

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

v.

MULTIMEDIA TECHNOLOGIES PTE. LTD.,
Patent Owner.

IPR2024-00354
Patent 10,419,805 B2

Before ST. JOHN COURTENAY, III, MICHAEL R. ZECHER, and
SHARON FENICK, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

LG Electronics, Inc. and LG Electronics U.S.A., Inc. (collectively, “Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting an *inter partes* review (“IPR”) of claims 1–18 (“the challenged claims”) of U.S. Patent No. 10,419,805 B2 (Ex. 1001, “the ’805 patent”). Petitioner filed a Declaration of Andrew Lippman, Ph.D. (Ex. 1003) with the Petition. Multimedia Technologies Pte. Ltd. (“Patent Owner”) filed a Preliminary Response. Paper 7 (“Prelim. Resp.”).

We have authority to determine whether to institute an *inter partes* review. *See* 35 U.S.C. § 314 (2018); 37 C.F.R. § 42.4(a) (2023). Under 35 U.S.C. § 314(a), we may not authorize an *inter partes* review unless the information in the petition and the preliminary response “shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.”

Upon consideration of the Petition, the Preliminary Response, and the evidence of record, for the reasons given below we determine the information presented in the Petition demonstrates there is a reasonable likelihood that Petitioner would prevail in establishing the unpatentability of at least one challenged claim of the ’805 patent.

Accordingly, we institute an *inter partes* review of claims 1–18 of the ’805 patent on all five asserted grounds of unpatentability set forth in the Petition.

I. INTRODUCTION

A. *Real Parties in Interest (“RPIs”)*

Petitioner identifies LG Electronics, Inc. and LG Electronics, U.S.A., Inc. as RPIs. Pet. 92. Patent Owner identifies itself, Multimedia

Technologies Pte. Ltd., as the only RPI. Paper 3 (Patent Owner’s Mandatory Notices), 2.

B. Related Matters

The parties indicate that the ’805 patent is the subject of the following two district court cases: (1) *Multimedia Technologies Pte. Ltd. v. LG Electronics Inc.*, No. 2:22-cv-00494 (E.D. Tex. filed Dec. 23, 2022); and (2) *Multimedia Technologies Pte. Ltd. v. Vizio, Inc.*, No. 2:23-cv-00124 (E.D. Tex. Filed Mar. 24, 2023). Pet. 92; Paper 4, 2.

Patent Owner notes that, in addition to this Petition, Petitioner filed the following three other petitions challenging related patents owned by Patent Owner: (1) *LG Electronics, Inc. v. Multimedia Technologies Pte. Ltd.*, IPR2024-00351, Paper 1 (PTAB Dec. 20, 2023) (challenging claims 1–6, 11–16, 21, and 22 of U.S. Patent No. 9,510,040 B2); (2) *LG Electronics, Inc. v. Multimedia Technologies Pte. Ltd.*, IPR2024-00352, Paper 1 (PTAB Dec. 20, 2023) (challenging claims 1–14 of U.S. Patent No. 9,247,174 B2); and (3) *LG Electronics, Inc. v. Multimedia Technologies Pte. Ltd.*, IPR2024-00353, Paper 3 (PTAB Dec. 22, 2023) (LG Corrected Petition) (challenging claims 1–4, 6, 8–10, 12–17, and 19 of U.S. Patent No. 9,055,254 B2). Paper 3, 2 (Patent Owner’s Mandatory Notices).

C. The ’805 Patent

The ’805 patent is titled “Data Service” and pertains to a data service system in an intelligent television. Ex. 1001, codes (54), (57). The ’805 patent describes how technology companies at the time of the writing were integrating features from different devices into one or two multi-functional devices and consolidating home devices, including integrating features and functionality into televisions. *Id.* at 1:45–67. The ’805 patent further describes that such “Smart TVs” represent a trend of technological

convergence between computers and television sets but there are still issues with the consolidation of features and the presentation of these features in Smart TVs. *Id.* at 2:1–12.

Figure 14, reproduced below, is a block diagram of a data service according to one embodiment: *Id.* at 10:62–63, 28:22–23.

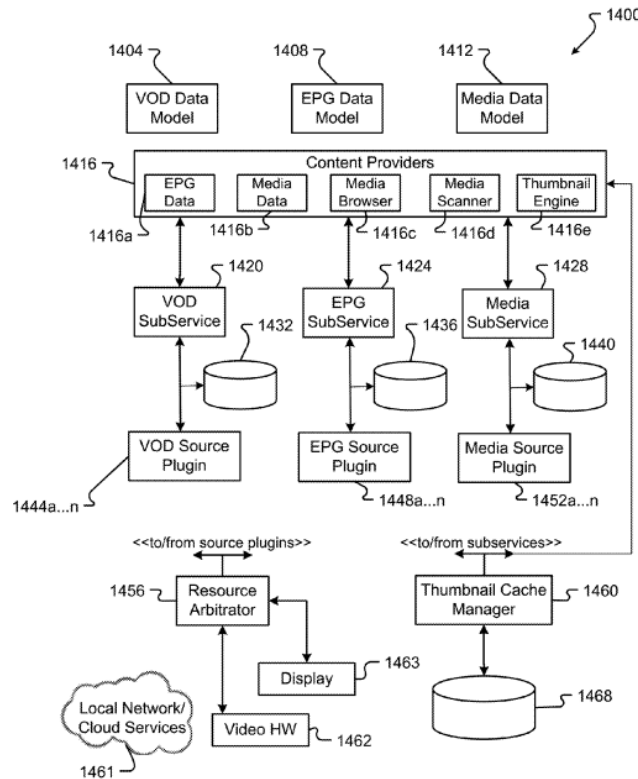


Fig. 14

Figure 14 illustrates models for different types of data, including video on demand (VOD) data model 1404, electronic program guide (EPG) data model 1408, and media data model 1412. *Id.* at 28:27–38. Received content from source plugins 1444a-n, 1448a-n, 1452a-n is converted to the specific format handled by the respective data model and the data models provide uniform formats for respective subservices 1420, 1424, and 1428. *Id.* at 33:17–33.

Figure 16, reproduced below, is a flow diagram for providing media or data to an internal content provider: *Id.* at 10:66–67, 34:10–12.

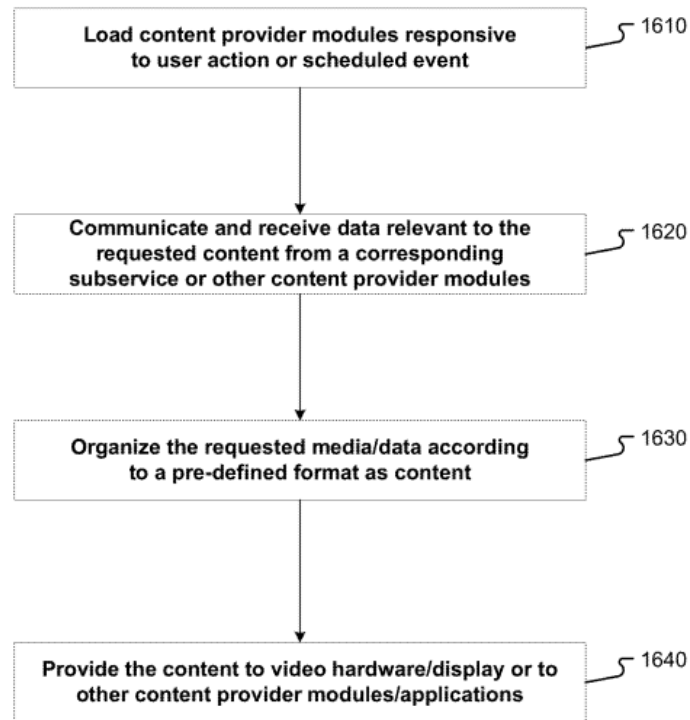


FIG. 16

In Figure 16, at step 1620, media and/or data relevant to requested content is received from a corresponding subservice or other content provider module. *Id.* at 34:38–41. At step 1630, content provider modules 1416 process the received media and/or data and organize such media and/or data into a pre-defined format for use by the relevant applications. *Id.* at 34:49–60. At step 1640, content provider 1416 provides content to video hardware 1462 and/or display 1463. *Id.* at 35:9–23.

D. Illustrative Claim

Petitioner challenges claims 1–18 of the '805 patent. Pet. 7. Of the challenged claims, claims 1, 10, and 17 are independent.

Claim 1, reproduced below, is illustrative of the challenged claims, and recites the following (bracketing and identifiers added):

[1.0] A method of providing content for a television (TV), the method comprising:

[1.1.1] receiving, by a processor, data relevant to one or more scheduled events from one of a corresponding subservice of a plurality of subservices,

[1.1.2] wherein the plurality of subservices comprises a video-on-demand (VOD) subservice, electronic programming guide (EPG) subservice, and a media subservice

[1.2.1] organizing, by the processor, the data according to a pre-defined format corresponding to each of the plurality of subservices,

[1.2.2] wherein the pre-defined format comprises one of a VOD data model, an EPG data model and a media data model,

[1.2.3] wherein organizing the data according to the pre-defined format comprises converting the data received from the subservice into the pre-defined format of the corresponding data model and

[1.2.4] wherein each of the VOD data model, EPG data model, and media data model provide a uniform format for the plurality of subservices; and

[1.3] providing, by the processor, the organized data to one or more of a plurality of content provider modules of the TV.

Ex. 1001, 37:56–38:10; Pet. 94 (Claim Appendix).

E. Prior Art

Petitioner submits the following asserted references as evidence:

Prior Art	Exhibit No.
Melnychenko, US 2013/0263184 A1 (published Oct. 3, 2013)	1005
Chen, US 2007/0226268 A1 (published Sept. 27, 2007)	1007
Kim, US 2012/0054794 A1 (published Mar. 1, 2012)	1006
Lee (Lee-1), US 9,008,190 B2 (issued Apr. 14, 2015)	1008
Lee (Lee-2), US 9,398,339 B2 (issued July 19, 2016)	1009
Ferren, US 8,893,184 B2 (issued Nov. 18, 2014)	1010
Choi, US 2013/0057764 A1 (published Mar. 7, 2013)	1011

a. Summary of Melnychenko (Ex. 1005)

Melnychenko is titled “System and Methods for Modifying Improperly Formatted Metadata.” Ex. 1005, code (54). Melnychenko describes an interactive media guidance application, including an interactive television program guide. *Id.* ¶¶ 31, 32. Melnychenko further describes such guides allow users to navigate among and locate many types of content, including television programming, video-on-demand (VOD), and Internet content. *Id.* ¶ 32.

Figure 1, reproduced below, shows an illustrative display screen that may be used to provide media guidance application listings in accordance with an embodiment of the invention: *Id.* ¶¶ 16, 35.

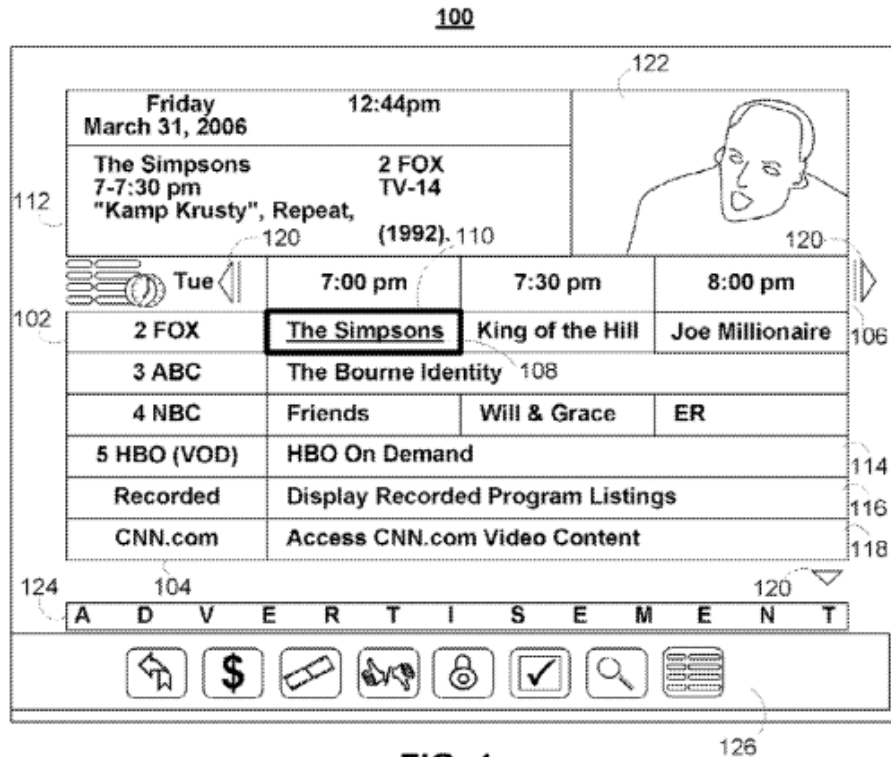


FIG. 1

“Figure 1 shows illustrative grid program listings display 100 that enables access to different types of content in a single display.” *Id.* ¶ 36. Display 100 includes grid 102, highlight region 110, program information region 112 that provides information relating to the program listing selected by highlight region 110, and video region 122 that allows the user to view and/or preview programs. *Id.* ¶¶ 36, 39.

b. Summary of Chen (Ex. 1007)

Chen is titled “Method of Managing Metadata and Set Top Box Device.” Ex. 1007, code (54). Chen relates to “a method of managing metadata and a set top box device therefor, and more particularly to a method of managing metadata operable to plural types of media data and a set top box device therefor.” *Id.* ¶ 3.

Figure 1, reproduced below, is a block diagram of a set top box 100 according to an embodiment of the invention: *Id.* ¶¶ 12, 16.

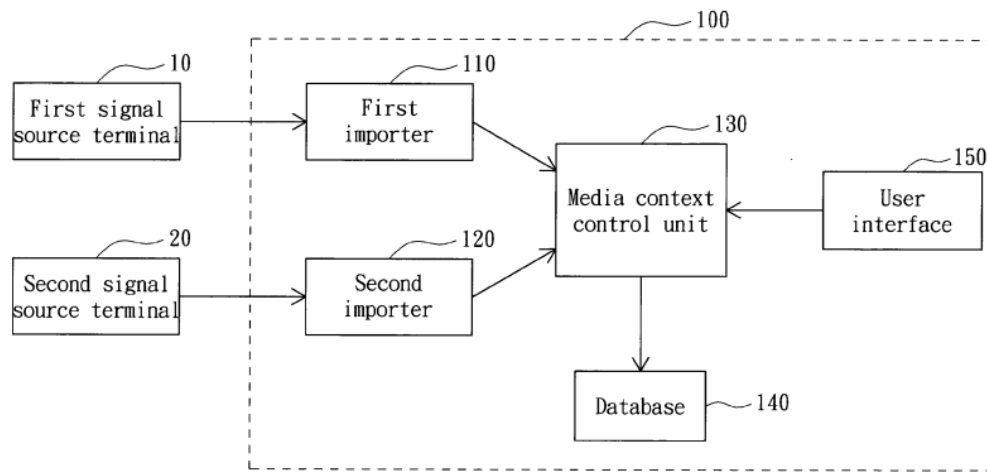


FIG. 1

Figure 1 illustrates “[t]he set top box 100 [which] is operable to receive plural types of media data transmitted by a signal source terminal, for example, TV programs transmitted by a cabled TV, a video on demand (VoD) movie program transmitted by the Internet, an AV data transmitted by a personal computer, or media data stored in other storage devices such as a universal serial bus (USB) storage unit.” *Id.* ¶ 16. “The set top box 100 includes a first importer 110, a second importer 120, a media context control unit 130, and a database 140.” *Id.* The first importer 110 generates a first metadata table complying with a specific table and the second importer 120 generates a second metadata table complying with the specific table. *Id.* [A] user interface 150 [provides] access [to] all the media data operable to the set top box 100 by the specific table of uniform format.” *Id.* ¶ 17.

Figure 3, reproduced below, illustrates the relationship among media data, metadata tables, and a database according to a preferred embodiment of the invention: *Id.* ¶¶ 14, 20.

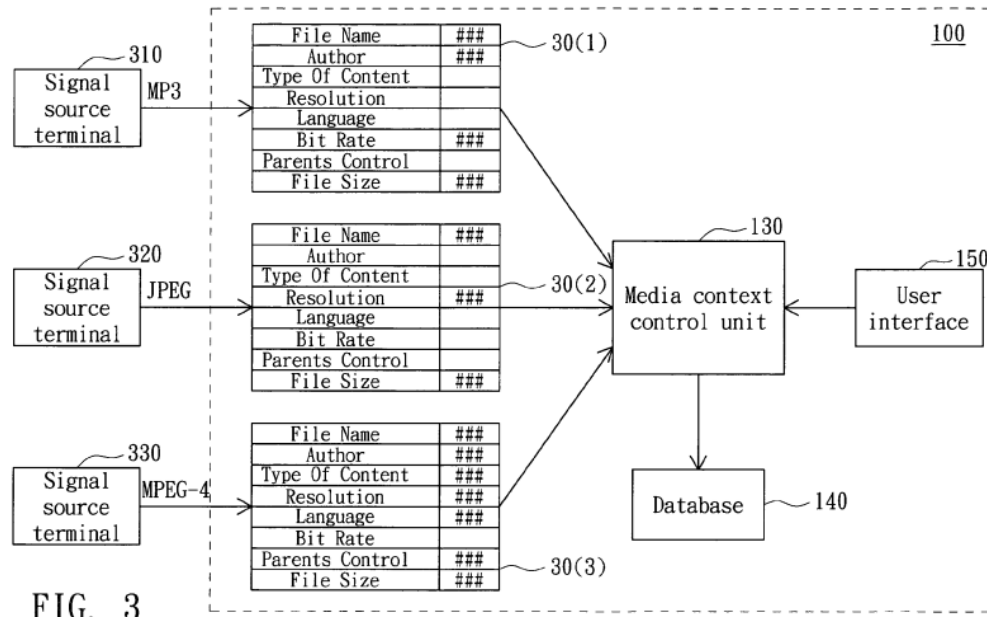


Figure 3 shows signal source terminals 310, 320 and 330, and metadata tables 30(1), 30(2) and 30(3). *Id.* ¶ 20.

c. Summary of Kim (Ex. 1006)

Kim is titled “Image Display Apparatus and Method for Operating the Same.” Ex. 1006, code (54). Figure 19, reproduced below, shows a “home screen displayed on an image display apparatus according to an embodiment.” *Id.* ¶ 21.

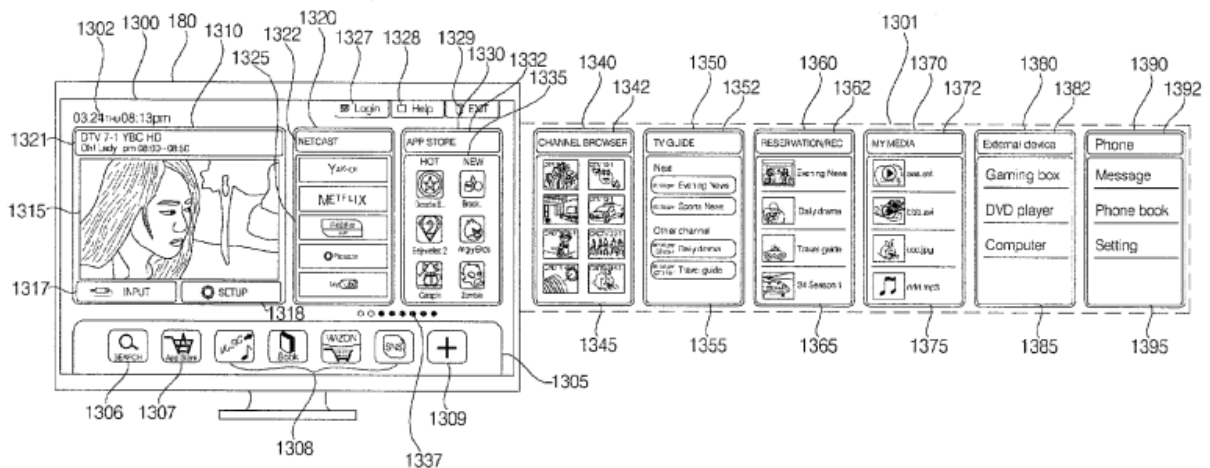


Figure 19 shows a card object area with “a plurality of card objects 1310, 1320, and 1330 which are classified based on the source or a type of content.” *Id.* ¶¶ 192–196. Card object 1310 may display a broadcast image. *Id.* ¶ 195. Card object 1320 may provide a list of content providers. *Id.* Card object 1330 may provide a list of applications. *Id.* Other card objects may be arranged in a hidden area 1301. *Id.* ¶ 196.

d. Summary of Lee-1 (Ex. 1008)

Kim incorporates Lee-1 by reference for examples of thumbnails and methods of using the same. Ex. 1006 ¶ 106. Lee-1 is titled “Apparatus for Processing Images and Method Thereof.” Ex. 1008, code (54). Lee-1 describes a “thumbnail generator 250 generates a thumbnail by scaling and compressing pictures inputted from [a] video decoder 215 or [a] DV decoder 217 . . . [a] size change is performed to display a thumbnail with an appropriate size when it is displayed on the display.” *Id.* at 8:31–40.

e. Summary of Lee-2 (Ex. 1009)

Lee-2 is titled “Image Display Apparatus and Method for Operating the Same.” Ex. 1009, code (54). Figure 39B, reproduced below, illustrates a favorite channel list screen including a favorite channel list: *Id.* at 41:42–44.



Figure 39B shows “a group area 3920 [that] includes tabbed menus including [a] plurality of groups, for example, A group, B group, C group, and D group. Each group favorite channel list may correspond to the favorite channel list of each user.” *Id.* at 41:42–67.

f. Summary of Ferren (Ex. 1010)

Ferren is titled “Mechanism for Facilitating Multiple Multimedia Viewing Planes in Media Display Systems.” Ex. 1010, code (54). Ferren describes use of “a relational database management system or an embedded database (e.g., Structured Query Language Lite (SQLite®)).” *Id.* at 10:4–37, Fig. 7. Ferren further describes “database 710 may be used to store datasets relating to the integrated [user interface], including (1) menus content, (2) sub-menus content, (3) metadata for media, (4) icons (for menu items), and (5) lists of current media selections, etc.” *Id.*

g. *Summary of Choi (Ex. 1011)*

Choi is titled “Method of Providing External Device List and Image Display Device.” Ex. 1011, code (54). Choi describes “a plurality of external device icons 820 representing a plurality of external devices are displayed on [a] full screen 810 of [a] display unit 180.” *Id.* ¶ 250. Choi further describes “displaying a specific symbol on an external device icon is used as one example of a method of distinguishing icons from each other, but the present invention is not limited thereto. That is, any one of letters, symbols, colors, and flashing lights may be used for distinction.” *Id.*

F. The Asserted Grounds of Unpatentability

Petitioner challenges claims 1–18 of the ’805 patent based upon the following grounds:

Grounds	Claim(s) Challenged	35 U.S.C. §	Reference(s)
1	1, 10, 17	103(a) ¹	Melnychenko, Chen
2	1–3, 6, 9–12, ² 16–18	103(a)	Melnychenko, Chen, Kim, Lee-1
3	4, 13	103(a)	Melnychenko, Chen, Kim, Lee-1, Lee-2
4	5	103(a)	Melnychenko, Chen, Kim, Lee-1, Lee-2, Ferren
5	6–8, 14, 15	103(a)	Melnychenko, Chen, Kim, Lee-1, Choi

Pet. 11. Patent Owner disputes Petitioner’s asserted grounds of unpatentability. *See generally* Prelim. Resp.

II. LEVEL OF ORDINARY SKILL IN THE ART

We consider the asserted grounds of unpatentability in view of the understanding of a person of ordinary skill in the art (POSITA). In assessing

¹ The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), amended 35 U.S.C. §§ 102, 103, and was effective on March 16, 2013. The ’805 patent claims the benefit of filing dates prior to the effective date of the applicable AIA amendments. *See* Ex. 1001, (codes 60, 63). Further, we understand Petitioner to contend that pre-AIA § 103 applies because Petitioner contends that each of the asserted references qualifies as prior art to the ’805 patent under pre-AIA § 102. Pet. 11. Therefore, we refer to the pre-AIA versions of 35 U.S.C. §§ 102, 103. Our analysis would not change under the AIA versions of §§ 102, 103.

² Claim 9 is not listed in Petitioner’s chart on page 11 of the Petition but is included in its substantive analysis under Ground 2 on page 72 of the Petition. *See* Pet. 72–74.

the level of ordinary skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (quoting *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986)). “[O]ne or more factors may predominate.” *Id.*

Relying upon the declaration testimony of Dr. Lippman, Petitioner contends that an ordinarily skilled artisan for the ’805 patent “would have been someone knowledgeable about and familiar with the television display technology that is pertinent to the ’805 patent. A POSITA would have had a bachelor’s degree in Electrical Engineering, Software Engineering, or Computer Engineering, or equivalent training, and approximately two years of experience working in the field of television systems and networking, human-computer interaction, or related technologies. Lack of work experience can be remedied by additional education, and vice versa.” Pet. 9 (citing Ex. 1003 ¶¶ 18–20). At this stage, “Patent Owner adopts Petitioner’s definition of a person of ordinary skill in the art (“POSITA”) for the purposes of [its] Preliminary Response.” Prelim. Resp. 28.

For purposes of this Decision, we adopt Petitioner’s definition of the level of ordinary skill in the art. On the present record, we are satisfied that this definition comports with the level of skill necessary to understand and implement the teachings of the ’805 patent and the asserted prior art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (explaining that the prior art itself can reflect appropriate level of ordinary skill in art).

III. CLAIM CONSTRUCTION

In interpreting the claims of the '805 patent, we “us[e] the same claim construction standard that would be used to construe the claim[s] in a civil action under 35 U.S.C. [§] 282(b).” *See* 37 C.F.R. § 42.100(b) (2023). Accordingly, our claim construction standard is the same as that of a district court. *See id.* Under the standard applied by district courts, claim terms are generally given their plain and ordinary meaning, as would have been understood by a person of ordinary skill in the art at the time of the invention and in the context of the entire patent disclosure. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). “There are only two exceptions to this general rule: (1) when a patentee sets out a definition and acts as his own lexicographer, or (2) when the patentee disavows the full scope of a claim term either in the specification or during prosecution.” *Thorner v. Sony Comput. Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012).

Petitioner states “no claim term requires express construction” (Pet. 9) but further states some claim terms are provided with explicit definitions in the specification (Pet. 9–10). Patent Owner “does not dispute Petitioner’s statement on claim construction for the purposes of [its] Preliminary Response.” Prelim. Resp. 29.

For purposes of this Decision, we determine that no aspects of the challenged claims require explicit construction. *See, e.g., Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))). We note, however, that, in our obviousness analysis below, we address the scope and

meaning of the claim terms “pre-defined format” and “uniform format,” as those terms pertain to the combined teachings of Melnychenko and Chen, as contested by the parties.

IV. PRINCIPLES OF LAW

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)).

A patent claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) when in evidence, objective evidence of nonobviousness.³ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). “[W]hen a patent claims a structure already known in

³ Patent Owner does not present arguments or evidence of secondary considerations (i.e., objective indicia of non-obviousness) in its Preliminary Response. *See generally* Prelim. Resp. Therefore, secondary considerations do not constitute part of our analysis herein.

the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result.” *KSR*, 550 U.S. at 416 (citing *United States v. Adams*, 383 U.S. 39, 50–51 (1966)). An obviousness inquiry is not limited to the prior art’s preferred embodiment. *See, e.g., Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1370 (Fed. Cir. 2007). We also recognize that prior art references must be “considered together with the knowledge of one of ordinary skill in the pertinent art.” *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994) (citing *In re Samour*, 571 F.2d 559, 562 (CCPA 1978)).

V. DISCRETIONARY DENIAL UNDER 35 U.S.C. 314(a)

A. *Parties Arguments*

Petitioner contends that we should not exercise our discretion to deny the Petition under § 314(a), primarily because it stipulates “if instituted, Petitioner will not pursue in District Court the specific grounds asserted here, or on any other ground that was raised or could have been reasonably raised in this IPR.” Pet. 90–91 (citing Interim Procedure for Discretionary Denials in AIA Post-grant Proceedings with Parallel District Court Litigation at 3, *available at* https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf. (“Director Memo”)) (emphasis omitted).

In response, Patent Owner contends that we should exercise our discretion to deny the Petition under § 314(a) because, among other reasons, Petitioner failed to file a stipulation consistent with the holding set forth in *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 (PTAB Dec. 1, 2020) (precedential as to § II.A) (“*Sotera*”). Prelim. Resp. 12–

17. After Patent Owner filed its Preliminary Response, we granted Petitioner authorization to file a “Notice of *Sotera* Stipulation” entered in the district court case where Petitioner is a party. *See* Ex. 1019.

B. Fintiv Analysis

It is well-settled that institution of an IPR is discretionary. *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he [U.S. Patent and Trademark Office] is permitted, but never compelled, to institute an IPR proceeding.”); 35 U.S.C. § 314(a) (“The Director *may not* authorize an inter partes review to be instituted unless the Director determines that the information presented in the petition filed under section 311 and any response filed under section 313 shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” (emphasis added)). In *Fintiv*, the Board discussed potential applications of *NHK Spring Co. v. Intrix-Plex Techs., Inc.*, IPR2018-00752, Paper 8 (PTAB Sept. 12, 2018) (precedential), as well as a number of other cases dealing with discretionary denial under § 314(a). *Fintiv* identifies a non-exclusive list of six factors parties may consider addressing, particularly where there is a related district court case involving the same patent and whether such a case provides any basis for discretionary denial. *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 5–16 (PTAB Mar. 20, 2020) (precedential).

Those factors include the following:

- a. *whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;*
- b. *proximity of the court's trial date to the Board's projected statutory deadline for a final written decision;*
- c. *investment in the parallel proceeding by the court and the parties;*
- d. *overlap between issues raised in the petition and in the parallel proceeding;*
- e. *whether the petitioner and the defendant in the parallel proceeding are the same party; and*
- f. *other circumstances that impact the Board's exercise of discretion, including the merits.*

Id. at 5–6 (emphasis added).

On June 21, 2022, the Director issued interim guidance in the form of a memo that further clarifies how we should approach analyzing the *Fintiv* factors. *See* Director's Memo. Notably, the Director stated that "the PTAB [Patent Trial and Appeal Board] will not discretionarily deny institution in view of parallel district court litigation where a petitioner presents a stipulation not to pursue in a parallel proceeding the same grounds or any ground that could have been reasonably raised before the PTAB." Director's Memo at 3.

In its Preliminary Response, Patent Owner contends that Petitioner fails to provide a proper *Sotera* stipulation for two reasons: (1) Petitioner did not file its stipulation in the U.S. District Court for the Eastern District of Texas, which is handling the two parallel district court cases; and, (2) Petitioner's stipulation would have little, if any, impact on the district court case where Vizio, Inc. ("Vizio") is a party. Prelim. Resp. 12–17. We do not agree with Patent Owner's arguments.

As an initial matter, we do not share Patent Owner’s view that a *Sotera* stipulation must be filed in the two parallel district court cases. *See* Prelim. Resp. 1316. This same argument was raised previously in another proceeding before the Board. *See Taiwan Semiconductor Mfg. Co. Ltd. v. Alidouble, Inc.*, IPR2023-00369, Paper 7 at 10 (PTAB July 12, 2023) (Institution Decision) (declining to discount petitioner’s stipulation because petitioner did not file it in the district court). In *Taiwan Semiconductor*, patent owner urged the Board to exercise discretion to deny institution under § 314(a) in light of a parallel district court litigation because, in part, petitioner had not filed the stipulation in the district court. *Id.* at 9. The Board disagreed and found that the Director’s Memo does not require that such a stipulation be filed in the district court, only that the petitioner must “stipulate[]” or “present[] a stipulation.” *Id.* at 8–9 (citing Director’s Memo at 3, 7).

Here, we agree with the Board’s reasoning in *Taiwan Semiconductor* case, and we understand the Director’s Memo as only requiring Petitioner to “stipulate[]” or “present[] a stipulation.” The Director’s Memo is silent regarding any requirement for Petitioner to file a stipulation in the district court case where Petitioner is a party. Director’s Memo at 3, 7.

Even if *arguendo* Petitioner’s *Sotera* stipulation should also be filed in district court, here Petitioner did file a “Notice of *Sotera* Stipulation” in the district court case where Petitioner is a party. Ex. 1019. This Notice states that:

[Petitioner] hereby stipulate[s], consistent with the stipulation made by the [p]etitioner in *Sotera* that, if the PTAB institutes an IPR in response to [LG’s] petition against [Patent Owner’s] U.S. Patent No. 10,419,805 (IPR2024-00354), [Petitioner] will not pursue in this litigation the grounds raised or any other

grounds that could have reasonably been raised before the PTAB in that instituted proceeding.

Id. at 3. Consequently, the purpose of Petitioner’s *Sotera* stipulation has been achieved here because it “mitigates any concerns of duplicative efforts between the district court and the Board, as well as concerns of potentially conflicting decisions.” *Sotera*, Paper 12 at 19 (citing *Sand Revolution II, LLC v. Cont’l Intermodal Group – Trucking LLC*, IPR2019-01393, Paper 24 at 12 (PTAB June 16, 2020) (Decision Granting Request for Rehearing) (informative)).

Although Patent Owner is correct that Petitioner’s *Sotera* stipulation would have little, if any, impact on the district court case where Vizio is a party (*see* Prelim. Resp. 16–17), the Director’s interim guidance does not condition or otherwise qualify the effect of a *Sotera* stipulation on our exercise of discretion to deny this Petition based on any remaining defendants in the parallel district court cases that are not subject to the stipulation (*see* Director Memo at 7, 9). Put simply, Petitioner has filed a *Sotera* stipulation in this proceeding and, as a result, we will not exercise our discretion to deny its’ Petition.

VI. GROUND 1 – ALLEGED OBVIOUSNESS OVER MELNYCHENKO AND CHEN

Petitioner contends that independent claims 1, 10, and 17 of the ’805 patent are unpatentable under 35 U.S.C. § 103(a) as obvious over Melnychenko in view of Chen. Pet. 11–51. Patent Owner opposes, arguing that claim limitations 1.2.1 and 1.2.4 are not taught. Prelim. Resp. 29–35.

A. *Claim 1*

1. *Preamble [1.0]*

The preamble of claim 1 recites: “[a] method of providing content for a television (TV), the method comprising.” Ex. 1001, 37:56–57.

Petitioner contends Melnychenko’s methods for modifying metadata associated with television content teaches the preamble of claim 1. Pet. 18–19 (citing Ex. 1005, Figs. 1, 3, 4, Abst., ¶¶ 30, 47, 55).

Patent Owner does not specifically address the preamble of claim 1 in the Preliminary Response. *See generally* Prelim. Resp.

To the extent that the preamble may be limiting, on this record, we preliminarily find Petitioner has shown that at least the combination of Melnychenko and Chen teaches the preamble [1.0].

2. *Limitation [1.1.1]*

Limitation [1.1.1] of claim 1 recites: “receiving, by a processor, data relevant to one or more scheduled events from one of a corresponding subservice of a plurality of subservices.” Ex. 1001, 37:58–60.

Petitioner reads the claimed “processor” on Melnychenko’s Metadata Pre-Processor 958, as depicted in Figure 9B. Pet. 20–21 (citing Ex. 1005 ¶¶ 124, 133, Fig. 9B). Petitioner reads the claimed “receiving . . . data relevant to one or more scheduled events from one of a corresponding subservice of a plurality of subservices” on Melnychenko’s user equipment device 300, as depicted in Figure 3, that “receives from media guidance data source 418 at ‘a system-specified period of time’ or a ‘user-specified period of time,’ which, separately and together, correspond to ‘one or more scheduled events.’” Pet. 21 (citing Ex.1005 ¶¶34, 64, 70; Ex.1003, ¶¶110-111). Petitioner contends the claimed “plurality of subservices” is taught by

Melnychenko's Figure 4 that depicts "user television equipment 402 receiv[ing] data from a media content source 416 and media guidance data source 418." Pet. 23–24 (citing Ex. 1005 ¶ 62, Fig. 4; Ex. 1003 ¶¶ 118–119).

Patent Owner does not specifically address limitation [1.1.1] in the Preliminary Response. *See generally* Prelim. Resp.

On this record, we preliminarily find Petitioner has shown that at least the combination of Melnychenko and Chen teaches limitation [1.1.1].

3. *Limitation [1.1.2]*

Limitation [1.1.2] of claim 1 recites: "wherein the plurality of subservices comprises a video-on-demand (VOD) subservice, electronic programming guide (EPG) subservice, and a media subservice." Ex. 1001, 37:60–63.

Petitioner contends that "Melnychenko's 'content source 416 and media guidance data source 418 may be integrated as one source device.'" Pet. 28 (quoting Ex.1005 ¶62). Petitioner further contends "Melnychenko's content sources 416 provide various types of content including VOD, television EPG, and media." *Id.* (citing Ex.1005 ¶¶ 63, 64, 72).

Petitioner contends: "[s]imilar to Melnychenko, Chen[] provides 'non-limiting' example sources, including VoD ('a video on demand (VoD)'), television broadcast ('a digital TV program, or a cabled TV program'), and media ('MPEG file, an MP3 file, ...a WMA file, a JPEG file')." Pet. 31 (citing Ex.1007, claim 6; *see also* Ex.1007 ¶¶ 9, 11, 18, 19, 22).

Patent Owner does not specifically address limitation [1.1.2] in the Preliminary Response. *See generally* Prelim. Resp.

On this record, we preliminarily find Petitioner has shown that at least the combination of Melnychenko and Chen teaches limitation [1.1.2].

4. *Limitation [1.2.1]*

Limitation [1.2.1] of claim 1 recites: “organizing, by the processor, the data according to a pre-defined format corresponding to each of the plurality of subservices.” Ex. 1001, 37:64–66.

Petitioner argues that “Melnychenko renders obvious ‘*organizing, by the processor, the data,*’” because “Melnychenko’s metadata pre-processor 958 modifies received metadata, including modifying punctuations, adding, and moving information.” Pet. 32 (citing Ex.1005 ¶¶116–123, 161; Ex. 1003 ¶¶141–142.). Petitioner further contends that Chen renders obvious “‘*organizing...the data*’ in a ‘*format corresponding to each of the plurality of subservices*’ by teaching that the received metadata is organized in a metadata table corresponding to each different type of content.” Pet. 34 (citing Ex.1003 ¶ 148, Fig. 3).

Regarding the claim term “pre-defined format,” Petitioner contends: “Chen discloses that the metadata is organized “*according to a predefined format*” because each metadata table complies with a pre-defined “**specific table of uniform format**.” Pet. 34–35 (citing Ex.1007 ¶¶ 9, 17, 19, 20; Fig. 2 (step 220); Ex. 1003 ¶¶149–150 (citing Ex. 1007, Fig. 3)).

Patent Owner disagrees with Petitioner:

Petitioner’s primary combination, Melnychenko in view of Chen, is premised on Chen’s disclosure of a singular, uniform format for metadata collected from, e.g., MP3, WMA, JPEG, and MPEG-4 files. This is inapposite to the inventions taught and claimed in the ‘805 patent, which require three different data models—a VOD data model, an EPG data model, and a media data model.

Prelim. Resp. 29.

Patent Owner further contends that the disclosure of Chen’s Figure 3, (including the Abstract, and paragraphs 6 and 7) “does not comport with plain language of the claim, or the nature and purpose of the invention as disclosed in the embodiments of the ‘805 Patent specification.” Prelim. Resp. 31.

As an initial matter, we note that by reading the claim term “pre-defined format” as recited in limitation [1.2.1] on the “**specific table of uniform format**” in Chen (Ex. 1007 ¶ 17, Fig. 3, tables 30(1), 30(2), and 30(3)), it appears Petitioner may be conflating the claim terms “pre-defined format” and “uniform format,” as recited in limitations [1.2.1] and [1.2.4], respectively. However, at this stage, we preliminarily credit Dr. Lippman’s testimony that “Chen renders obvious ‘*organizing...the data*’ in a ‘*format corresponding to each of the plurality of subservices*’ by teaching that the received metadata is organized in a metadata table corresponding to each different type of content.” Ex. 1003 ¶ 148. *See* Ex. 1007; Fig. 3, tables 30(1), 30(2), 30(3). Indeed, each of metadata tables 30(1), 30(2), and 30(3) appears to be organized in a pre-defined format by requiring certain columns set forth in the following order: (1) File Name; (2) Author; (3) Type of Content; (4) Resolution; (5) Language; (6) Bit Rate; (7) Parents Control; and (8) File size. Ex. 1007 ¶¶ 19, 20, Fig. 3. Stated differently, although the MP3 metadata table 30(1), JPEG metadata table 30(2), and MPEG-4 metadata table 30(3) may not include metadata in all eight columns, the metadata that is present for each of MP3, JPEG, and MPEG-4 is ordered in the pre-defined format outlined above.

Regarding the similar claim terms “pre-defined format” and “uniform format” as recited in [1.2.1] and [1.2.4], respectively, we note preliminarily and on the current record that “[w]here a claim lists elements separately, ‘the clear implication of the claim language’ is that those elements are ‘distinct component[s]’ of the patented invention.” *Becton, Dickinson & Co. v. Tyco Healthcare Group*, 616 F.3d 1249, 1254 (Fed. Cir. 2010) (quoting *Gaus v. Conair Corp.*, 363 F.3d 1284, 1288 (Fed. Cir. 2004)). Moreover, “the use of [two similar but different] terms in close proximity in the same claim gives rise to an inference that a different meaning should be assigned to each That inference, however, is not conclusive; it is not unknown for different words to be used to express similar concepts.” *Bancorp Services, L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1373 (Fed. Cir. 2004) (citing *Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 93 F.3d 1572, 1579 (Fed. Cir. 1996) (stating that “[i]f the terms ‘pusher assembly’ and ‘pusher bar’ described a single element, one would expect the claim to consistently refer to this element as either a ‘pusher bar’ or a ‘pusher assembly,’ but not both, especially not within the same clause. Therefore, in our view, the plain meaning of the claim will not bear a reading that ‘pusher assembly’ and ‘pusher bar’ are synonyms.”)).

Here, to the extent that we may be required to construe claims terms in the absence of any explicit claim construction by the parties, as noted above, “[we are] required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’” *Vivid Techs.*, 200 F.3d at 803. The claim construction standard set forth in *Phillips* (415 F.3d 1303) is applicable.

Under *Phillips*, the specification “is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best

guide to the meaning of a disputed term.” *Phillips*, 415 F.3d at 1315 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). Turning to the ’805 patent Specification, we find the following supporting descriptions for the claim term “pre-defined format,” as recited in limitation [1.2.1]:

(1) “For example, EPG information embedded with content feeds may contain limited information that are ***ordered in a pre-defined format*** (i.e., the ***order*** of other relevant information such as title, time, description, and/or other information about the programming).” Ex. 1001, 30:1–5 (emphasis added).

(2) “Process 1600 next organizes the requested media and/or data according to a *pre-defined format* as content 1630.” Ex. 1001, 34:49–50 (emphasis added).

(3) “The content provider modules will need to process the received media and/or data (i.e., in the forms of data models 1404, 1408, and 1412) and organize such media and / or data into a pre-defined format for use by the relevant applications 416.” Ex. 1001, 34:56–60 (emphasis added).

Turning again to the Specification, we find the following supporting descriptions in the ’805 patent for the claim term “uniform format” as recited in limitation [1.2.4]:

The data models provide ***uniform formats*** for the respective subservices (i.e., VOD subservice 1420, EPG subservice 1424, and media subservice 1428) and/or the internal content provider modules 1416 which interface with applications 416. In some implementations, step 1530 may be optional as the media and/or data may be sent to storage or be processed by data management 1400 without any conversion.

Ex. 1001, 33:25–33 (emphasis added).

Compare with: “In another implementation, the VOD or media content received may be converted into a **consistent format** for all contents. This may be helpful for various display configurations (i.e., displaying as thumb- nails, previews, etc.) depending on the hardware configurations and capabilities of Intelligent TV 100.” Ex. 1001, 30:46–51 (emphasis added).

Given that “it is not unknown for different words to be used to express similar concepts,” *Bancorp Services*, 359 F.3d at 1373 (Fed. Cir. 2004) (citation omitted), and because we are of the view that the description in Chen of a “**specific table of uniform format**” (Pet. 34–35 (citing Ex.1007 ¶¶ 9, 17, 19, 20; Fig. 2 (step 220); Ex. 1003 ¶¶149–150 (citing Ex. 1007 Fig. 3))) at least suggests an order in a pre-defined format, on this record, we preliminarily find Petitioner has shown that at least the combination of Melnychenko and Chen teaches limitation [1.2.1]. However, during the course of trial, we encourage the parties to present arguments and evidence regarding the proper scope and meaning of the claim terms “pre-defined format” and “uniform format,” as recited in limitations [1.2.1] and [1.2.4], respectively.

5. Limitation [1.2.2]

Limitation [1.2.2] of claim 1 recites: “wherein the pre-defined format comprises one of a VOD data model, an EPG data model and a media data model.” Ex. 1001, 37:66–38:1.

Petitioner contends: “In one embodiment, Chen’s specific table of **uniform format** corresponds to an ***XML file*** corresponding to all of the media data operable to the user’s device (e.g., set-top box).” Pet. 37 (citing Ex.1007 ¶19) (emphasis added). Petitioner asserts: “This is demonstrated by Chen’s Figure 3 . . . where the metadata tables (which are generated to

comply with the ‘specific table of uniform format’ of XML file) use symbol ‘###’ to denote what field will have metadata inputted and the order of the fields in the columns specify how the metadata is to be stored.” Pet. 38 (citing Ex.1003 ¶163).

Patent Owner does not specifically address limitation [1.2.2] in the Preliminary Response. *See generally* Prelim. Resp.

On this record, we preliminarily find Petitioner has shown that at least the combination of Melnychenko and Chen teaches limitation [1.2.2].

6. *Limitation [1.2.3]*

Limitation [1.2.3] of claim 1 recites: “wherein organizing the data according to the pre-defined format comprises converting the data received from the subservice into the pre-defined format of the corresponding data model and.” Ex. 1001, 38:1–5.

Petitioner contends:

It would have been obvious to a POSITA that in the proposed combination with Chen (*see* [1.2.1]-[1.2.2]), organizing includes converting Melnychenko’s metadata, which may come in a variety of metadata formats from the VOD, TV/EPG, and media guidance data source (which may be initially received in a format as shown at Figure 5) to be in a “**uniform format**.” Ex.1007, [0017], Ex.1003, ¶¶171-173. For example, it would have been obvious for Melnychenko’s metadata file 600 (which represents one format for a single piece of content, Ex.1005, [0089]) to be converted into a metadata table of uniform format, i.e., has fields that relate to all of the content that may be received by Melnychenko’s television. Ex.1003, ¶173.

Pet. 42.

Patent Owner does not specifically address limitation [1.2.3] in the Preliminary Response. *See generally* Prelim. Resp.

On this record, we preliminarily find Petitioner has shown that at least the combination of Melnychenko and Chen teaches limitation [1.2.3].

7. *Limitation [1.2.4]*

Limitation [1.2.4] of claim 1 recites: “wherein each of the VOD data model, EPG data model, and media data model provide a uniform format for the plurality of subservices; and.” Ex. 1001, 38:5–7.

Petitioner contends:

Melnychenko in view of Chen discloses that metadata tables corresponding to each media data sources are generated according to a “specific table of **uniform format**” (Ex.1007, [0017]) and that the specific table is of an XML file (Ex.1007, [0019]) with data models for VOD, EPG, and Internet and media (“*the VOD data model, EPG data model, and media data model*”). Thus, the combination of Melnychenko and Chen renders obvious that each of the media data models “*provide a uniform format for the plurality of subservices.*” Ex.1003, ¶¶ 177-179.

Pet. 43–44.

Patent Owner disagrees, and refers to the ’805 patent Specification at column 33, lines 23–35, and Figure 14. Prelim. Resp. 32–33. Patent Owner argues that “Petitioner’s focus on Chen’s disclosure of creating tables of metadata formatted into a singular format within a single database effectively reads this disclosed embodiment out of the scope of the claims of the ’805 Patent and is, thus, improper.” *Id.* at 33.

But our reviewing court guides: “although the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.” *Phillips*, 415

F.3d at 1323 (Fed. Cir. 2005) (citing, *e.g.*, *Nazomi Communications, Inc. v. ARM Holdings, PLC*, 403 F.3d 1364, 1369 (Fed. Cir. 2005) (claims may embrace “different subject matter than is illustrated in the specific embodiments in the specification”).

With this guidance in mind, on the current record and for the purpose of institution, we do not determine that limitation [1.2.4] should be limited to a particular embodiment that requires “three different data models, a VOD data model, an EPG data model, and a media data model,” each with its own uniform format. Prelim. Resp. 33. Instead, we view limitation [1.2.4] as broad enough to encompass a consistent or uniform format for each of the VOD data model, EPG data model, and media data model. *See* Ex. 1001, 30:46–51.

On this record, we preliminarily find Petitioner has shown that at least the combination of Melnychenko and Chen teaches limitation [1.2.4].

8. *Limitation [1.3]*

Limitation [1.3] of claim 1 recites: “providing, by the processor, the organized data to one or more of a plurality of content provider modules of the TV.” Ex. 1001, 38:8–10.

Petitioner notes that the claim terms “one or more” and “module” are defined in the ’805 patent: “‘*one or more*,’ includes ‘at least one of A, B, or C.’” Pet. 45 (quoting Ex.1001, 3:21-28). Petitioner also notes that “the ’805 patent defines ‘*module*’ as ‘any known or later developed hardware, software, firmware, artificial intelligence, fuzzy logic, or combination of hardware and software.’” *Id.* (quoting Ex.1001, 30:65-31:3).

Petitioner then contends that “Chen discloses that the organized metadata tables are provided to a media context control unit 130 which

facilitates storage in a database 140, as shown below at Figure 3.” Pet. 46 (citing Ex.1007 ¶¶16, 17; Ex.1003 ¶187).

Patent Owner does not specifically address limitation [1.3] in the Preliminary Response. *See generally* Prelim. Resp.

On this record, we preliminarily find Petitioner has shown that at least the combination of Melnychenko and Chen teaches limitation [1.3].

9. *Rationale for Combining Melnychenko and Chen under Ground 1*

Petitioner contends, *inter alia*: “Melnychenko and Chen are each in the same field of endeavor and therefore analogous art to the ’805 patent . . . [i]n addition, Melnychenko and Chen are each reasonably pertinent to a problem the inventors of the ’805 patent attempted to solve . . . of organizing metadata.” Pet. 13–14. Next, Petitioner contends that “[i]t would have been obvious to a POSITA, when implementing Melnychenko’s system, to apply Chen’s metadata organizing teachings because they provide implementation details applicable to Melnychenko’s metadata . . . and storing the organized metadata in a database.” *Id.* at 15–16. According to Petitioner, one of the benefits of applying Chen’s metadata organizing teachings to Melnychenko’s system includes allowing for the “design [of] a user interface operable to plural types of media data instead of designing various user interface according to the types of media data,” which results in simplified user interface that is more diversified and more convenient to operate. *Id.* (quoting Ex. 1007 ¶ 17). Petitioner also argues that another benefit of applying Chen’s metadata organizing teachings to Melnychenko’s system would result in the “prompt[] and correct[] retrieve[al] [of] the media data stored in the database.” *Id.* (quoting Ex.

1007 ¶ 20). Petitioner asserts that “a POSITA considering how to organize Melnychenko’s metadata . . . would have applied Chen’s [metadata] organizing teachings . . . to obtain one or more of the noted benefits.” *Id.* (citing Ex. 1003 ¶ 87).

Patent Owner responds: “Petitioner’s primary combination, Melnychenko in view of Chen, is premised on Chen’s disclosure of a singular, uniform format for metadata collected from, e.g., MP3, WMA, JPEG, and MPEG-4 files.” Prelim. Resp. 29. Patent Owner urges that “[t]his is *inapposite* to the inventions taught and claimed in the ‘805 patent, which require three different data models—a VOD data model, an EPG data model, and a media data model.” (emphasis added)

But Patent Owner is arguing the references separately. We preliminarily find Melnychenko teaches examples of an EPG data model 100, a VOD data model 5 (HBO (VOD)), and a media data model (CNN.com), as depicted within Figure 1, and as argued by Petitioner. *See* Pet. 19 (reproducing Ex. 1005, Fig. 1).

Moreover, prior art is analogous when it is: (1) from the same field of endeavor as the claimed invention; or (2) reasonably pertinent to the particular problem faced by the inventor, if the art is not from the same field of endeavor. *In re Bigio*, 381 F.3d 1320, 1325–26 (Fed. Cir. 2004). However, “[t]he Supreme Court’s decision in *KSR* . . . directs us to construe the scope of analogous art broadly.” *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1238 (Fed. Cir. 2010). “The field of endeavor of a patent is not limited to the specific point of novelty, the narrowest possible conception of the field, or the particular focus within a given field.” *Unwired Planet, LLC v. Google Inc.*, 841 F.3d 995, 1001 (Fed. Cir. 2016). A reference may be reasonably pertinent to the problem faced by the inventor where it would

have “logically . . . commended itself to an inventor’s attention in considering his problem.” *In re ICON Health and Fitness, Inc.*, 496 F.3d 1374, 1379–80 (Fed. Cir. 2007).

Here, even if *arguendo* (without deciding) that Patent Owner may be correct Chen is “inapposite” i.e., not suitable or otherwise non-analogous to the ’805 patent claims, Patent Owner does not address squarely Petitioner’s assertion that Chen is “reasonably pertinent to a problem the inventors of the ’805 patent attempted to solve . . . [i.e.] of organizing metadata.” *See* Pet. 13–14; *see also* Pet. 13–18. In particular, Patent Owner does not explain why Chen would not have “logically . . . commended itself to an inventor’s attention in considering his problem.” *ICON*, 496 F.3d at 1379–80.

Patent Owner further contends that “Petitioner’s proposed ground of Melnychenko in combination of Chen is **contrary** to this disclosure in the specification and the *required limitations recited in the claims*.” Prelim. Resp. 35 (emphasis added).

To the extent Patent Owner is arguing that the Melnychenko and Chen references are “contrary to” (*id.*) and thus “teach away” from the claimed invention, the “mere disclosure of alternative designs does not teach away.” *In re Mouttet*, 686 F.3d 1322, 1334 (Fed. Cir. 2012) (quoting *In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004)). A reference does not teach away if it merely expresses a general preference for an alternative invention but does not “criticize, discredit, or otherwise discourage” investigation into the invention claimed. *Fulton*, 391 F.3d at 1201.

Here, Melnychenko and/or Chen do not “criticize, discredit, or otherwise discourage” investigation into the invention claimed. *Fulton*, 391 F.3d at 1201. When combining references to establish obviousness, the appropriate consideration is whether the proposed combination would work

for its intended purpose, not whether the proposed combination is or inconsistent with (i.e., “contrary to”) the stated goal of one of the references, as argued by Patent Owner. *See* Prelim. Resp. 35. *See DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1326 (Fed. Cir. 2009). Furthermore, “if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.” *KSR*, 550 U.S. at 417 (citation omitted).

Moreover, we preliminarily credit the testimony of Dr. Lippman that an artisan would have had a reasonable expectation of success in combining Melnychenko and Chen in the manner proposed by Petitioner:

Although Chen provides examples in the context of metadata related to MP3, JPEG, and MPEG-4, Chen’s teachings represent a general technological principle that is readily applicable to metadata in general without limitation to media content. Ex.1007, [0011] (“...non-limiting embodiments”), [0019] (“The types of media operable to the set top box of the invention is not limited.”). In fact, Chen’s teachings are generally applicable to devices “operable to receive plural types of media data.” Ex.1007, Abstract; *see also* Ex.1007, [0015] (“...metadata of plural types of media data operable to a set top box.”). Thus, a [POSITA] would have expected to have success in applying Chen’s teachings to Melnychenko.

Ex. 1003 ¶ 90; Pet. 17. *See also id.* at ¶¶ 91–92.

For at least the aforementioned reasons, and at this preliminary stage, Petitioner has sufficiently shown a proper combination of the teachings of Melnychenko and Chen.

10. Conclusion for Claim 1 under Ground 1

Having considered the arguments and evidence presented by both the Petitioner and Patent Owner, we determine that Petitioner has established a reasonable likelihood that it would prevail in showing that the subject matter of independent claim 1 would have been obvious over the combination of Melnychenko and Chen under Ground 1.

B. Remaining Independent Claims 10 and 17 under Ground 1

Petitioner argues that the remaining independent claims 10 and 17 are “substantially similar” to claim 1 (Pet. 49–51), except for several limitations that Patent Owner has not specifically addressed for independent claims 10 and 17 under Ground 1. *See* Preliminary Response 30–35.

We have reviewed the record, and find Petitioner’s evidence and arguments are sufficient at this juncture regarding the obviousness of remaining independent claims 10 and 17 under Ground 1.

VII. GROUND 2 – ALLEGED OBVIOUSNESS
OVER MELNYCHENKO, CHEN, KIM, AND LEE-1

Petitioner contends that claims 1–3, 6, 9–12, and 16–18 would have been obvious over the combination of Melnychenko, Chen, Kim, and Lee-1. *See* Pet. 52–74.

Patent Owner contends that “Petitioner’s Ground 2 fails for at least the *same reasons* as Ground 1.” Prelim. Resp. 35 (emphasis added). Patent Owner summarizes that Ground 2 “does not address the deficiencies in the independent claims as addressed in Ground 1.” *Id.* (citing Pet. at 52–74).

Because Petitioner has demonstrated a reasonable likelihood of success in demonstrating that at least one claim of the '805 patent is unpatentable, we institute on all challenged claims and all grounds raised in the Petition. *See* 37 C.F.R. § 42.108(a) (2023). Therefore, at this stage of the proceeding, it is not necessary for us to provide an assessment of dependent claims 1–3, 6, 9–12, and 16–18 under Ground 2.

VIII. GROUND 3 – ALLEGED OBVIOUSNESS OVER MELNYCHENKO, CHEN, KIM, LEE-1, AND LEE-2

Petitioner contends that claims 4 and 13 would have been obvious over the combination of Melnychenko, Chen, Kim, Lee-1, and Lee-2. *See* Pet. 74–79.

Patent Owner contends that “Petitioner’s Ground 3 fails for at least the *same reasons* as Ground 1.” Prelim. Resp. 36 (emphasis added). Patent Owner summarizes that Ground 3 “does not address the deficiencies in the independent claims as addressed in Ground 1.” *Id.* (citing Pet. at 74–79).

Because Petitioner has demonstrated a reasonable likelihood of success in demonstrating that at least one claim of the '805 patent is unpatentable, we institute on all challenged claims and all grounds raised in the Petition. *See* 37 C.F.R. § 42.108(a) (2023). Therefore, at this stage of the proceeding, it is not necessary for us to provide an assessment of dependent claims 4 and 13 under Ground 3.

IX. GROUND 4 – ALLEGED OBVIOUSNESS
OVER MELNYCHENKO, CHEN, KIM, LEE-1, LEE-2,
AND FERREN

Petitioner contends that claim 5 would have been obvious over the combination of Melnychenko, Chen, Kim, Lee-1, Lee-2, and Ferren. *See* Pet. 79–83.

Patent Owner contends that “Petitioner’s Ground 4 fails for at least the *same reasons* as Ground 1.” Prelim. Resp. 36 (emphasis added). Patent Owner summarizes that Ground 4 “does not address the deficiencies in the independent claims as addressed in Ground 1.” *Id.* (citing Pet. at 79–83).

Because Petitioner has demonstrated a reasonable likelihood of success in demonstrating that at least one claim of the ’805 patent is unpatentable, we institute on all challenged claims and all grounds raised in the Petition. *See* 37 C.F.R. § 42.108(a) (2023). Therefore, at this stage of the proceeding, it is not necessary for us to provide an assessment of dependent claim 5 under Ground 4.

X. GROUND 5 – ALLEGED OBVIOUSNESS
OVER MELNYCHENKO, CHEN, KIM, LEE-1,
AND CHOI

Petitioner contends that claims 6–8, 14, and 15 would have been obvious over the combination of Melnychenko, Chen, Kim, Lee-1, and Choi. *See* Pet. 83–90.

Patent Owner contends that “Petitioner’s Ground 5 fails for at least the *same reasons* as Ground 1.” Prelim. Resp. 37 (emphasis added).

Patent Owner summarizes that Ground 5 “does not address the deficiencies in the independent claims as addressed in Ground 1.” *Id.* (citing Pet. at 83–90).

Because Petitioner has demonstrated a reasonable likelihood of success in demonstrating that at least one claim of the ’805 patent is unpatentable, we institute on all challenged claims and all grounds raised in the Petition. *See* 37 C.F.R. § 42.108(a) (2023). Therefore, at this stage of the proceeding, it is not necessary for us to provide an assessment of dependent claims 6–8, 14, and 15 under Ground 35

XI. CONCLUSION

After considering the arguments presented in the Petition, the Preliminary Response, and the evidence of record, we determine that Petitioner has demonstrated a reasonable likelihood of success in proving that at least one claim of the ’805 patent is unpatentable as obvious over the combination of Melnychenko and Chen under Ground 1.

Accordingly, we institute an *inter partes* review of all challenged claims (i.e., claims 1–18) on all grounds set forth in the Petition. Our determinations at this stage of the proceeding are based on the evidentiary record currently before us. This decision to institute trial is not a final decision as to the patentability of any claim for which we have instituted an *inter partes* review. *See TriVascular, Inc. v. Samuels*, 812 F.3d 1056, 1068 (Fed. Cir. 2016) (noting that “there is a significant difference between a Petitioner’s burden to establish a ‘reasonable likelihood of success’ at institution, and actually proving invalidity by a preponderance of the evidence at trial”). We will base any final decision on the full record developed during trial.

XII. ORDER

In consideration of the foregoing, it is hereby

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review is instituted for claims 1–18 of the '805 patent on all the unpatentability grounds asserted in the Petition; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial, which commences on the entry date of this decision.

IPR2024-00354
Patent 10,419,805 B2

FOR PETITIONER:

David L. McCombs
Gregory P. Huh
David O'Dell
Jonathan Bowser
HAYNES AND BOONE, LLP
david.mccombs.ipr@haynesboone.com
gregory.huh.ipr@haynesboone.com
david.odell.ipr@haynesboone.com
jon.bowser.ipr@haynesboone.com

FOR PATENT OWNER:

Ryan J. Singer
SCHULTE ROTH & ZABE LLP
ryan.singer@srz.com