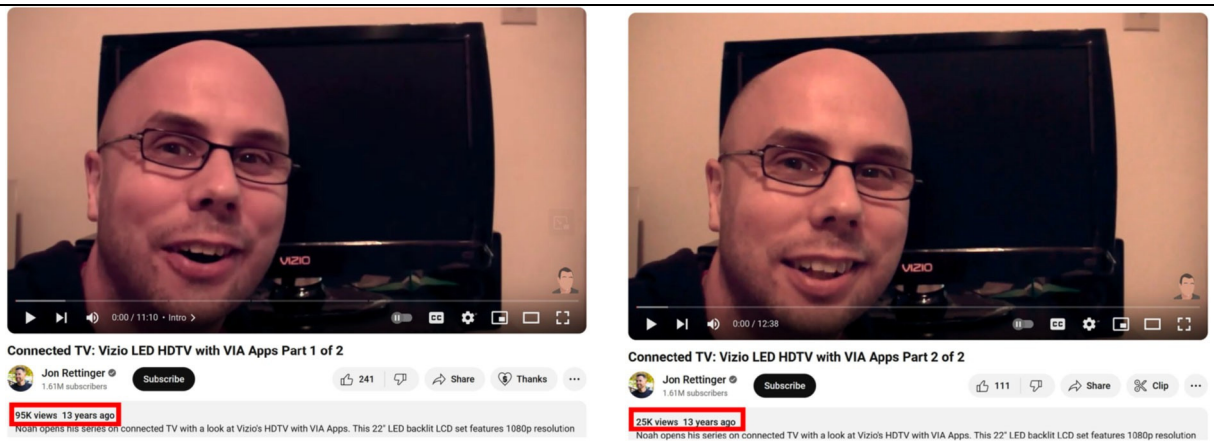
[4] The TechnoBuffalo Videos have been downloaded from YouTube and provided as EX-1005 through EX-1010 (TechnoBuffalo1) and EX-1011 through EX-1017

HDTV, under the name Jon Rettinger (owner/manager of TechnoBuffalo) at https://www.youtube.com/watch?v=MnjqA2IQHG8 ("TechnoBuffalo1") and https://www.youtube.com/watch?v=S9oVDVDHVBM ("TechnoBuffalo2") (collectively, "TechnoBuffalo" or "the TechnoBuffalo Videos"). EX-1025, ¶3. The videos were posted over two years before the '384 Patent's earliest priority date and over one year before the earliest provisional application cited. *Id*., ¶¶2-6.

The TechnoBuffalo Videos were publicly accessible as early as January 19-20, 2011, when Noah Kravitz ("Kravitz"), TechnoBuffalo's editor-at-large, created and uploaded them onto TechnoBuffalo's YouTube channel. EX-1025, ¶¶3-6. Anyone viewing YouTube could search, find, and/or play the videos, which have been available for viewing on YouTube since January 2011. *Id*., ¶¶7, 9. No restrictions were placed on accessing the videos and, as of February 12, 2012, TechnoBuffalo1 had over 95,360 views and TechnoBuffalo2 had over 25,042 views. EX-1014, ¶¶10-11.[5]

(TechnoBuffalo2). Due to upload size limitations, the videos were broken down into two-minute segments for submission.

[5] Kravitz has personal knowledge regarding TechnoBuffalo and provided an authenticating declaration. EX-1025. The videos are also subject to judicial notice. Fed. R. Evid. 201(b); *Ensor v. Jenkins*, No. CV ELH-20-1266, 2022 WL 703920,

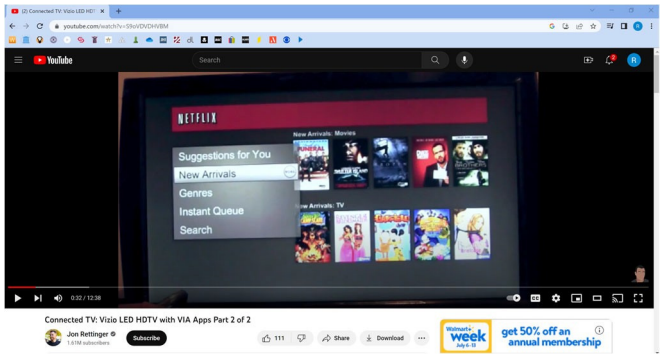


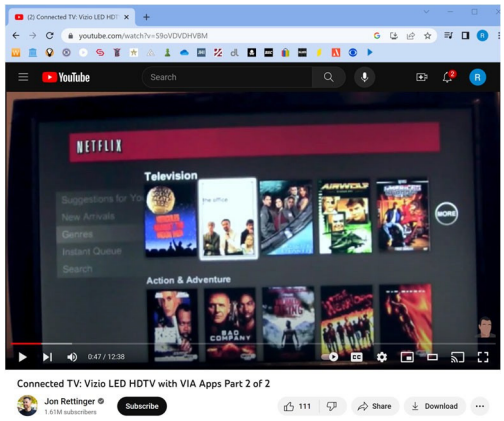
EX-1005 (annotated); EX-1011 (annotated).

The TechnoBuffalo Videos are prior art under pre-AIA 35 U.S.C. §§ 102(a), 102(b), and/or AIA 35 U.S.C. § 102(a).

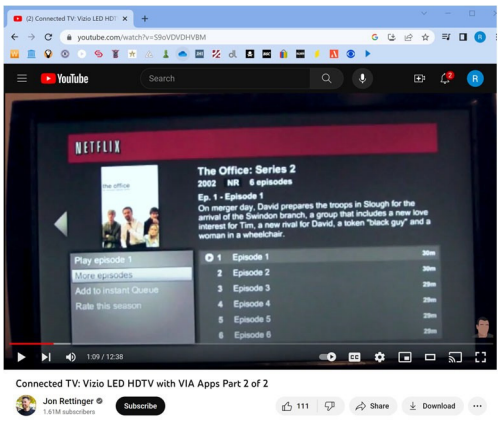
TechnoBuffalo reviews a VIZIO television and provides a demonstration of Netflix's UIs. EX-1003, ¶72. The demonstration shows Netflix's hierarchical UIs used to navigate VOD content. *Id*.

*5 (D. Md. Mar. 8, 2022) ("The Court may take judicial notice of the video's publication on YouTube. *See* Fed. R. Civ. P. 201."); *MACOM Tech. Sols. Inc. v. Litrinium, Inc.*, No. SACV19220JVSJDEX, 2019 WL 4282906, *1 (C.D. Cal. June 3, 2019); 37 C.F.R. § 42.62(a).





EX-1011, 0:32; *id.*, 0:47.





EX-1011, 1:09; *id.*, 1:51.

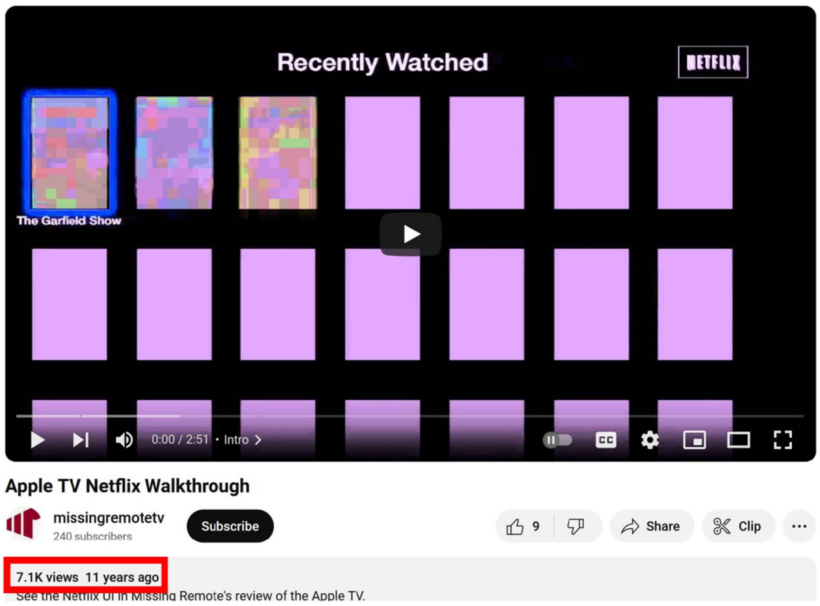
b. MissingRemote Video (Netflix on Apple TV)

Since 2009, Andrew Van Til ("Van Til") has created content for https://www.missingremote.com/, which provides technical reviews of products. He also posted technical reviews on the missingremotetv channel on YouTube. EX-1026, ¶2.

On April 5, 2012, Van Til created a video, which he posted to YouTube on April 16, 2012, entitled "Apple TV Netflix Walkthrough" at https://www.youtube.com/watch?v=rglW9JQVMjQ ("MissingRemote"). *Id.*, ¶¶3-

5. MissingRemote was posted over one year before the '384 Patent's earliest priority date and four months before the earliest provisional application cited. *Id.*, ¶¶3-5.

MissingRemote was publicly accessible as of April 16, 2012, when Van Til created and uploaded it to YouTube. *Id.*, ¶¶2-6. Anyone viewing YouTube could search, find, and/or play the video. *Id.*, ¶¶4, 7. On February 9, 2024, the video had over 7,172 views. EX-1015, ¶7.[6]

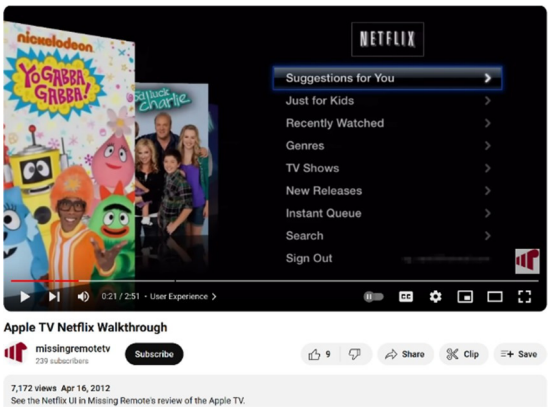


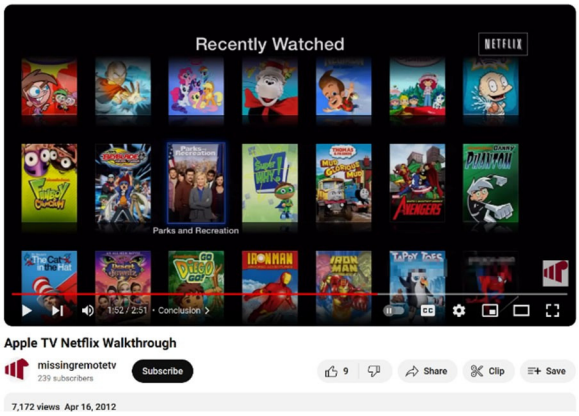
EX-1018 (annotated).

[6] Van Til has personal knowledge regarding MissingRemote and provided an authenticating declaration. EX-1026. The video is also subject to judicial notice. *Ensor,* 2022 WL 703920, *5; *MACOM*, 2019 WL 4282906, *1; 37 C.F.R. § 42.62(a).

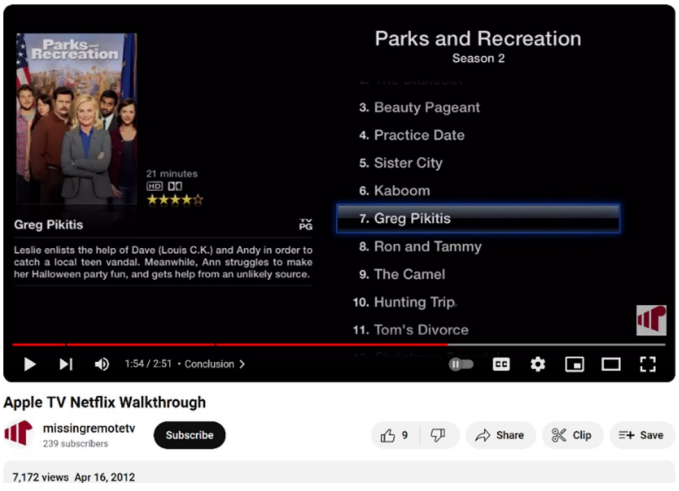
MissingRemote is prior art under pre-AIA 35 U.S.C. §§ 102(a), 102(b), and/or AIA 35 U.S.C. § 102(a).

MissingRemote provides another demonstration of Netflix's hierarchical UIs on an Apple TV device. The visual design of the UIs on an Apple TV device were slightly different from a VIZIO TV (*see* TechnoBuffalo), but the major elements relevant to this IPR were materially similar.





EX-1018, 0:21; *id.*, 1:51.



EX-1018, 1:54.

c. Hunt (Netflix Patent)

U.S. Patent 8,365,235 to Hunt *et al*. ("Hunt") was filed on September 5, 2008 and published on June 18, 2009. EX-1020. Hunt is prior art under pre-AIA 35 U.S.C. §§ 102(a), 102(b), and/or AIA 35 U.S.C. § 102(a).

Hunt is a Netflix patent. EX-1020 (Assignee: Netflix, Inc.); *id*., 7:35-37 ("In an embodiment, the media selection service 108 is the Netflix® service commercially available from Netflix, Inc., Los Gatos, Calif."). Hunt provides additional details about Netflix's VOD delivery platform and related UIs that complement TechnoBuffalo and MissingRemote. EX-1003, ¶81.

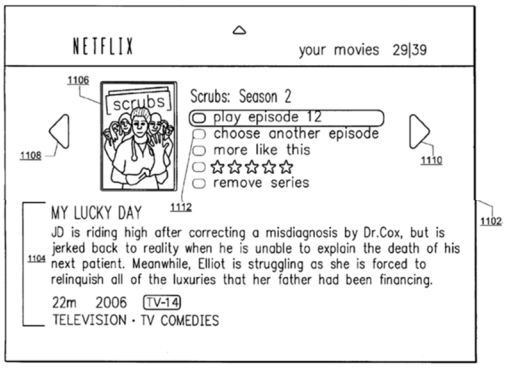


FIG. 11

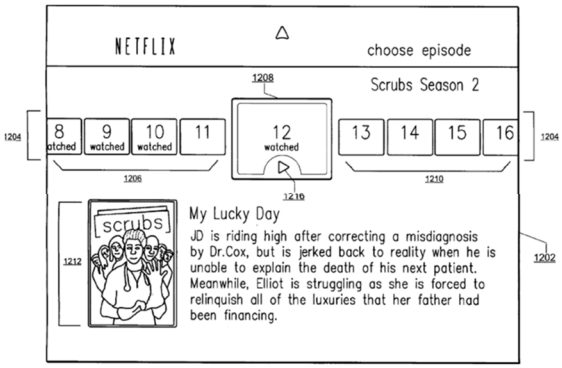


FIG. 12

EX-1020, Figs. 11, 12.

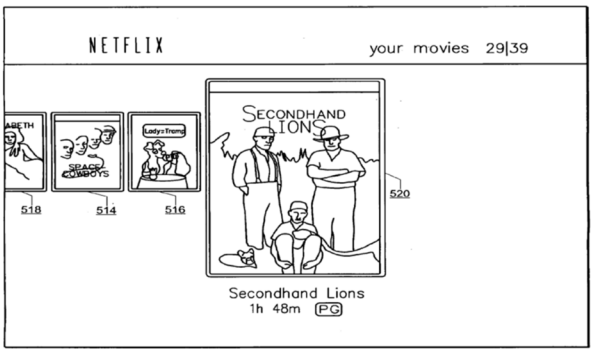


FIG. 7

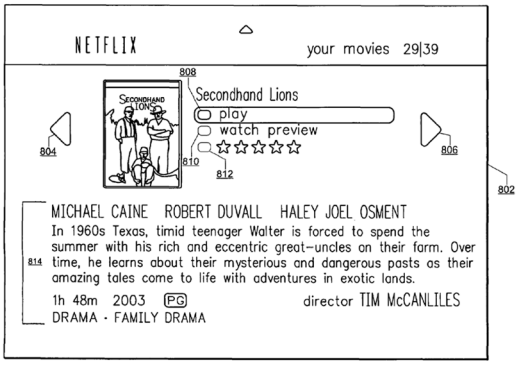


FIG. 8

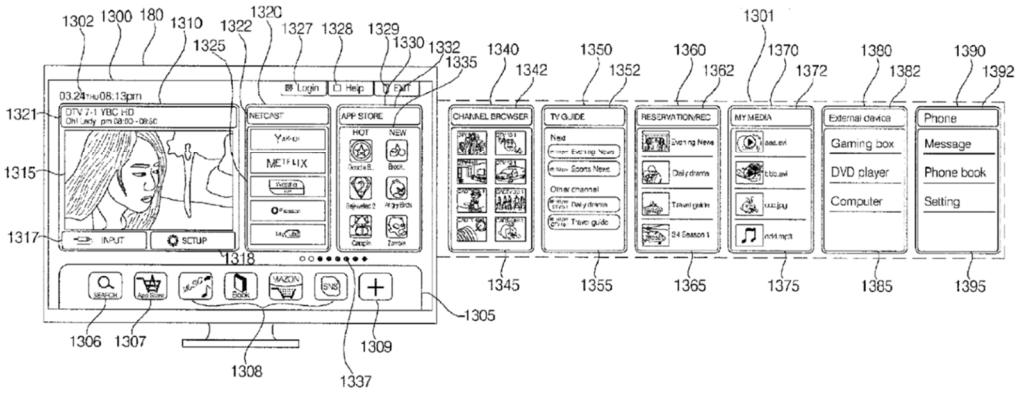
EX-1020, Figs. 7 and 8.

ii. Kim

U.S. Patent Publication No. 2012/0054794 to Kim *et al*. ("Kim"), was filed on March 9, 2011, claims priority to Provisional Application No. 61/379,369, filed on September 1, 2010, and published on March 1, 2012. EX-1019. Kim is prior art under pre-AIA 35 U.S.C. §§ 102(a), 102(e), and/or AIA 35 U.S.C. § 102(a).

Kim discloses methods for controlling an "image display apparatus 100," such as "a smart TV," to display content to a user. EX-1019, [0037]-[0038], Abstract. Kim's TV home screen displays card objects arranged according to content sources. *Id*., [0060], [0137], [0192]-[0217]; EX-1003, ¶85.

FIG. 19



EX-1019, Fig. 19.

The selectable content sources include various content providers ("CPs") such as "Metflix" (*i.e*., "Netflix"). EX-1019, [0195], [0201]; Figs. 38-41 (identifying Netflix); EX-1003, ¶86. Kim teaches that "many other CPs may be listed in the CP list 1325." EX-1019, [0201].

Kim teaches an intelligent television including multiple features, wherein the Netflix application can be implemented by the TV as shown and/or described in TechnoBuffalo, MissingRemote, and Hunt. EX-1003, ¶87.

iii. Hunleth

U.S. Patent 7,634,793 to Hunleth *et al*. ("Hunleth") was filed June 3, 2005 and issued December 15, 2009. EX-1010. Hunleth is prior art under pre-AIA 35 U.S.C. §§ 102(a), 102(b), and/or AIA 35 U.S.C. § 102(a).

Hunleth is directed to "systems and methods for processing and transferring multimedia data between nodes in a communication system, *e.g*., an interactive television system, usable to create, for example, sophisticated entertainment user interfaces in the home." EX-1021, 1:15-19. An exemplar UI taught by Hunleth is below.

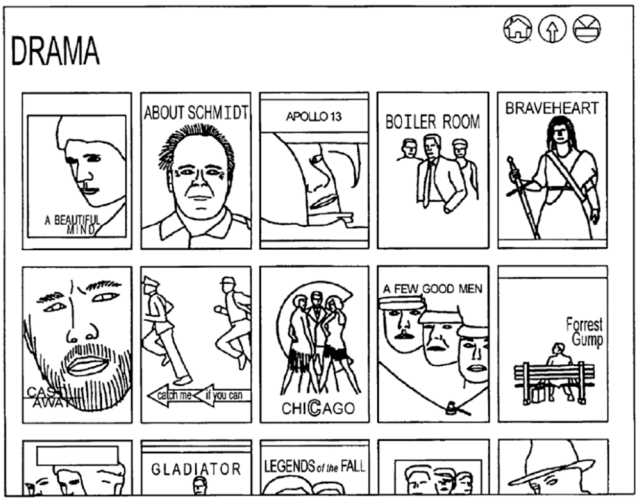


FIG. 1A

EX-1021, Fig. 1A.

Once a selection is made from the UI (*e.g.*, for "Apollo 13"), the following view is generated.

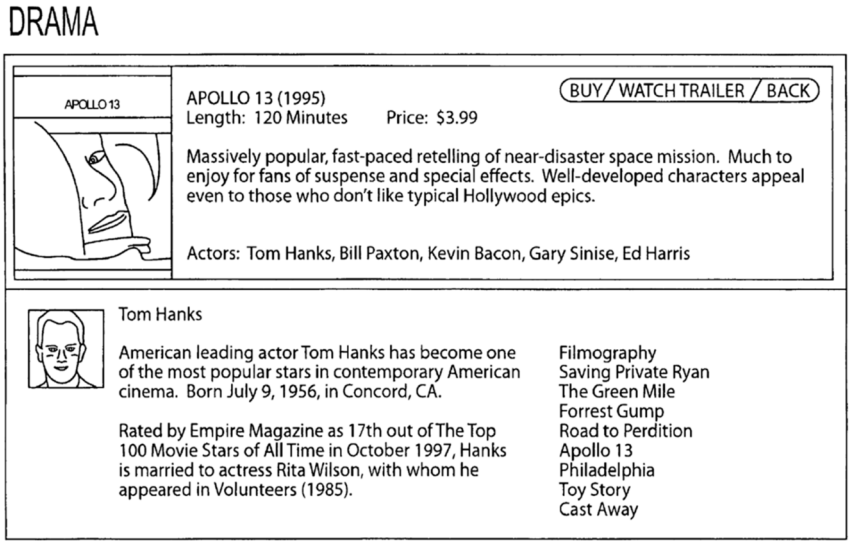


FIG. 2

EX-1021, Fig. 2.

Hunleth also teaches methods using metadata to generate UI screens. *Id.*, 4:45-48; 5:2-17; EX-1003, ¶92.

iv. Ma

U.S. Patent Publication No. 2012/0054679 to Ma *et al.* ("Ma"), filed on May 16, 2011, claims priority to Provisional No. 61/378,883, filed on August 31, 2010, and published on March 1, 2012. EX-1022. Ma is prior art under pre-AIA 35 U.S.C. §§ 102(a), 102(e), and/or AIA 35 U.S.C. § 102(a).

Ma is directed to a "menuing structure" for presenting items of media content on a media device. EX-1022, [002]. Ma teaches that devices (e.g., Apple TVs) are configurable to present VOD content via a "menuing structure that

facilities the navigation and selection of media item choices." *Id*., [0021]. Ma teaches using different regions for displaying items of media categories and sub-category regions and menu options. *Id.*, [0021].

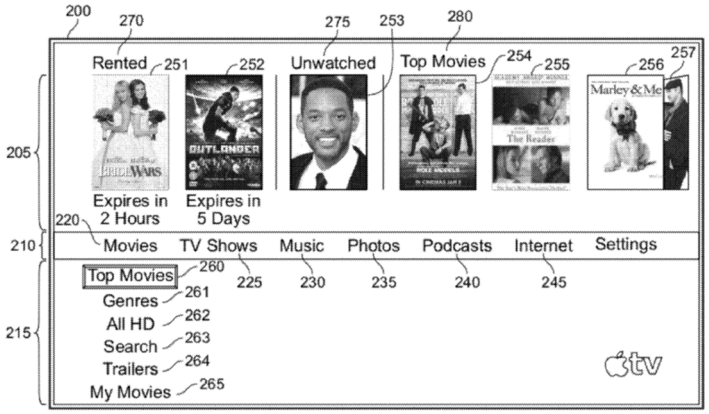


FIG. 2

Id., Fig. 2.

IV. LEVEL OF ORDINARY SKILL IN THE ART

A person of ordinary skill in the art ("POSITA") in August of 2012 would have been knowledgeable and familiar with UIs in consumer products that are pertinent to the '384 Patent. A POSITA would have had a bachelor's degree in Electrical, Software, or Computer Engineering, or equivalent training, and approximately two years of experience working in the field of television and/or digital video systems, human-computer interaction, or related technologies. Lack of professional experience can be remedied by additional education, and vice versa. EX-1003, ¶21.

V. CLAIM CONSTRUCTION

No claim terms require express construction. *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017).

The '384 Patent self-defines "intelligent TV" as "a television configured to provide one or more intuitive UIs and interactions based on a unique application platform and architecture." EX-1001, 17:65-18:1. Further, "computer-readable medium" "refers to any tangible storage and/or transmission medium that participate in providing instructions to a processor for execution." *Id.*, 15:42-45.

VI. THE CHALLENGED CLAIMS ARE UNPATENTABLE

A. Ground 1: Claims 1-12 Are Obvious Under 35 U.S.C. § 103(a) Over Kim in View of TechnoBuffalo, MissingRemote, Hunt, and Hunleth

i. Reasons to Combine Kim, TechnoBuffalo, MissingRemote, Hunt, and Hunleth

A POSITA would have found it obvious to combine TechnoBuffalo, MissingRemote, and Hunt ("the Netflix references"). EX-1003, ¶103.[7]

[7] Patent Owner's infringement contentions rely on Netflix in the related litigation. EX-1023. Because Netflix existed before August 2012, the well-established truism applies: "That which infringes if later anticipates if earlier." *Polaroid Corp. v. Eastman Kodak Co.,* 789 F.2d 1556, 1573 (Fed. Cir. 1986) (citing *Peters v. Active Mfg. Co.,* 129 U.S. 530, 537 (1889)).

The TechnoBuffalo and MissingRemote videos demonstrate the operation and UIs of Netflix, thereby providing a POSITA with an express motivation to combine the teachings as a single, comprehensive documentation describing the various functions and features of Netflix. For example, TechnoBuffalo shows the launch and execution of Netflix installed on a TV. EX-1010; EX-1011. TechnoBuffalo2 shows movies such as "Bad Company" in a collection view and shows a digest view of "The Office." EX-1011, 0:43, 1:11. MissingRemote shows a similar digest view of a TV series and movies like "War Horse" in a collection view using Netflix. EX-1018, 0:09, 2:10. While slight differences exist between the UIs in TechnoBuffalo2 and MissingRemote, a POSITA would have understood that menu designs from the Apple TV device could have been used on the VIZIO TV for the same platform (Netflix) as a known design alternative. EX-1003, ¶104. A POSITA would have been able to successfully implement those design changes, just as Netflix did before the Critical Date. *Id*. Hunt is a Netflix patent that provides details on the operation of Netflix's platform. *Id*., ¶105.

Together, these references detail various aspects of Netflix, including Netflix's prior art UIs, and provide an explicit motivation to combine. *Cimline, Inc. v. Crafco, Inc*., 413 F. App'x 240, 245 (Fed. Cir. 2011); *Samsung Elec. Co. Ltd. v. Memoryweb*, *LLC*, PGR2022-00034, Paper 11, 46-50 (PTAB Nov. 17,

2022) (granting institution and finding sufficient motivation to combine references that describe the operation of the same product and for making design choices).

A motivation to combine may also be found based on the "background knowledge, creativity, and common sense of [a] person of ordinary skill." *Cimline Inc*., 413 F. App'x 240, 245. Netflix UIs were well-known, in public use, and within a POSITA's background knowledge. EX-1003, ¶107. Thus, combining the teachings from the Netflix references would involve (1) combining prior art elements according to known methods to yield predictable results, (2) a simple substitution of known elements to obtain predictable results, (3) use of known techniques to improve similar products (Netflix) in the same way; and (4) substitutions that would have been obvious "obvious to try" for Netflix involving a finite number of identified, predictable solutions, with a reasonable expectation of success. *Id*.; *see also id*., ¶¶54-63.

A POSITA would have also found it obvious to combine the teachings of the TechnoBuffalo Videos, MissingRemote, Hunt, and Hunleth with Kim to obtain beneficial and predictable results. EX-1003, ¶108.

Kim discloses an intelligent TVs's home screen including CP applications. EX-1019, [0201]. CPs provide VOD for real-time streaming. *Id*., [0063], [0159]. An exemplar CP is "Metflix" (i.e., Netflix). EX-1019, [0201], Fig. 19, Figs. 38-41. Thus, Kim provides a POSITA with an express motivation to combine the

teachings relating to Netflix—in TechnoBuffalo, MissingRemote, Hunt—with Kim's teachings. EX-1003, ¶109.

Similar to Hunt, Hunleth discloses user selections of movies in a collection view resulting in a detail view display. EX-1021, 4:45-51; Fig. 1B, Fig. 2. Hunleth provides further details about how the client device uses the selected content's metadata to generate UIs. *Id*., 5:2-17; EX-1003, ¶110. A POSITA would have been motivated to combine Hunleth's teachings regarding metadata use and management to generate and display UIs with the other teachings from TechnoBuffalo, MissingRemote, Hunt, and Kim to: (1) ensure that UIs are accurately generated, (2) enable sufficient data to be supplied to render rich UIs, (3) provide UIs in a manner that is sensitive to time delays; and (4) provide UIs that resolve conflicting parameters and enable advanced UIs to be generated. EX-1021, 2:63-3:3; EX-1003, ¶111.

TechnoBuffalo, MissingRemote, Hunt, and Hunleth are natural extensions of Kim and complement Kim by disclosing additional details about UI design and generation, including using metadata to generate UIs. EX-1003, ¶112. It would have been obvious to a POSITA to implement the UIs and other teachings from TechnoBuffalo, MissingRemote, Hunt, and Hunleth on Kim's apparatus once Netflix is selected. *Id*.

A POSITA would have been motivated to combine the teachings of Kim with TechnoBuffalo, MissingRemote, Hunt, and Hunleth because those references consider analogous methods (*e.g.*, providing UIs including selectable menu items), are in the same field (*e.g.*, use of display apparatuses for providing content from CPs), and the underlying technologies are directed toward solving the same problem (*e.g.*, increasing user convenience and overall UI effectiveness by providing more intuitive UIs). EX-1019, [0282]; EX-1021, 2:64-66; EX-1003, ¶113.

The combination of TechnoBuffalo, MissingRemote, Hunt, and Hunleth with Kim merely combines prior art elements (*e.g.*, smart TVs, processors, non-transitory computer readable medium having stored thereon processor executable instructions, GUIs, metadata) according to known methods (*e.g.*, generating and presenting GUIs using metadata for VOD content from CPs such as Netflix) to yield predictable results (*e.g.*, providing users with an ordered UI to select and watch movies and TV shows, just as Netflix was doing on televisions before the Critical Date). EX-1003, ¶114.

The combination is a simple substitution of one known element (*e.g.*, methods for using metadata and presenting GUIs) for another (*e.g.*, adding a CP to Kim's list of CPs) to obtain predictable results (*e.g.*, using metadata and presenting GUIs for VOD from content providers such as Netflix). EX-1003, ¶115.

The combination is nothing more than applying a known technique (*e.g.*, use of metadata and hierarchical GUIs) to improve the similar system of Kim, wherein Kim specifically envisions Netflix being used on its TV. EX-1019, [0201], Figs. 19, 42; EX-1003, ¶116.

Kim includes teachings and suggestions (*e.g.*, references to Netflix, metadata manager 712) that would have led a POSITA to modify Kim's TV to include teachings from TechnoBuffalo, MissingRemote, Hunt, and Hunleth to arrive at the claimed invention. EX-1019, [0201], [0053], Figs. 19, 42; EX-1003, ¶117.

The results would have been predictable and there would have been a reasonable expectation of success in the combination because Kim teaches and/or suggests the use of Netflix, the TechnoBuffalo and MissingRemote videos provide live demonstrations of Netflix on intelligent televisions (so the combination was actually successful), Hunt provides further details relating to Netflix, and Hunleth teaches well-known methods of using metadata to generate UIs. EX-1003, ¶¶54-63, 118. A POSITA would have been able to successfully implement the combination as demonstrated by the prior art and background knowledge of a POSITA, including knowledge of the state of GUIs (including those of streaming platforms such as Netflix) and smart TVs at the Critical Date. EX-1003, ¶¶30-63, 119.

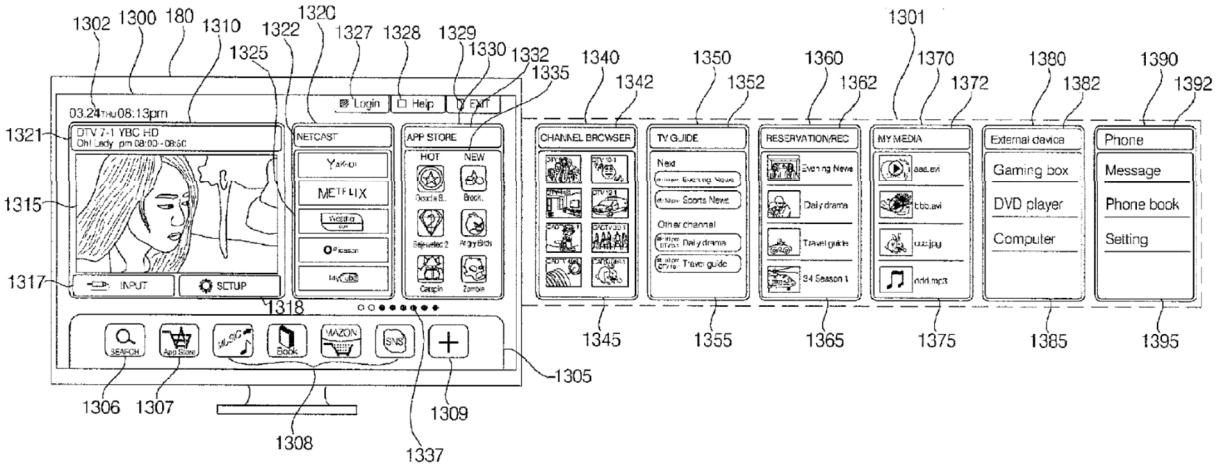
ii. Claim 1

a. Limitation [1.0]

First, Kim discloses "*an intelligent television*" by teaching an "image display apparatus [that] may be configured as … a ***smart TV [intelligent television]***" and a "method of controlling the same" to "display various types of content including still or video images as well as multimedia content." EX-1019, [0282]-[0289], Fig. 9; EX-1003, ¶120.

The Kim TV is an "*intelligent television*" as it provides multiple UIs and interactions based on its unique application platform and architecture. EX-1003, ¶121. The Kim TV provides UIs for an App Store, multimedia (My Media), TV Guide, and CP applications. EX-1019, [0040], [0063], [0201]-[0209], Fig. 19; EX-1003, ¶121. A POSITA would have understood that the CP applications employ their own UIs and that Kim's TV would have integrated Internet connectivity with parallel application functionality. EX-1003, ¶121.

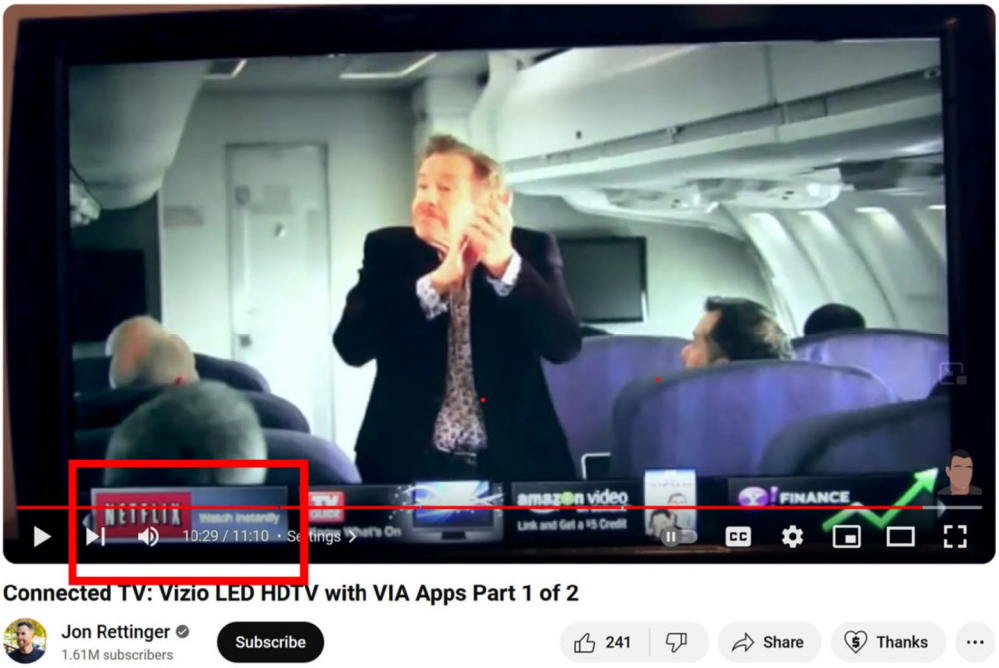
FIG. 19



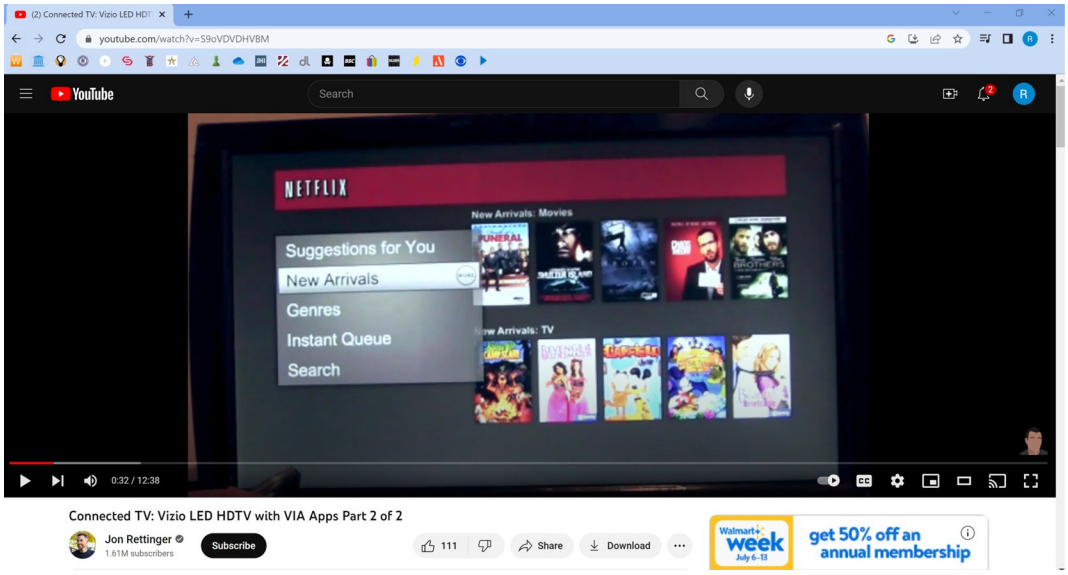
EX-1019, Fig. 19.

Second, Kim discloses a "*method for providing video-on-demand (VOD) in an intelligent television*." Kim teaches that "the image display apparatus 100 may receive non-linear A/V content [that] … may be, for example, a Content on Demand (CoD) application." EX-1019, [0040]. Kim teaches the use of Real-Time Streaming Protocol (RTSP) for users selecting VOD. *Id*., [0063]. Kim further identifies "Metflix" (i.e., Netflix) as a CP that provides VOD. *Id*., [0201], Fig. 19; EX-1003, ¶¶86, 122.

Third, TechnoBuffalo1 discloses this limitation, depicting a smart VIZIO HDTV with VIA Apps (*i.e*., an "*intelligent television*") including Netflix. EX-1003, ¶123.



EX-1010 (annotated).



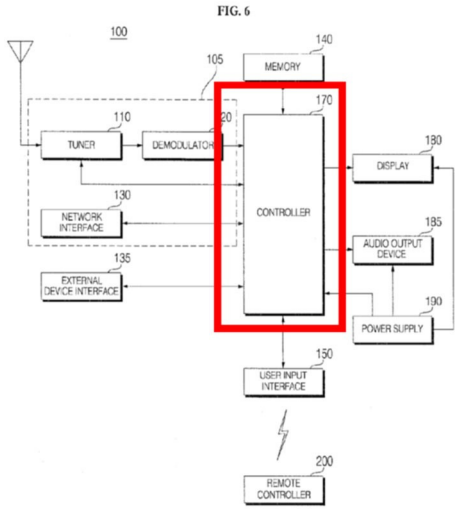
EX-1011, 0:32.

b. Limitation [1.1]

First, Kim teaches the intelligent television's processor receiving selections for VOD content. EX-1003, ¶124. Kim discloses a "controller 170" to "provide

overall control to the image display apparatus 100." EX-1019, [0089]. The controller includes "a video processor … an audio processor and a data processor" and may also include an "additional application processor." *Id*., [0085], [0133], [0166]. Controller 170 utilizes a software platform with an operating system ("OS") to perform display apparatus operations. *Id*., [0145], [0166], Figs. 11-12.

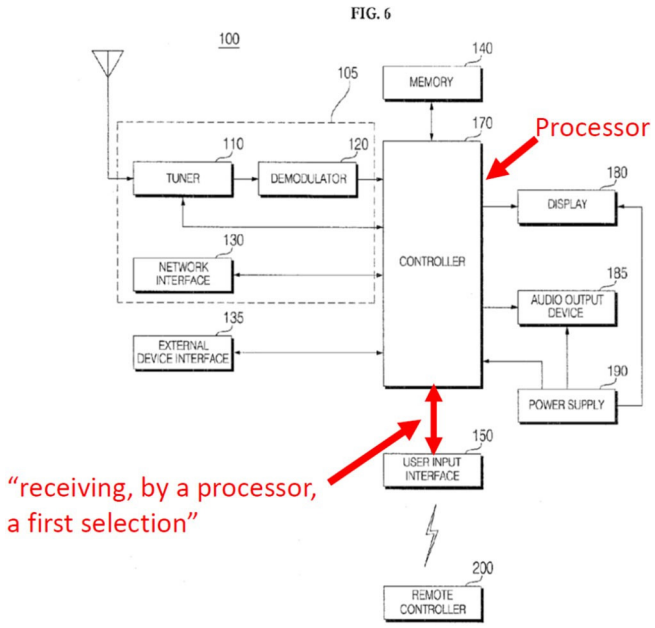
A POSITA would have understood that controller 170 corresponds to multiple processors (*e.g*., video processor, audio processor, data processor, application processor) that execute OS-based software, among other software, to implement the operations of the image display apparatus 100 ("*intelligent TV*"). EX-1003, ¶125. Kim's controller (including one or more of the processors described above) corresponds to "*a processor*," which is consistent with the '384 Patent's teaching that a processor "may include multiple processor cores, and/or implement multiple virtual processors." EX-1001, 28:55-67; EX-1003, ¶125. Kim's controller ("processor") is shown below:



EX-1019, Fig. 6 (annotated).

The Petition will primarily refer to controller 170 as the "processor." However, a POSITA would have understood Kim's teaching—that "***the controller 170, or any other processor***" (EX-1019, [0166]) may perform functions for controlling the image display apparatus—contemplates a single processor being used instead. EX-1003, ¶127. There, the controller would be replaced by the "other processor" (*e.g.*, a single processor) that performs the controlling functions, and that processor would correspond to the claimed "*processor*." *Id*.

User interface 150 may receive various user input signals or control signals from a remote controller 200 and local keys, which are provided to controller 170. EX-1019, [0086]-[0087], Fig. 14; *see also id.*, [0060], [0109]-[0110], [0112]-[0113], [0173]. Controller 170 receives a signal associated with a user selection via the remote controller 200. EX-1003, ¶128.



EX-1019, Fig. 6 (annotated).

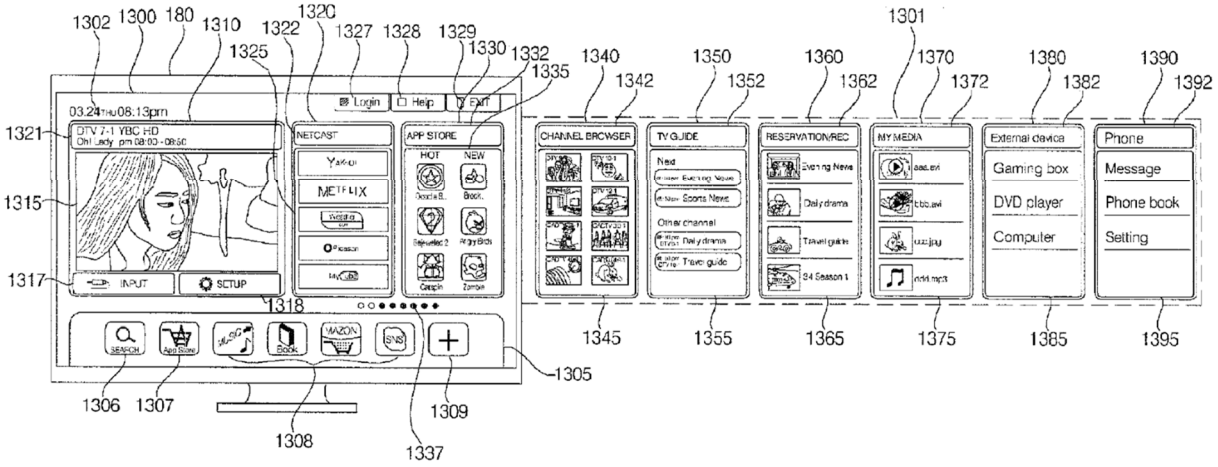
Thus, Kim discloses an intelligent television processor that receives VOD content selections from, for example, remote controller 200. Because Kim's processor provides ***overall*** control to apparatus 100 (EX-1019, [0089]), it would receive all selections recited in claim 1, including "*a first selection for a VOD content*." EX-1003, ¶129.

Second, it would have been obvious to a POSITA that the VIZIO TV in TechnoBuffalo includes a processor that provides overall control as taught by Kim. EX-1003, ¶130. Using processors in smart TVs to receive input signals from remote control devices was well known before the Critical Date. *Id*. It was also well known that smart TV processors provide GUIs to users. *Id*., ¶131. At a minimum, Kim teaches and/or suggests that the VIZIO TV included a processor to

implement the claimed steps. *Id*., ¶132; EX-1019, 5:42-6:40. A POSITA would have further recognized that the TV's UIs in TechnoBuffalo would have been efficiently implemented as different software applications running on a processor, which would allow the use of standard programming languages and developer kits. EX-1003, ¶132. Thus, a POSITA would have understood that the VIZIO TV's processor received user selections, including "*a first selection for a VOD content*." *Id*.

Third, Kim and TechnoBuffalo1 teach "*a first selection for a VOD content.*" Kim discloses UIs including selectable items for CP applications. EX-1019, [0201]; EX-1003, ¶133.

FIG. 19



EX-1019, Fig. 19.

"[I]f a specific CP is selected from the CP list 1325, a list of content available from the selected CP may be displayed on the display 180." EX-1019,

[0201]. For example, a user selecting "Metflix" would be provided with access to Metflix's VOD content, satisfying the "first selection for a VOD content" limitation. EX-1003, ¶134. This is consistent with the '384 Patent's teachings and Patent Owner's second example of alleged infringement. EX-1001, 44:26-35, Fig. 17; EX-1023, 2; EX-1003, ¶134.

Similarly, TechnoBuffalo1 includes VIA Apps, including a selectable menu item for Netflix. Selecting Netflix would be "*a first selection*." EX-1003, ¶135.



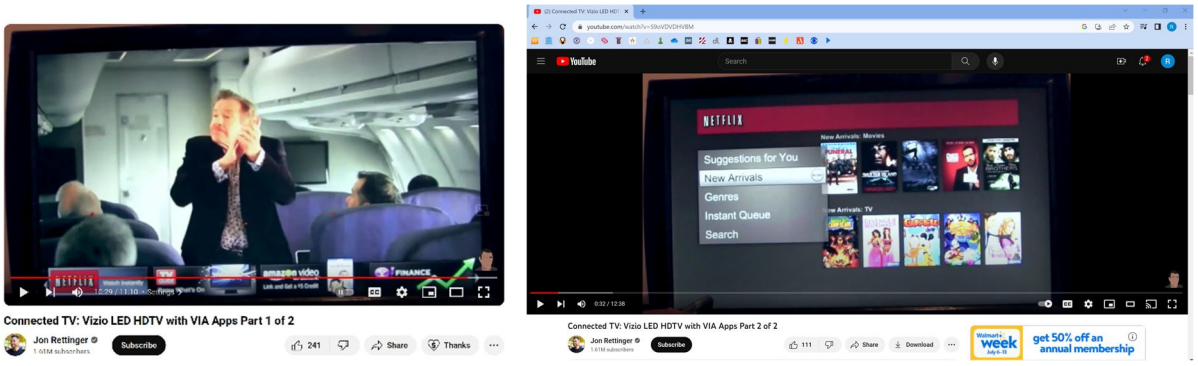
EX-1010.

c. Limitation [1.2]

First, as discussed at [1.1] (§VI.A.ii.b), Kim and TechnoBuffalo disclose "*a first selection for a VOD content.*"

Second, Kim and TechnoBuffalo disclose "*providing … a master view of the VOD content*" "*in response to the first selection*." Kim provides a UI for selecting CPs of VOD content like Netflix. Kim teaches "if a specific CP is selected from the CP list 1325, a list of content available from the selected CP may be displayed on the display 180." EX-1019, [0201]; *id.*, [0040], [0063]. A POSITA would have understood that selecting "Metflix" would have caused Kim's television to provide a separate UI (master view of VOD content) associated with Metflix. *Id.*; EX-1003, ¶137.

Similarly, in TechnoBuffalo, clicking on "Netflix" from the global menu (below left) would have resulted in Netflix's master view being displayed (below right). EX-1003, ¶138. At a minimum, it would have been obvious to a POSITA to present Netflix's master view in response to selecting Netflix in the global menu, which would involve the use of a known technique (*e.g.*, use of hierarchical menus) to achieve a predictable result, wherein a POSITA would have a reasonable expectation of success of implementing the design. *Id.* A POSITA would have been motivated to design the VIZIO TV in this manner to allow the Netflix home screen to be accessed. *Id.*, ¶139. This is consistent with Patent Owner's second example of alleged infringement. *Id.*; EX-1023, 4.



EX-1010; EX-1011, 0:32.

Third, Kim teaches that the master view is provided "*by the processor*." As discussed at [1.1] (§VI.A.ii.b), Kim's processor provides "overall control to the image display apparatus 100," and utilizes a software platform with the OS to perform display apparatus operations. EX-1019, [0089], [0145], [0166], Figs. 11, 12; EX-1003, ¶140.

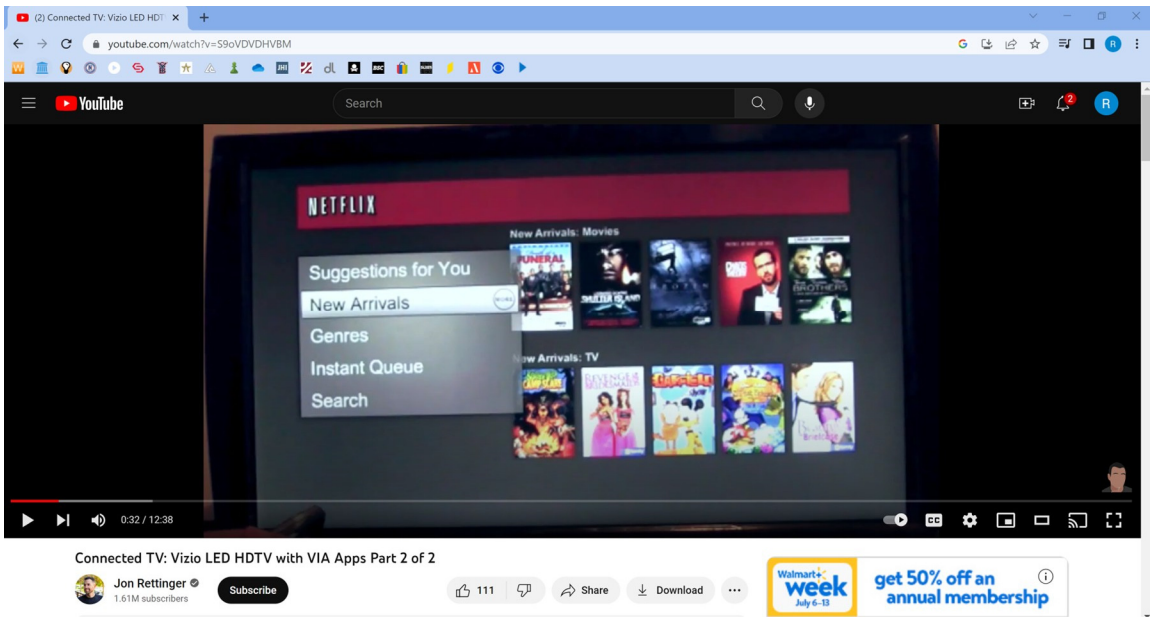
Kim's "UI manager 714 and the service manager 713 may ***manage the overall state*** of the image display apparatus 700, ***provide UIs***, and manage other managers." *Id*., [0060]. "The UI manager 714 may provide a Graphical User Interface (GUI) in the form of an OSD and may perform a reception operation corresponding to a key input received from the user." *Id*. Further, the "controller 170 may control the image display apparatus 100 according to a user command received through the user input interface 150 or according to an internal program. *Id*., [0090]. Thus, a POSITA would have understood that Kim's processor provides

various views in response to user selections, including providing "*a master view of VOD content*" "*in response to the first selection*." EX-1003, ¶141.

Fifth, TechnoBuffalo2 and MissingRemote disclose "*a master view*" that "*presents two or more collections of the VOD content organized by a characteristic of the VOD content.*" EX-1003, ¶142.

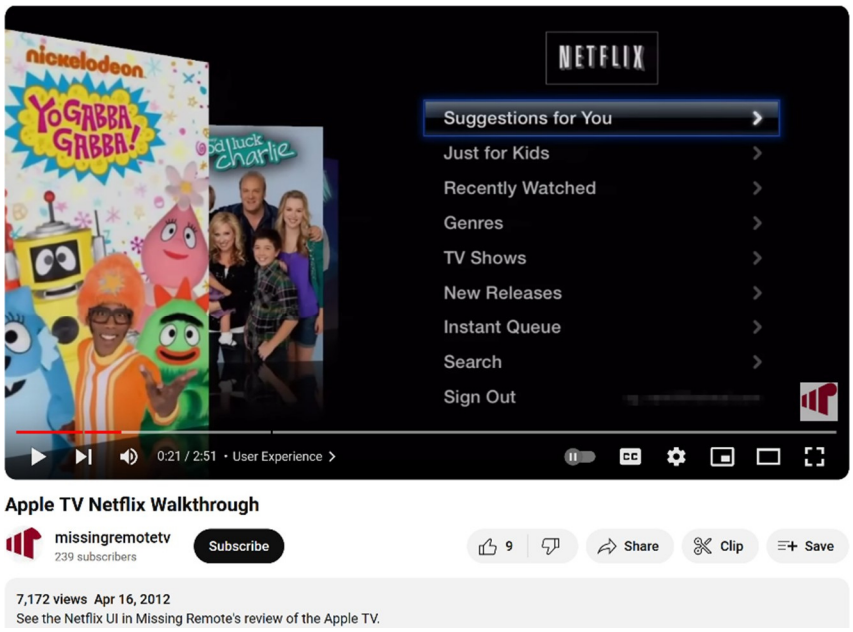
Kim teaches that a display for applications like "Netflix" can be provided in response to a user selection ("*the first selection*"). EX-1019, [0040], [0063], [0201], Fig. 39. While Kim does not depict Netflix's master view, TechnoBuffalo2 and MissingRemote do. EX-1003, ¶144.

Netflix's home screen ("*master view*") demonstrated in TechnoBuffalo2 presents multiple collections of the VOD content organized by a characteristic (*e.g.*, "Suggestions for You," "New Arrivals," etc.) of the VOD content. *Id.*, ¶145.



EX-1011, 0:32.

Similarly, Netflix's "*master view*" demonstrated in MissingRemote presents multiple collections of the VOD content organized by a characteristic (*e.g.*, "Suggestions for You," "Recently Watched," etc.) of the VOD content. EX-1003, ¶145.



EX-1018, 0:21.

As discussed herein (*e.g.*, §VI.A.i), it would have been obvious to a POSITA to combine the teachings of Kim, TechnoBuffalo2, and MissingRemote because Kim teaches using Netflix as a VOD content provider, and TechnoBuffalo2 and MissingRemote depict embodiments of Netflix's preexisting UIs. EX-1003, ¶147.

d. Limitation [1.3]

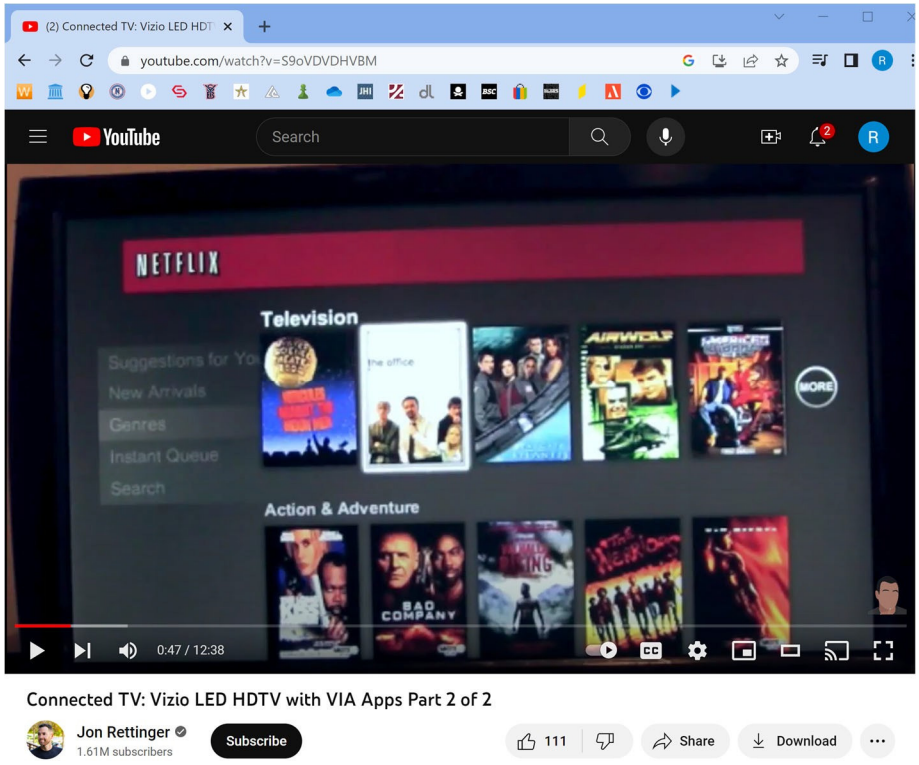
First, user selections, including "*a second selection for a VOD content*," would be "*received, by [the] processor*" as taught by Kim. *See* [1.1]; EX-1003, ¶148.

Second, "*a second selection*" disclosed by TechnoBuffalo2 include selections for "Suggestions for You," "New Arrivals," "Genres," "Instant Queue," or "Search" in Netflix's master view. EX-1011, 0:32. This is consistent with Patent Owner's second example of alleged infringement. EX-1023, 4; EX-1003, ¶149.

Third, "*a second selection*" disclosed by MissingRemote include "Just for Kids," "Recently Watched," "Genres," "New Releases," etc. EX-1018, 0:21; EX-1003, ¶150.

e. Limitation [1.4]

First, TechnoBuffalo2 discloses providing "*a collection view*" in response to a user selection ("*second selection*") of a selectable item in Netflix's master view. For example, selecting "Genres" results in the television providing a menu ("*collection view*") having content organized by "Television" and "Action & Adventure." EX-1003, ¶151.

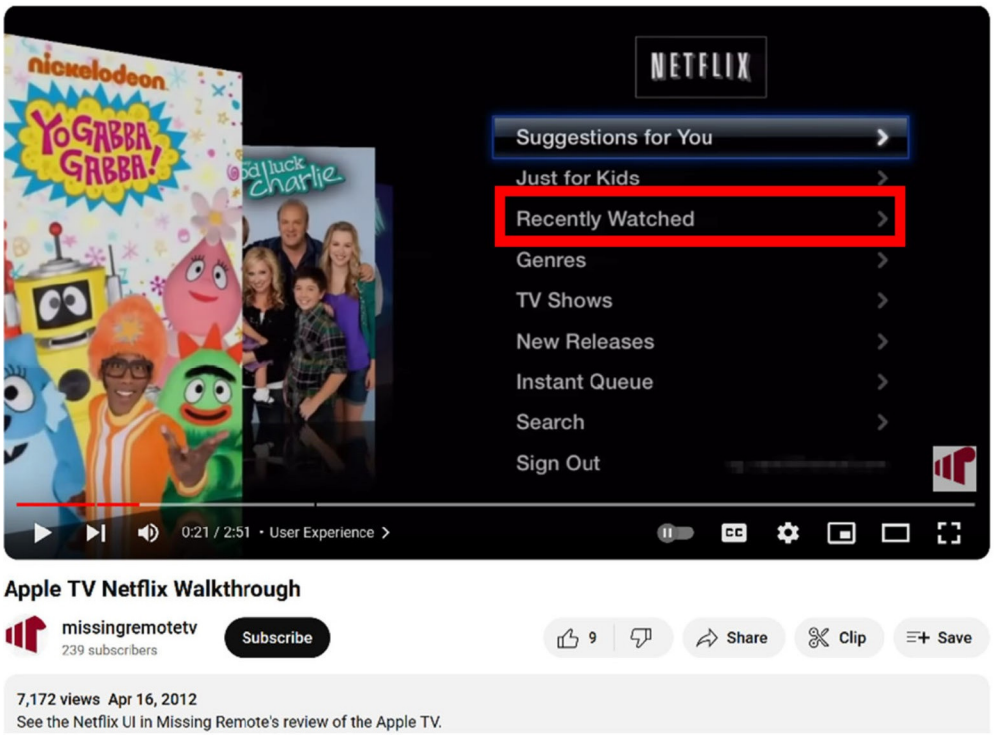


EX-1011, 0:47.

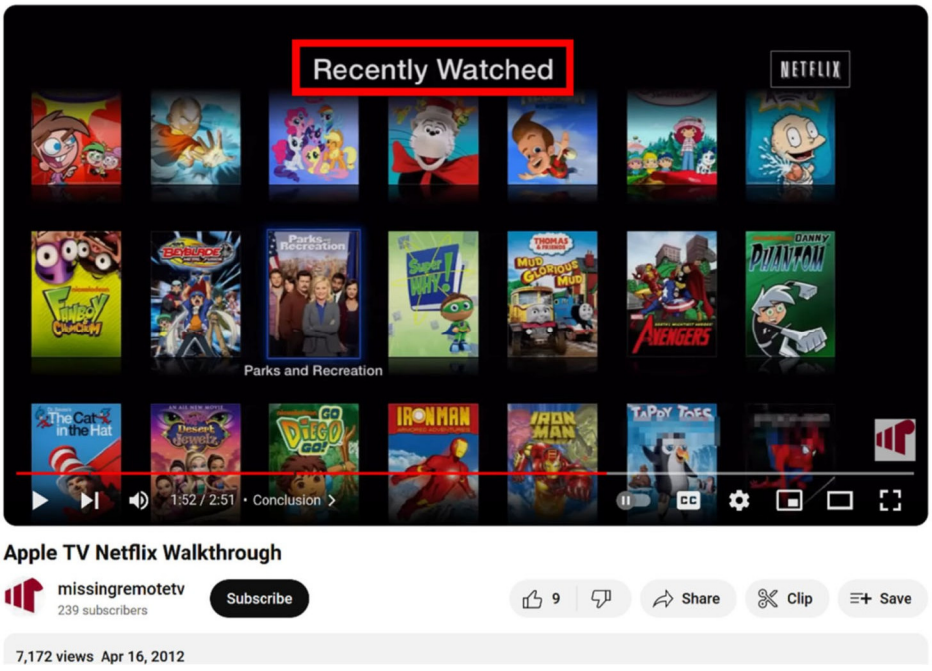
The "*collection view*" above presents collections of multiple items of the VOD content (*e.g.*, "The Office," "Bad Company"), and is organized by a characteristic of the VOD content (*e.g.*, genres).[8] EX-1003, ¶152.

Second, MissingRemote discloses a collection view in response to a second selection (*e.g.*, selection for "Recently Watched") having the corresponding characteristic. EX-1003, ¶153.

[8] A POSITA would have understood that selecting other "characteristics" would result in corresponding collection views being presented in TechnoBuffalo2. *See, e.g.*, TechnoBuffalo2, 0:37 (New Arrivals); EX-1003, ¶152.



EX-1018, 0:21 (annotated).



EX-1018, 1:51 (annotated).

Third, a POSITA would have understood that a processor provides different views, including "*a collection view of VOD content*" (above), as taught by Kim. *See* [1.2] (§VI.A.ii.c); EX-1003, ¶154.

It would also have been obvious to a POSITA that a processor provides views relating to Netflix, including "*the collection view*," as taught by Hunt. EX-1003, ¶155. It would have been obvious for Netflix—demonstrated in TechnoBuffalo and MissingRemote—to implement details disclosed in Hunt (a Netflix patent) relating to the same VOD streaming platform. *Id*.

Hunt's "***processor 140 displays a menu*** of available programs on display 142." EX-1020, 9:32-33. Hunt further discloses that "***streaming media processor 140 generates screen display*** 502 for video output in response to a user powering on the processor, or in response to a user making a selection from a UI in which the user requests to view movies or other audiovisual programs that are available for instant viewing." *Id*., 16:16-22. A POSITA would have understood that a processor provides different views relating to Netflix, including "*a collection view of VOD content*" as taught by Hunt. EX-1003, ¶157. Even without Hunt, it would have been obvious to use a processor to provide Netflix's UIs, which would involve the use of a known technique (*e.g*., using a processor to provide GUI elements in a smart TV) to achieve a predictable result, wherein a POSITA would

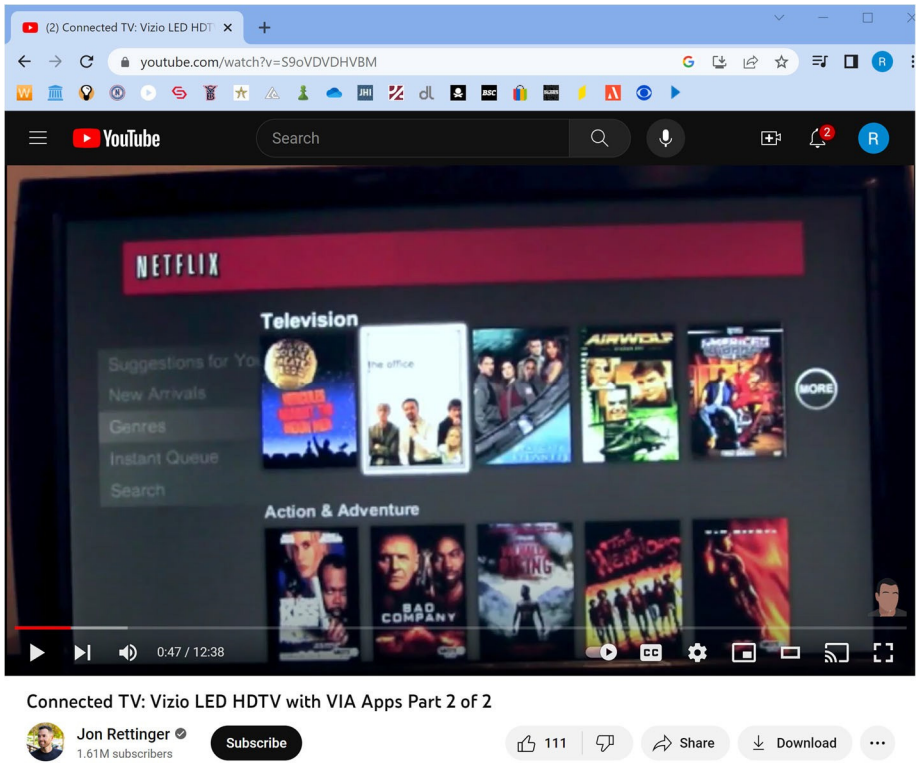
have a reasonable expectation of success of making the device. *Id*.; *see also id*., ¶¶54-63.

Hunleth's views are also provided by a processor. EX-1021, 29:12-22 ("Systems and methods for processing metadata according to exemplary embodiments of the present invention can be performed by processors …"), 11:23-34, claim 8; EX-1003, ¶158.

f. Limitation [1.5]

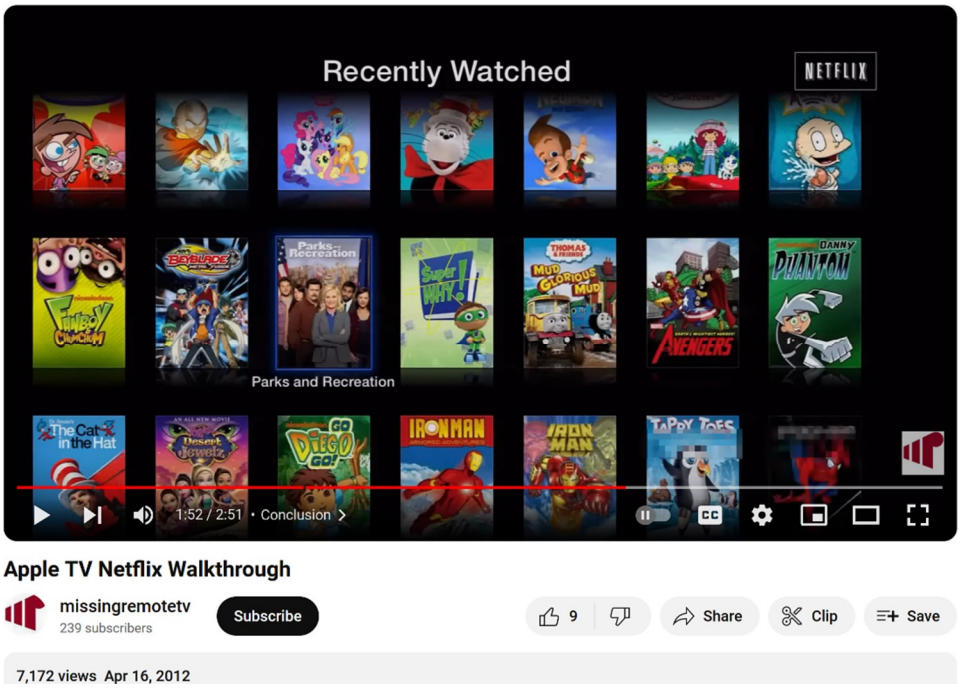
First, user selections, including "*a third selection for a VOD content*," would be "*receiv[ed], by the processor*" as taught by Kim. *See* [1.1]; EX-1003, ¶159.

Second, selecting "The Office" or "Bad Company" in TechnoBuffalo2's collection view below would satisfy the "*third selection for a VOD content*" limitation. EX-1003, ¶160.



EX-1011, 0:47.

Third, selecting "Parks and Recreation" in MissingRemote's collection view satisfies the "*third selection for a VOD content*" limitation. EX-1003, ¶161.

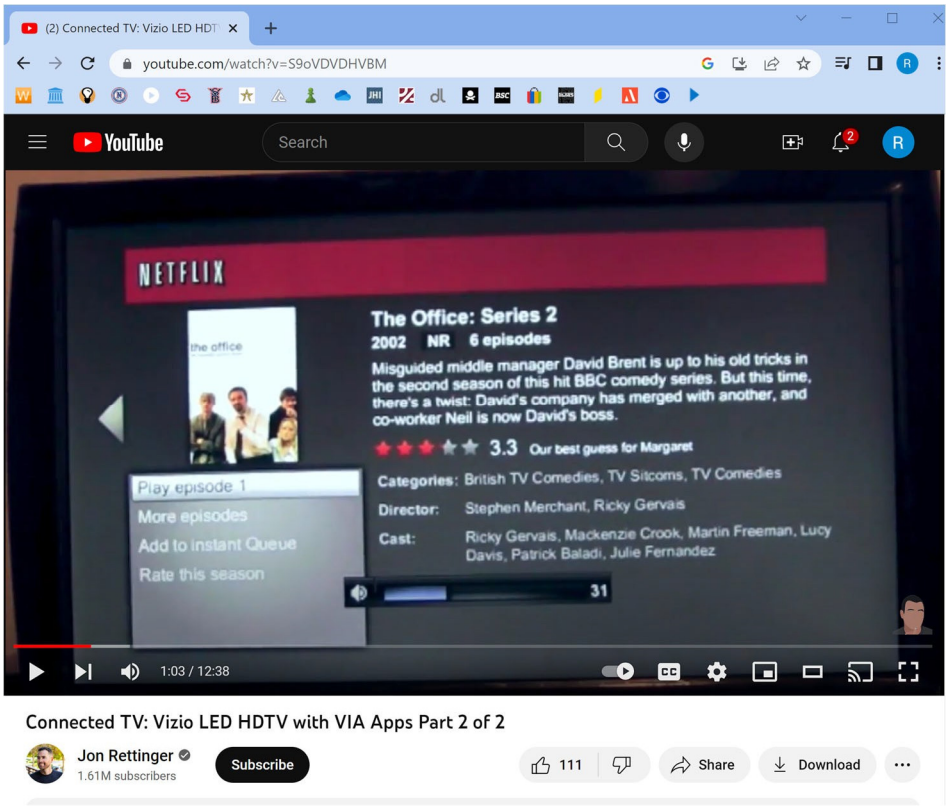


EX-1018, 1:51.

g. Limitation [1.6]

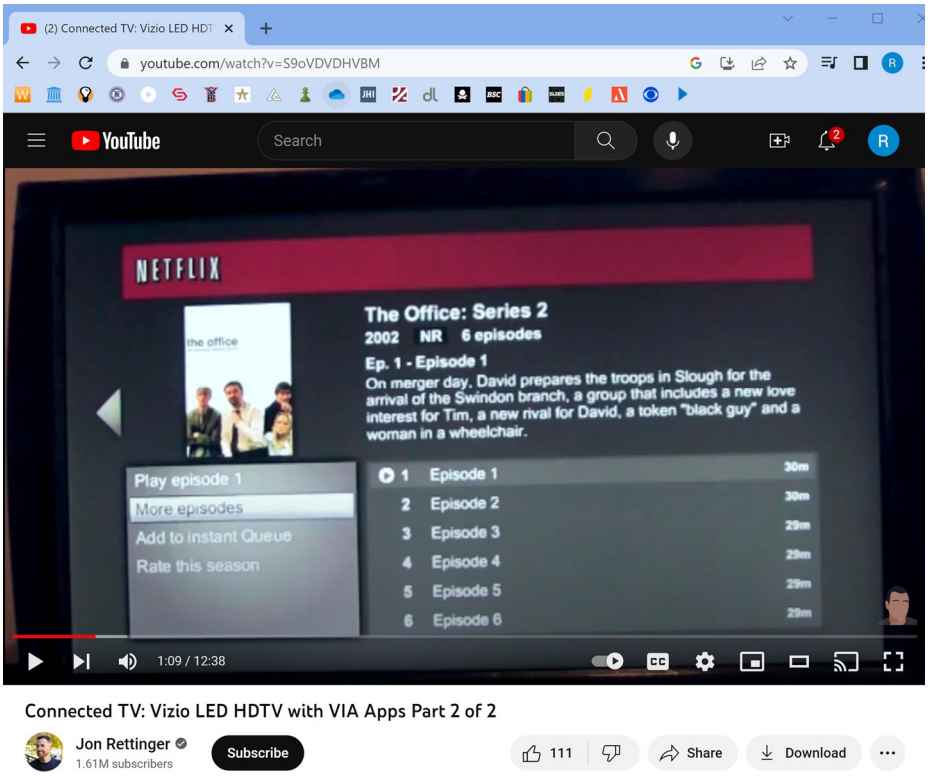
First, a POSITA would have understood that a processor provides Netflix's views (*e.g.*, detail and digest) as taught by Kim, Hunt, and Hunleth. *See* [1.2], [1.4] (§§VI.A.ii.c, VI.A.ii.e); EX-1003, ¶162.

Second, if "*the third selection*" in TechnoBuffalo2 is for a TV series (*e.g.*, "The Office"), then "*a digest view*" is provided. EX-1003, ¶163.



EX-1011, 1:03.

This is "*a digest view*" as it presents information (*e.g.*, number of episodes, synopsis of entire season, ratings for season, menu items for "More episodes") about a set of VOD content (*e.g.*, television episodes in Season 2) that is associated with a series (*e.g.*, "The Office"). EX-1003, ¶164. Alternatively, it would have been obvious to a POSITA to present the following digest view in response to "*the third selection*." *Id.*



EX-1011, 1:09.

This is also a digest view because it presents information (*e.g.*, year, rating, number of episodes (6), episode lengths) about a set of VOD content (*e.g.*, episodes in Season 2) that are associated with a series (*e.g.*, "The Office"). Presenting either of the digest views shown above in response to "*the third selection*" would have been obvious as mere design choices of known UI presentations. EX-1003, ¶165.

Presenting the menu at EX-1011, 1:09, in direct response to "*the third selection*" would also have been obvious to a POSITA because that is the sequencing used by Netflix for Apple TV devices. EX-1003, ¶166; *see* EX-1018, 1:54. Moreover, providing the menu above in direct response to "*the third*

selection" would have been a simple substitution of one known element (EX-1011, 1:09) for another (EX-1011, 1:03) to obtain a predictable result. EX-1003, ¶167. The substitution would also have been "obvious to try" for a POSITA because a finite number of digest views were used by Netflix, the solution would have been predictable, and there would have been a reasonable expectation of success since Netflix was already using the menu design. *Id*.

Third, Hunt discloses digest views for TV episodes associated with a series. EX-1003, ¶167.

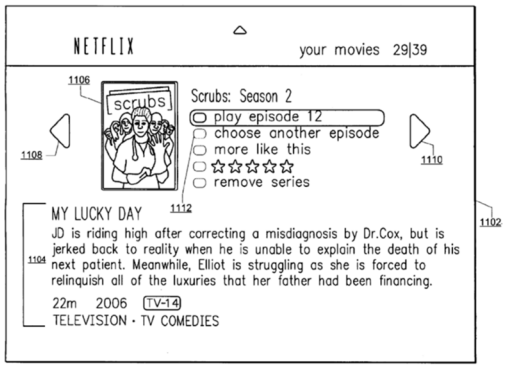


FIG. 11

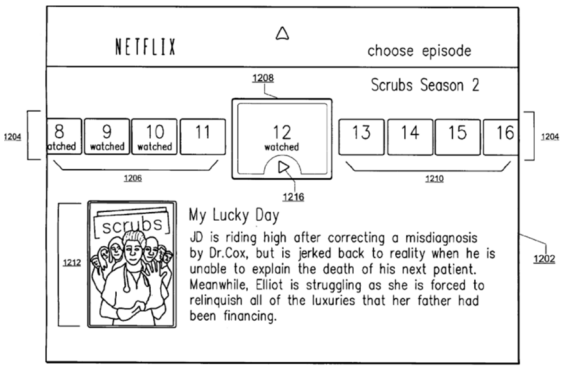


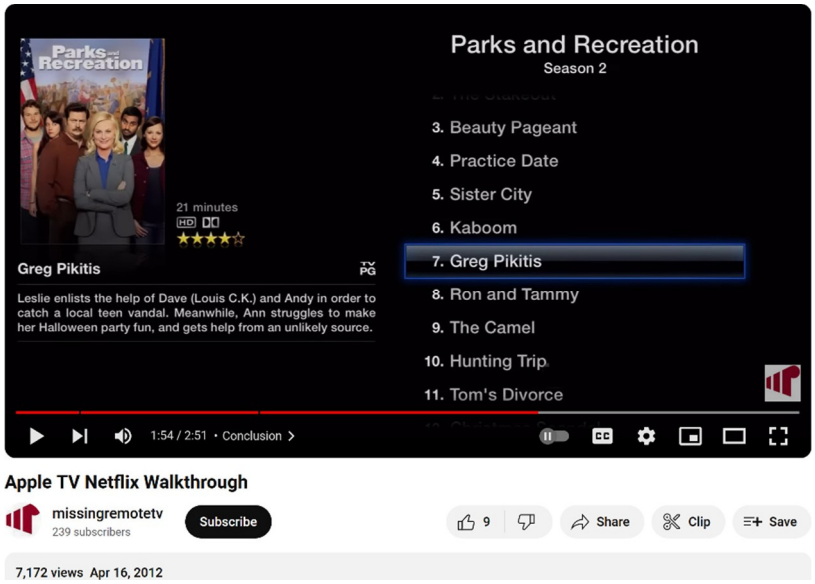
FIG. 12

EX-1020, Figs. 11, 12.

Hunt teaches that the digest views are provided in response to a selection ("*third selection*") in the collection view. EX-1020, 18:33-51; EX-1003, ¶168. It would have been obvious to a POSITA to present Hunt's Fig. 12 view in response to "*the third selection*" for the same reasons set forth above for TechnoBuffalo. EX-1003, ¶169. A POSITA would have been motivated to combine the teachings from TechnoBuffalo, MissingRemote, and Hunt, including arrangement of

Netflix's prior art UIs, to provide a user-friendly hierarchical menu design, and those references provide an explicit motivation to combine. *Id.*

Fourth, if "*the third selection*" in MissingRemote is for the TV series "Parks and Recreation," then "*a digest view*" is provided. EX-1003, ¶170.



EX-1018, 1:54.

This is a digest view because it presents information (*e.g.*, episode titles) about a set of VOD content (*e.g.*, episodes in Season 2) that are associated with a series (*e.g.*, "Parks and Recreation"). EX-1003, ¶171.

Fifth, movies (*e.g.*, "Bad Company") can be selected as "*the third selection*" in the collection view. EX-1011, 0:47; EX-1003, ¶172. TechnoBuffalo2 and MissingRemote do not show Netflix's menu associated with a selection for a movie in the collection view. Nonetheless, it would have been obvious to a

POSITA to provide "*a detail view*" in response to a selection for a movie as taught by Hunt. *Id*.

As discussed herein (*e.g*., §VI.A.i), it would have been obvious to a POSITA for Netflix—demonstrated in TechnoBuffalo and MissingRemote—to include features included in Netflix's own patents covering the same platform.

Hunt discloses a "poster screen," which is called a collection view in the '384 Patent. EX-1020, 17:17-18, EX-1003, ¶174. Hunt teaches that if "Secondhand Lions" is selected in the collection view (bottom left), then "streaming media processor 140 displays a springboard screen 802 ["*a detail view*"] in response to a user pressing a selection button" (bottom right). EX-1020, 17:33-38; EX-1003, ¶174.

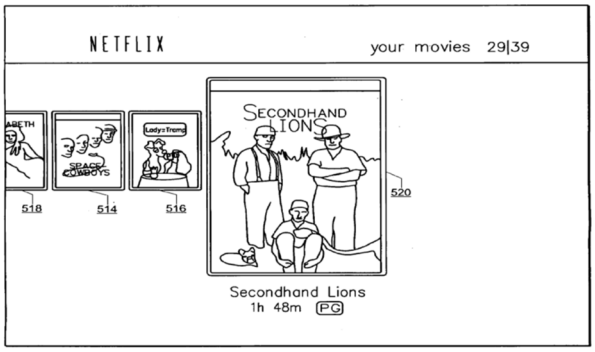


FIG. 7

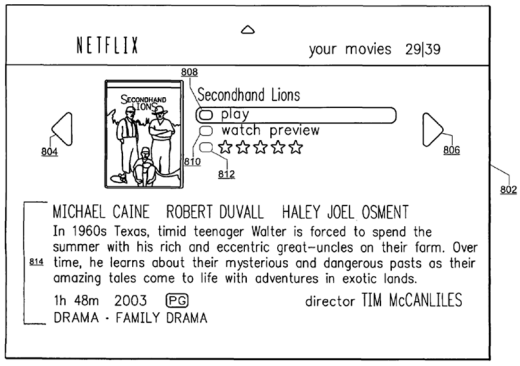


FIG. 8

EX-1020, Figs. 7 and 8.

Fig. 8 is "*a detail view*" as it presents information (*e.g*., title, rating, etc.) about a selected VOD content item (*e.g*., "Secondhand Lions"). EX-1003, ¶175.

Sixth, Hunleth also teaches providing "*a detail view*" in response to a selection of a movie from a collection view. EX-1021, 5:46-51; EX-1003, ¶176.

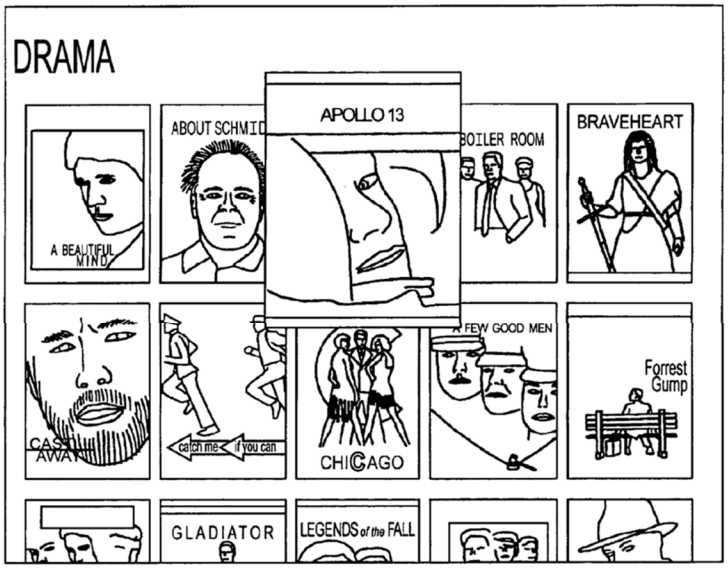


FIG. 1B

EX-1010, Fig. 1B (collection view).

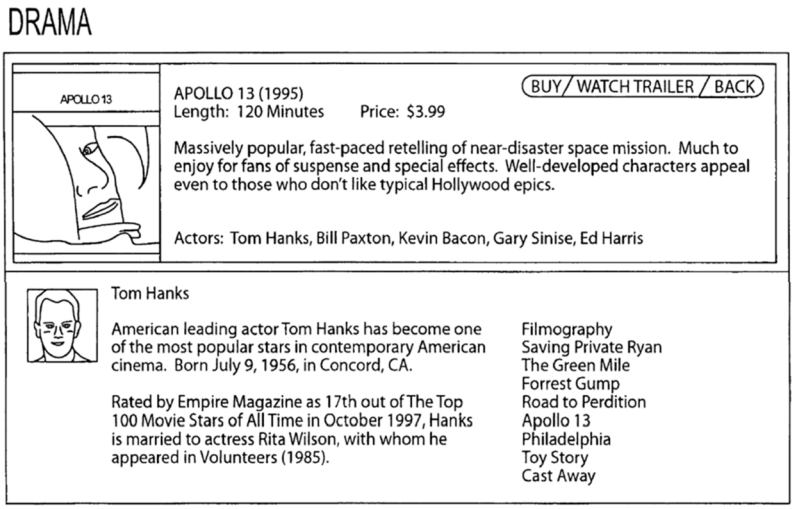


FIG. 2

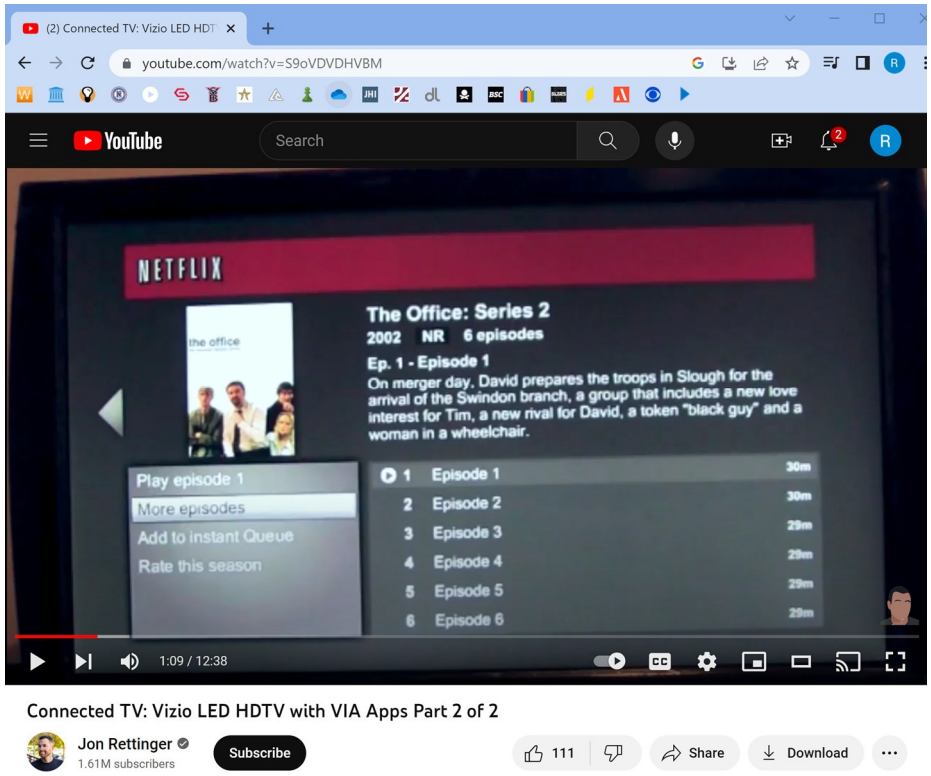
EX-1010, Fig. 2 (detail view).

h. Limitation [1.7]

First, as discussed at [1.6] (§VI.A.ii.g), TechnoBuffalo2, MissingRemote, Hunt, and Hunleth teach that digest and detail views are provided in response to selections from collection views. If a selection in the collection view is for a TV series, the processor provides a related digest view. *See* [1.6] (§VI.A.ii.g); EX-1011, 1:03, 1:09; EX-1018, 1:51, 1:54; EX-1003, ¶177. If the selection is for a movie or single show, the processor provides a detail view. *See* [1.6] (§VI.A.ii.g); EX-1020, 17:33-38, Fig. 8; EX-1021, 5:46-51, Figs. 1B, 2; EX-1003, ¶177.

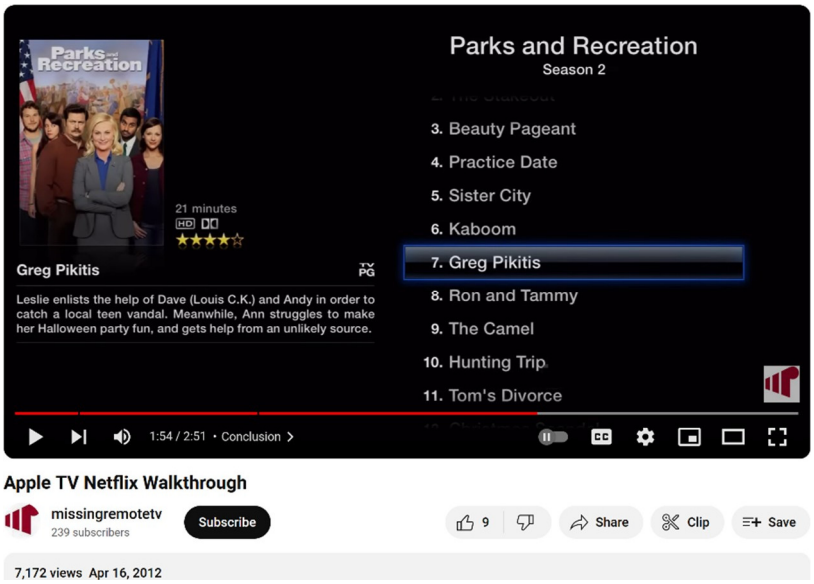
Second, as discussed at [1.2], [1.4], [1.6] (§§VI.A.ii.c, VI.A.ii.e, VI.A.ii.g), Kim, Hunt, and Hunleth teach that views—master, collection, detail, and digest views—are generated and provided "*by the processor*." EX-1003, ¶178.

Third, it would have been obvious to a POSITA to "*determine[e] … if the selection in the collection view is for a series or one of a movie or single show*." For example, Netflix's digest view shown in TechnoBuffalo2 displays episodes in a series and includes a selectable menu item for "More episodes" and multiple selectable items arranged in a column to display episodes in the series. EX-1003, ¶179.



EX-1011, 1:09.

MissingRemote also discloses a digest view for Netflix displaying episodes in a series. EX-1003, ¶180.



EX-1018, 1:54.

Hunt discloses two digest view embodiments that are displayed in response to a selection for a series. EX-1020, 18:33-51; EX-1003, ¶181.

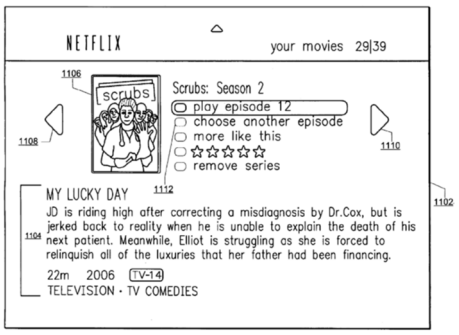


FIG. 11

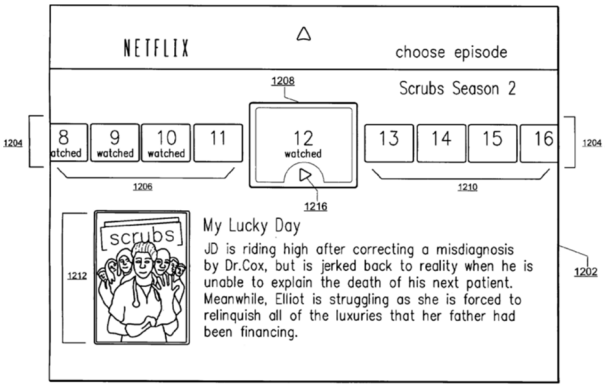


FIG. 12

EX-1020, Figs. 11, 12.

Hunt teaches that a different detail view is displayed in response to a selection for a movie. EX-1020, 17:33-38; EX-1003, ¶182.

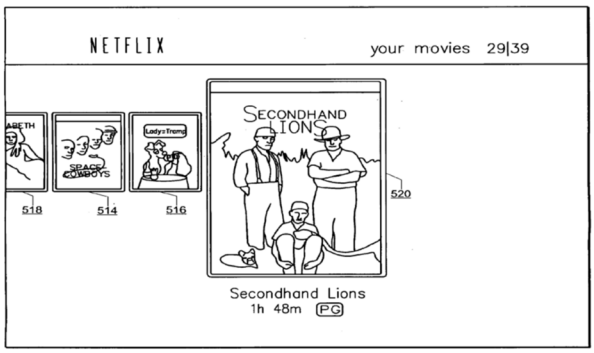


FIG. 7

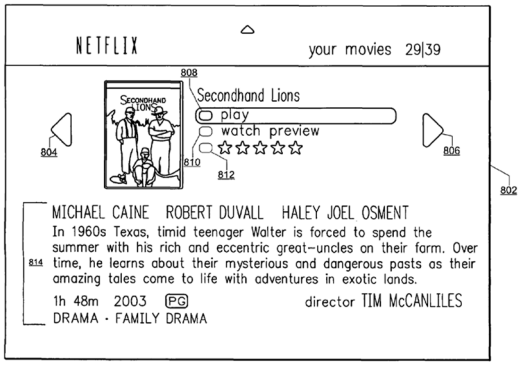


FIG. 8

EX-1020, Figs. 7, 8.

As demonstrated by the Netflix references, a POSITA would have avoided using UI designs for a TV series to display a single movie, and vice versa (as Netflix taught/did). EX-1003, ¶183. For example, for a TV series, many users would want to know the number of seasons, and episodes per season, for the series

before committing to watching a new series. *Id*. Allowing users to select a specific episode in a series would also have been a desirable feature. *Id*. For a movie, displaying episode information would have been nonsensical (movies lack episodes), and users would have been interested in seeing information like runtime, genre, and actors. *Id*.

To present an appropriate UI (digest view vs. detail view) for selected content, it would have been obvious to a POSITA for the television to determine, before generating the digest or detail view, whether the user selection in the collection view was for a series or stand-alone content. EX-1003, ¶184. It would have been "obvious to try" and would have involved common sense to "*determine[e] … if the selection in the collection view is for a series or one of a movie or single show*" to allow the television to generate an appropriate UI to match the user selection (digest view for a series and detail view for a movie). *Id*.

Moreover, a POSITA would have recognized that different views can be implemented as different portions of software, such as using a standard Model/View/Controller ("MVC") architecture, which was well known and used in many software platforms before the Critical Date. EX-1003, ¶185; EX-1048, 122-125; EX-1049, 236-237. MVC architecture allows different views to be implemented as separate templates that permit different formatting and a controller on the back end can access the data model specific to a particular view. EX-1003,

¶186. This allows developers to work on different portions of the UI without conflict. *Id*. It also allows new views (or UI pages) to be added in a modular manner. *Id*. For example, the data in the model retrieved by a controller (such as the types of objects being shown in the current view) can be used to generate a link to a new view depending on the object's characteristics, such as whether the object shown represents a TV series, a TV episode, or a movie. *Id*.

Thus, determining whether a selection in a collection view was for a series or movie (or single show) would have merely involved combining prior art elements (smart TVs, processors, non-transitory computer readable medium having stored thereon processor executable instructions, GUIs, metadata) according to known methods (use of metadata to identify and distinguish types of content) to yield a predictable result (provide appropriate GUIs for TV series and movies). EX-1003, ¶187.

The combination is nothing more than applying a known technique (*e.g*., use metadata to generate content appropriate UIs as demonstrated by Netflix) to improve the similar system of Kim, wherein Kim envisions Netflix being used on the TV. EX-1019, [0201], Figs. 19, 42; EX-1003, ¶188.

Further, TechnoBuffalo2, Hunt, and Hunleth teach and/or suggest to a POSITA that the television should make a determination about whether a selection

in a collection view is for a series or movie in order to ensure that the right type of UI is used for different types of content. EX-1003, ¶189.

In addition to the motivations previously discussed (*e.g.,* §VI.A.i), a POSITA would have been motivated to have the TV determine whether a selection in a collection view was for a series or movie to ensure that the right type of UI is used for different types of content. EX-1003, ¶190. TechnoBuffalo, MissingRemote, and Hunt provide an explicit motivation to make this claimed determination in order to present the views already used by Netflix. *Id.*

Fourth, "*determining, by a processor, if the selection in the collection view is for a series or one of a movie or single show*" would have been obvious to a POSITA in view of Hunleth. EX-1003, ¶191. Hunleth discloses a method of using metadata delivered from CPs to generate UIs by devices such as televisions. EX-1021, 4:23-27, 4:45-48, 6:2-4.

In Hunleth, a user is presented with a collection view of content (*e.g.*, "Apollo 13") from a CP.

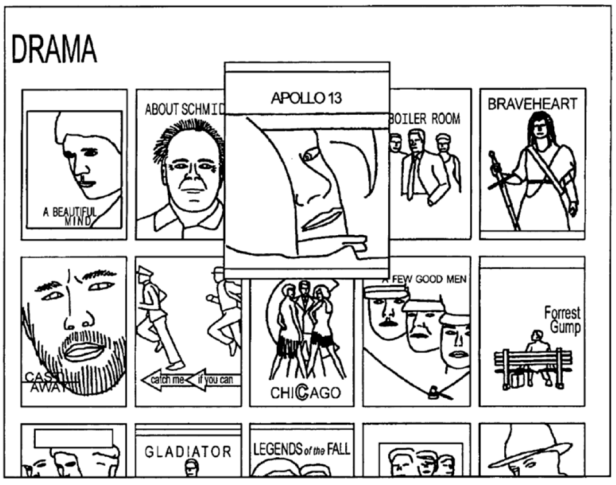


FIG. 1B

EX-1021, Fig. 1B.

When "Apollo 13" is selected, "metadata delivered from content providers, can be used to generate the [next] user interface screen." EX-1021, 4:45-51; EX-1003, ¶194. Hunleth's Figure 3 provides an exemplar metadata table used to create a UI (*i.e.*, "*detail view*") for the selected content. *Id*., 5:14-17.

METADATA CATEGORIES	CONTENT																								CAST			COLLABORATIVE				INSTANCE						
	TITLE	YEAR	STUDIO/PUBLISHER	EPISODE NAME	SYNOPSIS	DESCRIPTION	PLOT KEYWORDS	PRODUCER	DIRECTOR	PRINCIPAL CAST	EXTENDED CAST	ARTIST	WRITERS	CATEGORY	GENRE	AIRING (P,F,R)	RUNTIME	RATING	PICTURE/COVER ART	TRACKS	TRAILERS	CONTENT LOOKUP	BIOS	CREDITS	PHOTO	USER RATING	EDITORIAL RATING	CRITICAL REVIEWS	LINKS TO OTHER MEDIA	SYSTEM ID	TIME	LOCATION	PRICE	USAGE RESTRICTIONS	COPY RESTRICTIONS	
TV BROWSER/PVR	X	X		X	X				X				X	X	X	X	X	X											X	X	X				
TMS	X	X	M	X	X	X		X	X	X			X		X	X	X	X						X		M					X	X	P			
GEMSTAR																																				
MSO																													X		X				
VOD BROWSER	X	X			X	X	X		X	X					X		X	X	X	?	X		X	X	X					X		X	X	X		
MUZE																																				
IMDB	X	X			X	X	X	X	X	X	X		X		X		X	X								X							X			
ALLMOVIEGUIDE	X	X	X		X	X	X	X	X	X			X	X	X		X	X	X	D			X	?			X	X	X							
MUSIC BROWSER	X											X			X		X		X	X		X	X													
ALLMOVIEGUIDE	X	X	X									X			X		X	X	X	X			X				X	X	X							
MUZE																																				
GRACENOTE	X	X	X												X		X			X		X														
FREEDB.ORG	X	X										X			X		X		?	X		X														
MUSICBRAINZ.ORG	X											X					X			X		X														

FIG. 3

EX-1021, Fig. 3.

Hunleth discloses metadata categories that could be used to determine whether a selection was for a single TV show/movie or a series. For example, if no "X" is included under the column for "EPISODE NAME," then the intelligent TV would be able to determine that the content is for a single show or movie. EX-1003, ¶195. Likewise, an "X" in the "ALLMOVIEGUIDE" row could indicate that the selected content is a movie as opposed to a TV show. *Id*. Moreover, the metadata shown in Fig. 3 is not exhaustive, and Hunleth teaches that "[t]hose skilled in the art will appreciate that other types of information could be provided []." EX-1021, 4:45-55, 5:8-14.

Hunleth further teaches that once the metadata is received, the client device uses some or all the metadata to generate a UI screen corresponding to the selected content (below). EX-1021, 5:2-7; EX-1003, ¶196.

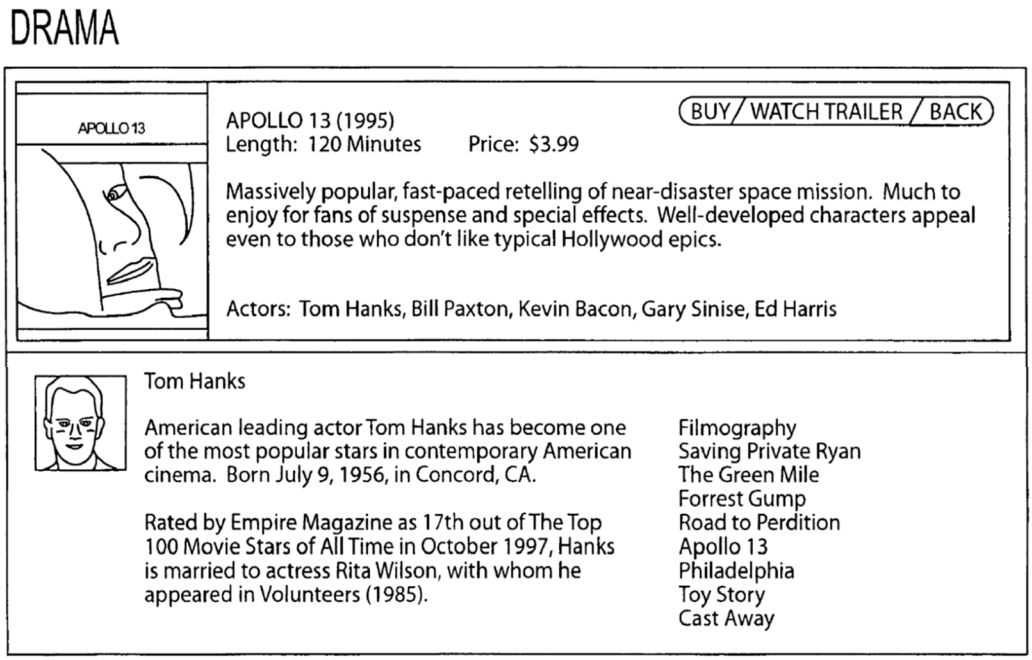


FIG. 2

EX-1021, Fig. 2.

TechnoBuffalo2, MissingRemote, and Hunt show that Netflix was presenting a detail view in response to a selection for a movie, and a digest view in response to a selection for a TV series well before the '384 Patent. EX-1003, ¶197. It would have been obvious to a POSITA to use metadata—as taught by Hunleth—to generate appropriate UIs for movies and TV shows in a series. *Id.*; §IV.A.i. A POSITA could have used the metadata already disclosed by Hunleth to make the determination, or could have added new categories of metadata (*e.g.*, adding columns for "movie" and "TV series" in Fig. 3 of Hunleth) to make the determination, which was contemplated by Hunleth. EX-1003, ¶197; EX-1021, 4:51-55; 5:8-17. Hunleth's teachings are consistent with Hunt's teachings

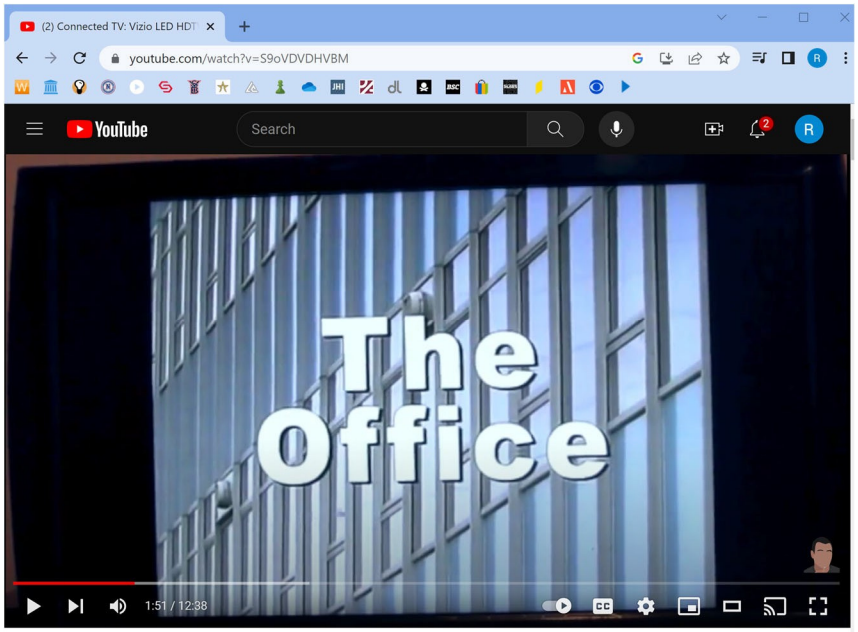
regarding Hunt's springboard screens (*i.e.,* digest and detail views) including metadata about the content. EX-1020, 17:44-47, 18:36-40; EX-1003, ¶197. A POSITA would have recognized that separating the data in this manner was a common method of programming in MVC architectures. EX-1003, ¶¶185-186, 198.

A POSITA would have been motivated to determine if a user selection in a collection view was for a series or one of a movie or single show to ensure that an appropriate UI was generated and displayed to the user. EX-1003, ¶¶185-186, 198-199. A POSITA would have been motivated to use metadata to make that determination because metadata provides a quick, accurate, and flexible way to make the desired determination in a way with which developers were already familiar. *Id*.; §VI.A.i.

A POSITA would have had a reasonable expectation of success in designing an intelligent television to determine whether content was a part of a series or a single show or movie using metadata because that would have involved simple methods known to a POSITA (as demonstrated by several prior art devices). EX-1003, ¶¶54-64, 200. Moreover, Hunleth discloses using metadata to generate a detail view for a selection of "Apollo 13," which demonstrates the aforementioned success. *Id*.

i. Limitation [1.8]

TechnoBuffalo2 teaches "*a player view*." EX-1003, ¶201.



EX-1011, 1:51.

TechnoBuffalo, MissingRemote, and Hunt teach—and it would have been obvious for a POSITA to implement—"*an ordered set of user interfaces*" including a master view at a top level (EX-1011, 1:32), a collection view at a second level (EX-1011, 0:47), either a digest view (EX-1011, 1:03, 1:09) or detail view (EX-1020, Fig. 8) at a third level, and a player view (EX-1011, 1:51) at a fourth and bottom level for an intelligent TV as described herein. EX-1003, ¶202. Significantly, Netflix used the claimed ordered set of interfaces well before the Critical Date. *Id.*

iii. Claim 2

a. Limitation [2.0]

This limitation for "*[a]n intelligent television system*" is obvious over Kim in view of TechnoBuffalo. *See* [1.0] (§VI.A.ii.a); EX-1003, ¶203.

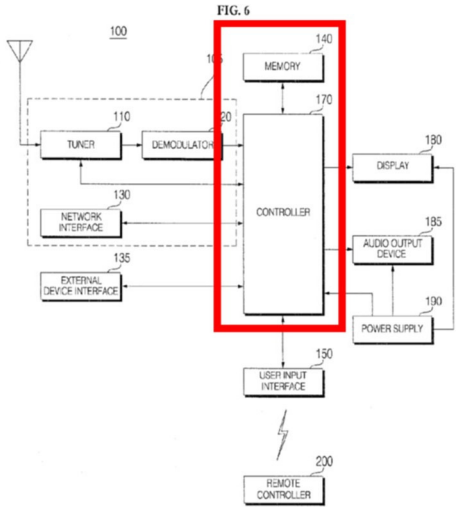
b. Limitation [2.1]

First, Kim discloses memory 140, which "may store various programs necessary for the controller 170 to process and control signals, and may also store processed video, audio and data signals." EX-1019, [0084]. "The memory 140 may temporarily store a video, audio and/or data signal received from the external device interface 135 or the network interface 130." *Id*. "The memory 140 may include, for example, at least one of a flash memory-type storage medium, a hard disk-type storage medium, a multimedia card micro-type storage medium, a card-type memory (*e.g.* a Secure Digital (SD) or eXtreme Digital (XD) memory), a Random Access Memory (RAM), a Read-Only Memory (ROM) such as an Electrically Erasable and Programmable Read Only Memory, or another appropriate type of storage device." *Id*., [0085]. "The image display apparatus 100 may reproduce content stored in the memory 140 (*e.g*., video files, still image files, music files, text files, or application files)." *Id*.; EX-1003, ¶204.

"[T]he volatile memory of media processor 140 is capable of storing about one to five minutes of buffered video data." *Id*., 7:62-44, 8:1-14; 15:47-51. Thus,

Kim and Hunt teach "*a memory operable to store video-on-demand (VOD) content*." EX-1003, ¶205.

Second, Kim discloses "*a processor in communication with memory*." EX-1019, [0085], [0092], Fig. 6 (below); EX-1003, ¶206.



Third, the processor would be operable to execute a UI application. *See* [1.1] (§VI.A.ii.b); EX-1003, ¶207.

c. Limitation [2.2]

This limitation is obvious over Kim in view of TechnoBuffalo and MissingRemote. *See* [1.1], [1.2] (§§VI.A.ii.b, VI.A.ii.c); EX-1003, ¶208.

d. Limitation [2.3]

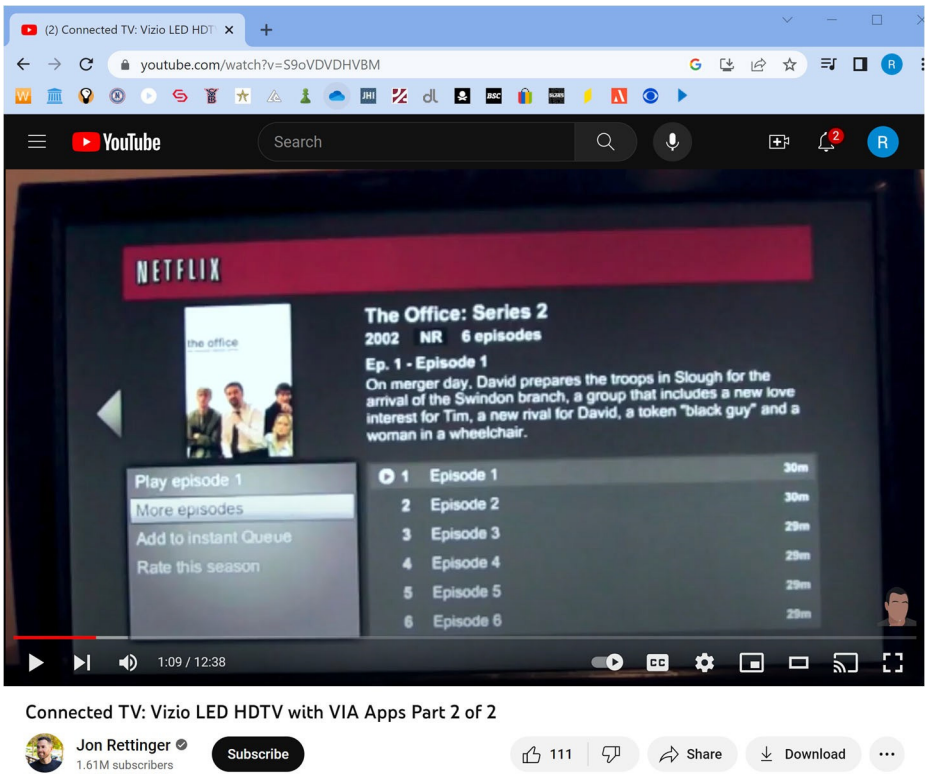
This limitation is obvious over Kim in view of TechnoBuffalo and MissingRemote. *See* [1.3], [1.4] (§§VI.A.ii.d, VI.A.ii.e); EX-1003, ¶209.

e. Limitations [2.4] and [2.6]

This limitation is obvious over Kim in view of TechnoBuffalo, MissingRemote, Hunt, and Hunleth. *See* [1.5], [1.6], [1.7] (§§VI.A.ii.f, §VI.A.ii.g, VI.A.ii.h); EX-1003, ¶210.

f. Limitation [2.5]

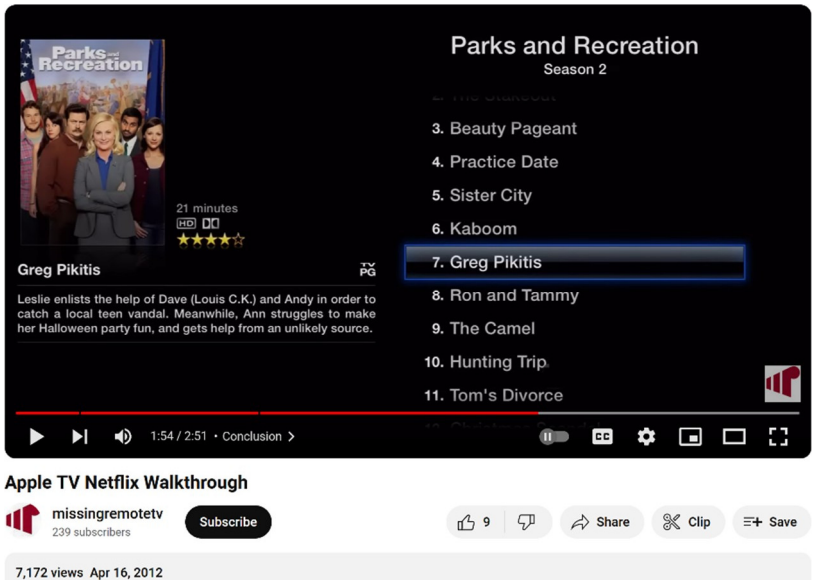
First, as discussed at [1.6] (§VI.A.ii.g), TechnoBuffalo2 teaches a digest view for a television series (*e.g.*, "The Office"). The digest view provides a listing of multiple episodes associated with the series. EX-1003, ¶211.



EX-1011, 1:09.

As discussed at [1.6] (§VI.A.ii.g), it would have been obvious for a selection of a TV show in the collection view to bring the user to this embodiment of a digest view. EX-1003, ¶212.

Second, as discussed at [1.6] (§VI.A.ii.g), MissingRemote teaches a digest view for a series (*e.g.*, "Parks and Recreation"). The digest view provides a listing of multiple episodes associated with the series. EX-1003, ¶213.



EX-1018, 1:54.

Third, as discussed at [1.6] (§VI.A.ii.g), Hunt teaches a digest view for a television series, which provides a listing of multiple episodes associated with the series. EX-1003, ¶214.

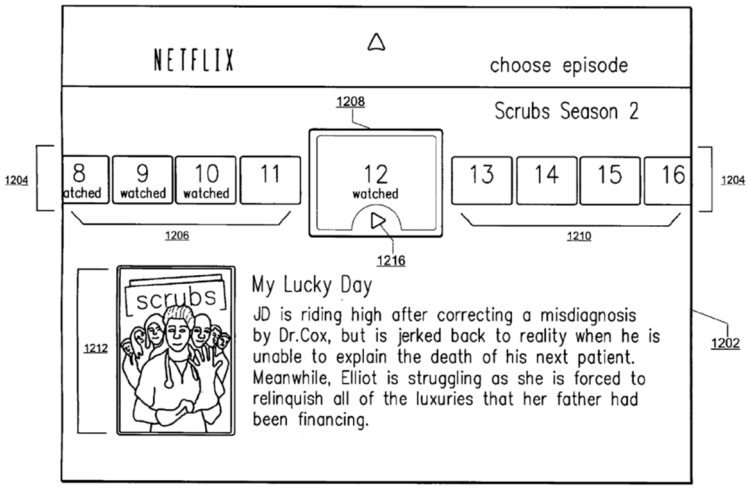


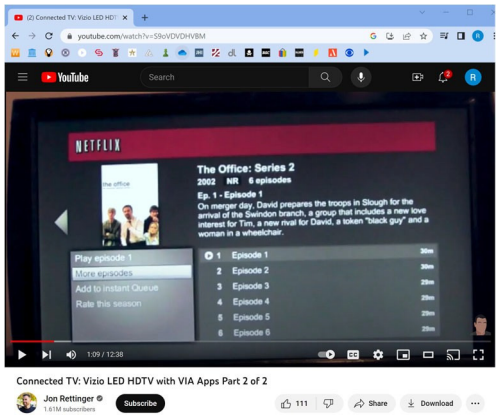
FIG. 12

EX-1020, Fig. 12.

g. Limitation [2.7]

First, as discussed at [1.6], [1.7] (§§VI.A.ii.g, VI.A.ii.h), TechnoBuffalo, MissingRemote, and Hunt disclose a digest view in response to the third selection. It would have been obvious to a POSITA to receive "*a fourth selection of an episode in the digest view.*" EX-1003, ¶215.

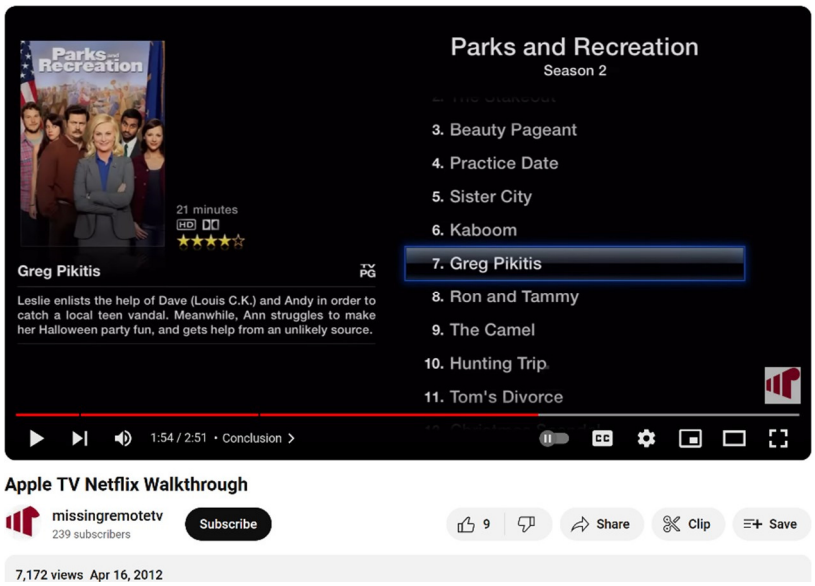
TechnoBuffalo2 discloses that selecting "Episode 5" (fourth selection) from the digest view results in the player being presented (below). The same applies for Hunt's digest view, which is similar to TechnoBuffalo's digest view. EX-1003, ¶216.





EX-1011, 1:09, 1:51.

As to MissingRemote, a POSITA would have understood that selecting "Greg Pikitis" ("*fourth selection*") from the digest view would have resulted in that episode being played by the TV. EX-1003, ¶217.



EX-1018, 1:54.

Second, as discussed at [1.6], [1.7] (§§VI.A.ii.g, VI.A.ii.h), it would have been obvious to present a detail view in response to a third selection as taught by Hunt.

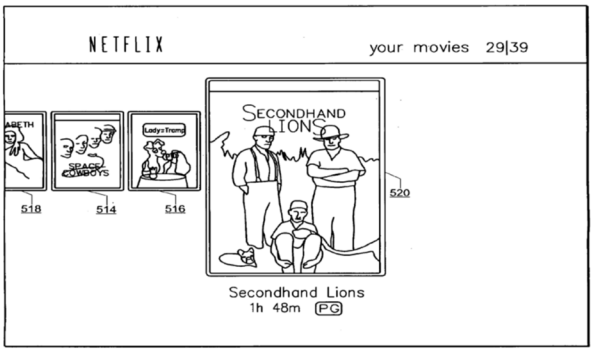


FIG. 7

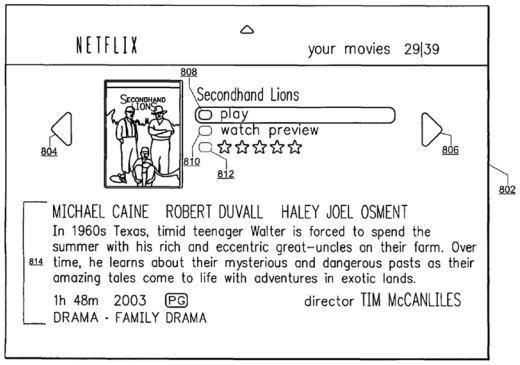


FIG. 8

EX-1020, Fig. 7 (collection view), Fig. 8 (detail view).

From there, a POSITA would have understood that receiving a fifth selection of a UI device (*e.g.*, receiving a selection of "play" in Fig. 8) would have caused the movie to play because the ultimate desire of a user is to watch VOD content. EX-1003, ¶219. In response to the fifth selection, it would have been obvious to provide a player (*e.g.*, EX-1011, 1:09) to present the movie to the user as taught by TechnoBuffalo. *Id.*

h. Limitation [2.8]

This limitation is obvious over Kim in view of TechnoBuffalo, MissingRemote, Hunt, and Hunleth. *See* [1.8] (§VI.A.ii.i); EX-1003, ¶220.

iv. Claim 3 (Limitation [3.0])

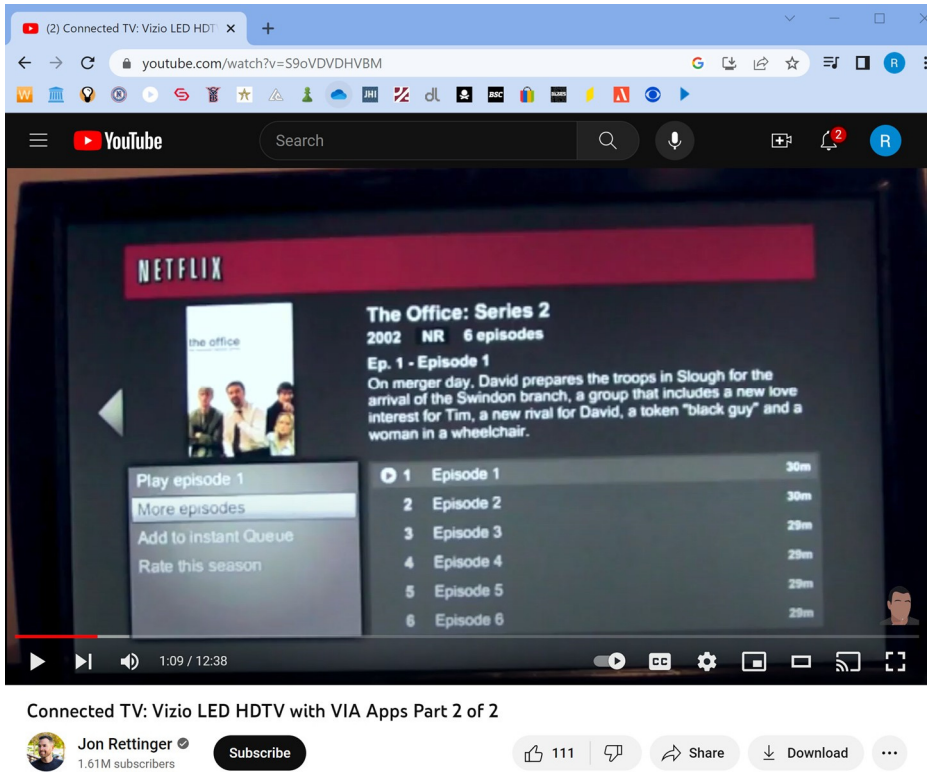
Claim 3 is obvious over Kim in view of TechnoBuffalo and MissingRemote. *See* [2.5] (§VI.A.iii.f); EX-1003, ¶221.

v. Claim 4 (Limitation [4.0])

As discussed at [1.6] (§VI.A.ii.g), TechnoBuffalo2 discloses two digest views associated with a TV series. Both digest views include a selectable menu item to play an episode of the series. EX-1003, ¶222.

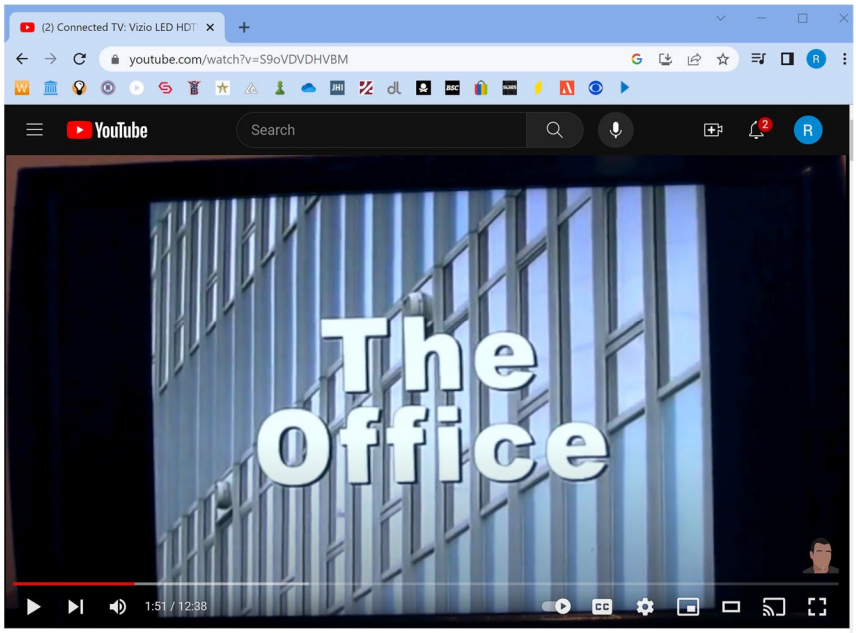


EX-1011, 1:03 (including "Play episode 1" menu item).



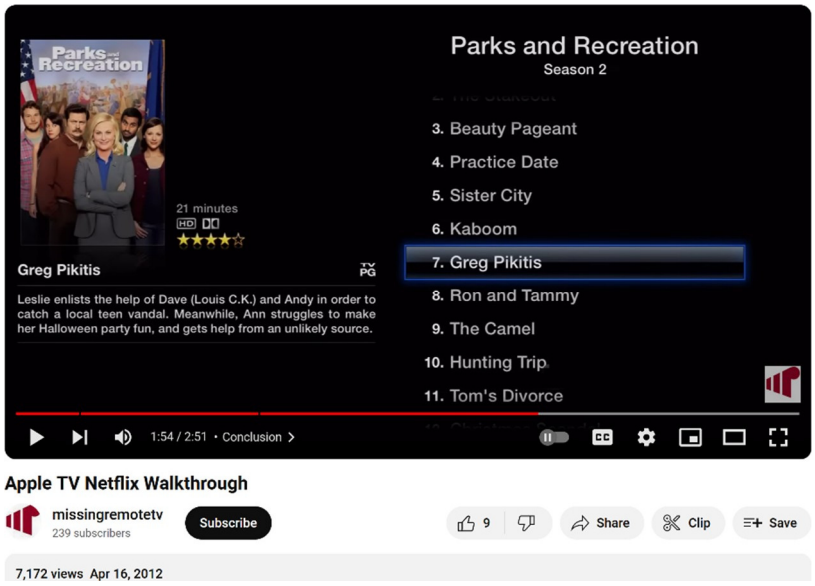
EX-1011, 1:09 (including play button).

A POSITA would have understood that in response to selecting play ("*the fourth selection*"), a player to present the episode to the user would be provided as in TechnoBuffalo2. EX-1003, ¶223.



EX-1011, 1:51.

MissingRemote also discloses "*a digest view*." EX-1003, ¶224.



EX-1018, 1:54.

A POSITA would have understood that a user selection of "Greg Pikitis" ("*fourth selection*") would cause the TV to provide a player to present the episode to the user. EX-1003, ¶225.

vi. Claim 5 (Limitation [5.0])

This limitation is obvious over Kim in view of TechnoBuffalo, MissingRemote, and Hunt. *See* [2.7] (§VI.A.iii.g); EX-1003, ¶226.

vii. Claim 6 (Limitation [6.0])

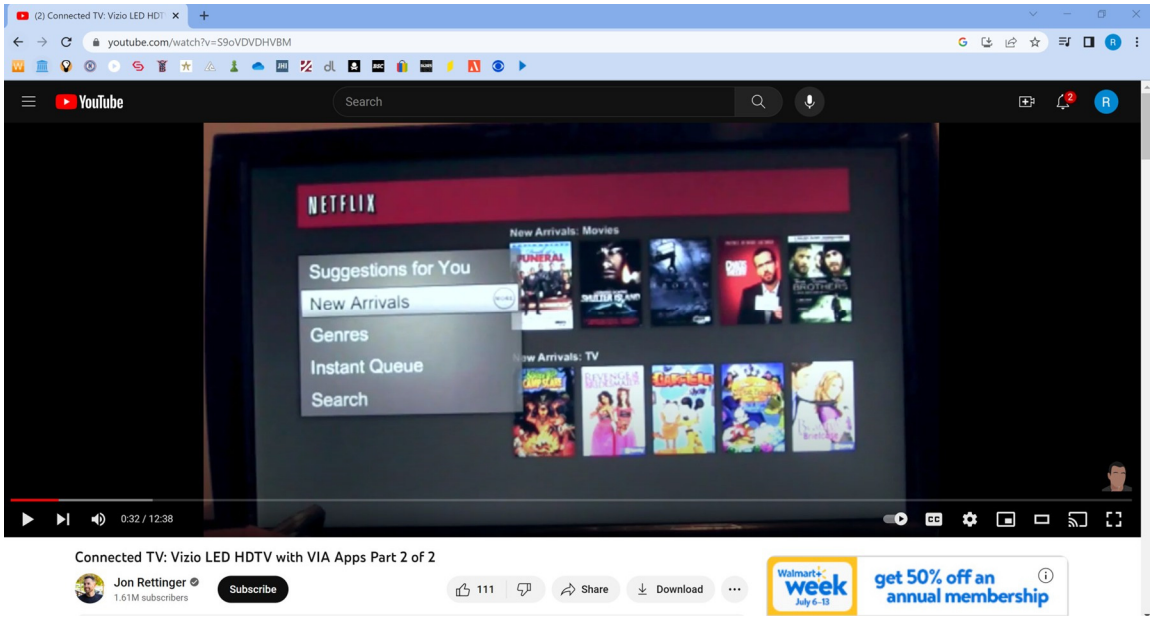
As discussed at [1.2] (§VI.A.ii.c), TechnoBuffalo2 discloses a master view of VOD content. Claim 6 requires the master view to include at least two "*user-selectable devices*." The '384 Patent teaches that "user interface 2100 provides a navigation bar 2120 having selectable devices 2104 through 2116." EX-1001, 46:6-8.



Fig. 21

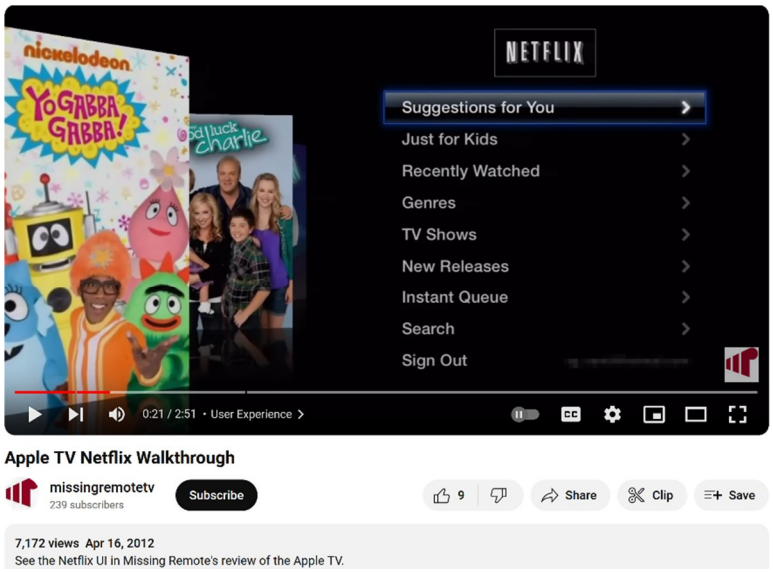
EX-1001, Fig. 21.

TechnoBuffalo2's master view includes multiple user-selectable devices (*e.g.*, "Suggestions for You," "New Arrivals") to view a collection view based on one of two or more criteria (*e.g.*, suggested content, new content, content organized by genre). EX-1003, ¶228.



EX-1011, 0:32.

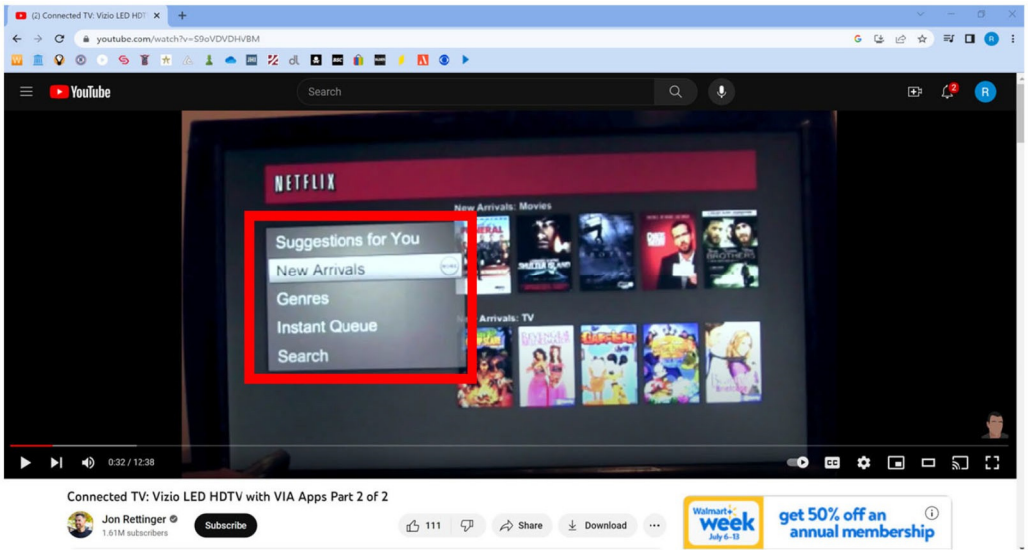
MissingRemote's master view includes multiple user-selectable devices (*e.g.*, "Suggestions for You," "Recently Watched") to view a collection view based on one of two or more criteria (*e.g.*, suggested, recently watched, and new content). EX-1003, ¶229.



EX-1018, 0:21.

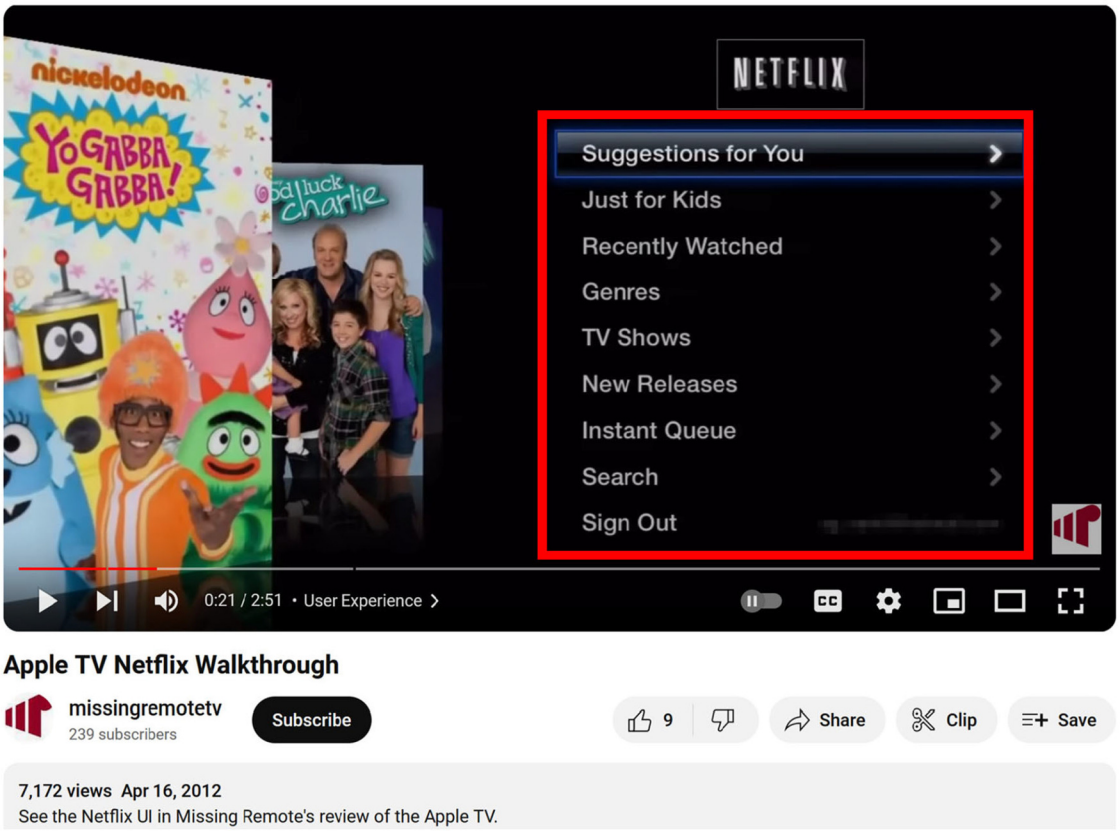
viii. Claim 7 (Limitation [7.0])

As discussed at [1.2], [6.0] (§§VI.A.ii.c, VI.A.vii), TechnoBuffalo2 discloses a master view of VOD content. The master view includes a vertical navigation bar to select between types of content. EX-1003, ¶230.



EX-1011, 0:32 (annotated).

MissingRemote discloses a similar navigation bar for its master view.

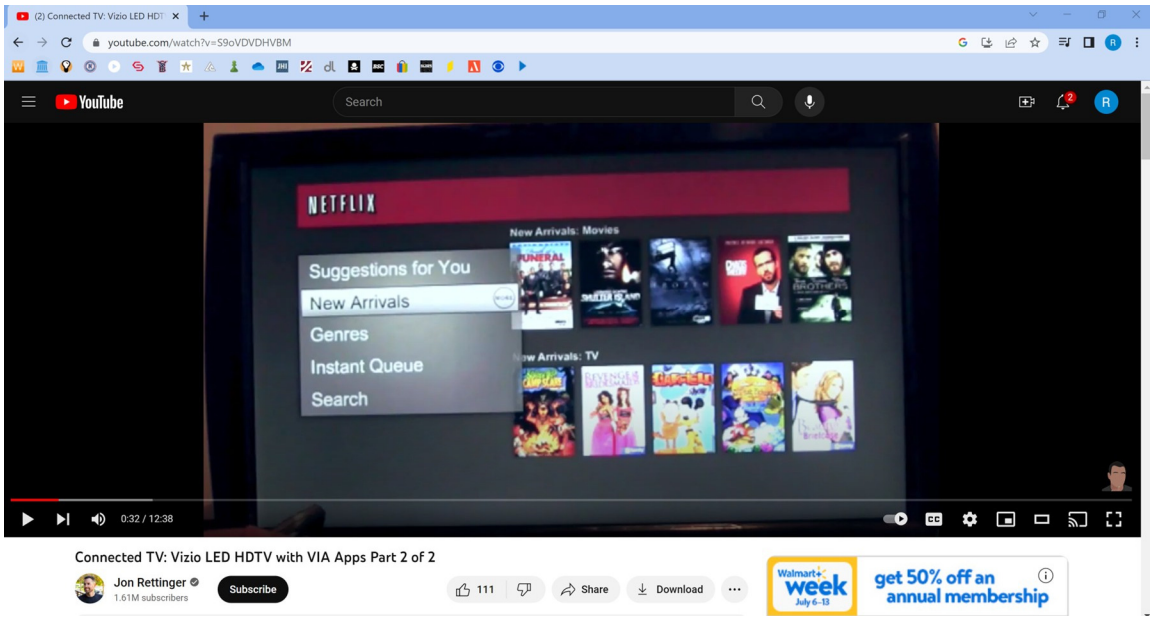


EX-1018, 0:21 (annotated).

While not required by claim 7, it would have been obvious to a POSITA to implement the navigation bar horizontally. EX-1003, ¶233. Horizontal navigation bars were known elements for UIs. *Id.*; *see, e.g.*, EX-1022, Fig. 2. In addition to the motivations previously discussed (*e.g.*, §VI.A.i), a POSITA would have been motivated to use a horizontal navigation bar to present information in an ordered and efficient manner, allowing users to quickly, easily and intuitively access content, as done on many other computing devices before the '384 Patent. EX-1003, ¶233. A POSITA would have been able to successfully implement this design change. *Id.*

ix. Claim 8 (Limitation [8.0])

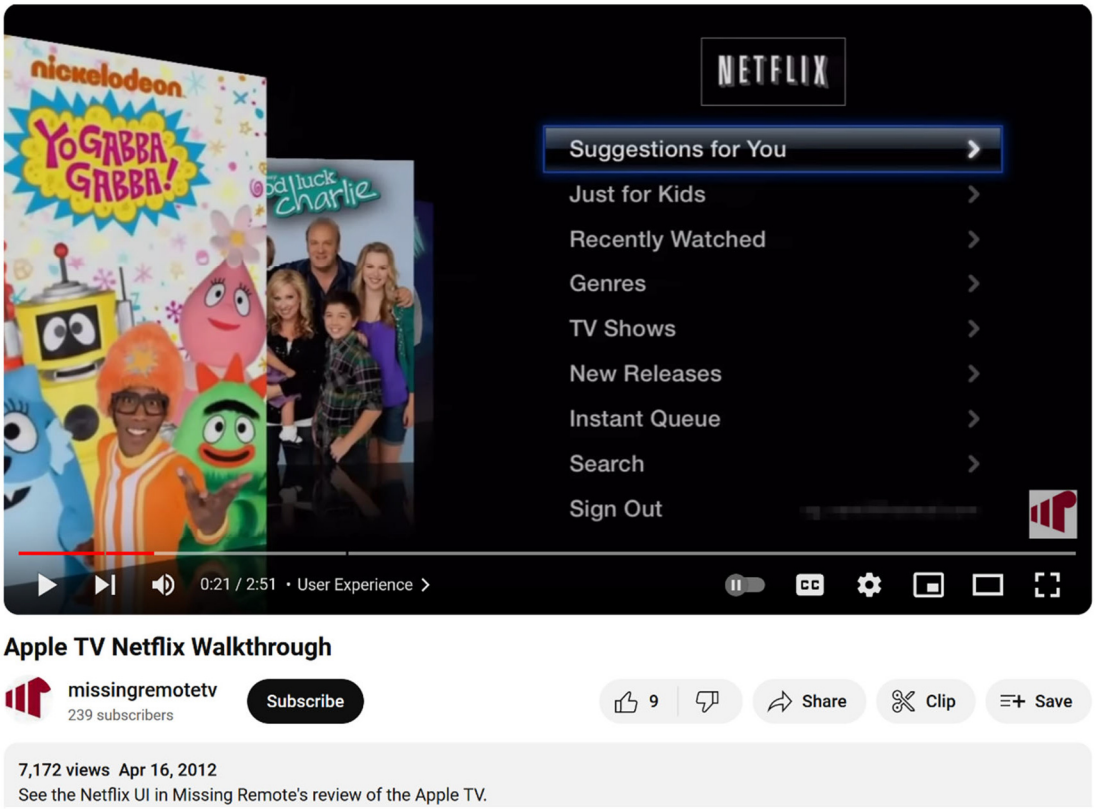
As discussed at [7.0] (§VI.A.viii), TechnoBuffalo2 discloses a master view of VOD content, which includes movie and television series content. EX-1003, ¶234.



EX-1011, 0:32.

Although only one type of content is required for claim 8, a POSITA would have understood the television and movie content to further include showcase or variety content. EX-1003, ¶235.

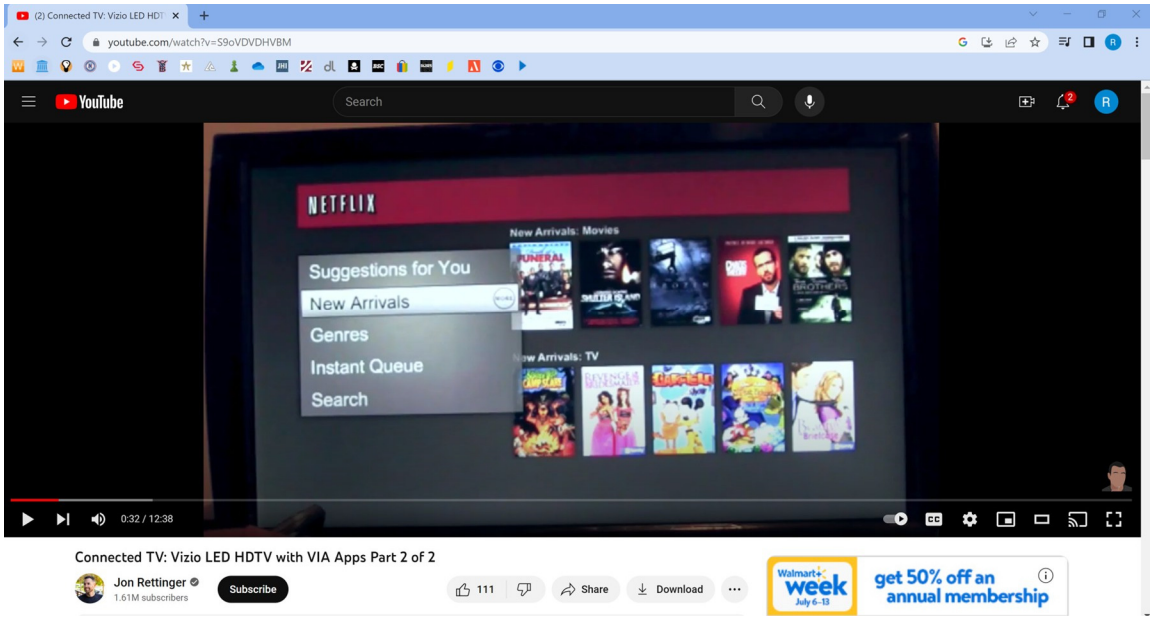
The same is true for MissingRemote's master view. EX-1003, ¶236.



EX-1018, 0:21.

x. Claim 9 (Limitation [9.0])

As discussed at [1.2], [6.0] (§§VI.A.ii.c, VI.A.vii), TechnoBuffalo discloses a master view ("*master layout*") of VOD content including user-selectable devices. The master layout includes user selectable devices for viewing a collection of content based on newest content (*e.g.*, "New Arrivals") and recommended content (*e.g.*, "Suggestions for You"). EX-1003, ¶237.



EX-1011, 0:32.

xi. Claim 10 (Limitation [10.0])

This limitation is obvious over Kim in view of TechnoBuffalo, MissingRemote, and Hunt. *See* claims 6-9; EX-1003, ¶238.

xii. Claim 11

a. Limitation [11.0]

This limitation is obvious over Kim in view of TechnoBuffalo and MissingRemote. *See* [2.1], [2.2], [2.3] (§§VI.A.iii.b, VI.A.iii.c, VI.A.iii.d); EX-1003, ¶239.

First, Kim discloses non-transitory medium such as "a ROM, a CD-ROM, a magnetic tape, a floppy disc, an optical data storage" having "code that is written on a computer-readable recording medium and, can thus, be read by a processor" and "executed" to perform the noted method. EX-1019, [0085] (disclosing

additional examples of non-transitory computer readable medium), [0299]; EX-1003, ¶240.

Second, an intelligent TV is a "*computing system*." EX-1003, ¶241; EX-1001, 18:13-19.

Third, Kim teaches the use of a non-transitory computer readable medium having stored thereon processor executable instructions that cause the TV to execute a method. EX-1019, [0085], [0120], [0147], [0156]-[0159], [0166]; EX-1003, ¶242. The use of a non-transitory computer readable medium having stored thereon processor executable instructions that cause the TV to execute a method would also have been obvious to a POSITA. EX-1003, ¶142. Further, a POSITA would have understood that all method steps in claim 11 would have been the result of executing instructions by a processor. *Id*.

b. Limitation [11.1]

This limitation is obvious over Kim in view of TechnoBuffalo. *See* [1.1], [1.2], [11.1] (§§VI.A.ii.b, VI.A.ii.c, VI.A.xii.b); EX-1003, ¶243.

c. Limitation [11.2]

This limitation is obvious over Kim in view of TechnoBuffalo, MissingRemote, and Hunt. *See* [1.3], [1.4], [11.1] (§§VI.A.ii.d, VI.A.ii.e, VI.A.xii.b); EX-1003, ¶244.

d. Limitation [11.3]

This limitation is obvious over Kim in view of TechnoBuffalo, MissingRemote, and Hunt. *See* [1.5], [1.6], [11.1] (§§VI.A.ii.f, VI.A.ii.g, VI.A.xii.b); EX-1003, ¶245.

e. Limitation [11.4]

This limitation is obvious over Kim in view of TechnoBuffalo, MissingRemote, and Hunt. *See* [1.7], [11.1] (§§VI.A.ii.h, VI.A.xii.b); EX-1003, ¶246.

f. Limitation [11.5]

This limitation is obvious over Kim in view of TechnoBuffalo, MissingRemote, and Hunt. *See* [1.7], [11.1] (§§VI.A.ii.h, VI.A.xii.b); EX-1003, ¶247.

g. Limitation [11.6]

This limitation is obvious over Kim in view of TechnoBuffalo, MissingRemote, and Hunt. *See* [1.8], [11.1] (§§VI.A.ii.i, VI.A.xii.b); EX-1003, ¶248.

xiii. Claim 12 (Limitation [12.0])

This limitation is obvious over Kim in view of TechnoBuffalo, MissingRemote, and Hunt. *See* claims 6-9, 11; EX-1003, ¶249.

B. Ground 2: Claims 1-12 Are Obvious Under 35 U.S.C. § 103(a) Over Kim in View of Ma, Hunt, and Hunleth

i. Reasons to Combine Kim, Ma, Hunt, and Hunleth

A POSITA would have found it obvious to combine the teachings of Kim with Ma, Hunt, and Hunleth. EX-1003, ¶250.

Kim discloses a home screen for intelligent TVs including applications for CPs. EX-1019, [0201], Fig. 19. CPs provide VOD for real-time streaming. *Id*., [0063], [0159]; EX-1003, ¶251. Ma provides an exemplar CP capable of providing VOD, which could have been added to Kim's list of CPs. EX-1003, ¶251. Hunt includes additional teachings relating to presenting menu items in response to VOD selections. *Id*. Further, since Hunt is a Netflix patent, and Kim discloses its TVs as including Netflix, Kim provides a POSITA with an express reason and motivation to combine the teachings of Kim and Hunt. EX-1003, ¶252; *Cimline,* 413 F. App'x at 245; *Memoryweb*, PGR2022-00034, Paper 11, 46-50.

Similar to Hunt, Hunleth discloses user selections of movies (*e.g.*, "Apollo 13") in a collection view resulting in the display of the detail view. EX-1021, 4:45-51; Figs. 1B (collection view), 2 (detail view). Hunleth also provides details about how the selected content's metadata can be used by the client device to generate UIs, including the collection and detail views shown in Figs. 1B and 2. EX-1021, 5:2-17; EX-1003, ¶253.

A POSITA would have been motivated to combine Hunleth's teachings regarding metadata use and management to generate and display UIs with the other teachings from Ma, Kim, and Hunt to: (1) ensure that UIs are accurately generated, (2) enable sufficient data to be supplied to render rich UIs, (3) provide UIs in a manner that is sensitive to time delays; and (4) provide UIs that resolve conflicting parameters and enable advanced UIs to be generated. EX-1003, ¶254; EX-1021, 2:63-3:3.

Ma, Hunt, and Hunleth are natural extensions of Kim and complement Kim's disclosure by disclosing details about UI design and generation, including using metadata to generate UIs. EX-1003, ¶255. It would have been obvious to a POSITA to implement the UIs and other teachings from Ma, Hunt, and Hunleth on Kim's TV once Ma is selected as a CP. *Id*. A POSITA would have combined the teachings of Ma, Hunt, and Hunleth with Kim to obtain beneficial and predictable results. *Id*.

A POSITA would have been motivated to combine the teachings of Ma with Kim because Kim teaches that its television includes applications from VOD CPs, and a POSITA would have been motivated to present the VOD content using an intuitive GUI. EX-1003, ¶256.

A POSITA would have been motivated to combine the teachings of Kim with Ma, Hunt, and Hunleth because those references consider analogous methods

(*e.g.*, providing UIs including selectable menu items), are in the same field (*e.g.*, use of display apparatuses for providing content from CPs), and are directed toward solving the same problem (*e.g.*, increasing user convenience and overall effectiveness of UIs by providing more intuitive UIs). EX-1019, [0282]; EX-1021, 2:64-66; EX-1003, ¶257.

The combination of Ma, Hunt, and Hunleth with Kim is merely combining prior art elements (*e.g.*, smart TVs, processors, non-transitory computer readable medium having stored thereon processor executable instructions, GUIs, metadata) according to known methods (*e.g.*, generating and presenting of GUIs using metadata for VOD content from CPs) to yield predictable results (*e.g.*, providing users with an ordered UI to select and watch movies and TV shows). EX-1003, ¶258.

The combination is a simple substitution of one known element (*e.g.*, methods for using metadata and presenting GUIs) for another (*e.g.*, adding a CP (Ma) to Kim's list of CPs) to obtain predictable results (*e.g.*, using metadata and presenting GUIs for VOD from CPs). *Id.*

The combination is nothing more than applying a known technique (*e.g.*, use of metadata and hierarchical GUIs) to improve the similar system of Kim, wherein Kim specifically envisions applications for different CPs being used on the Kim intelligent TV. EX-1019, [0201], Fig. 19; EX-1003, ¶259. Kim includes teachings

and suggestions (*e.g.*, references to various CPs, metadata manager 712) that would have led a POSITA to modify the Kim TV to include teachings from Ma, Hunt, and Hunleth to arrive at the claimed invention. *Id.*; EX-1019, [0053], [0201], Fig. 19.

The results would have been predictable and there would have been a reasonable expectation of success in the combination given that Kim discloses the use of CP applications on the intelligent television, Ma provides implementation details for displaying VOD on an intelligent television, Hunt provides further details relating to VOD delivery (*e.g.*, exemplar menu views, processor details), and Hunleth teaches well-known methods of using metadata to generate UIs. EX-1003, ¶260.

ii. Claim 1

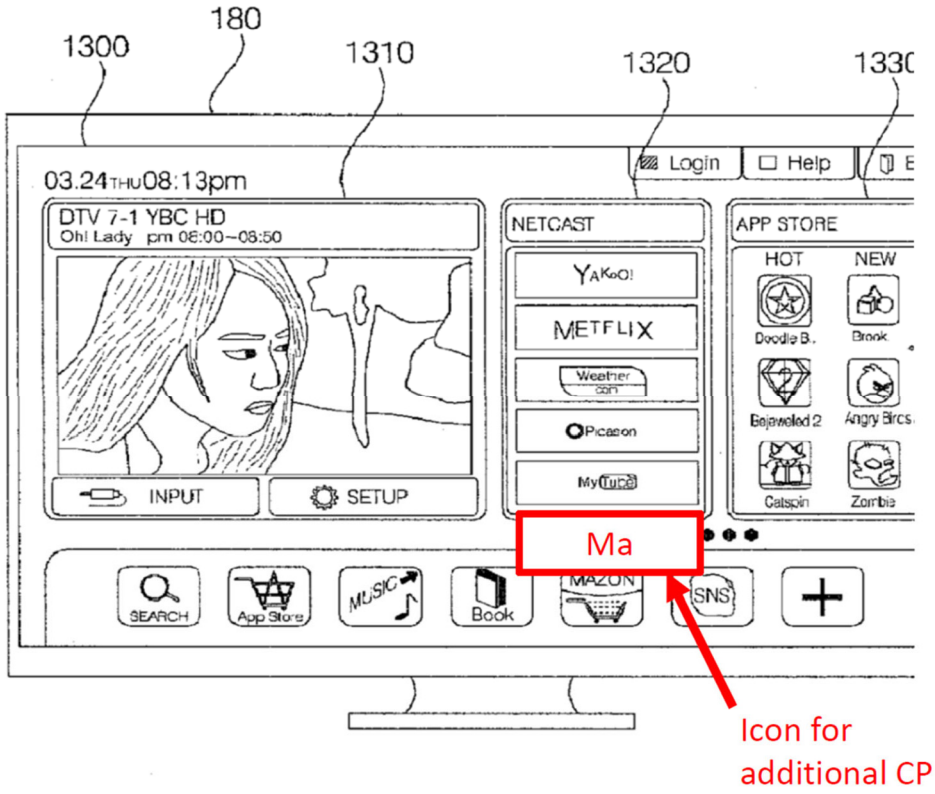
a. Limitation [1.0]

Kim discloses this limitation. *See* [1.0], Ground 1 (§VI.A.ii.a); EX-1003, ¶261.

b. Limitation [1.1]

Kim discloses this limitation. *See* [1.1], Ground 1 (§VI.A.ii.b); EX-1003, ¶262.

Kim also teaches that other CPs may be listed in CP list 1325. EX-1019, [0201]. A POSITA would have found it obvious to, and Kim provides express motivation for, adding Ma's CP to Kim's CP list as shown below. EX-1003, ¶263.



EX-1019, Fig. 19 (modified and annotated).

Once added to Kim's CP list, a user selecting "Ma" (first selection) would have directed the user to Ma's menu structure for presenting VOD content. EX-1003, ¶264.

c. Limitation [1.2]

First, examples of a "*first selection*" include selecting "Netflix" or "Ma" from Kim's home screen. *See* [1.1], Grounds 1, 2 (§§VI.A.ii.b, VI.B.ii.b). EX-1003, ¶265.

Second, Ma discloses "*a master view of the VOD content.*" Specifically, once a user makes "*the first selection*" of the Ma icon as described above, it would have been obvious to a POSITA for the TV to provide "a top-level media menu

200 with which a user of media device 100 can interact to browse and select items of media content for playback." EX-1022, [0023]. Ma's top-level media menu ("*master view*") "includes 3 different regions including a shelf region 205 for displaying individual items of media content, a media type category region 210, which includes names of different media type categories (*e.g.*, Movies 220, TV Shows 225, Music 230, Photos 235, Podcasts 240, Internet 245), and a sub-category region 215, in which sub-category menu options are displayed for each media type category." *Id.*; EX-1003, ¶266.

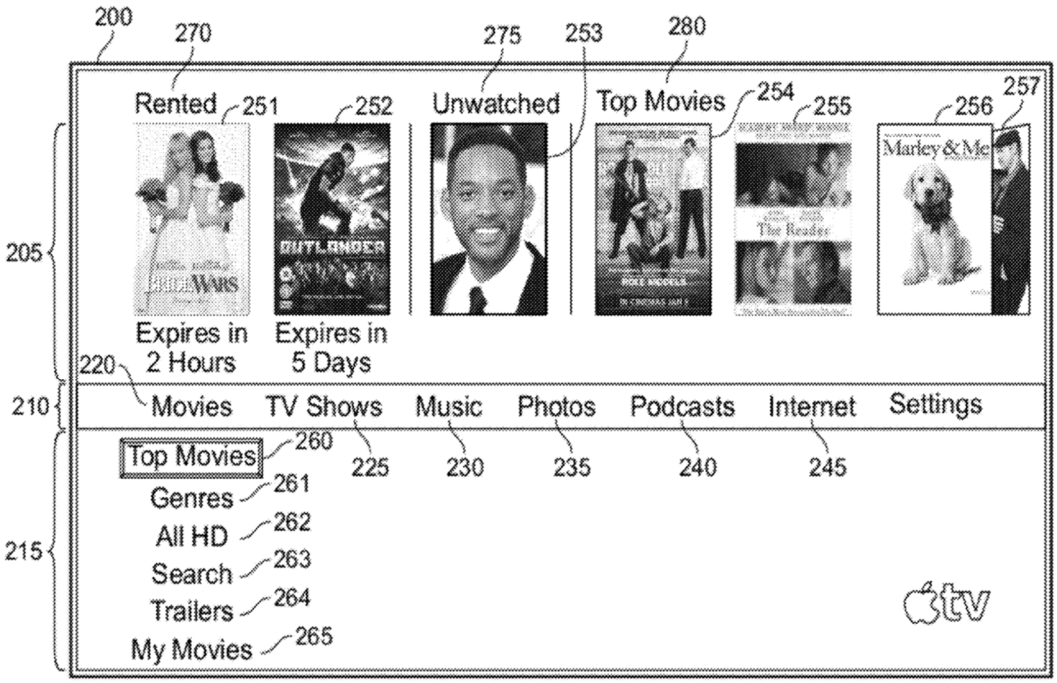


FIG. 2

EX-1022, Fig. 2 (master view embodiment).

Ma's master view presents multiple collections of VOD content organized by a characteristic of the VOD content (e.g., movie collections organized by characteristics such as "Rented," "Unwatched"). EX-1022, Fig. 2; EX-1003, ¶267.

Ma's master view features movies. However, a POSITA would have understood that the master view could have featured television shows as taught by Ma (below). EX-1003, ¶268.

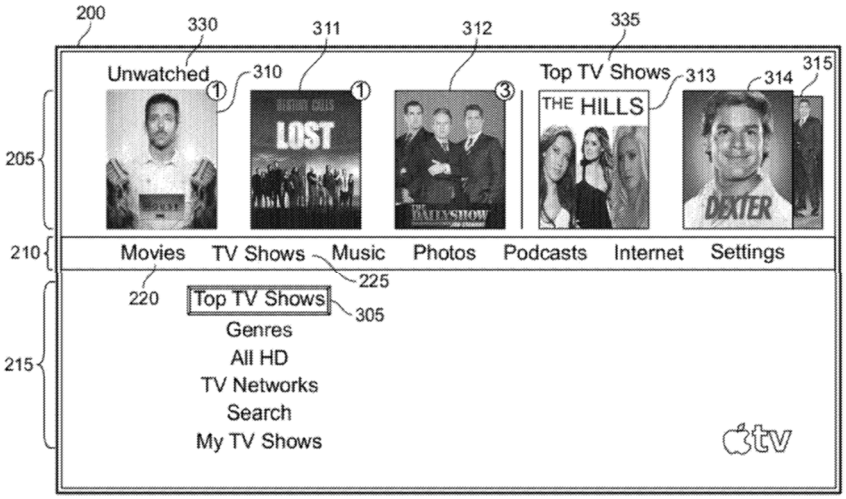


FIG. 3

EX-1022, Fig. 3.

This view presents multiple collections of VOD content organized by a characteristic of the VOD content (*e.g.*, collections of TV shows organized by characteristics such as "Unwatched," "Top TV Shows"). EX-1022, Fig. 3; EX-1003, ¶269.

Additionally, it would have been obvious to a POSITA to implement Ma's master view to display both movies and TV shows. EX-1003, ¶270. This would

have involved a known technique (for example displaying VOD content by some category, *e.g.,* favorites, including a mixture of TV shows and movies) to achieve a predictable result, wherein a POSITA would have a reasonable expectation of success of implementing the design. *Id*. Using different UI designs including varying content is taught by Ma. EX-1022, [0030], [0053]. A POSITA would have been motivated to display TV shows and movies together to provide a flexible UI allowing users to quickly, easily, and intuitively access both content types from the same view, which is expressly taught by Ma. EX-1022, [0030], [0053]; EX-1003, ¶271.

Third, as discussed at [1.1], Ground 1 (§VI.A.ii.b), the master view is provided "*by the processor*" consistent with Kim's teachings. EX-1003, ¶272. Additionally, Ma teaches that its "***processor 705 [] can be configured to generate output signals for presentation***, such as one or more streams representing media content or ***an interface for interacting with a user***." EX-1022, [0079]. Thus, a POSITA would have understood that a processor provides the master view of VOD content (*i.e*., generate output signals for presentation) in view of Kim and Ma. EX-1003, ¶272.

d. Limitation [1.3]

First, as discussed at [1.1], [1.2] (§§VI.B.ii.b, VI.B.ii.c), Kim's UI receives user input and control signals, and Kim's processor receives signals associated

with user selections, including "*a second selection for a VOD content*." EX-1003, ¶273. Ma similarly teaches that the processor receives signals and commands associated with user selections, including a second selection. *Id*., EX-1022, [0084].

Second, Ma discloses multiple "second selection[s]" for VOD content by a user, which is received by the processor. If "the user were to select the Top Movies sub-category 260, e.g., by clicking a button on the remote control, the media device would respond by displaying an entirely different menu screen related to Top Movies." EX-1022, [0024]. Further, "selection of any of these sub-category menu choices would results in the media device 100 changing the screen to display a different menu associated with the selected sub-category choice." *Id*. Thus, the limitation for a "*second selection for a VOD content*" is satisfied by selections for "Rented," "Unwatched," "Top Movies," "Top TV Shows," "Genres," "All HD," "TV Networks," "My Movies," and "My TV Shows." EX-1022, Figs. 2 and 3; EX-1003, ¶274.

e. Limitation [1.4]

First, as described at [1.3] (§VI.B.ii.d), "second selections" disclosed in Ma include selections for "Rented," "Unwatched," "Top Movies," etc. EX-1022, Figs. 2, 3; EX-1003, ¶275.

Ma teaches that "additional or different shelf groupings of media items can be used as desired." EX-1022, [0030], [0053]. Accordingly, it would have been

obvious to a POSITA to add another selectable button relating "Favorites," including a grouping of VOD identified as a "Favorite," to Ma's master view. EX-1003, ¶276. Selecting "Favorites" would have satisfied the "second selection" limitation consistent with the analysis above. *Id*. Adding this menu choice would have been an obvious way to allow the user to navigate to the "Favorites" menu disclosed in Fig. 5B of Ma. *Id*. A POSITA would have understood the need to access the Favorites menu and would therefore have been motivated to add this menu choice to provide users with that access. *Id*.

Second, it would have been obvious to a POSITA for a second selection in Ma's Fig. 2 menu to result in a collection view of VOD content, the collection view presenting two or more items of the VOD content having the characteristic. EX-1003, ¶277. For example, Ma teaches that if "the user were to select the Top Movies sub-category 260, e.g., by clicking a button on the remote control, the media device would respond by displaying an entirely different menu screen related to Top Movies." EX-1022, [0024].

Ma does not show the "entirely different menu screen," but it would have been obvious to a POSITA for that screen to be a collection view as disclosed in Ma's Figure 5B. EX-1003, ¶278. For example, it would have been obvious for a "second selection" for "Top Movies" to result in a collection view as shown below. *Id*.

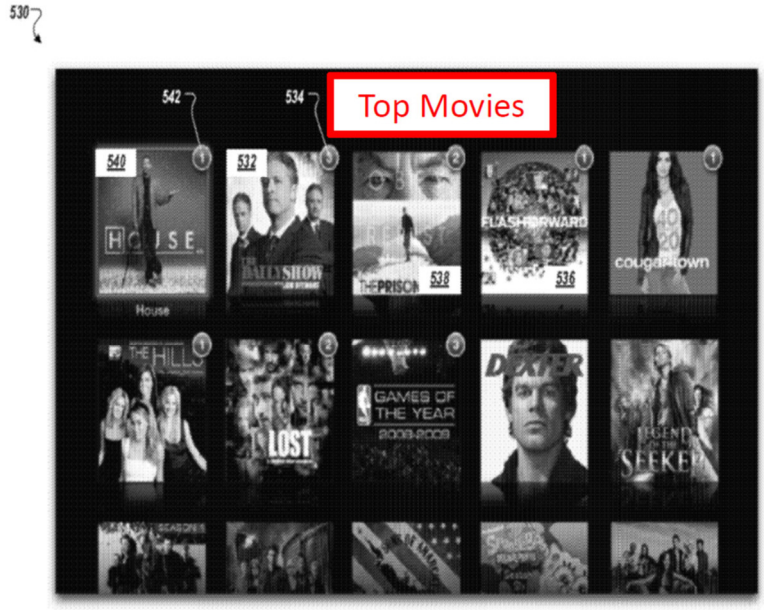


FIG. 5B

EX-1022, Fig. 5B (modified).

As another example, as discussed above, it would have been obvious to a POSITA to add a selectable button for "Favorites" to Ma's top-level media menu. EX-1003, ¶279. From there, it would have been obvious, in response to a "*second selection*" of the new "Favorites" button, to display an entirely new menu screen relating to "Favorites" disclosed in Fig. 5B of Ma (below). *Id*.

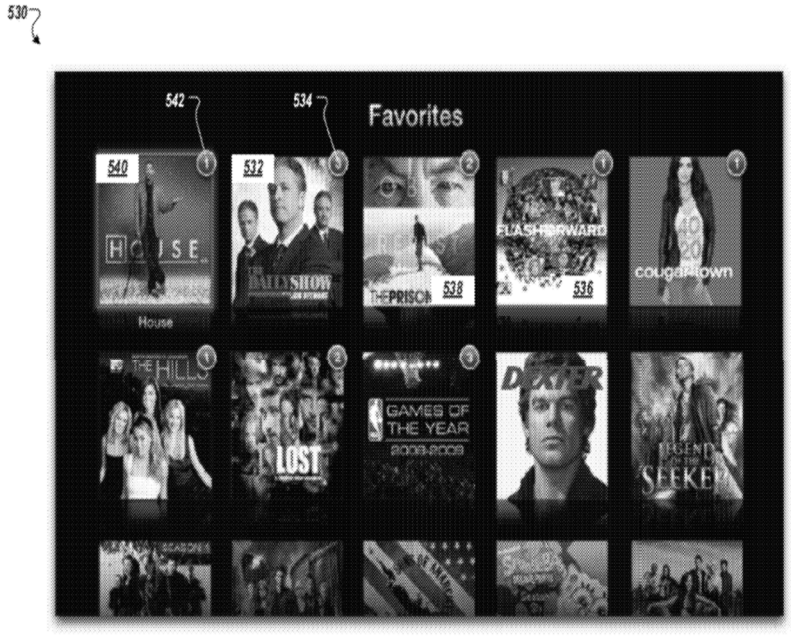


FIG. 5B

EX-1022, Fig. 5B (unmodified).

Figure 5B's menu screen is a collection view of VOD content (*e.g.*, TV shows), wherein the collection view presents two or more items of the VOD content having the characteristic "Favorites."

As another example, in response to a "second selection" of the "My Movies" selectable text in Ma's master view (EX-1022, Fig. 2, item 265), it would have been obvious to a POSITA to present a collection view of movies as disclosed in Hunt for "your movies." EX-1003, ¶281.

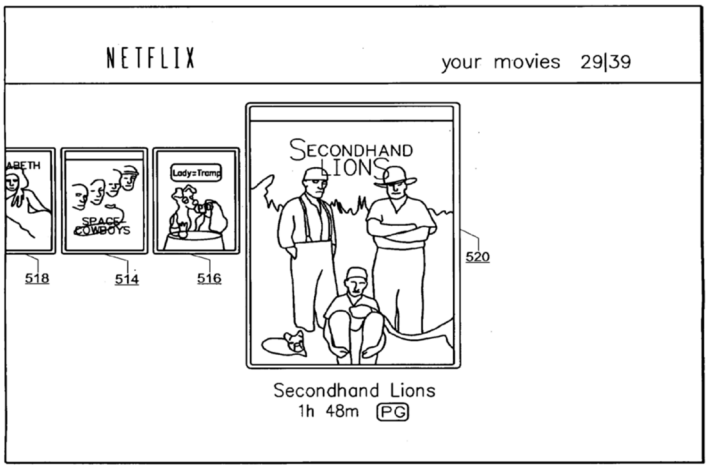


FIG. 7

EX-1020, Fig. 7.

A POSITA would have recognized the overlap between "My Movies" in Ma, and "your movies" in Hunt. EX-1003, ¶282. Thus, providing a collection view as disclosed in Hunt's Fig. 7 would have been an obvious result of a user selecting "My Movies" in Ma's master view. *Id*. A POSITA would have been motivated to display a collection view based on Ma's use of collection views for similar selections (*e.g*., presenting a collection view for Favorites TV shows). *Id*.

Third, the collection view is "provided by the processor." Consistent with [1.1] and [1.2] (§§VI.B.ii.b, VI.B.ii.c), Kim's processor provides "overall control to the image display apparatus 100." EX-1019, [0089]. Kim's processor utilizes a software platform with the OS to perform display apparatus operations. *Id*., [0145], [0166], Figs. 11, 12. Ma's "processor 705 [] can be configured to generate output signals for presentation, such as one or more streams representing media content or an interface for interacting with a user." *Id*., [0079]. Thus, it would have been

obvious to a POSITA for the processor to provide the collection view of VOD content based on the teachings of Kim and/or Ma. EX-1003, ¶283.

f. Limitation [1.5]

First, consistent with [1.1] and [1.2] (§§VI.B.ii.b, VI.B.ii.c), Kim's UI receives user input signals or control signals, and Kim's processor receives user selection signals, including "*a third selection for a VOD content*." EX-1003, ¶284. Ma's processor receives signals and commands associated with user selections, including the third selections discussed below. *Id*.; EX-1022, [0084].

Second, multiple selections satisfy the "*third selection for a VOD content*" limitation as taught by Ma and Hunt. For example, selecting House in Ma's Fig. 5B collection view would be "*a third selection for a VOD content*." EX-1003, ¶285. Similarly, if the content in Fig. 5B included movies (*see* EX-1022, [0054]), then selecting a movie would be "*a third selection for a VOD content*." *Id*.

Further, as explained at [1.4] (§VI.B.ii.e), it would have been obvious to a POSITA to include a collection view for other collections of VOD content (*e.g.*, "Rented," "Unwatched," "Top Movies"). EX-1003, ¶286. Selections made within those collection views would also satisfy the "*third selection for a VOD content*" limitation. *Id*.

Further, selecting "Secondhand Lions" in Hunt's Fig. 7, which uses a collection view to present VOD content, would also satisfy the limitation for "*a third selection for a VOD content*." EX-1003, ¶287.

g. Limitation [1.6]

First, as discussed at [1.5] (§VI.B.ii.f), "*a third selection*" comprises a user selection of the television series "House" in Fig. 5B of Ma. Consistent with Ma's teachings, it would have been obvious to a POSITA that selecting "House" would cause "a series screen 550 [to be] displayed for the TV series 540 [House]." EX-1022, [0063]; EX-1003, ¶288. In Ma's Fig. 5C, "[t]he series screen 550 displays shortcuts 554, 556 pointing to episodes for the most recently accessed season of the TV series 540." *Id*.

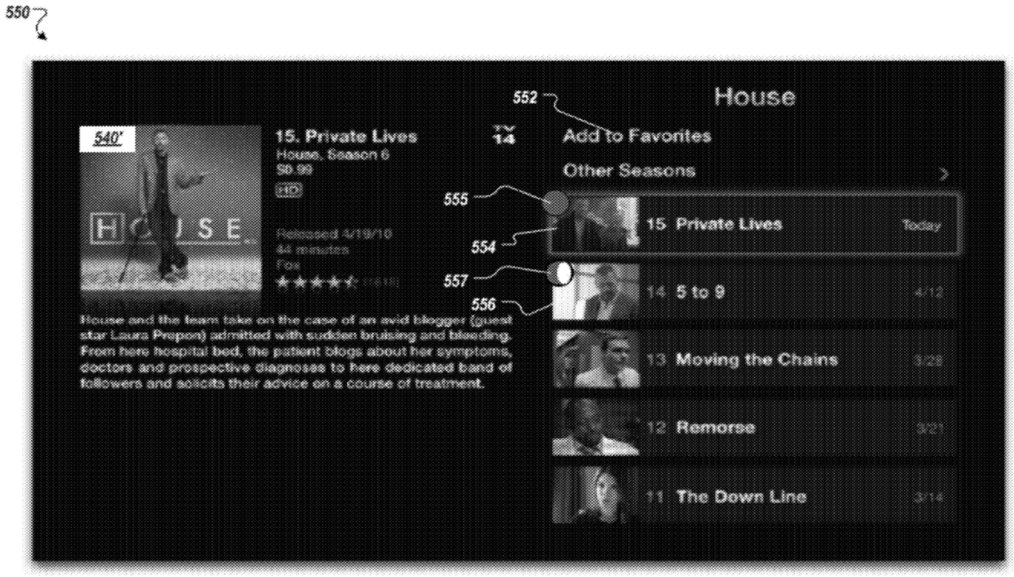


FIG. 5C

EX-1022, Fig. 5C.

Ma's "series screen" represents a "*digest view*" as it presents information about a set of VOD content (*e.g.*, TV episodes) that are associated with a series (*e.g.*, "House"). EX-1003, ¶289.

Additionally, it would have been obvious to a POSITA that selecting a TV show in Figure 5B of Ma results in the presentation of a "*digest view*" as shown in either Fig. 11 or Fig. 12 of Hunt. EX-1003, ¶290.



FIG. 11

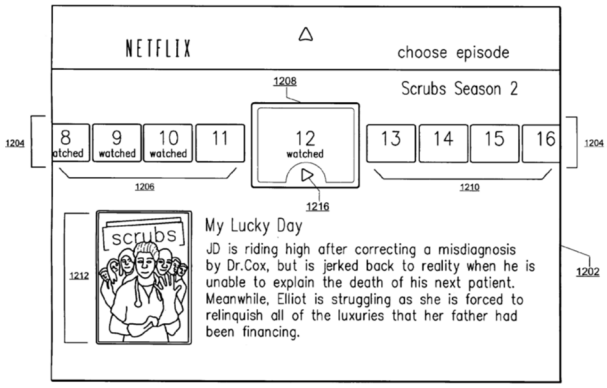


FIG. 12

EX-1020, Figs. 11, 12.

Both figures represent "*digest views*" for TV show episodes from a CP. EX-1003, ¶291.

Second, as discussed at [1.5] (§VI.B.ii.f), a "*third selection*" comprises a user selecting a movie (*e.g.*, "Secondhand Lions") within Hunt's Fig. 7 collection view.

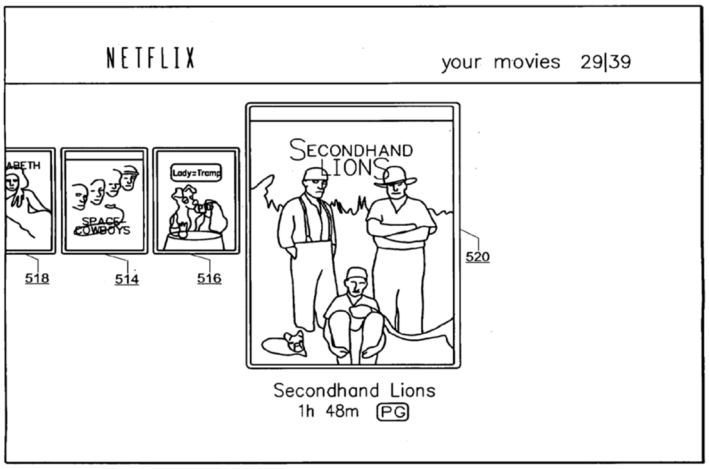


FIG. 7

EX-1020, Fig. 7.

Hunt teaches that selecting "Secondhand Lions" in Fig. 7's collection view results in the device providing a springboard screen relating to "Secondhand Lions" as shown in Hunt's Fig. 8. EX-1009, 17:33-38 ("FIG. 8 illustrates a springboard screen relating to ["Secondhand Lions"]. In an embodiment, streaming media processor 140 displays a springboard screen 802 in response to a user pressing a selection button while a movie poster image is displayed in the center large poster image position of FIG. 5, FIG. 6, FIG. 7."); EX-1003, ¶293.

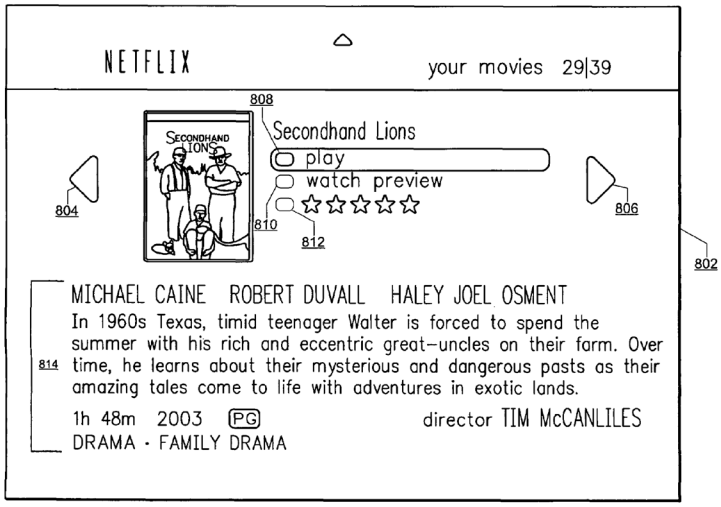


FIG. 8

EX-1020, Fig. 8.

Hunt's "springboard screen" represents "*a detail view*," as it presents information (*e.g.*, actors, synopsis, rating, etc.) about a selected item of the VOD content (*e.g.*, "Secondhand Lions"). EX-1003, ¶294.

Third, Hunleth teaches providing a detail view in response to a selection of a movie from a collection view. EX-1021, 5:46-51; EX-1003, ¶295.

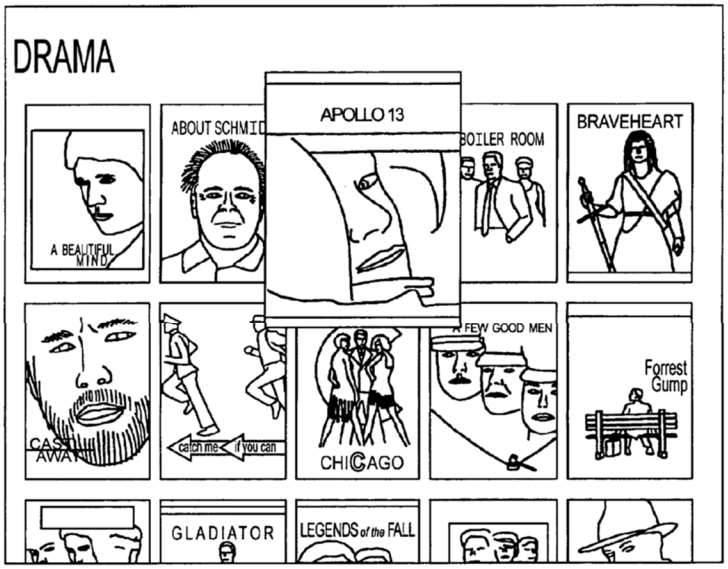


FIG. 1B

EX-1021, Fig. 1B (collection view).

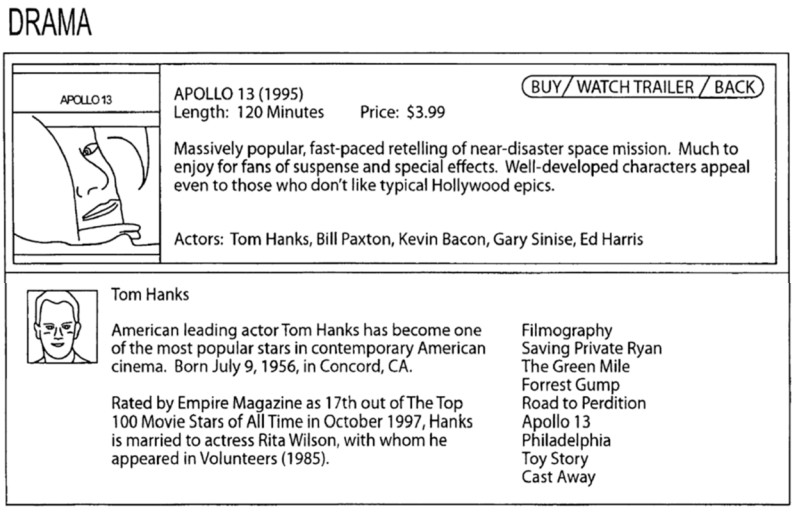


FIG. 2

EX-1021, Fig. 2 (detail view).

Fourth, as discussed at [1.1], [1.2], and [1.4] (§§VI.B.ii.b, VI.B.ii.c, VI.B.ii.e), Kim's processor provides "overall control to the image display apparatus 100." EX-1019, [0089]. Kim's processor utilizes a software platform

with the OS to perform display apparatus operations. *Id*., [0145], [0166], Figs. 11, 12. Ma's "processor 705 [] can be configured to generate output signals for presentation, such as one or more streams representing media content or an interface for interacting with a user." *Id*., [0079]. Thus, a POSITA would have understood that a processor provides detail and digest views of VOD content. EX-1003, ¶296.

h. Limitation [1.7]

First, as discussed at [1.6] (§VI.B.ii.g), if the third selection in the collection view (EX-1022, Fig. 5B) is for a series (*e.g*., "House"), the processor receives the selection and provides a digest view (EX-1022, Fig. 5C; EX-1007, Fig. 12) in response. If the third selection in the collection view (EX-1022, Fig. 5B (modified to include movies); EX-1020, Fig. 7) is for a movie (*e.g*., "Secondhand Lions"), the processor receives the selection and provides a detail view (EX-1020, Fig. 8). EX-1003, ¶297.

Second, as discussed at [1.2], [1.4], and [1.6] (§§VI.B.ii.c, VI.B.ii.e, VI.B.ii.g), Kim, Ma, Hunt, and Hunleth teach that views (*e.g*., master, collection, detail, digest views) are generated and provided by a processor. EX-1003, ¶298.

Third, as discussed herein (*e.g.*, §§VI.A.i, VI.A.ii, VI.B.i), it would have been obvious to a POSITA to determine, by a processor, if the selection in a

collection view is for a series or one of a movie or single show using metadata as taught by Kim, Hunt, and Hunleth. EX-1003, ¶299. Ma does not alter the analysis.

Similar to the Netflix references in Ground 1, Ma teaches delivering VOD content for movies and TV shows and discloses an exemplar digest view in response to a selection of a series from collection view. EX-1022, Figs. 5, 5B, 5C. A POSITA would have understood that Ma's digest view (Fig. 5C) would not be used for a single show or movie. EX-1003, ¶299. Thus, a POSITA would have been motivated to determine, by a processor, if the selection in a collection view is for a series or one of a movie or single show using metadata for the same reasons stated above for Ground 1. EX-1003, ¶300*;* §§VI.A.i, VI.A.ii, VI.B.i.

i. Limitation [1.8]

First, as discussed at [1.2], [1.4], [1.6], and [1.7] (§§VI.B.ii.b, VI.B.ii.e, VI.B.ii.g, VI.B.ii.h), Kim, Ma, Hunt, and Hunleth teach UIs comprising a master view, a collection view, a digest view, and a detail view. EX-1003, ¶301.

Second, Hunt teaches a player view for VOD content. *See, e.g.*, EX-1020, 17:49-55, 19:29-35, Fig. 9. It also would have been obvious to a POSITA for the television to have a player view at a bottom level to display the selected content. EX-1003, ¶302.

Third, it would have been obvious to a POSITA to have a navigation view of VOD content to be an ordered set of UIs, which is consistent with the above

descriptions. It would have been obvious to a POSITA that ordered set would include a master view at a top level (EX-1022, Fig. 2), a collection view at a second level (EX-1022, Fig. 2; EX-1020, Figs. 5-7; EX-1021, Fig. 1B), either a digest view (EX-1022, Fig. 5C; EX-1020, Figs. 11, 12) or detail view (EX-1020, Fig. 8; EX-1021, Fig. 2) at a third level, and a player view (EX-1022, Fig. 9) at a fourth and bottom level. EX-1003, ¶303.This is the hierarchy disclosed and/or taught by the references including Ma. *Id*.

iii. Claim 2

a. Limitation [2.0]

This limitation is obvious over Kim. *See* [1.0] (§VI.B.ii.a); EX-1003, ¶304.

b. Limitation [2.1]

This limitation is obvious over Kim in view of Hunt. *See* [2.1], Ground 1 (§VI.A.iii.b); EX-1003, ¶305.

c. Limitation [2.2]

This limitation is obvious over Kim in view of Ma. *See* [1.1], [1.2] (§§VI.B.ii.b, VI.B.ii.c); EX-1003, ¶306.

d. Limitation [2.3]

This limitation is obvious over Kim in view of Ma. *See* [1.3], [1.4] (§§VI.B.ii.d, VI.B.ii.e); EX-1003, ¶307.

e. Limitation [2.4] and [2.6]

This limitation is obvious over Kim in view of Ma and Hunt. *See* [1.5], [1.6], [1.7] (§§VI.B.ii.f, VI.B.ii.g, VI.B.ii.h); EX-1003, ¶308.

f. Limitation [2.5]

First, as discussed at [1.6] (§VI.B.ii.g), Ma teaches a digest view for a television series. The digest view provides a listing of multiple episodes for the series. EX-1003, ¶309.

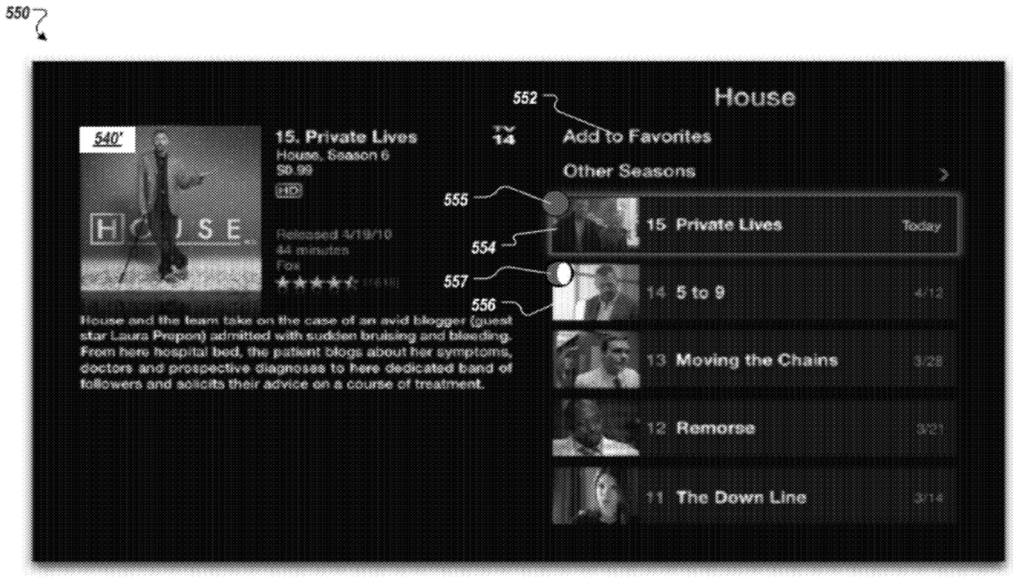


FIG. 5C

EX-1022, Fig. 5C.

Second, as discussed at [1.6] (§VI.B.ii.g), Hunt teaches a digest view for a television series. The digest view lists multiple episodes for the series. EX-1003, ¶310.

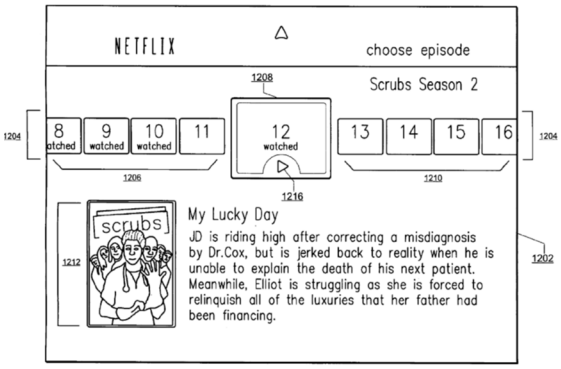


FIG. 12

EX-1020, Fig. 12.

g. Limitation [2.7]

First, as discussed at [1.6], [1.7] (§§VI.B.ii.g, VI.B.ii.h), Ma and Hunt disclose a digest view in response to the third selection. It would have been obvious to receive "*a fourth selection of an episode in the digest view.*" EX-1003, ¶311.

In Ma, a POSITA would have understood that selecting an episode from Fig. 5C would result in a player being presented to allow users to watch the episode. EX-1003, ¶312.

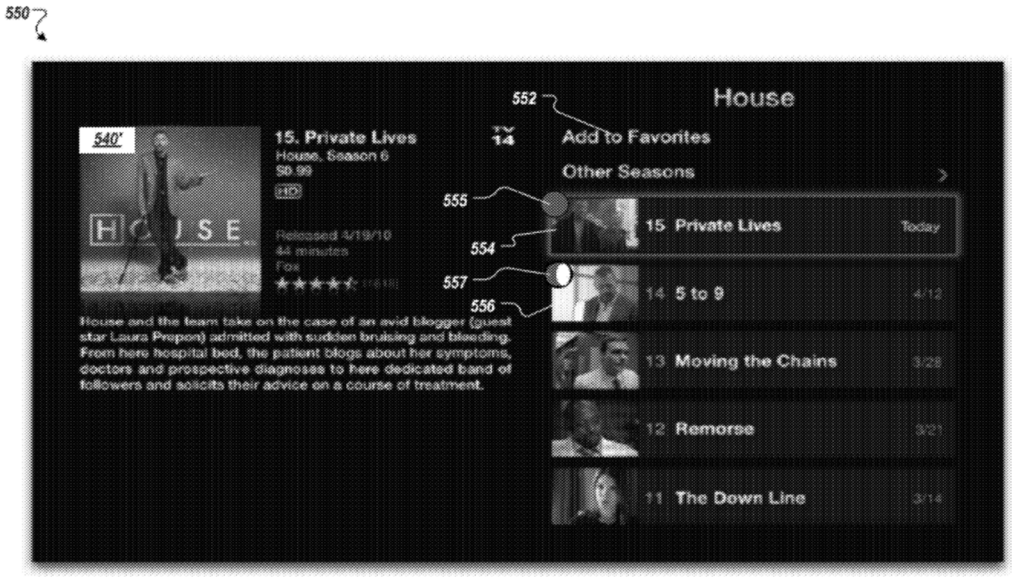


FIG. 5C

EX-1022, Fig. 5C.

Hunt also teaches displaying a player for VOD content in response to a user selection of an episode. *See, e.g.*, EX-1020, 17:49-55, 19:29-35, Fig. 9; EX-1003, ¶313.

Second, as discussed at [1.6] and [1.7] (§§VI.B.ii.g, VI.B.ii.h), it would have been obvious to present a detail view in response to a third selection as taught by Hunt. EX-1003, ¶314.

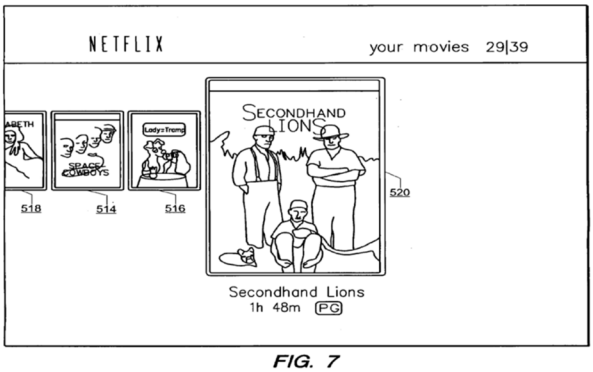


FIG. 7

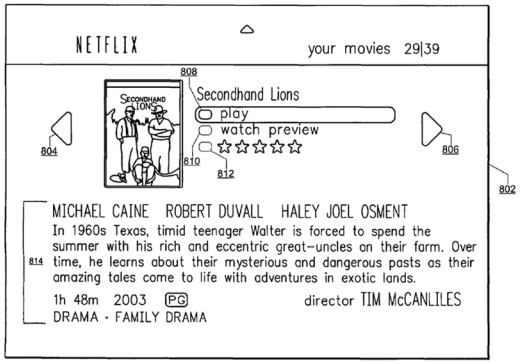


FIG. 8

EX-1020, Fig. 7 (collection view), Fig. 8 (detail view).

From there, it would have been obvious for the TV to receive a fifth selection of a UI device (*e.g.*, receiving a selection of the "play" button in Fig. 8 above) to play the movie. EX-1003, ¶315. In response to the fifth selection, a POSITA would have understood that a player would be provided to present the movie to the user as taught by Hunt. *Id*.

h. Limitation [2.8]

This limitation is obvious over Kim in view of Ma, Hunt, and Hunleth. *See* [1.8] (§VI.B.ii.i); EX-1003, ¶316.

iv. Claim 3 (Limitation [3.0])

As discussed at [1.6] (§VI.B.ii.g), Ma discloses a digest view for a television series (*e.g.*, "House"). The digest view lists multiple episodes associated with the series. EX-1003, ¶317.

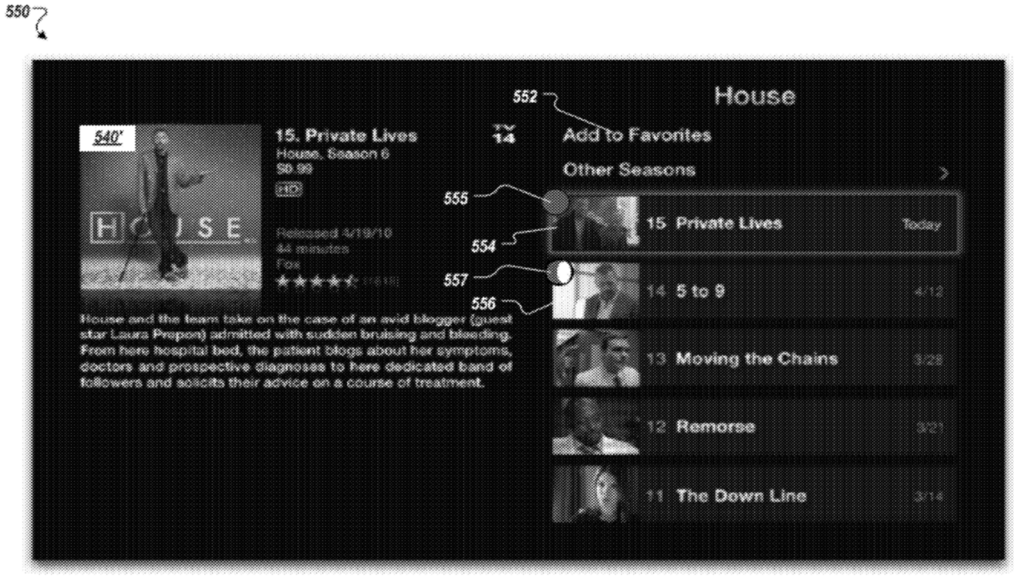


FIG. 5C

EX-1022, Fig. 5C.

v. Claim 4 (Limitation [4.0])

As discussed at [1.6], [1.8], and [3.0] (§§VI.B.ii.g, VI.B.ii.i, VI.B.iv), Ma and Hunt disclose digest views for a television series. Selecting a TV show episode results in a player being presented. For example, as shown in Hunt's Fig. 11, selecting "play episode 12" ("*the fourth selection*") would result in a player being provided to present the episode to the user. EX-1020, 17:49-55, 19:29-35, Fig. 9; EX-1003, ¶318. A POSITA would have understood that a player view would be provided in response to the fourth selection to allow the user to watch the selected content. *Id*.

vi. Claim 5 (Limitation [5.0])

This limitation is obvious over Kim in view of Ma, Hunt, and Hunleth. *See* [2.7] (§VI.B.iii.g); EX-1003, ¶319.

vii. Claim 6 (Limitation [6.0])

As discussed at [1.2] (§VI.B.ii.c), Ma discloses a master view of VOD content. Ma's master view includes multiple user-selectable devices (*e.g.*, selectable interfaces for "Movies," "TV Shows," "Unwatched," "Top Movies," "Favorites") to view a collection view based on one of two or more criteria (*e.g.*, movies, TV, rented, unwatched, favorite). EX-1003, ¶320.

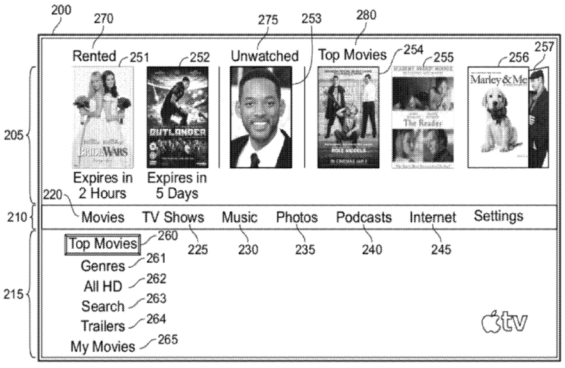


FIG. 2

EX-1022, Fig. 2.

viii. Claim 7 (Limitation [7.0])

As discussed at [1.2] (§VI.B.ii.c), Ma discloses a master view of VOD content. The master view includes a navigation bar to select between types of content (*e.g.*, Movies, TV Shows). EX-1003, ¶321.

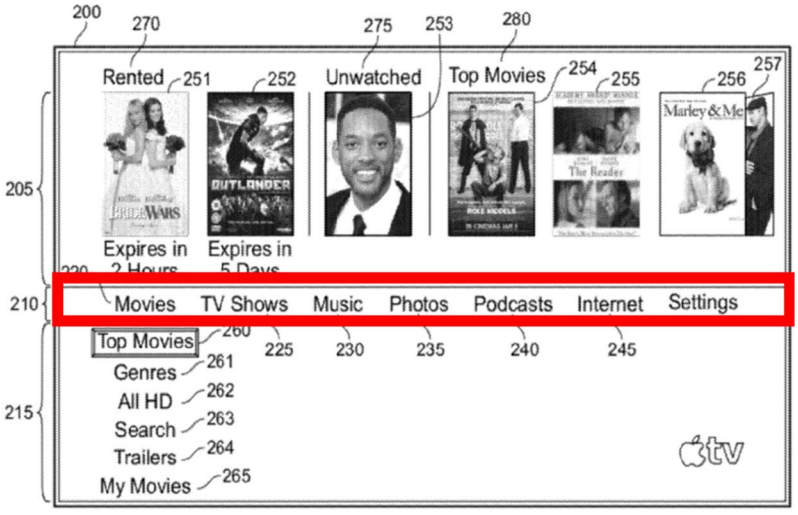


FIG. 2

EX-1022, Fig. 2 (annotated).

ix. Claim 8 (Limitation [8.0])

Ma discloses movie and television series content. EX-1022, Figs. 2 and 3. Although claim 8 only requires one type of content, it would have been obvious for the television and moving content to further include showcase and variety content. EX-1003, ¶322.

x. Claim 9 (Limitation [9.0])

As discussed at [1.2] (§VI.B.ii.c), Ma discloses a master view of VOD content. Ma's master layout includes user selectable devices for at least a collection of content based on top watched content (*e.g.*, "Rented") and recommended content (*e.g.*, "Top Movies"). EX-1022, Fig. 2. Further, as discussed at [1.4] (§VI.B.ii.e), it would have been obvious to add a user selectable device for favorites content, which would provide the user with access to the "Favorites" menu shown in Ma's Fig. 5B. EX-1003, ¶323.

xi. Claim 10 (Limitation [10.0])

This limitation is obvious over Kim in view of Ma, Hunt, and Hunleth. *See* [2.1], [2.2], [2.3] (§§VI.B.iii.b, VI.B.iii.c, VI.B.iii.d); EX-1003, ¶324.

xii. Claim 11

a. Limitation [11.0]

This limitation is obvious over Kim in view of Ma and Hunt. *See* [2.1], [2.2], [2.3] (§§VI.B.iii.b, VI.B.iii.c, VI.B.iii.d); EX-1003, ¶325; [11.0], Ground 1 (§VI.A.xii.a).

b. Limitation [11.1]

This limitation is obvious over Kim in view of Ma. *See* [1.1], [1.2], [11.1] (§§VI.B.ii.b, VI.B.ii.c, VI.B.xii.b); EX-1003, ¶326.

c. Limitation [11.2]

This limitation is obvious over Kim in view of Ma and Hunt. *See* [1.3], [1.4], [11.1] (§§VI.B.ii.d, VI.B.ii.e, VI.B.xii.b); EX-1003, ¶327.

d. Limitation [11.3]

This limitation is obvious over Kim in view of Ma, Hunt, and Hunleth. *See* [1.5], [1.6], [11.1] (§§VI.B.ii.f, VI.B.ii.g, VI.B.xii.b); EX-1003, ¶328.

e. Limitation [11.4]

This limitation is obvious over Kim in view of Ma, Hunt, and Hunleth. *See* [1.7], [11.1] (§§VI.B.ii.h, VI.B.xii.b); EX-1003, ¶329.

f. Limitation [11.5]

This limitation is obvious over Kim in view of Ma, Hunt, and Hunleth. *See* [1.7], [11.1] (§§VI.B.ii.h, VI.B.xii.b); EX-1003, ¶330.

g. Limitation [11.6]

This limitation is obvious over Kim in view of Ma, Hunt, and Hunleth. *See* [1.8], [11.1] (§§VI.B.ii.i, VI.B.xii.b); EX-1003, ¶331.

xiii. Claim 12 (Limitation [12.0])

This limitation is obvious over Kim in view of Ma, Hunt, and Hunleth. *See* claims 6-9, 11; EX-1003, ¶332.

VII. DISCRETIONARY DENIAL WOULD BE INAPPROPRIATE

A. Discretionary Denial Under *Fintiv* Inappropriate

The *Fintiv* factors favor institution. (1) No motion to stay has been filed. (2) The trial date is irrelevant in light of Petitioner's stipulation below. (3) The copending litigations are in relatively early stages. (4) **Petitioner hereby stipulates that if instituted, Petitioner will not pursue in District Court the specific grounds asserted here, or on any other ground that was raised or could have been reasonably raised in this IPR**. For this reason alone, the Board should not discretionarily deny institution in view of the parallel proceedings. *See* June 21, 2022 Director Memo, p. 3. (5) Petitioner's involvement in the parallel proceeding should not be a basis for denying institution. (6) The merits of this case are compelling for the reasons described above. Accordingly, discretionary denial is inappropriate here.

B. Discretionary Denial Under 35 U.S.C. § 325(d) Is Inappropriate

Denial under § 325(d) is not warranted because the challenges presented herein are neither cumulative nor redundant to the '384 Patent's prosecution.

VIII. CONCLUSION

For the foregoing reasons, the challenged claims are unpatentable.

Dated: December 17, 2024

Respectfully Submitted,

/David L. McCombs/
David L. McCombs
Lead Counsel for Petitioners
Registration No. 32,271

IX. MANDATORY NOTICES

A. Real Party in Interest (§42.8(b)(1))

The real party-in-interest of this petition pursuant to 37 C.F.R. 42.8(b)(1) is LG Electronics and Inc. and LG Electronics U.S.A. Inc.

B. Related Proceedings

The '384 Patent is involved in the following proceedings:

- *Multimedia Technologies Pte. Ltd. v. VIZIO, Inc.*, No. 2:22-cv-00124 (E.D. Tex.);
- *Multimedia Technologies Pte. Ltd. v. LG Electronics Inc. and LG Electronics USA, Inc.*, No. 2:22-cv-00494 (E.D. Tex.); and
- *Vizio, Inc. v. Multimedia Technologies, PTE. LTD.*, IPR2024-00723, (PTAB Mar. 22, 2024).

C. Lead and Back-up Counsel (§42.8(b)(3))

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D. Service Information (§42.8(b)(4))

Petitioners consent to service in this proceeding by email at the addresses above.

CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), Petitioners hereby certify, in accordance with and in reliance on the word count provided by the word-processing system used to prepare this Petition, that the number of words in this paper is 13,947. Pursuant to 37 C.F.R. § 42.24(d), this word count excludes the table of contents, table of authorities, mandatory notices under § 42.8, certificate of service, certificate of word count, appendix of exhibits, and any claim listing.

Dated: December 17, 2024

Respectfully Submitted,

/David L. McCombs/
David L. McCombs
Lead Counsel for Petitioners
Registration No. 32,271

CERTIFICATE OF SERVICE

The undersigned certifies that, in accordance with 37 C.F.R. § 42.6(e) and 37 C.F.R. § 42.105, service was made on Patent Owner as detailed below.

Date of service	December 17, 2024
Manner of service	Federal Express
Documents served	Petition for Inter Partes Review Under 35 U.S.C. § 312 and 37 C.F.R. § 42.104 of U.S. 9,578,384 B2; Petitioner's Exhibit List; Exhibits Ex.1001 through Ex.1051; and Petitioners' Power of Attorney.
Persons served per USPTO records via Federal Express	Multimedia Technologies – Patents and Licensing LLC No.178, Sec. 3 Minquan East Road, 8 Floor Taipei, -105401 Taiwan Sheridan Ross P.C. 1560 Broadway Suite 1200 Denver, CO 80202
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