

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

T-MOBILE US, INC., AT&T MOBILITY LLC, CELLCO PARTNERSHIP
D/B/A VERIZON WIRELESS, ERICSSON INC. AND
NOKIA OF AMERICA CORPORATION,

Petitioners,

v.

SMART RF INC.,

Patent Owner.

Case IPR2025-00612

U.S. Patent 8,078,561

PATENT OWNER'S PRELIMINARY RESPONSE

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I. INTRODUCTION

Pursuant to 35 U.S.C. § 313 and 37 C.F.R. § 42.107, Patent Owner Smart RF Inc. (“Patent Owner”) submits this Preliminary Response the Petition for *Inter Partes* Review (“Petition,” Paper 2) filed by T-Mobile US, Inc., AT&T Mobility LLC, Cellco Partnership d/b/a Verizon Wireless, Ericsson Inc., and Nokia of America Corporation (“Petitioners”) and challenging claims 1-22 of U.S. Patent No. 8,078,561 (the “’561 patent”) (Ex. 1001). The Board should not institute *inter partes* review because Petitioners have not met their burden of showing a reasonable likelihood of prevailing on any of its proposed grounds of unpatentability, each based on obviousness under 35 U.S.C. § 103(a) (pre-AIA).

Each of Petitioners’ three grounds require that an article purportedly published in IEEE Transactions on Microwave Theory and Techniques (“Liu,” Ex. 1004) qualify as prior art, and Petitioners have failed to prove that fact. More specifically, Petitioners have not and cannot to prove that Liu was publicly accessible before the critical date, which the Federal Circuit calls the “touchstone in determining whether a reference constitutes a printed publication.” *Jazz Pharms., Inc. v. Amneal Pharms., Inc.*, 895 F.3d 1347, 1356 (Fed. Cir. 2018) (quoting *In re Hall*, 781 F.2d 897, 898-99 (Fed. Cir. 1986)). Thus, each of the grounds of the Petition should be denied. *See Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1351 n. 10 (Fed. Cir. 2016) (affirming Board decision that because reference was

not a printed publication the Petitioners could not rely upon it for claims under §102 or §103).

Patent Owner does not concede the legitimacy of any arguments in the Petition that are not specifically addressed in this preliminary response and expressly reserves the right to rebut any such arguments in its patent owner response if *inter partes* review is instituted. Additionally, Patent Owner is not limited to the arguments presented here in this preliminary response, but expressly reserves the right to raise further arguments, including claim construction arguments. Patent Owner also incorporates and makes reference to the arguments presented in Patent Owner's Request for Discretionary Denial of Institution (Paper 8).

II. APPLICABLE LEGAL STANDARDS

The Board may only grant a petition for *inter partes* review where “the information presented in the petition ... 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.” 35 U.S.C. § 314(a); 37 C.F.R. § 42.108(c). Petitioners bear the burden of showing that this statutory threshold has been met. *See* Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756 (Aug. 14, 2012) (“The Board ... may institute a trial where the petitioner establishes that the standards for instituting the requested trial are met”).

At a minimum, the reasonable-likelihood-of-prevailing standard “effectively requires the petitioner to present a prima facie case justifying a rejection of the claims in a patent.” 112 Cong. Rec. S1375 (daily ed. Mar. 8, 2011) (quoting Sen. Kyl). As explained by the Federal Circuit, “the expedited nature of IPRs bring[s] with it an obligation for petitioners to make their case in their petition to institute.” *Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369 (Fed. Cir. 2016). Moreover, the Board may not overlook flaws in the petition or reformulate its challenges to enhance their suitability. *See SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1355 (2018) (“[I]t’s the petitioner, not the Director, who gets to define the contours of the proceeding.”); *see also id.* (“[T]he petitioner is master of its complaint . . .”); *see also id.* at 1353 (forbidding the Board from “curat[ing]” the petition).

Whether a reference qualifies as a printed publication under §102 is a legal question based on underlying fact findings, such as whether the Liu was publicly accessible before the critical date. *See Acceleration Bay, LLC v. Activision Blizzard, Inc.*, 908 F.3d 765, 772 (Fed. Cir. 2018). “Because there are many ways in which a reference may be disseminated to the interested public, ‘public accessibility’ has been called the touchstone in determining whether a reference constitutes a ‘printed publication’” *Jazz Pharms., Inc.*, 895 F.3d at 1356 (quoting *In re Hall*, 781 F.2d at 898-99). And a reference is publicly accessible if it was “disseminated or

otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it.” *Id.* at 1355-56 (citing *In re Wyer*, 655 F.2d 221, 226 (CCPA 1981)). Further, it is Petitioner’s burden to prove by a preponderance of the evidence that a reference is publicly accessible and a printed publication. *See Nobel Biocare Servs. AG v. Instradent USA, Inc.* 903 F.3d 1365, 1375 (Fed. Cir. 2018).

Consistent with the requirements of §§ 312(a) and 314(a), at the institution stage a petitioner must provide “far more than is required in typical notice pleading,” and instead “must identify, with particularity, evidence sufficient to establish a reasonable likelihood that the reference was publicly accessible before the critical date of the challenged patent and therefore that there is a reasonably likelihood that it qualifies as a printed publication.” *Hulu, LLC v. Sound View Innovations, LLC*, IPR2018-01039, Paper 29 at 2 (PTAB Dec. 20, 2019).

III. INSTITUTION SHOULD BE DENIED FOR ALL THREE GROUNDS

Each of Petitioners’ three grounds require that Liu qualify as prior art. In Ground 1, Petitioners contend that claims 1 and 4-6 are rendered obvious by Liu and further in view of a POSITA. Pet. at 34. Similarly, in Ground 2, Petitioners contend that claims 2, 7-10, and 15-18 (which Petitioners characterize as being directed to Weiner models and predistorters) are rendered obvious by Liu and further in view of a POSITA. Pet. at 49. Finally, in Ground 3, Petitioners contend that claims 3, 11-

14, and 19-22 (which they characterize as being directed to Hammerstein models and predistorters) are rendered obvious by Liu and further in view of a POSITA and Ding. Pet. at 49. Because Petitioners cannot satisfy their burden to demonstrate that Liu is a printed publication under §102, institution of each of Petitioners' grounds should be denied. *Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1351 n. 10 (Fed. Cir. 2016).

A. Petitioners cannot show that Liu was publicly accessible by the critical date.

The '561 patent claims priority to a provisional application filed on December 1, 2006. Ex. 1001 at 1. Thus, in order to qualify as prior art under either §§ 102(a) or 102(b) (pre-AIA), Liu would have to be a printed publication more than one year before the priority date; *i.e.*, before December 1, 2005 (the "critical date"). *See Nobel Biocare Servs. AG*, 903 F.3d at 1375. That determination is a legal question based upon underlying factual findings, including whether Liu was publicly accessible before the critical date. *See Acceleration Bay, LLC*, 908 F.3d at 772. Public accessibility is the "touchstone" in determining whether Liu is a printed publication. *See Jazz Pharms.*, 895 F.3d at 1356.

Petitioners contend that Liu is an article published in the IEEE Transactions on Microwave Theory and Techniques journal. Pet. at 1. In an attempt to demonstrate that Liu is a printed publication, Petitioners make only the conclusory statement that "Liu was published in November 2005, and is prior art to the '561

Patent under 35 U.S.C. §§ 102(a) and 102(b) (pre-AIA)” and cite, in a paragraph, to the Declaration of Gordon MacPherson. Pet. at 2 (citing Ex. 1006 (MacPherson Declaration)). Petitioners’ attorney-argument that Liu is prior art is not evidence and does not satisfy Petitioners’ burden. Further, as explained further below, Mr. MacPherson’s declaration is hearsay, fails to authenticate Liu, and fails to demonstrate that Liu was publicly available by the critical date.

B. Petitioners do not cite or satisfy the requirements of *Hulu*.

In a precedential decision, the PTAB answered the question of “[w]hat is required for a petitioner to establish that an asserted reference qualifies as ‘printed publication’ at the institution stage?” *Hulu* at 2. The PTAB answered that a petitioner must provide “far more than is required in typical notice pleading,” and instead “must identify, with particularity, evidence sufficient to establish a reasonable likelihood that the reference was publicly accessible before the critical date of the challenged patent and therefore that there is a reasonably likelihood that it qualifies as a printed publication.” *Id.* at 13. The PTAB also rejected the argument that there is any presumption in favor of finding a reference to be a printed publication. *Id.* at 16. The PTAB also rejected the petitioner’s argument that indicia such as conventional markers of publication, such as a copyright date, edition identifiers, publication by a commercial publisher, and the assignment of an ISBN number, were per se sufficient to meet the standard for institution. *Id.* at 17-18. For example, the

PTAB cited a previous decision finding that a conference paper bearing the copyright date of 2012 and including the date of September 2012 on its cover was insufficient to show the paper was disseminated prior to the conference in November 2012. *Id.* at 19 (citing *In-Depth Geophysical, Inc. v. ConocoPhillips Co.*, IPR2019-00849, Paper 14 at 4-13 (PTAB Sept. 6, 2019)).

Here, Petitioners do not cite or address *Hulu* and fail to establish that Liu is a printed publication. Indeed, Petitioners arguments here are far more deficient than those made by the petitioner in *Hulu*. Petitioners do not “identify, *with particularity*, evidence sufficient to establish a reasonable likelihood that the reference was publicly accessible.” *Hulu* at 13 (emphasis added). Petitioners make no arguments supporting that Liu is authentic or was publicly accessible, and only rely on the deficient MacPherson Declaration. Pet. at 2. Thus, institution should be denied. *See Lenovo (United States) Inc. v. Intellectual Ventures LLC*, IPR2024-01224, Paper 11 at 21-22 (PTAB Feb. 6, 2025) (finding that petitioner failed to establish that reference is a printed publication where petitioner does not cite or address *Hulu* decision and never squarely address whether publicly accessible).

C. Liu was not publicly accessible before December 1, 2005.

Moreover, Petitioners’ reliance on the MacPherson Declaration is misplaced. As an initial matter, by relying on the MacPherson Declaration, Petitioners concede that Liu is not self-authenticating and does not itself show that it was a prior art

printed publication. Critically, the declaration contains hearsay, does not authenticate Liu, and does not demonstrate that Liu was publicly accessible.

In his declaration, signed December 11, 2024 (nearly 20 years after the fact), Mr. MacPherson purportedly attaches a copy of what he claims to be the Liu article as Exhibit A. *See* Ex. 1006, ¶8.¹ Mr. MacPherson was not an employee of IEEE in 2005 and thus does not have personal knowledge regarding the date the Liu article became publicly accessible.² Nonetheless, Mr. MacPherson states that he obtained a copy of the article attached as Exhibit A “through IEEE Xplore, where it is maintained in the ordinary course of IEEE’s business” and that “Exhibit A is a true and correct copy of the Exhibit, as it existed on or about December 10, 2024.” *Id.*, ¶9 (first paragraph number 9). Mr. MacPherson then asserts that “the article and abstract from IEEE Xplore show the data of publication” and that “Xplore populates this information using the metadata associated with the publication.” *Id.*, ¶10. But Mr. MacPherson does not explain what this metadata represents, how it is associated with the publication, how it was created, or when it was created.

Further, the MacPherson Declaration contains out-of-court statements meant to prove the truth of the matters asserted, which are inadmissible hearsay. *See* F.R.E.

¹ Patent Owner notes that the Docusign Envelope ID that appears in the top left corner of the Declaration is missing from Exhibit A, indicating that it was not attached to what Mr. MacPherson signed.

² *See* <https://www.linkedin.com/in/gordon-macpherson-ieee/>.

801. The Board should therefore give no consideration to the MacPherson Declaration, and deny institution. *See ServiceNow, Inc. v. Hewlett-Packard Co.*, IPR2015-00716, Paper 13 at 16 (PTAB Aug. 26, 2015) (denying institution where evidence is inadmissible hearsay). First, relying on a date on a reference to prove that it was publicly available is for the truth of the matter and is itself hearsay. *See id.*; *see also Apple, Inc. v. DSS Tech Management, Inc.*, IPR2015-00373, Paper 8 at 10-11 (PTAB June 25, 2015). Also hearsay are his statements that “the article and abstract from IEEE Xplore show the data of publication” and that “Xplore populates this information using the metadata associated with the publication.” Ex. 1006, ¶10. Both of those statements are offered by Petitioners to prove that the article was published by a certain date, and are hearsay subject to no exception. *See* FRE 801 and 802.

In addition to being hearsay, the MacPherson Declaration fails to authenticate Liu, because it reveals that Mr. MacPherson has no knowledge of whether Liu was publicly accessible before the critical date. *See* FRE 901(b)(1). His statement that “Exhibit A is a true and correct copy of the Exhibit, as it existed on or about December 10, 2024” only supports a claim that the Liu article was maintained in Xplore as of December 10, 2024, not before December 1, 2005. *See* Ex. 1006, ¶9 (first paragraph number 9). But Mr. MacPherson does not provide any support that the article was publicly accessible ever, much less before December 1, 2005. He

does not explain when it was available online, including through Xplore, or when the journal containing the article would or could have actually been received by any member of the public.

Furthermore, the dates on the exhibit to the MacPherson Declaration only demonstrate, at most, that the article was copyrighted as of November 2005 and that it was included in the November 2005 issue of that journal, but it does not demonstrate that the article was *publicly accessible* before December 1, 2005. *See TRW Automotive U.S. LLC v. Magna Electronics Inc.*, IPR2014-01347, Paper 25 at 8 (PTAB Jan. 6, 2016) (granting motion to exclude reference based on lack of authentication and finding that a copyright notice “is probative that IEEE owns a copyright to the article, it is not probative that the article was ever published by IEEE or anyone else”).

Thus, Petitioners fail to prove that Liu was “available [before December 1, 2005] to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it.” *Acceleration Bay, LLC*, 908 F.3d at 774 (quoting *Voter Verified, Inc. v. Premier Election Sols., Inc.*, 698 F.3d 1374, 1380 (Fed. Cir. 2012)).

IV. CONCLUSION

Petitioners have not and cannot satisfy their burden to prove that Liu was publicly accessible before December 1, 2005. Liu, therefore, does not qualify as

prior art, and cannot be used to show that the claims are allegedly obvious under §103. Consequently, Petitioners have not met their burden of showing a reasonable likelihood of prevailing. Patent Owner respectfully submits that the Board should deny institution.

Dated: July 14, 2025

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CERTIFICATE OF COMPLIANCE WITH WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), I certify that this Response complies with the type-volume limits of 37 C.F.R. § 42.24(b)(1) because it contains 2,477 words, excluding the parts of this Patent Owner's Preliminary Response that are exempted by 37 C.F.R. § 42.24(a), according to the word processing system used to prepare this Patent Owner's Preliminary Response.

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CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing Patent Owner's Preliminary Response was served on July 14, 2025 to Lead and Back-up Counsel for Petitioner at the service address provided in Petitioner's Mandatory Notices:

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