

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

**SAMSUNG ELECTRONICS CO., LTD. AND
SAMSUNG ELECTRONICS AMERICA, INC.,**
Petitioners,

v.

MAXELL, LTD.,
Patent Owner

Case: IPR2025-01311

U.S. Patent No. 11,812,091

**PATENT OWNER PRELIMINARY RESPONSE TO PETITION FOR
INTER PARTES REVIEW OF U.S. PATENT NO. 11,812,091**

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Patent Trial and Appeal Board
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

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PATENT OWNER'S EXHIBIT LIST

Description	Exhibit #
Notice Letter to Samsung (July 7, 2021)	2001
Follow-up Notice Letter to Samsung (December 29, 2021)	2002
Docket Navigator Time to Trial Statistics for the Eastern District of Texas	2003
Docket Control Order, <i>Maxell, Ltd. v. Samsung Elecs. Co., Ltd.</i> , No. 5:25-cv-00052-RWS (E.D. Tex.)	2004
Jury Trial Transcript, Vol. 4, <i>Maxell, Ltd. v. Samsung Elecs. Co., Ltd.</i> , No. 5:23-cv-00092-RWS (E.D. Tex.)	2005
Complaint, <i>Maxell, Ltd. v. Samsung Elecs. Co., Ltd.</i> , No. 5:25-cv-00052-RWS (E.D. Tex.)	2006
Follow-up Notice Letter to Samsung (April 21, 2025)	2007
Law360 Article, "Maxell Settles Patent Suit Against Apple Over Mobile Tech"	2008
Law360 Article, "Maxell Scores \$43M EDTX Jury Win In ZTE Patent Trial"	2009
Law360 Article, "Maxell, Huawei Reach Terms To End Smartphone Patent Suit"	2010
Hudson Institute Article, "Google's Loss to Sonos Settles It, Big Tech Has an IP Piracy Problem"	2011
PatentRenewal.com Article, "which-companies-hold-the-most-patents-in-the-world"	2012
Motion for Partial Summary Judgment of Validity Based on Sotera Stipulations, <i>Maxell, Ltd. v. Samsung Elecs. Co., Ltd.</i> , No. 5:23-cv-00092-RWS (E.D. Tex.)	2013
Follow-up Notice Letter to Samsung (November 28, 2024)	2014
Petitioner's Invalidity Contentions (November 28, 2025)	2015
US Patent Application Publication No. US 2008/0184297	2016

LISTING OF CHALLENGED CLAIMS¹

Claim	Claim Text
[1pre]	A digital content reproducing apparatus, comprising:
[1a]	a network communication circuitry configured to receive digital contents and related information from an outside server;
[1b]	a decoder configured to decode the digital contents received via the network communication circuitry;
[1c]	a display; and
[1d]	a controller configured to control reproduction of the digital contents decoded by the decoder and display of the reproduced digital contents on the display,
[1e]	wherein the controller is configured to alternatively display either of a first operation panel including at least one of linear operation buttons, receiving user instructions regarding linear reproduction functions of the reproduced digital contents, or a second operation panel including at least one of interactive operation buttons, receiving user-instructions of interactive functions to the outside server, together with the reproduced digital contents,
[1f]	wherein the related information includes: time related information which represents a time during which the reproduced digital contents and at least one of the interactive operation buttons are displayed, and
[1g]	panel related information for deciding whether displaying the first operation panel including at least one of the linear operation buttons or the second operation panel including at least one of the interactive operation buttons,
[1h]	wherein the controller, when controlling reproduction of the digital contents, is further configured to:

¹ For convenience purposes only, Patent Owner adopts for this Preliminary Response the numbering of claim elements advanced by Petitioner in the Petition (Paper 3) on page viii-xi. Patent Owner does not concede the appropriateness of such grouping and numbering of claim elements.

[1i]	display at least one of the interactive operation buttons during the time represented by the time related information, and
[1j]	other than the time represented by the time related information, display at least one of the linear operation buttons or at least one of the interactive operation buttons based on the panel related information.
[2pre]	The digital content reproducing apparatus according to claim 1,
[2a]	wherein the controller is further configured to display either the first operation panel or the second operation panel in a substantially same panel rendering area as alternative operation panels.
[3pre]	The digital content reproducing apparatus according to claim 1,
[3a]	wherein the controller is further configured to display either the first operation panel or the second operation panel in a lower part of the display.
[4pre]	The digital content reproducing apparatus according to claim 1,
[4a]	wherein the controller is further configured to adjust a rendering area size of the reproduced digital contents based on whether the display displays the first operation panel or the second operation panel.
[5pre]	The digital content reproducing apparatus according to claim 1,
[5a]	wherein the first operation panel or the second operation panel can be displayed independently from displaying the reproduced digital contents.
[6pre]	The digital content reproducing apparatus according to claim 1,
[6a]	wherein the controller is further configured to control to maintain a rendering area size of the reproduced digital contents, even when the first operation panel or the second operation panel is displayed.
[7pre]	The digital content reproducing apparatus according to claim 1,
[7a]	wherein all of one or more linear operation buttons and one or more interactive operation buttons provide mutually differing functions from each other.
[8pre]	The digital content reproducing apparatus according to claim 1,
[8a]	wherein the time related information is an appreciation term corresponding to one digital content of the digital contents.
[9pre]	The digital content reproducing apparatus according to claim 7,
[9a]	wherein the appreciation term is related to a predetermined date.
[10pre]	The digital content reproducing apparatus according to claim 2, wherein the controller further configured to:

[10a]	store the digital contents received from the outside server via the network communication circuitry into a storage; and
[10b]	reproduce the digital contents stored in the storage.
[11pre]	The digital content reproducing apparatus according to claim 1,
[11a]	wherein the first operation panel is a linear operation panel in which all of one or more displayed buttons are linear operation button.
[12pre]	The digital content reproducing apparatus according to claim 1,
[12a]	wherein the second operation panel is an interactive operation panel in which all of one or more displayed buttons are interactive operation button.
[13pre]	The digital content reproducing apparatus according to claim 1,
[13a]	wherein the outside server is a video on demand server.
[14pre]	A digital content reproducing apparatus, comprising:
[14a]	a network communication circuitry configured to receive digital contents and related information from a video on demand server;
[14b]	a decoder configured to decode the digital contents received via the network communication circuitry;
[14c]	a display; and
[14d]	a controller configured to control reproduction of the digital contents decoded by the decoder and display of the reproduced digital contents on the display,
[14e]	wherein the controller is configured to display at least one of linear operation buttons, receiving user-instructions regarding linear reproduction functions of the reproduced digital contents, or at least one of interactive operation buttons, receiving user-instructions of interactive functions to the video on demand server, together with the reproduced digital contents,
[14f]	wherein the related information includes: time related information which represents a time during which the reproduced digital contents and at least one of the interactive operation buttons are displayed, and
[14g]	panel related information for deciding to display at least one of the linear operation buttons or at least one of the interactive operation buttons,
[14h]	wherein the controller, when controlling reproduction of the digital

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	contents, is further configured to:
[14i]	display at least one of the interactive operation buttons during the time represented by the time related information, and
[14j]	other than the time represented by the time related information, display at least one of the linear operation buttons or at least one of the interactive operation buttons based on the panel related information.
[15pre]	The digital content reproducing apparatus according to claim 14,
[15a]	wherein the controller is further configured to display at least one of the linear operation buttons or at least one of the interactive operation buttons in a lower part of the display.
[16pre]	The digital content reproducing apparatus according to claim 14,
[16a]	wherein the controller is further configured to control to maintain a rendering area size of the reproduced digital contents, even when at least one of the linear operation buttons or at least one of the interactive operation buttons are displayed.
[17pre]	The digital content reproducing apparatus according to claim 14,
[17a]	wherein all of one or more linear operation buttons and one or more interactive operation buttons provide mutually differing functions from each other.
[18pre]	The digital content reproducing apparatus according to claim 14,
[18a]	wherein the time related information is an appreciation term corresponding to one digital content of the digital contents.
[19]	The digital content reproducing apparatus according to claim 18, wherein the appreciation term is related to a predetermined date.
[20pre]	The digital content reproducing apparatus according to claim 14, wherein the controller further configured to:
[20a]	store the digital contents received from the video on demand server via the network communication circuitry into a storage; and
[20b]	reproduce the digital contents stored in the storage.

I. INTRODUCTION

Patent Owner Maxell, Ltd. (“Patent Owner”) respectfully requests that the Director deny institution of the Petition filed by Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc., (hereinafter “Petitioner”) challenging the patentability of claims 1-20 (“challenged claims”) of U.S. Patent No. 11,812,091 (“the ’091 Patent”) (EX1001).

Petitioner has failed to demonstrate a reasonable likelihood of success on the grounds submitted in its Petition because: (1) all but one of the cited references were already considered by the Office; (2) Petitioner has not met its requirement under 37 C.F.R. § 42.104(b)(3) regarding claim constructions; and (3) none of the cited references—whether taken alone or in reasonable combination—disclose or render obvious the arrangement of each limitation in the challenged claims. For example, the “time related information” limitation is not disclosed in any of the cited references.

For at least these reasons, Petitioner has failed to meet their burden of showing a reasonable likelihood of prevailing. Accordingly, the Director should deny Petitioner’s request to institute *inter partes* review.

II. BACKGROUND

A. Overview of the '091 Patent

The '091 Patent, entitled “Multimedia Player Displaying Operation Panel Depending on Contents,” is generally directed to a digital content operating apparatus that switches between two different types of user-operation panels depending on the digital content being displayed. EX1001, Abstract.

The '091 Patent identifies a core usability problem in conventional multimedia playback systems: prior devices displayed all operation keys—linear and interactive—regardless of whether the currently displayed content supported those functions. As such, this forced users to navigate “a number of remote keys” and required “learning time,” reducing ease of use and often shrinking the content display area to make room for unnecessary buttons. *See id.* at 1:23–40. To overcome these limitations, the invention seeks to “display automatically only usable operation keys in accordance with information on digital contents,” thereby shortening learning time, reducing motion distance, and improving ease of use while maintaining a large rendering area. *See id.* at 2:1–14.

Specifically, the '091 Patent discloses a digital content reproduction apparatus that monitors content-associated information and automatically switches between

two mutually exclusive panels: a linear content operation panel and an interactive content operation panel. The controller extracts information such as an appreciation term and other digital content attributes and, based on changes in this information, “exclusively” displays one panel or the other so that only usable keys appear in the panel-rendering area. *See id.* at 2:15–31; 3:1–50. The specification explains that during reproduction of linear contents, the device displays the linear content operation panel with functions such as “reproduce, stop, fast forward, fast backward, previous skip, next skip,” while during interactive contents the interactive panel displays interactive keys. *See id.* at 3:51–65. Critically, “the linear content operation panel A4 and interactive content operation panel A5 are displayed exclusively and are not displayed at the same time.” *See id.* at 3:66–4:1. This dynamic, metadata-driven UI switching—absent from the prior art—allows the device to provide different operation keys depending on the content, improve user operability, and maintain an optimal content display area. *See id.* at 4:17–35.

FIG. 2

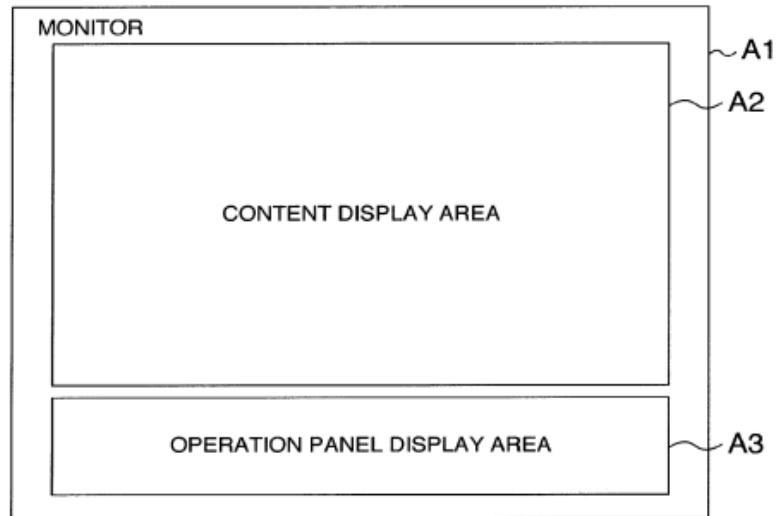
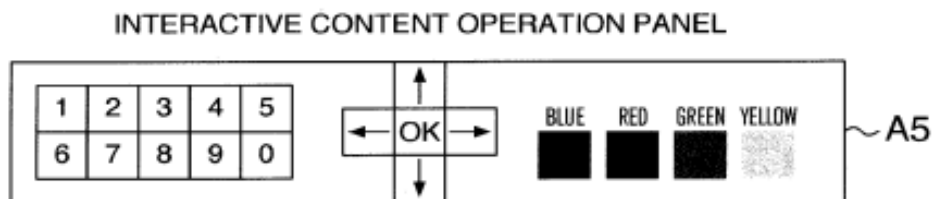


FIG. 3



FIG. 4



Id. at Figs. 2-4.

B. Patent Prosecution History

U.S. Patent Application No. 17/868,139 (“’139 application”), which would ultimately issue as the ’091 Patent, claims priority to Japanese application published on August 30, 2005.

The ’139 application was allowed without any Office Actions. In the Notice of Allowance, dated July 3, 2023, the Examiner noted the following:

Reasons for allowance

The following is an examiner's statement of reasons for allowance: Independent claims 2 and 15 present limitation as a whole that are allowable over the prior art, recites the uniquely distinct features for "wherein the related information includes: time related information which represents a time during which the reproduced digital contents and at least one of the interactive operation buttons are displayed, and panel related information for deciding whether displaying the first operation panel including at least one of the linear operation buttons or the second operation panel including at least one of the interactive operation buttons, wherein the controller, when controlling reproduction of the digital contents, is further configured to: display at least one of the interactive operation buttons during the time represented by the time related information, and other than the time represented by the time related information, display at least one of the linear operation buttons or at least one of the interactive operation buttons based on the panel related information" as well as all in combination with all limitations in the independent claims and the enabling portions of the specification. The closest prior art of Holloway et al. US 2006/0041655 discloses a system for controlling a host using a remote control whose functions are defined by that host. Functions on the remote control are arranged by the host and grouped logically for easy navigation. The communication between the remote and host is bi-directional, and can occur in real time. The controlled devices can be devices for controlling applications within a home or within a commercial building.--Abstract, either singularly or in combination, fail to anticipate or render the above underlined limitation obvious.

EX1002 at 23.

The prosecution history therefore demonstrates that the USPTO recognized that the interplay between the related information, reproduced digital content, and the operation panels of the '091 Patent as patentably distinct over the relevant art. As shown below, Petitioner's cited references fail to disclose at least the same limitations the Examiner noted as the reasons for allowance in the Notice of Allowance.

More importantly, the file history demonstrates that the USPTO considered at least: (1) all but one of Petitioner's prior art references; (2) the prior IPR Petitions that applied these references to the great grandparent patent ('394 Patent); (3) Dr. Bederson's invalidity expert reports that applied these references to the '394 Patent and noted that the claims of the '091 Patent were allowable over all this prior art because of limitations that were identified in the Reasons for allowance including limitations not present in the '394 Patent claims. See EX1001 at 1-5 (confirming consideration of: (1) Phillips, Wallis, Ellis, Uchida, and continuation of Ellis '430 (i.e., 2008/0184297); (2) Petition for IPR2022-01348, Petition for IPR2019-00089, and Petition for IPR2023-00316; and (3) Expert Report of Benjamin B. Bederson, PH.D., Regarding Invalidity of U.S. Pat. No. 8,17,394); *see also* EX1002 at 23 ("Reasons for allowance.")

C. Summary of Petitioner's Proposed Grounds for Unpatentability.

Petitioner alleges that claims 1-20 of the '091 Patent would have been obvious under post-AIA 35 U.S.C. § 103 and raises six grounds of alleged unpatentability.

Pet. at 1. The alleged invalidity grounds are summarized as follows:

Ground	'091 Claims	Type of Challenge	References
1	1, 3-5, 7, 11-15, 17, and 20	§ 103	Phillips, Wallis
2	1, 3-5, 7, 11-15, 17, and 20	§ 103	Phillips, Wallis, Logan
3	2, 6, 10, and 16	§ 103	Phillips-Wallis combinations, Uchida
4	8, 9, 18, and 19	§ 103	Phillips, Wallis, Ellis
5	8, 9, 18, and 19	§ 103	Phillips, Wallis, Logan, Ellis
6	1-3, 6-9 and 14-19	§ 103	Ellis'430, Wallis

The references relied upon by Petitioner are summarized below:

1. Phillips (EX1010)

Phillips is entitled "Interactive Television Program Guide For Recording Enhanced Video Content." EX1010. Contrary to Petitioner's assertion, Philips **was** considered by the USPTO when allowing the '091 Patent. *See* EX1001 at 2 (listing "7,293,276 B2 Phillips et al."); *see also* Pet. at 6 (**falsely** stating that "Phillips is

analogous art to the '091 patent and was **not considered** during prosecution of the '091 patent”) (emphasis added). Phillips describes an interactive television program guide that enhances program-guide content by providing recording and alert features for videos associated with promotions, advertisements, and other selectable displays. See EX1010, Abstract, Figs. 1-3. When a user selects certain displayed content, the system may present an option to record a related video. *Id.* That option appears within an information display screen generated in response to the user's interaction with a selectable display. *Id.*

2. Ellis '430 (EX1021)

Ellis '430 is entitled “Systems And Methods For Interactive Program Guides With Personal Video Recording Features.” EX1021. While Ellis '430 was not considered by the USPTO during prosecution of the '091 Patent another “Ellis” that is a continuation of Ellis '430 with similar disclosures (*e.g.*, the same 126 Figures and corresponding description was considered). See EX1001 at 3 (listing “2008/0184297 A1 Ellis et al.”); *see also* EX2016 (listing U.S. Patent Application No. 10/105,128, which is the serial no of Ellis '430—on the face and also including the same Figures 1-126 and descriptions as EX1021). The Petition glosses over the fact that the disclosures of Ellis '430 were **considered** by virtue of the consideration

of a later application publication in the chain with the same disclosures. *See* Pet. at 9 (stating that “Ellis ’430 is analogous art to the ’091 patent and was **not considered** during prosecution of the ’091 patent”) (emphasis added).

Ellis ’430 describes an interactive television application that provides an enhanced personal video recorder (“PVR”) and interactive television program guide functionalities. EX1021, Abstract.

3. Wallis (EX1011)

Wallis is entitled “Non-Linear Interactive Video Navigation.” EX1011. Wallis describes a system and method for delivering interactive video and audio content items, e.g., movie clips music videos, adverts, to a user playback device such as a television (TV) set.” EX1011, Abstract. Contrary to Petitioner’s assertion, Wallis **was** considered by the USPTO during prosecution of the ’091 Patent. *See* EX1001 at 3 (listing “2005/0188408 Al Wallis et al.”); *see also* Pet. at 11 (**falsely** stating that “Wallis is analogous art to the ’091 patent and was **not considered** during prosecution of the ’091 patent.”) (emphasis added).

4. Logan (EX1013)

Logan is entitled “Methods and Apparatus for Recording and Replaying Video Broadcasts.” EX1013. Logan describes “replaying a broadcast sports event

using a video on demand or personal video recording system.” EX1013, Abstract. The system creates a metadata that subdivides the original broadcast into segments and associates descriptive information with each segment. *Id.*

5. Ellis (EX1014)

Ellis is entitled “Interactive Television Systems with Digital Video Recording and Adjustable Reminders.” EX1014. Contrary to Petitioner’s assertion, Ellis **was** considered by the USPTO **in combination** with Phillips and Wallis during prosecution of the ’091 Patent. *See* EX1001 at 2-3 (listing each of Phillips, Wallis, and “2004/0154040A1 Ellis Michael D”); *see also* Pet. at 15 (**falsely** stating that “Ellis is analogous art to the ’091 patent and although it is listed on the face of the ’091 patent, it was **not considered** by the Examiner in combination with **Phillips, Wallis** and/or Logan”) (emphasis added).

Ellis describes a system “in which an interactive television application is used to support network based or local personal video recorder capabilities.” EX1014, Abstract. A user may use this application to view lists of program listings. *Id.*

6. Uchida (EX1015)

Uchida is entitled “Display Device, Two-Way Communication System and Display Information Using Method.” EX1015. Contrary to Petitioner’s assertion,

Uchida **was** considered by the USPTO during prosecution of the '091 Patent. *See* EX1001 at 2 (listing "US 8,773,360 B2 Uchida et al."); *see also* Pet. at 16 (**falsely** stating that "Uchida is analogous art to the '091 patent and was **not considered** during prosecution of the '091 patent") (emphasis added).

Uchida discloses a "display device [that] receives an information signal from a base device, and displays main display information that is an image derived from a display signal of the information signal on an LCD." EX1015, Abstract. In the case where the display device displays a control panel for accepting an operation input from a user on the LCD, the display device controls a size change processor so that a size and a position of display of the main display information is so changed as not to overlap with display of the control panel." *Id.*

III. LEVEL OF ORDINARY SKILL

For purposes of this preliminary response only, Patent Owner does not raise an issue with the level of ordinary skill proposed by Petitioner. Pet. at 19. Patent Owner reserves the right to contest Petitioner's definition of a person or ordinary skill in the art ("POSITA") in the event of institution.

IV. CLAIM CONSTRUCTION

To minimize the disputes that the Board needs to address at this preliminary

stage, for the purposes of this Preliminary Response only, Patent Owner simply applies Petitioner's own constructions to show how the Petitioner has not met its burden under 37 CFR § 42.104(b)(4). Patent Owner, however, reserves all rights to dispute Petitioner's proposed constructions with the support of expert testimony to the extent the Board decides to institute review of this Petition. Any statements made herein with respect to the lack of a claim element in a prior art reference are under Petitioner's proposed constructions and should not be construed as an admission on behalf of Patent Owner that such construction is proper under the *Phillips* standard.

V. LEGAL STANDARD

A claim is also not patentable if the differences between the claim and the prior art are such that the subject matter as a whole would have been obvious to a person of ordinary skill in the art at the time of the invention. 35 U.S.C. § 103(a). Obviousness requires assessing (1) the "level of ordinary skill in the pertinent art," (2) the "scope and content of the prior art," (3) the "differences between the prior art and the claims at issue," and (4) "secondary considerations" of non-obviousness such as "commercial success, long felt but unsolved needs, failure of others, etc." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) (quoting *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18 (1966)).

It is a petitioner's burden "to demonstrate both 'that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so.'" *Intelligent Bio-Systems, Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1367-68 (Fed. Cir. 2016) (quotations and citations omitted). However, a petitioner must first show that all of the claimed elements are disclosed in the prior art. *See Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1164 (Fed. Cir. 2006) (considering motivation to combine and reasonable expectation of success only "if all the elements of an invention are found in a combination of prior art references").

VI. PETITIONER'S EXPERT DECLARATION IS ATTORNEY ARGUMENT VEILED IN EXPERT TESTIMONY

Petitioner relies on a declaration from its expert Dr. Bederson (EX1003). However, Dr. Bederson copies verbatim Petitioner's arguments and lacks sufficient facts and data to support his positions. For example:

Petition	Dr. Bederson's Declaration (EX1003)
A POSITA would have been motivated to combine Phillips and Wallis at least because they are analogous art to the '091 Patent as they are directed to the	A POSITA would have been motivated to combine Phillips and Wallis at least because they are analogous art to the '091 Patent as they are directed. to the

Petition	Dr. Bederson's Declaration (EX1003)
same field of endeavor, i.e., interactive televisions systems that provide enhanced user experiences through specially formatted screen displays and presentation of user controls. EX1003, ¶149. (Pet. at 46)	same field of endeavor, i.e., interactive televisions systems that provide enhanced user experiences through specially formatted screen displays and presentation of user controls. (EX1003, ¶149)
A POSITA would have been specifically motivated to incorporate Wallis's metadata attribute table, as described above, e.g., §VI.A.8, into Phillips's systems to control whether an interactive operation panel or a linear operation panel is displayed to the user and, within each type of operation panel, what specific buttons to include. (Pet. at 46-47)	A POSITA would have been specifically motivated to incorporate Wallis's metadata attribute table, as described above, e.g., §IX.A.8, into Phillips's systems to control whether an interactive operation panel or a linear operation panel is displayed to the user and, within each type of operation panel, what specific buttons to include. (EX1003, ¶150)

The above citations are merely exemplary for Ground 1 (obviousness based on Phillips and Wallis) but Petitioner employs the same tactics for each of the other Grounds. *See generally* Sections VII(B)-(F), *infra*.

Such conclusory and superficial attorney argument in the guise of expert testimony cannot serve as sufficient support for Petitioner's arguments. *See, e.g., Cardiacom, LLC v. Bosch Healthcare Sys., Inc.*, IPR2013-00439, Paper 26, 15-16 (P.T.A.B. Jan. 16, 2014); *see also Kinetic Techs., Inc. v. Skyworks Solutions, Inc.*, IPR2014-00529, Paper 8, 15-16 (P.T.A.B. Sept. 23, 2014) ("Merely repeating an

argument from the Petition in the declaration of a proposed expert does not give that argument enhanced probative value,” and a petitioner cannot move forward to trial based upon such “mere conclusory statements.”) (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)); *TRW Auto. US LLC v. Magna Elecs., Inc.*, IPR2014- 00258, Paper 18, 10-11 (P.T.A.B. Aug. 27, 2014) (giving little to no weight to expert testimony that “did not elaborate on [Petitioner’s] position because it simply repeated [Petitioner’s] conclusory statements verbatim”); *see also InfoBionic, Inc. v. Braemar Mfg., LLC*, IPR2015-01704, Paper 11, 6 (P.T.A.B. Feb. 16, 2016) (denying institution because expert merely repeated the argument in the Petition about what a reference meant without explaining why the expert believed that meaning to be correct).

Moreover, such conclusory opinions by an expert that merely parrot Petitioner’s arguments should be accorded little weight when used to supply a missing limitation. *See Xerox Corp. et al. v. Bytemark, Inc.*, IPR2022-00624, Paper 12, p. 5 (P.T.A.B. Feb. 10, 2023) (Former Director Vidal noting in a Sua Sponte affirmation of the decision: “I determine that the Board was correct in giving little weight to Petitioner’s expert because the expert declaration merely offered conclusory assertions without underlying factual support and repeated, verbatim,

Petitioner's conclusory arguments.”). Former Director Vidal stated that:

The declaration does not provide any technical detail, explanation, or statements supporting why the expert determines that the feature in question was required or would have been obvious based on the prior art disclosure. See Ex. 1003 ¶ 54. Instead, the declaration copies, word-for-word, Petitioner's conclusory assertions. Compare *id.*, with Pet. 28–29. The declaration sets forth Petitioner's conclusory assertions as though they are facts, rather than setting forth facts and evidence in support of Petitioner's assertions. Accordingly, I agree with the Board's explanation that “the cited declaration testimony is conclusory and unsupported, adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight” under 37 C.F.R. § 42.65(a).

Id. As discussed *infra*, Dr. Bederson's “opinions” are copied verbatim from the Petition, including in attempting to fill in missing limitations in violation of 37 C.F.R. § 42.104(b)(4).

Therefore, little to no weight should be given to Dr. Bederson's testimony. And, absent his conclusory testimony, the Petition has no evidentiary support. Institution should be denied for this reason alone.

VII. THE BOARD SHOULD DENY INSTITUTION IN VIEW OF SAMSUNG'S INDICATION THAT IT IS NOT LIMITED TO ASSERTING A DIFFERENT CLAIM CONSTRUCTION OF ANY CLAIM TERM FOR ANY OTHER PURPOSE

Petitioner states: "Petitioner's proposal to adopt the 'ordinary and customary meaning' in this petition **in no way limits its rights to assert a different claim construction of any claim term for any other purpose, including litigation** or another IPR petition." Pet. at 19 (emphasis added). By providing such a broad reservation of rights, Petitioner explicitly indicates that it will be taking different claim construction positions because it's claim construction positions in this proceeding "in no way limits their rights to assert a different claim construction of any claim term for any other purpose, including litigation or another IPR petition." *Id.* Indeed, by conceding that it is reserving rights to take a different claim construction position for "any other purpose," including for another IPR petition, Petitioner is indicating that it wants to have the flexibility to take different claim construction positions even for additional invalidity arguments before the Board. In view of Petitioners' broad *Sotera* stipulation (EX1027), this "any other purpose" includes invalidity challenges Petitioner intends to present to the District Court based on the following system prior art:

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Patent Owner's Preliminary Response

e. '091 Patent

Prior Art Products and Systems – U.S. Patent No. 11,812,091	
• TiVo • ReplayTV • Time Warner Full Service Network • Comcast VoD/DVR • AOL TV • Microsoft Web TV • RealPlayer • Discovery is ongoing, and Defendants will identify additional products and systems as they become available.	

(EX2015 at 133)

This “any other purpose” also includes invalidity arguments under §112 for the eight terms disclosed by Petitioner in District Court proceeding. See EX2015 at 176-180. Based on its disclosures in District Court litigation, Petitioner is indicating that it wants to have the flexibility to take different claim construction positions “for any other purpose” including even for additional invalidity arguments. Such reservation of rights does not comply with the requirements of 37 C.F.R. § 42.104(b)(3) and this Board’s prior decision and will result in development of inconsistent records by Petitioner across multiple forums.

Specifically, under 37 C.F.R. § 42.104(b)(3), petitioners must clearly articulate **in the petition** “[h]ow the challenged claim is to be construed.” If, according to Petitioner, its claim construction positions in this Petition do not limit its ability to assert a claim construction position “of any claim term for any other

purpose,” then how does Petitioner propose that the Board interpret such limitations to assess Petitioner’s invalidity challenges, particularly where such constructions would result in an inconsistent record with Petitioner’s proffered constructions in the District Court litigation, including eight different §112 challenges. Petitioner is silent and provides no explanation for its basis for being non-committal in its position of claim construction to obtain an institution decision in this forum, only to turn around and reserve the ability to seek different claim construction of any claim term “for any other purpose” in another proceeding.

Indeed, Petitioner has done just that in prior IPRs where it argued for a plain and ordinary meaning of “character” in IPR2024-00735 and IPR2024-00777, but argued for a narrower construction of the same term in a jury trial to argue for non-infringement. *See e.g.*, IPR2024-00735, Paper No. 38 at 9-10; *see also* IPR2024-000828, Paper No. 39 at 6-10 (contending in the IPR that “mode” should be given its plain and ordinary meaning but arguing in front of the jury that two modes require the implementation of two algorithms).

But a petitioner must explain why it takes different claim construction positions in the petition and in district court and asserting different claim construction positions in the two forums alone favors denial of institution. *See Revvo*

Technologies, Inc. v. Cerebrum Sensor Technologies, Inc., IPR2025-00632, Paper 20 (P.T.A.B. November 3, 2025) (Dir. Squires, precedential); *American Airlines, Inc. et al v. Intellectual Ventures I LLC*, IPR2025-01055, Paper 11 (P.T.A.B. November 21, 2025) (denying institution when Petitioner was construing terms as plain and ordinary in the Petition, yet arguing for §112 challenges in a different forum).

Instead of agreeing to be bound by the claim construction positions or lack thereof set forth in this Petition, Petitioner wants to “assert a different claim construction of **any** claim term for **any** other purpose” including in litigation or another IPR petition. Pet. at 19 (emphases added). The Board or Patent Owner should not be burdened by such an unbounded position on claim construction when defending its patent rights. Indeed, this is the precise reason why 37 C.F.R. § 42.104(b)(3) requires Petitioner to explain how the challenged claims are to be construed. Petitioner cannot have it both ways.

Accordingly, for this additional reason the Board should deny institution of this petition.

VIII. THE PETITION DOES NOT SHOW A LIKELIHOOD OF PREVAILING WITH RESPECT TO ANY CHALLENGED CLAIM

A. The Petition Includes Materially False Statements And Does Not Explain Why A Different Finding Of Patentability Is Warranted Where The Office Found These Same Claims Patentable Over The Same Prior Art

The Memorandum dated 9/16/2025 states that “when patent claims being challenged before the Board in an America Invents Act (AIA) trial proceeding . . . , have already been adjudicated, post-issuance, **before the Office**, in district court, or at the U.S. International Trade Commission (ITC) . . . the Board shall explain in the institution or final written decision why a different outcome is warranted.” See https://www.uspto.gov/sites/default/files/documents/Memo_re_prior_findings_of_fact_and_conclusions_of_law_9_16_25.pdf.

Instead of providing **any** explanation or rationale on why a different outcome is warranted **when** the same claims were found patentable over the same prior art before the Office during prosecution of the '091 Patent, the Petition includes the following materially false statements:

- “Phillips . . . was **not** considered during prosecution of the '091 patent.”

Pet. at 6 (emphasis added). The face of the '091 Patent contradicts
Petitioner:

7,293,276 B2 11/2007 Phillips et al.

EX1001 at 2

- “Ellis’430 . . . was **not** considered during prosecution of the ’091 patent.” Pet. at 9 (emphasis added). However, the face of the ’091 Patent lists “Ellis” that is a continuation of Ellis ’430 with similar disclosures (*e.g.*, the same 126 Figures and corresponding description).

2008/0184297 A1 7/2008 Ellis et al.

EX1001 at 3

- “Wallis . . . was **not** considered during prosecution of the ’091 patent.” Pet. at 11 (emphasis added). The face of the ’091 Patent contradicts Petitioner:

2005/0188408 A1 8/2005 Wallis et al.

EX1001 at 3

- “Ellis . . . although it is listed on the face of the ’091 patent, it was **not considered** by the Examiner in combination with **Phillips, Wallis** and/or Logan.” Pet. at 15 (emphasis added). As noted above, the face of the ’091 Patent contradicts Petitioner because the Examiner did consider Ellis in combination with Phillips and Wallis.

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- “Uchida . . . was **not** considered during prosecution of the '091 patent.”

Pet. at 16 (emphasis added). The face of the '091 Patent contradicts

Petitioner:

8,773,360 B2 7/2014 Uchida et al.

EX1001 at 2

These materially false statements are particularly troubling where Petitioner itself acknowledges that “multiple grounds based on combinations of Phillips, Wallis, and Uchida, among other prior art” were part of prior IPRs. Pet. at 5. These IPRs were **also** considered by the Examiner during prosecution of the '091 Patent and are also listed on the face of the '091 Patent:

Motorola Mobility LLC v. Maxell, Ltd., Petition for Inter Partes Review of U.S. Pat. No. 8,170,394, Inter Partes Review No. IPR2022-01348 filed Aug. 18, 2022.

Blackberry Corporation v. Maxell, Ltd., Petition for Inter Partes Review of U.S. Pat. No. 8,170,394, Inter Partes Review No. IPR2019-00089, Mar. 29, 2019.

Vizio, Inc. v. Maxell, Ltd., Petition for Inter Partes Review of U.S. Pat. No. 8,170,394, Inter Partes Review No. IPR2023-00316 filed Mar. 3, 2023, pp. 1-86.

EX1001 at 1-3.

As shown above, the Office not only considered Phillips, Ellis'430 (equivalent thereof), Wallis, Ellis, and Uchida but also considered prior IPR petitions

combining such references and made “a finding of fact or conclusion of law” that claims 1-20 of the '091 Patent are patentable over such prior art.

Far from providing any explanation on why a different outcome is warranted in view of the same prior art, the Petition includes multiple false characterizations of the prosecution history of the '091 Patent casting doubt on whether Petitioner met its certification obligations under 37 CFR §11.18.

Absent any explanation on “why a different outcome is warranted” in the Petition, the Board should simply confirm the Office's prior finding of fact and conclusion of law that claims 1-20 of the '091 Patent are not rendered obvious in view of one or more of Phillips, Ellis'430 (equivalent thereof), Wallis, Ellis, and Uchida.

B. Ground 1: Petitioner Fails to Establish That Claims 1, 3-5, 7, 11-15, 17, And 20 Would Have Been Obvious Over Phillips in View of Wallis.

As noted above, the Office has already made a prior finding of fact and conclusion of law that claims 1-20 of the '091 Patent are not rendered obvious over Phillips in view of Wallis. *See* EX1002 at 23 (“Reasons for allowance”); *see also* EX1001 at 2-3. Thus the Office has already concluded that Phillips in view of Wallis does not teach each and every element of claims 1, 3-5, 7, 11-15, 17, and 20. The

Petitioner provides no explanation as to why the prior findings of the Office are incorrect. Accordingly, Petitioner has not provided a reasonable likelihood of prevailing on Ground No. 1.

Further, the Petition has not shown that Phillips in combination with Wallis teaches at least elements [1e]-[1j] (and comparable elements of claim 14), as required for each of these claims. Additionally, because dependent claims 3-5, 7, 11-13, 15, 17, and 20 depend from claim that Petitioner has not shown to be unpatentable, Petitioner has also failed to show that claims 3-5, 7, 11-13, 15, 17, and 20 are unpatentable by Phillips in view of Wallis.

1. No Motivation to Combine Phillips with Wallis

At the time of the '091 Patent, it would not have been obvious to a POSITA to combine Phillips with Wallis. Petitioner's statement as to why Phillips and Wallis should be combined is conclusory and unsupported by sufficient evidence and analysis. Pet. at 46.

Petitioner notes that both Phillips and Wallis relate generally to interactive television systems and asserts that their common goal is to make user interaction with digital contents "as intuitive as possible." Pet. at 46. From that high-level similarity, Petitioner leaps to the conclusion that a POSITA would have been

motivated to import Wallis's attribute table into Phillips so that metadata would dynamically determine whether a linear or interactive operation panel is displayed, and which buttons to include. Pet. at 47–48. That is not a sufficiently articulated reasoned motivation tied to the specific combination and claim structure at issue.

Phillips and Wallis address different problems in different contexts. Phillips focuses on program guides and VoD playback using mode-specific screens and a standard playback toolbar. EX1010, 20:18–30; 22:59–23:9. Wallis focuses on non-linear navigation through sequences of VoD promotional clips and content items, using attributes to control skipping, favorites, and link targets. EX1011 ¶¶9–19, 30–33, 56–65. Neither reference discusses varying the type of playback operation panel—linear versus interactive—on a per-content basis using metadata. That concept comes from the '091 Patent, not from the prior art.

Petitioner also state that, from a programming standpoint, implementing Wallis's attributes in Phillips would be “a simple and predictable outcome of a condition in an ‘if’ programming statement.” Pet. 48. The fact that an “if” statement could be written does not establish why a POSITA would write it, or why they would have a reasonable expectation that refactoring Phillips in that way would maintain the advantages Phillips actually describes. *KSR* makes clear that obviousness cannot

be grounded merely on the capability of combining elements with hindsight; there must be an articulated reason with a rational underpinning.

Here, neither reference suggests using server-delivered attributes of content to select between two different operation panels displayed with reproduced digital contents, with separate time-governed operation periods for each, as in the '091 Patent.

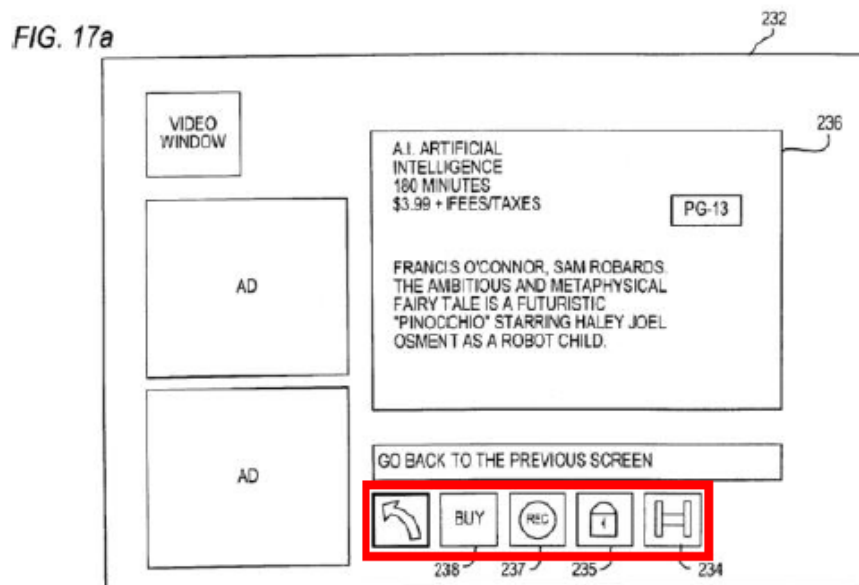
Petitioner's motivation to modify rationale is based on boilerplate statements, represent pure hindsight, and are a verbatim parroting of its expert's, Dr. Bederson, opinions. In short, the proposed combination does not arise naturally from the teachings of Phillips and Wallis, but only by using the '091 Patent itself as a roadmap. The Petition therefore fails to establish a sufficient motivation to combine, or that the proposed combination would predictably yield the claimed arrangement.

2. The Combination of Phillips and Wallis Fails to Disclose Limitation [1e]

Petitioner fails to show that Phillips in combination with Wallis discloses claim element [1e]: "wherein the **controller is configured to alternatively display either** of a first operation panel including at least one of linear operation buttons, receiving user instructions regarding linear reproduction functions of **the reproduced digital contents**, or a second operation panel including at least one of

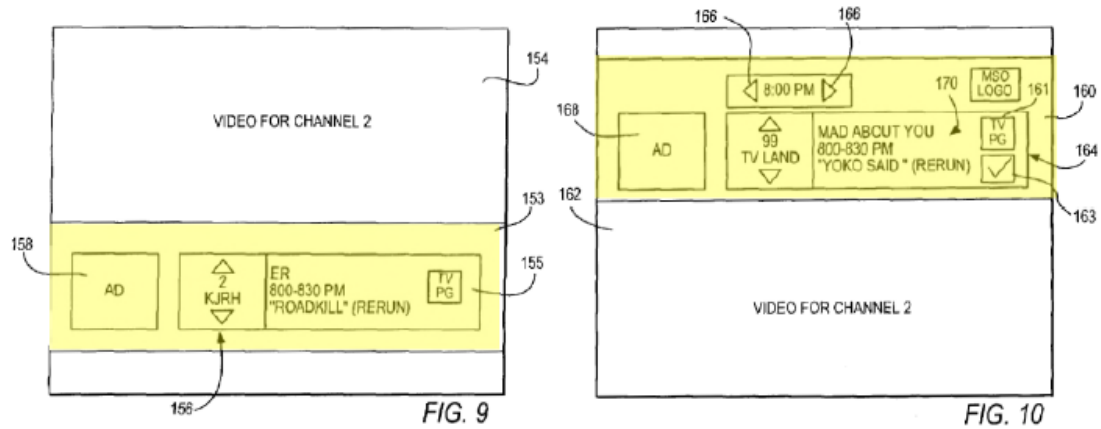
interactive operation buttons, receiving user-instructions of interactive functions to the outside server, **together with the reproduced digital contents.**”

Petitioner's showing on limitation [1e] rests on equating a wide variety of guide, navigation, and transactional screens in Phillips with “interactive content operation panels,” and then asserting that these screens are alternately displayed with Phillips's playback toolbar 248. Pet. at 30–32. But Petitioner never demonstrates that Phillips discloses alternatively displaying a first operation panel or a second operation panel “**together with the** reproduced digital contents.” That reading overstates what Phillips actually discloses. For example, Petitioner points to FIG. 17a as one example of second operation panel:



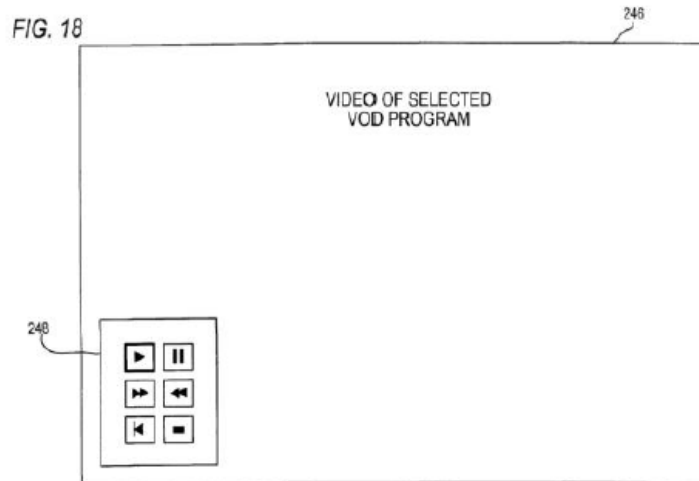
Pet. at 28

Petitioner also points to Figures 9 and 10 for additional examples of second operation panel:



Pet. at 29

Next, Petitioner points to Fig. 18 as displaying the first operation panel:



Pet. at 31.

But each panel in Phillips is being displayed with different content not together “**together with the** reproduced digital contents,” as required by claim.

In particular, Figure 17a, shows “video-on-demand screens that may be used to **order and access** video-on-demand content.” EX1010, 5:40-42. Thus, the screen is not being displayed “**together with the** reproduced digital contents” because no digital content is being reproduced, let alone **the** reproduced digital content. The content has yet to be purchased or accessed. In contrast, Figure 18 shows a “VOD Program” with “video-on-demand playback controls” that was purchased and is being reproduced and displayed **after** it was accessed from different controls of Figure 17a. *Id.* at 5:40-46. Further, Phillips does not disclose that the **controller is configured to alternatively display either** of a first operation panel or a second operation panel together with the reproduced digital content.

Thus, these controls do not meet the claimed requirements “the **controller is configured to alternatively display either** of a first operation panel including at least one of linear operation buttons, receiving user instructions regarding linear reproduction functions of **the reproduced digital contents**, or a second operation panel including at least one of interactive operation buttons, receiving user-

instructions of interactive functions to the outside server, **together with the reproduced digital contents,**” as required by claim 1.

Further, the examples of Figures 9 and 10 combined with Figure 18 also do not meet the claim requirements because Figures 9 and 10 show “program listings information for the current channel” or “a channel that may different from the current channel.” EX1001 at 5:10-19. Thus, the program listings are displayed with broadcast channel and have nothing to do with the “video-on-demand playback controls” shown in Figure 17a. *Id.* at 5:40-46. Indeed, Figures 9 and 10 are related to broadcast content that is completely separate from the video on demand content, and at no point does Petitioner identify any rationale on why such panels can be considered to be displayed “together with the reproduced digital contents,” as required by claim 1.

Petitioner cites the Board’s earlier observation in a different IPR that Figures 17a and 18 “are examples of the alternative display of either the linear content operation panel or the interactive content operation panel ... together with outputted digital content.” Pet. at 31-32. But the prior IPR was directed to a different claim and was considered by the Office prior to the finding of patentability of the instant claims.

Further, even accepting that Figure 17a illustrates some form of “interactive” screen, the Petition still does not identify anywhere in Phillips where (1) that screen is an “operation panel” that controls reproduction, or (2) the system alternates between two different operation panels—one linear and one interactive—for the reproduced digital contents based on received related and time-related information as claim 1 also requires, a claim requirement which was not part of the '394 Patent claims considered in the prior IPR. At most, Phillips discloses one linear playback toolbar and a set of non-playback menus. That is not enough for limitation [1e].

For these reasons, Petitioner fails to show a reasonable likelihood of success on limitation [1e]. The Petition should be denied.

3. The Combination of Phillips and Wallis Fails to Disclose Limitation [1f]

Petitioner fails to show that Phillips in combination with Wallis discloses claim element [1f]: “wherein the related information includes: time related information which represents a time during which the reproduced digital contents and at least one of the interactive operation buttons are displayed.”

The Petition falls short on limitation [1f], which requires “time related information” that is part of the received “related information” that is received “from an outside server.” Petitioner points to Phillips’s statements that the flip display 153

and browse display 160 “may be removed manually or automatically (*e.g.*, after a few seconds or a minute or two).” Pet. at 33–35. From this, Petitioner characterizes the removal behavior as “time related information” and, further, contends that this information is received from an outside server because program guide functions “may be supported” using server 36 or 56. *Id.*

Nothing in Phillips supports those leaps. The cited passages merely describe a local user-interface behavior: if the user does nothing for “a few seconds or a minute or two,” the overlay disappears without any mentioning of this being tied to any information received from an outside server. EX1010, 16:36–38; 17:25–28. Phillips never labels this as “time information,” never associates it with any particular content, and never indicates that the timeout values are delivered from an outside server along with the content. Nor does Phillips connect this timeout with any “operation panel” associated with the “reproduced digital contents.” The underlying television program continues normally; only the overlay is removed. The Petition points to no disclosure in which, for example, time metadata received from a server defines a period during which a particular operation panel (linear or interactive) is displayed together with the reproduced content, as claim 1 requires.

The balance of Petitioner's argument is functional speculation—that GUI timing parameters “would” be configured centrally for consistency, invoking a general “golden rule” of interface design. Pet. at 35. That kind of generic design philosophy cannot substitute for actual disclosure of “time related information” that is received from an outside server as part of the claimed “related information” and that is associated with and/or linked to an interactive or linear operation panel of the reproduced contents.

For these reasons, Petitioner fails to show a reasonable likelihood of success on limitation [1f]. The Petition should be denied.

4. The Combination of Phillips and Wallis Fails to Disclose Limitation [1g]

Petitioner fails to show that Phillips in combination with Wallis discloses claim element [1g]: “panel related information for deciding whether displaying the first operation panel including at least one of the linear operation buttons or the second operation panel including at least one of the interactive operation buttons.”

Petitioner turns to Wallis for the “panel related information” of limitation [1g], asserting that Wallis's “attributes” (e.g., “can save to favourites,” “can skip,” “video controllable,” “target”) are the claimed panel related information because, in Petitioner's view, they “determine whether interactive operation buttons or linear

operation buttons are displayed.” Pet. at 36–37. That characterization is not rooted in Wallis’ disclosure.

Wallis describes a system in which VoD promotional content items and other VoD content are associated with attributes that govern their navigational properties—whether a promo can be skipped, whether the viewer can save the item to a favorites list, whether fast-forward/rewind is enabled, and to what “target” a content item links. EX1011, ¶¶18–19, 32–33, 56–65. The “video controllable” attribute, for example, indicates “whether the ff/rew/pause keys [are] active” during a given item. EX1011 ¶61. The “can save to favourites” attribute indicates whether “a button press can cause an item to be added to the user’s favourites list,” and the “can skip” attribute indicates whether the item is skippable in the promo sequence. EX1011 ¶¶60, 63, 80. The “target” attribute identifies the destination content or service to which the link jumps. EX1011 ¶¶15–16, 66–68, 69–77.

None of these attributes is described as a selector between two different playback operation panels received as part of related information from an outside server. Wallis nowhere teaches two distinct on-screen operation panels or any mechanism in which the value of an attribute causes one panel or the other to be drawn and such information to be included in related information received from an

outside server. Rather, the attributes control the semantics of navigation for promo sequences, leaving the underlying UI presentation unspecified. Re-labeling those navigation attributes as “panel related information” that “decides whether to display linear operation buttons or interactive operation buttons” (EX1003 ¶¶115–116) is expert gloss, not something Wallis itself discloses.

The Petition also suggests, in a cursory manner, that Wallis's attribute data is “delivered, along with the content items, to the user playback device.” Pet. at 37. But Wallis primarily describes attributes stored and used in a service database 204 on the server side. EX1011 ¶¶35–42, 50–56. Petitioner identifies no passage in Wallis that describes those attributes as panel-selection attributes provided and then used by the playback device to choose between two different operation panels displayed with the reproduced contents. On this record, Wallis does not provide the missing “panel related information.”

For these reasons, Petitioner fails to show a reasonable likelihood of success on limitation [1g]. The Petition should be denied.

5. The Combination of Phillips and Wallis Fails to Disclose Limitation [1h]

Petitioner fails to show that Phillips in combination with Wallis discloses claim element [1h]: “wherein the controller, when controlling reproduction of the

digital contents, is further configured to.”

For limitation [1h], Petitioner simply incorporates its previous discussion and states that Phillips discloses the limitation. Pet. at 37. As already explained above for limitations [1d] and [1e], Phillips does not disclose any mechanism in which the claimed controller receives user instructions for linear reproduction functions via a first operation panel and user instructions for interactive functions to an outside server via a second, alternative operation panel together with the reproduced digital contents. Phillips's playback toolbar 248 provides local playback control, and its various guide, menu, and promotional screens provide navigation and transaction options, but the reference does not disclose the claimed architecture of two alternative operation panels whose display is governed by related and time related information. Simply restating the prior mapping does not cure those deficiencies.

For these reasons, Petitioner fails to show a reasonable likelihood of success on limitation [1h]. The Petition should be denied.

6. The Combination of Phillips and Wallis Fails to Disclose Limitation [1i]

Petitioner fails to show that Phillips in combination with Wallis discloses claim element [1i]: “display at least one of the interactive operation buttons during the time represented by the time related information.”

Petitioner's treatment of limitation [1i] also fails for the same reasons as discussed above. The claim requires that the second operation panel with interactive buttons is displayed with the reproduced digital contents only during the "interactive operation period" represented by the time related information. Petitioner again equates the auto-removal of the flip and browse overlays in Phillips with this "interactive operation period," and treats the local timeout behavior as the claimed time related information. Pet. 38.

Phillips, however, merely states that the flip display 153 and browse display 160 may be removed "after a few seconds or other suitable time period of user inactivity." EX1010, 16:36–38; 17:25–28. As with limitation [1f], there is no indication that these timeouts are part of any "information" that is received from an outside server, nor that they are associated with particular digital contents as opposed to being generic UI settings. Nor does Phillips describe these overlays as the kind of "second operation panel" contemplated by the '091 Patent, i.e., a panel that sends user-instruction of interactive functions to an outside server concerning the reproduced contents. They are temporary browse/flip overlays that come and go based on user mode and local inactivity, regardless of what content is playing. Without a server-provided time related parameter governing the display period of a

second operation panel, Petitioner cannot meet limitation [1i].

For these reasons, Petitioner fails to show a reasonable likelihood of success on limitation [1i]. The Petition should be denied.

7. The Combination of Phillips and Wallis Fails to Disclose Limitation [1j]

Petitioner fails to show that Phillips in combination with Wallis discloses claim element [1j]: “other than the time represented by the time related information, display at least one of the linear operation buttons or at least one of the interactive operation buttons based on the panel related information.”

Petitioner's attempt to satisfy limitation [1j] with Phillips in view of Wallis is based entirely on hindsight. Petitioner posits that when the flip or browse buttons disappear in Phillips, “the linear operation panel (e.g., as shown in Fig. 18)” would then be displayed on the channel being viewed, “for example, based on Wallis's panel related information associated with the content.” Pet. at 39. No such sequence of events is ever described in either reference.

Phillips does not state that removal of the flip or browse overlays causes any playback toolbar to appear, let alone the VoD toolbar 248 over live television. The cited passages simply say that the overlays “may be removed” after a period of inactivity. EX1010, 16:36–38; 17:25–28. There is also no disclosure in Phillips that

any information—panel-related or otherwise—controls whether a linear playback panel versus an interactive panel is displayed. Which Phillips screen is visible is not dependent on per-content attributes.

Wallis, for its part, does not teach using its navigation attributes as selectors between two types of playback operation panels, as explained above. EX1011 ¶¶18–19, 56–65. Re-purposing those attributes to decide which panel to show “other than during the time represented by the time related information,” as claim 1 requires, is not a teaching of Wallis; it is the invention of the '091 Patent projected back onto the prior art. Petitioner's scenario—interactive flip buttons disappear, and a content-dependent linear panel appears based on attribute metadata—is simply not how either Phillips or Wallis is described as operating.

For these reasons, Petitioner fails to show a reasonable likelihood of success on limitation [1j]. The Petition should be denied. And because claims 3-5, 7, and 11-13 depend from claim 1, Petitioner has not met its burden for those claims either. Accordingly, the Petition should be denied.

8. The Combination of Phillips and Wallis Fails to Disclose Claim 14

Petitioner's challenge to claim 14 fails at the threshold because it does not meaningfully address the additional and distinct requirements of this claim. Rather

than presenting any analysis tied to the actual language of claim 14, the Petition simply recites a series of cross-references— “See claim [1pre],” “See claims [1a] and 13,” “See claim [1d],” and so on—for every limitation of claim 14. Pet. at 44–45.

In particular, the Petition substantively fails for the same reasons that its challenge to claim 1 fails. Claim 14 recites the same core architecture that is missing from Petitioner's analysis of claim 1: a controller that alternately displays linear operation buttons and interactive operation buttons together with reproduced digital contents, based on related information that includes both time related information and panel related information received from a video on demand server. Claim 14 thus contains **additional** narrowing requirements that Petitioner does not address at all. Yet Phillips and Wallis **do not disclose** any VoD server that delivers UI-related information, much less information defining a time period during which interactive operation buttons are displayed or information that selects between linear and interactive operation buttons outside that period. As explained above, Phillips's VoD server supplies VoD content, but all UI behavior—toolbar appearance, flip/browse overlays, menu transitions—is driven locally at the set-top box, not by related information received from the VoD server. EX1010, 16:22–17:28; 20:18–30. And

Wallis's navigation attributes, which relate to skip behavior, favorites, and link targets in promo sequences, are not the claimed panel related information and are not tied to VoD playback or time-windowed UI behavior. EX1011 ¶¶18–19, 56–65.

Claim 14's preamble and opening limitations require that both the digital contents and the related information be received "**from a video on demand server.**" Petitioner nowhere identifies where Phillips or Wallis discloses a VoD server delivering the claimed **time related information** or **panel related information**. The Petition simply cross-references claim 1 and asserts that the same arguments apply. But those arguments were already deficient for claim 1, and they cannot be bootstrapped to satisfy the more demanding limitations of claim 14. The Petition never explains how the proposed combination could be modified so that the VoD server, rather than local UI logic, provides the "interactive operation period" or performs content-based panel selection. Nor does it identify any teaching, suggestion, or rationale in the art that would lead a POSITA to redesign Phillips's and Wallis's systems to operate in that claimed manner.

For these reasons, Petitioner fails to show a reasonable likelihood of success on claim 14. The Petition should be denied. And because claims 15, 17, and 20 depend from claim 14, Petitioner has not met its burden for those claims either.

Accordingly, the Petition should be denied.

C. Ground 2: Petitioner Fails to Establish That Claims 1, 3-5, 7, 11-15, 17, And 20 Would Have Been Obvious Over Phillips in View Of Wallis And Logan

As noted above, the Office has already made a prior finding of fact and conclusion of law that claims 1-20 of the '091 Patent are not rendered obvious over Phillips in view of Wallis. *See* EX1002 at 23 (“Reasons for allowance”); *see also* EX1001 at 2-3. Thus the Office has already concluded that Phillips in view of Wallis does not teach each and every element of claims 1, 3-5, 7, 11-15, 17, and 20. Logan does not overcome the deficiencies of Phillips and Wallis. The Petitioner provides no explanation as to why the prior findings of the Office are incorrect. Accordingly, Petitioner has not provided a reasonable likelihood of prevailing on Ground No. 2.

In particular, Petitioner has not shown likelihood of prevailing with respect to Ground 2 because Phillips in view of Wallis and Logan does not teach each and every element of Claims 1, 3-5, 7, 11-15, 17, and 20. Specifically, as discussed above, Phillips in combination with Wallis does not teach elements [1e]-[1j] (and comparable elements of claim 14), as required for each of these claims. Additionally, because dependent claims 3-5, 7, 11-13, 15, 17, and 20 depend from claim that Petitioner has not shown to be unpatentable, Petitioner has also failed to show that

claims 3-5, 7, 11-13, 15, 17, and 20 are unpatentable by Phillips in view of Wallis and Logan.

Petitioner's Ground 2 simply layers Logan on top of its flawed Phillips–Wallis combination, but it never cures the fundamental deficiencies identified above. As explained in Ground 1 (incorporated by reference herein), Phillips does not disclose panel-related information, and does not disclose the claimed time-related information that is received from an outside server. Wallis likewise provides no teaching of time-related information received from an outside server and no disclosure of a controller that selects between linear and interactive operation panels together with reproduced digital contents in the manner required by the '091 Patent. Because these core limitations remain absent, Logan cannot supply what is missing—particularly because Logan's teachings concern sports highlight navigation and operate in a fundamentally different manner than the claimed digital-content reproducing apparatus.

Petitioner's reliance on Logan's "Mini-Nav Bar" only underscores the gap. Pet. at 49. Logan does not disclose any "time-related information" that is received from an outside server and that represents a time during which reproduced digital contents and interactive operation buttons are displayed. Instead, Logan describes a

localized on-screen guide in sports replay systems, such as a “Mini-Nav Bar” showing segment titles, which appears and disappears based on the viewer’s navigation mode. EX1013, ¶¶0087-0089. Logan explains that the Mini-Nav Bar is simply a “small graphic bar displayed near or at the bottom of the screen” and is removed “after a timeout (e.g., several seconds).” *Id.* The disappearance is not based on information “received from an outside server,” but is governed by the user’s own mode of interaction or client-side configuration. Logan states that the manner in which the Mini-Nav Bar is presented “may be configured by the provider” (EX1013, ¶0093), but this refers only to generic user-interface preferences or preset behaviors—not to the server-supplied, content-specific “time related information” required by claims 1 and 14. Nothing in Logan teaches or suggests that the Mini-Nav Bar’s display time or behavior is delivered with specific digital content from a remote server, in contrast to the claim language where time-related information is included within the related information received from the outside server. Petitioner’s argument therefore rests on a fundamental mischaracterization of Logan.

Petitioner’s attempt to analogize Logan’s Mini-Nav Bar to the claimed time-related information further fails because the Mini-Nav Bar is not tied to “the reproduced digital contents” in the way the claims require. Logan’s bar is a sports

navigation overlay that reflects segment titles, not a panel of interactive functions tied to content attributes. It is not “displayed together with the reproduced digital contents” based on server-provided related information, nor does it govern when interactive operation buttons are displayed. Petitioner’s reasoning conflates GUI timeout with the mechanism claimed in the ’091 Patent.

1. No Motivation to Combine Phillips with Wallis and Logan

Logan provides no reason to combine its teachings with Phillips and Wallis. Petitioner asserts that Logan is “analogous art” because it relates to interactive television systems (Pet. at 50), but similarity of high-level context is not enough. The ’091 Patent is directed to controlling alternative display of distinct operation panels—linear and interactive—based on server-provided related information. Logan, by contrast, concerns sports-segment navigation with playlists, highlight sequences, and game-specific metadata. EX1013, ¶¶0049–0062, 0072–0084. Those systems operate on entirely different paradigms. A POSITA would have recognized that Logan’s Mini-Nav Bar is designed for sports segments and user control of replayed highlight data—not for selecting between linear and interactive operation panels tied to content attributes. Petitioner points to no teaching in Logan that would make it useful or desirable to inject sports-highlight navigation into Phillips’s VoD

interface or Wallis's metadata-driven attribute system. This is hindsight reconstruction.

Even if Logan's Mini-Nav Bar were incorporated into Phillips, the resulting system would still not perform the controller-based switching required by claims 1 and 14. The claims require a controller that (1) displays interactive operation buttons during the server-defined time related interval, and (2) outside that interval, displays linear or interactive operation buttons based on panel-related information. Logan neither teaches nor suggests this controller logic. Petitioner's approach merely stacks unrelated systems together and declares the result "obvious," without identifying any coherent modification pathway or addressing the technical incompatibilities among the references.

For these reasons, Petitioner fails to show a reasonable likelihood of success on claims 1, 3-5, 7, 11-15, 17, and 20. The Petition should be denied.

D. Ground 3: Petitioner Fails to Establish That Claims 2, 6, 10, And 16 Would Have Been Obvious Over Phillips-Wallis Combinations in View Of Uchida

As noted above, the Office has already made a prior finding of fact and conclusion of law that claims 1-20 of the '091 Patent are not rendered obvious over Phillips, Wallis, and Uchida. See EX1002 at 23 ("Reasons for allowance"); *see also*

EX1001 at 2-3. Thus, the Office has already concluded that Phillips in combination of Wallis and Uchida does not teach each and every element of claims 1, 3-5, 7, 11-15, 17, and 20. The Petitioner provides no explanation as to why the prior finding is incorrect. Accordingly, Petitioner has not provided a reasonable likelihood of prevailing on Ground No. 3.

Further, Ground 3 depends on the same Phillips–Wallis combinations addressed in Ground 1, with Uchida added for the dependent limitations. Pet. at 53. Claims 2, 6, and 10 each depend from independent claim 1, and claim 16 depend from independent claim 14. For these claims, Petitioner largely incorporates its arguments from Ground 1. *See* Pet. at 53-57. Therefore, for at least the reasons provided above in relation to claims 1 and 14 in Ground 1—which are incorporated herein by reference—Petitioner fails to establish that claims 2, 6, 10, and 16 would have been rendered obvious based on Phillips, Wallis, and Uchida.

Because Ground 1 fails, Ground 3 similarly fails for the reasons provided above regarding Ground 1. In addition, as explained below, Petitioner does not show that Uchida remedies the deficiencies in Phillips and Wallis concerning the alternative display of operation panels, the claimed time-related information, or the rendering-area requirements. Ground 3 fails as follows.

1. No Motivation to Combine Phillips-Wallis combination with Uchida

Petitioner's motivation-to-combine argument is conclusory and insufficient. Petitioner asserts that the references "share the same field of interactive television systems" and therefore a POSITA would have combined them. Pet. at 58. That reasoning rests entirely on high-level generalities and does not explain why a POSITA would redesign Phillips and Wallis to adopt Uchida's static split-screen arrangement.

The deficiencies in Grounds 1 and 2 remain unaddressed. Nothing in Phillips or Wallis suggests that UI panels should be anchored to a fixed region of the display. Nothing in Uchida teaches using server-supplied information to alternate between linear and interactive panels. And nothing in the art suggests replacing Phillips's local toolbar behavior with the claimed architecture.

Petitioner also relies on generalized GUI "consistency" principles, citing Shneiderman's "Eight Golden Rules." Pet. at 59. But such abstract design guidelines do not provide the kind of specific, articulated rationale required under *KSR*. They do not explain why a POSITA would combine Phillips's locally controlled playback toolbar, Wallis's metadata governing promotional clip navigation, and Uchida's unrelated static panel layout to yield the claimed invention.

2. Petitioner Fails to Show That the Combination of Phillips, Wallis, and Uchida Discloses Claims 2 and 10

Claim 2 requires displaying “either the first operation panel or the second operation panel in a substantially same panel rendering area as alternative operation panels.” EX1001, claim 2. This limitation presupposes the existence of two distinct operation panels—a linear operation panel and an interactive operation panel—whose selection is governed by related information, including time related information and panel related information. As explained in Ground 1, neither Phillips nor Wallis discloses such panels, much less a panel-selection architecture governed by metadata. *See* EX1010; EX1011; EX1003.

Petitioner relies on Uchida's Figures 10A–10C to argue that linear and interactive panels appear in a common panel-rendering area. Pet. at 53-54. But Uchida merely shows that a static control region exists at the right side of a content display region; the type of buttons appearing in that control region does not depend on server-supplied information, nor does the appearance of the region alternate based on “related information” as claimed. EX1015, 21:36-22:7, 21:54-67; Figs. 10A-10C. Uchida does not teach or suggest the claimed switching between two different panels that are displayed together with the reproduced content and controlled by time-dependent and panel-dependent information received from a server.

Because Petitioner has not established that Phillips and Wallis disclose the required operation panels or the panel-selection mechanism, Uchida's static layout cannot satisfy claim 2.

Claim 10 incorporates claim 2, and therefore fails for the same reasons discussed above.

3. Petitioner Fails to Show That the Combination of Phillips, Wallis, and Uchida Discloses Claims 6 and 16

Claim 6 requires that "a rendering area size of the reproduced digital contents is maintained even when the first operation panel or the second operation panel is displayed." EX1001, claim 6. This limitation depends on the same two-panel architecture as claim 2.

Petitioner again points to Uchida's Figures 10A–10C, arguing that Uchida maintains a fixed content area (the red box). Pet. at 57. But this argument fails for two reasons.

First, Phillips and Wallis do not disclose the claimed first and second operation panels. Without those, Petitioner cannot rely on Uchida to show how those nonexistent panels would affect a rendering area.

Second, Uchida does not disclose anything analogous to the claimed architecture. Uchida's static layout does not alternate operation panels, does not

respond to metadata, and does not maintain a rendering area because of any control circuitry behavior comparable to that required by the '091 Patent.

Because Petitioner has not shown that the underlying system discloses the claimed panel architecture, it necessarily fails to show that the rendering-area behavior associated with that architecture is met.

Regarding claim 16, claim 16 fails for the same reasons as claim 6.

For these reasons, Petitioner fails to show a reasonable likelihood of success on claims 2, 6, 10, and 16. The Petition should be denied.

E. Ground 4: Petitioner Fails to Establish That Claims 8, 9, 18, And 19 Would Have Been Obvious in View of Ground 1 and Ellis

As noted above, the Office has already made a prior finding of fact and conclusion of law that claims 1-20 of the '091 Patent are not rendered obvious over Phillips, Wallis, and Ellis. *See* EX1002 at 23 (“Reasons for allowance”); *see also* EX1001 at 2-3. Thus, the Office has already concluded that Phillips in combination with Wallis and Ellis does not teach each and every element of claims 8, 9, 18, and 19. The Petitioner provides no explanation as to why the prior finding is incorrect. Accordingly, Petitioner has not provided a reasonable likelihood of prevailing on Ground No. 4.

Further, Ground 4 depends on the same Phillips–Wallis combinations addressed in Ground 1, with Ellis added for the dependent limitations. Claims 8 and 9 each depend from independent claim 1, and claims 18 and 19 each depend from independent claim 14. For these claims, Petitioner largely incorporates its arguments from Ground 1. *See* Pet. at 63-65. Therefore, for at least the reasons provided above in relation to claims 1 and 14 in Ground 1—which are incorporated herein by reference—Petitioner fails to establish that claims 8, 9, 18, and 19 would have been rendered obvious based on Ground 1 and Ellis.

Because Ground 1 fails, Ground 4 similarly fails for the reasons provided above regarding Ground 1. In addition, as explained below, Petitioner does not show that Ellis remedies the deficiencies in Phillips and Wallis concerning the time related information, or an appreciation term. Ground 4 fails as follows.

1. No Motivation to Combine Ground 1 with Ellis

Petitioner also has not shown a motivation to combine the Ellis with the Phillips–Wallis combination. Although the references relate to interactive television systems, they address different problems: Phillips concerns how interactive buttons appear and disappear during channel browsing, while Ellis concerns retention policies for network-recorded programs. EX1014, 11:43-12:55; EX1003, Abstract.

Nothing in Phillips suggests incorporating PVR-retention metadata into its interactive control system, and nothing in Ellis proposes modifying interactive operations based on program expiration. Petitioner therefore has not established a reason to combine these features or a reasonable expectation of success.

1. Petitioner Fails to Show That the Combination of Phillips, Wallis, and Ellis Discloses Claims 9 and 19

Claims 9 and 19 further require that the appreciation term is “related to a predetermined date.” Petitioner again relies on Ellis’s expiration dates. Pet. at 65. But because Ellis’s expiration dates are not appreciation terms—and do not govern user-interaction windows—Petitioner necessarily fails to show that they satisfy the added “predetermined date” requirement.

In the '091 Patent, the predetermined date governs the user’s ability to interact with digital content using interactive operation buttons. EX1001, 5:41–58. In Ellis, the predetermined expiration date governs only how long a program remains in storage before being deleted. EX1014, ¶¶0012, 165. The two concepts are not analogous, and Petitioner has not demonstrated otherwise.

For these reasons, Petitioner fails to show a reasonable likelihood of success on claims 8, 9, 18, and 19. The Petition should be denied.

F. Ground 5: Petitioner Fails to Establish That Claims 8, 9, 18, And 19 Would Have Been Obvious in View of Ground 2 and Ellis

Petitioner fails to establish a reasonable likelihood of prevailing on Ground 5 for the same reasons Ground 4 fails. Claims 8 and 18 require that the “time related information” of independent claims 1 and 14 is an “appreciation term,” and claims 9 and 19 further require that the appreciation term is “related to a predetermined date.”

For these reasons, Petitioner fails to show a reasonable likelihood of success on claims 8, 9, 18, and 19. The Petition should be denied.

G. Ground 6: Petitioner Fails to Establish That Claims 1-3, 6-9 And 14-19 Would Have Been Obvious in View of Ellis '430 and Wallis

As noted above, the Office has already made a prior finding of fact and conclusion of law that claims 1-20 of the '091 Patent are not rendered obvious over Ellis '430's disclosure (based on similar disclosures in a continuation) and Wallis. See EX1002 at 23 (“Reasons for allowance”); *see also* EX1001 at 2-3. Thus, the Office has already concluded that Ellis '430 in combination with Wallis does not teach each and every element of claims 1-3, 6-9, and 14-19. The Petitioner provides no explanation as to why the prior finding is incorrect. Accordingly, Petitioner has not provided a reasonable likelihood of prevailing on Ground No. 6.

Further, Ellis '430 in view of Wallis does not teach each and every element of independent claims 1 and 14, or their asserted dependents. In particular, Ellis '430 in combination with Wallis does not teach limitations [1d]–[1j] (and comparable limitations of claim 14), which recite a specific controller architecture that alternately displays linear and interactive operation panels with reproduced digital contents based on “related information” that includes both “time related information” and “panel related information” received from an outside server. Additionally, because dependent claims 2–3, 6–9, 15–19 depend from independent claims that Petitioner has not shown to be unpatentable, Petitioner has also failed to show that claims 2–3, 6–9, 15–19 are unpatentable over Ellis '430 in view of Wallis.

1. No Motivation to Combine Ellis '430 with Wallis

At the time of the '091 Patent, it would not have been obvious to a POSITA to combine Ellis '430 with Wallis in the manner proposed. Petitioner asserts that Ellis'430 and Wallis are analogous because they both relate generally to interactive television systems and seek to make user interaction with digital contents more convenient or intuitive. Pet. at 90. From that high-level similarity, Petitioner leaps to the conclusion that a POSITA would have been motivated to import Wallis's attribute table into Ellis '430 so that attribute metadata would determine whether an

“interactive operation panel” or “linear operation panel” is displayed, and which buttons those panels contain. Pet. at 90–91. That is not a sufficiently articulated, reasoned motivation tied to the specific combination and claim structure at issue here.

Ellis '430 addresses PVR and interactive program-guide functionality in a conventional broadcast/VoD system. EX1021, Abstract. It focuses on recording, buffering, delete priorities, and UI overlays for live and recorded television, including browse/flip overlays and PVR playback overlays. EX1021 ¶¶156–177, 231–236, 317–324, 349–356, 471–478. Wallis, by contrast, addresses metadata-controlled navigation within sequences of VoD promotional items and content, using attributes such as “can skip,” “can save to favourites,” and “target” to govern skip behavior and link destinations. EX1011 ¶¶18–19, 56–65. Neither reference discusses using server-provided metadata to select between two different types of playback operation panels—linear versus interactive—presented with the same reproduced digital contents and governed by server-defined time windows, as required by the '091 claims. That concept comes from the '091 Patent, not from Ellis'430 or Wallis.

Petitioner further asserts that integrating Wallis's attribute table into Ellis '430 would be “a simple and predictable outcome of a condition in an ‘if’ programming

statement,” and that this supposed simplicity provides the motivation to combine. Pet. at 91–92. But the fact that a programmer could write an “if” statement does not explain why a POSITA would redesign Ellis ’430’s system so that server-delivered metadata controls the choice between linear and interactive operation panels displayed with decoded contents, or why a POSITA would have reasonably expected that such a redesign would preserve the advantages Ellis ’430 actually describes (e.g., its PVR-centric buffering and delete-priority features).

Here, neither Ellis ’430 nor Wallis suggests using server-delivered attributes to (1) define a time window during which interactive operation buttons are displayed with reproduced contents and (2) select between linear and interactive operation panels, as the ’091 claims require. Petitioner’s rationale for combining Ellis ’430 and Wallis is built on generic statements about customization and “future data types,” (Pet. at 91) and simply restates conclusory expert opinion at a high level. EX1003 ¶¶263–265. It does not arise naturally from the teachings of Ellis ’430 and Wallis, but instead uses the ’091 Patent itself as a roadmap. The Petition therefore fails to establish a sufficient motivation to combine or that the proposed combination would predictably yield the claimed arrangement.

2. The Combination of Ellis '430 and Wallis Fails to Disclose Limitation [1d]

Petitioner fails to show that Ellis'430 in combination with Wallis discloses claim element [1d]: “a controller configured to control reproduction of the digital contents decoded by the decoder and display of the reproduced digital contents on the display.”

For limitation [1d], Petitioner points to Ellis '430's set-top box 9922 in the remote-PVR arrangement of Figure 2C, asserting that it, together with server 9908, constitutes the claimed “controller.” Pet. at 74–75. But Ellis '430 describes set-top box 9922 as conventional tuning and routing equipment that communicates with a remote PVR server and passes audio/video signals to a display device. EX1021 ¶181 (“user equipment 9920 may include set-top box 9922 for communicating with server 9908”), ¶183 (“set-top box 9922 may send audio/video signal and signals that are representative of graphics through recording equipment 9924 to display device 9926”). The server 9908, in turn, is described as a remote PVR service that records and plays back programs. EX1021 ¶181–182. The entire disclosure of Ellis '430—all 100+ pages and 100+ Figures—are entirely silent as to any disclosure of a “controller.” There is not even a single instance where “controller” is disclosed in Ellis '430 because of a different set-top box/tuner architecture (e.g., “tuner” is

disclosed over thirty-five times). There is no evidence presented that a “tuner” is a controller.

Claim 1 recites a controller in the reproduction chain that is “configured to control reproduction of the digital contents decoded by the decoder and display of the reproduced digital contents on the display,” and that also, in later limitations, alternately displays linear and interactive operation panels based on related information. Petitioner does not identify any disclosure in Ellis ’430 where set-top box 9922, server 9908, or any other component is described as a distinct controller that performs those specific functions. Instead, Petitioner treats Ellis ’430’s generic set-top box/PVR infrastructure as if it were the claimed controller without once explaining where Ellis ’430 actually attributes to that box the claimed control over reproduction and display as required by claim 1.

For these reasons, Petitioner fails to show a reasonable likelihood of success on limitation [1d]. The Petition should be denied.

3. The Combination of Ellis ’430 and Wallis Fails to Disclose Limitation [1e]

Petitioner fails to show that Ellis ’430 in combination with Wallis discloses claim element [1e]: “wherein the controller is configured to alternatively display either of a first operation panel including at least one of linear operation buttons,

receiving user instructions regarding linear reproduction functions of the reproduced digital contents, or a second operation panel including at least one of interactive operation buttons, receiving user-instructions of interactive functions to the outside server, together with the reproduced digital contents.”

Petitioner's showing on limitation [1e] relies on two different UI elements in Ellis '430: (1) the browse or flip overlay 260 in Figure 16, with “change channel option 262” and navigation via left/right arrows, EX1021 ¶234–236, and (2) the PVR playback overlay 2404 in Figure 39, with rewind, play, fast-forward, pause, and stop options. EX1021 ¶321–322. Pet. at 75–78. Petitioner labels the former an “interactive operation panel” and the latter a “linear operation panel,” and asserts that Ellis '430 “alternatively” displays them. *Id.* That characterization overstates what Ellis '430 actually discloses.

First, Ellis '430's browse/flip overlay 260 is not described as a panel that sends “user-instructions of interactive functions to the outside server.”. Rather, overlay 260 appears as a local overlay when the user is in browse or flip mode and allows the user to scroll through channels or titles using local remote-control input. EX1021 ¶234 (“change channel option 262 ... provide[s] the user with the ability to scroll through channels”), ¶235 (right/left arrow keys show titles for earlier or later

programs or other recorded programs), ¶236 (flip mode changes the channel to the next program or recorded program). Ellis '430 does not state that these commands are sent to any "outside server" for interactive processing; they are standard navigation operations.

Second, Ellis '430's PVR overlay 2404 is indeed a playback panel, but its buttons are strictly local linear controls: rewind 2408, play 2410, fast-forward 2412, pause 2414, stop 2416, program title 2418, and playback time 2420. EX1021 ¶322. Ellis '430 makes clear that overlay 2404 is a "PVR playback video overlay ... used to control the flow of video 2402" for a recording on the PVR. EX1021 ¶321–322. It does not act as an "interactive" panel sending instructions to an outside server; it is a local playback toolbar.

Third, Ellis '430 does not describe a controller that alternatively displays these two panels "together with the reproduced digital contents" based on received "related information," as claim 1 requires. The browse/flip overlay 260 appears when the system is in browse or flip mode, and overlay 2404 appears when the user is performing PVR playback. EX1021 ¶234–236, ¶321–324. These are distinct modes tied to different use cases and different content, not two operation panels that a controller alternates between "together with the reproduced digital content."

For these reasons, Petitioner fails to show a reasonable likelihood of success on limitation [1e]. The Petition should be denied.

4. The Combination of Ellis '430 and Wallis Fails to Disclose Limitation [1f]

Petitioner fails to show that Ellis '430 in combination with Wallis discloses claim element [1f]: “wherein the related information includes: time related information which represents a time during which the reproduced digital contents and at least one of the interactive operation buttons are displayed.”

For limitation [1f], Petitioner identifies two things in Ellis '430: (1) the fact that program guide data includes program times (EX1021 ¶159–161) and (2) the presence of the browse/flip overlay when a live television program is being viewed from a buffer (EX1021 ¶234–236). Pet. at 78–80. Petitioner then characterizes the program times as “time related information” and asserts that they represent a time during which live broadcast content and at least one interactive button (the browse/flip overlay) are displayed.

Ellis '430 does not support that chain of reasoning. The cited passages simply explain that program guide data includes schedule times (EX1021 ¶159–161) and that browse/flip overlay 260 may be available when watching a live program from a buffer. EX1021 ¶234–236. Ellis '430 nowhere states that the program times are used

to define a period during which the overlay is displayed, nor that the overlay's presence is governed by any "time related information" that is part of "related information" received from an outside server, as claim 1 requires. The browse/flip overlay's appearance and disappearance is not disclosed to be based on server-delivered information tied to the reproduced contents.

Moreover, Ellis '430 does not describe any information being labeled or treated as "time related information" that represents an "interactive operation period" for the reproduced contents. The Petition again fills this gap with inference and generalities about what would be done, but does not identify any passage in Ellis '430 where time data from distribution facility 110 is used to govern when interactive buttons are displayed together with reproduced contents.

For these reasons, Petitioner fails to show a reasonable likelihood of success on limitation [1f]. The Petition should be denied.

For these reasons, Petitioner fails to show a reasonable likelihood of success on limitation [1f]. The Petition should be denied.

5. The Combination of Ellis '430 and Wallis Fails to Disclose Limitation [1g]

Petitioner fails to show that Ellis'430 in combination with Wallis discloses claim element [1g]: "panel related information for deciding whether displaying the

first operation panel including at least one of the linear operation buttons or the second operation panel including at least one of the interactive operation buttons.”

Ellis '430 **does not** disclose any “panel related information” at all (Pet. at 81), so Petitioner turns to Wallis and asserts that the attribute metadata in Wallis—such as “can save to favourites,” “can skip,” “video controllable,” and “target”—is the claimed panel related information. Pet. at 81. Petitioner further contends, in a conclusory manner, that those attributes are used to “govern the presentation of selectable portions of the screen,” and thus “decide” whether linear or interactive buttons are displayed. Pet. at 36-37.

As with Ground 1, that gloss is not grounded in the actual disclosure of Wallis. Wallis describes attribute data that governs the navigational behavior of VoD promo items: whether the viewer can fast-forward or rewind (“video controllable”), whether an item can be skipped (“can skip”), whether it can be saved as a favourite (“can save to favourites”), and what target content a link leads to (“target”). EX1011 ¶¶18–19, 56–63, 80. Wallis does not teach two different operation panels—one linear and one interactive—or any mechanism in which attribute values are used to select between panels displayed with the reproduced contents. Rather, the attributes influence how the system responds to remote-control inputs and what navigation

options are available within a promo sequence.

Nor does Petitioner identify any disclosure that Wallis's attributes are delivered to the user equipment as "panel related information" used by a controller at the user device to choose between different on-screen panels. Wallis's primary description places the attributes in a service database and describes their use at the server/application level. EX1011 ¶¶35–42, 50–56. Recasting these navigation attributes as panel-selection metadata that decides whether a "first operation panel" or "second operation panel" is displayed is an after-the-fact re-interpretation, not something Ellis '430 or Wallis actually discloses.

For these reasons, Petitioner fails to show a reasonable likelihood of success on limitation [1g]. The Petition should be denied.

6. The Combination of Ellis '430 and Wallis Fails to Disclose Limitation [1h]

Petitioner fails to show that Ellis '430 in combination with Wallis discloses claim element [1h]: "wherein the controller, when controlling reproduction of the digital contents, is further configured to."

For limitation [1h], the Petition largely incorporates its prior mapping and asserts that Ellis '430 satisfies this limitation based on the same browse/flip and PVR playback overlays discussed for [1d] and [1e]. Pet. at 81. But as explained above,

Ellis '430 does not disclose any controller that, when controlling reproduction of decoded digital contents, is “further configured” to perform the specific panel-selection behavior recited in claim 1.

Instead, Ellis'430 describes conventional behaviors: live/recorded playback, local overlays, and menu access. EX1021 ¶231–236, ¶317–324, ¶349–356. There is no disclosure that these overlays are displayed as a result of any “related information” received from an outside server, nor that they are selected by a controller performing the functions recited in [1e]–[1j]. Simply re-invoking the same Ellis '430 passages already addressed under [1d] and [1e] does not satisfy the separate requirement of [1h].

For these reasons, Petitioner fails to show a reasonable likelihood of success on limitation [1h]. The Petition should be denied.

7. The Combination of Ellis '430 and Wallis Fails to Disclose Limitation [1i]

Petitioner fails to show that Ellis'430 in combination with Wallis discloses claim element [1i]: “display at least one of the interactive operation buttons during the time represented by the time related information.”

Limitation [1i] requires that the second operation panel with interactive buttons is displayed together with the reproduced digital contents only during the

“time represented by the time related information.” As discussed above, Petitioner attempts to satisfy “time related information” with Ellis ’430’s program schedule times and the availability of browse/flip overlay 260 when viewing live buffered television. It then equates the period in which the browse/flip overlay is shown with the claimed “time represented by the time related information.” Pet. at 81.

Ellis ’430 does not make that connection. There is no indication that the system derives or receives any time field that represents a specific interval during which the browse/flip overlay must be displayed, nor that any such time field is part of the “related information” received from distribution facility 110. Instead, browse/flip behavior is described functionally and locally, based on user navigation within the guide. EX1021 ¶234–236. Without a server-provided time parameter that governs the display of interactive operation buttons for the reproduced contents, Ellis ’430 does not meet limitation [1i].

For these reasons, Petitioner fails to show a reasonable likelihood of success on limitation [1i]. The Petition should be denied.

8. The Combination of Ellis ’430 and Wallis Fails to Disclose Limitation [1j]

Petitioner fails to show that Ellis’430 in combination with Wallis discloses claim element [1j]: “other than the time represented by the time related information,

display at least one of the linear operation buttons or at least one of the interactive operation buttons based on the panel related information.”

The Petition's attempt to satisfy limitation [1j] rests on the same speculative combination of Ellis '430 and Wallis discussed above. Petitioner suggests that when the browse/flip overlay is not active (i.e., “other than the time represented by the time related information”), Ellis '430 would display a linear operation panel like overlay 2404, and that Wallis' attribute data would be used as panel-related information to determine whether linear or interactive buttons appear. Pet. at 81–82.

But neither Ellis '430 nor Wallis describes such an arrangement. Ellis '430 does not say that deactivation of browse/flip overlay 260 leads to the display of overlay 2404 on the same content. EX1021 ¶¶234–236, ¶¶321–324. Overlay 2404 appears in the context of PVR playback, not as a default panel whenever “interactive” overlays are absent. Nor does Ellis'430 ever state that any metadata—let alone Wallis's attributes—controls which overlay is displayed.

Wallis, for its part, does not disclose using its attributes to choose between linear and interactive panels displayed with reproduced contents, as discussed under [1g]. EX1011 ¶¶18–19, 56–65. Treating those attributes as panel-selection flags that decide which type of operation panel appears “other than during the time represented

by the time related information” is not based on Wallis's disclosure; it is an application of the '091 claim structure to the prior art with hindsight.

For these reasons, Petitioner fails to show a reasonable likelihood of success on limitation [1j]. The Petition should be denied. And because claims 2, 3, and 6–9 depend from claim, Petitioner has not met its burden for those claims either. Accordingly, the Petition should be denied.

9. The Combination of Ellis'430 and Wallis Fails to Disclose Claim 14

Petitioner's challenge to claim 14 fails at the threshold because it does not meaningfully address the additional and distinct requirements of this claim. Rather than presenting any analysis tied to the actual language of claim 14, the Petition simply cross-references its analysis of claim 1 (“See XI.A.1,” “See XI.A.2,” etc.) for every limitation of claim 14. Pet. at 87–89.

In particular, the Petition fails for the same reasons that its challenge to claim 1 fails. Claim 14 recites the same core controller architecture that is missing from Petitioner's analysis of claim 1: a controller that alternately displays linear operation buttons and interactive operation buttons together with reproduced digital contents, based on related information that includes both time related information and panel related information. Claim 14 further requires that the digital contents and related

information be received from a video on demand server. Yet neither Ellis '430 nor Wallis discloses a VoD server delivering UI-controlling metadata that defines a time window for interactive buttons or selects between linear and interactive buttons outside that window.

Ellis '430 does mention that server 112 at distribution facility 110 may be capable of providing “near video-on-demand and video-on-demand.” EX1021 ¶161. But as explained above, all of Ellis'430's UI behavior—browse/flip overlays, PVR overlays, delete priority screens, and live controls overlays—is driven locally at the user equipment based on user actions and local state, not by related information received from a VoD server. EX1021 ¶231–236, ¶317–324, ¶349–356. And Wallis's navigation attributes, which relate to skipping, favourites, and link targets for promo sequences, are not the claimed panel related information and are not tied to VoD playback or time-windowed UI behavior. EX1011 ¶¶18–19, 56–65.

Claim 14's preamble and initial limitations require “network communication circuitry configured to receive digital contents and related information from a video on demand server.” Petitioner nowhere identifies where Ellis '430 or Wallis discloses a VoD server delivering the claimed time related information or panel related information, or any controller that uses such information in the way claim 14

requires. The Petition simply cross-references its already deficient claim 1 analysis and asserts that the same reasoning applies. It never explains how the proposed combination would be modified so that the VoD server, rather than local UI logic, provides the “time related information” or determines, based on “panel related information,” whether the apparatus displays linear or interactive operation buttons.

For these reasons, Petitioner fails to show a reasonable likelihood of success on claim 14. The Petition should be denied. And because claims 15-19 depend from claim 14, Petitioner has not met its burden for those claims either. Accordingly, the Petition should be denied.

IX. CONCLUSION

For at least the foregoing reasons, the Director should deny institution of the Petition.

Dated: December 15, 2025

Respectfully submitted,

/Robert G Pluta Reg No 50970 /
Robert G. Pluta (Reg. No. 50,970)
Amanda S. Bonner (Reg. No. 65,224)
MAYER BROWN LLP
71 S. Wacker Drive
Chicago, IL 60606
Telephone: (312) 701-8641
Fax: (312) 706-8144

Saqib J. Siddiqui (Reg. No. 68,626)
MAYER BROWN LLP
1999 K Street NW
Washington, D.C. 20006
Telephone: 202-263-3000
ssiddiqui@mayerbrown.com

Counsel for Maxell, Ltd.

Case IPR2025-01311
Patent No. 11,812,091
Patent Owner's Preliminary Response

CERTIFICATE OF SERVICE

I hereby certify that on this 15th day of December, 2025, a copy of the attached
PATENT OWNER'S PRELIMINARY RESPONSE was served by electronic
mail to the attorneys of record, at the following addresses:

Salvatore Tamburo
Salvatore.tamburo@us.dlapiper.com

James Heintz
jim.heintz@us.dlapiper.com

Henry Fildes
Henry.fildes@us.dlapiper.com

Dated: December 15, 2025

Respectfully submitted,

/Robert G. Pluta/
Robert G. Pluta (Reg. No. 50,970)

Counsel for Maxell, Ltd.

Case IPR2025-01311
Patent No. 11,812,091
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CERTIFICATION PURSUANT TO 37 C.F.R. § 42.24(d)

Pursuant 37 CFR 42.24(d), the undersigned certifies that this Preliminary Response and complies with the type-volume limitation of 37 CFR § 42.24(a). The word count application of the word processing program used to prepare this Patent Owner's Preliminary Response indicates that the Preliminary Response contains 13,912 words, excluding the parts of the brief exempted by 37 C.F.R. § 42.24(a).

Respectfully submitted,

/Robert G. Pluta, Reg. No. 50,970 /

Robert G. Pluta (Reg. No. 50,970)

Counsel for Maxell, Ltd.