

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.,
Petitioner,

v.

HEADWATER PARTNERS II LLC,
Patent Owner.

IPR2025-00426
Patent 9,094,868 B2

Before ROBERT J. WEINSCHENK, SCOTT B. HOWARD, and
STEPHEN E. BELISLE, *Administrative Patent Judges*.

BELISLE, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314
Granting Motion for Joinder
35 U.S.C. § 315(c); 37 C.F.R. § 42.122

I. INTRODUCTION

Samsung Electronics Co., Ltd. (“Petitioner”) filed a Petition (Paper 3, “Pet.”) requesting an *inter partes* review of claims 1–34 of U.S. Patent No. 9,094,868 B2 (Ex. 1001, “the ’868 patent”), assigned to Headwater Partners II LLC (Paper 8, 1, “Patent Owner”). Petitioner also filed a Motion for Joinder to be joined as a petitioner to *T-Mobile USA, Inc. v. Headwater Partners II LLC*, IPR2024-01468, filed September 20, 2024, and instituted May 7, 2025 (“the T-Mobile IPR” with the petitioners¹ in that matter collectively referred to herein as “T-Mobile”). Paper 2 (“Mot.”). Patent Owner filed a Preliminary Response in this proceeding (Paper 11, “Prelim. Resp.”), which is substantively the same as the one it filed in the T-Mobile IPR. Patent Owner also disclaimed claims 1–10 and 16–34 of the ’868 patent, leaving only dependent claims 11–15 (“Challenged Claims”) at issue in this case. *See* IPR2024-01468, Ex. 3001 (Disclaimer, dated Mar. 11, 2025); Prelim. Resp. 1; 37 C.F.R. § 42.107(e) (2024) (“No *inter partes* review will be instituted based on disclaimed claims.”). Patent Owner did not file any opposition to the joinder motion.

We have authority to determine whether to institute an *inter partes* review. 35 U.S.C. § 314(b) (2024); 37 C.F.R. § 42.4(a). We may not institute an *inter partes* review “unless . . . 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). The “reasonable likelihood” standard is “a higher standard than mere notice pleading” but

¹ The other petitioners in IPR2024-01468 are AT&T Services, Inc., Cellco Partnership d/b/a Verizon Wireless, Ericsson Inc., and Nokia of America Corporation.

“lower than the ‘preponderance’ standard to prevail in a final written decision.” *Hulu, LLC v. Sound View Innovations, LLC*, IPR2018-01039, Paper 29 at 13 (PTAB Dec. 20, 2019) (precedential). When instituting *inter partes* review, the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim. 37 C.F.R. § 42.108(a).

Applying those standards, and upon consideration of the information presented in the Petition and Preliminary Response, we determine that Petitioner has demonstrated a reasonable likelihood of success in proving that at least one of the Challenged Claims is unpatentable. *See* 35 U.S.C. § 314; 37 C.F.R. § 42.4(a). Accordingly, we institute an *inter partes* review as to all Challenged Claims of the ’868 patent on all relevant grounds raised in the Petition. We also *grant* Petitioner’s Motion for Joinder.

II. BACKGROUND

A. *Real Parties in Interest*

Petitioner identifies Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. as real parties in interest. Pet. 66.

Patent Owner identifies itself as a real party in interest. Paper 8, 1.

B. *Related Matters*

According to the parties, the ’868 patent has been asserted in *Headwater Partners II LLC v. Cellco Partnership*, No. 2:24-cv-00007 (E.D. Tex.); *Headwater Partners II LLC v. T-Mobile USA, Inc.*, No. 2:24-cv-00015 (E.D. Tex.); and *Headwater Partners II LLC v. AT&T Services, Inc.*, No. 2:24-cv-00016 (E.D. Tex.). Pet. 66; Paper 8, 1.

Both parties also identify the T-Mobile IPR. Pet. 66; Paper 8, 1.

C. The '868 Patent

The '868 patent is titled “User Equipment Link Quality Estimation Based on Positioning,” and issued on July 28, 2015, from U.S. Application No. 14/053,574, filed October 14, 2013. Ex. 1001, codes (10), (21), (22), (45), (54). The '868 patent claims priority to U.S. Provisional Application No. 61/714,151, filed October 15, 2012. Ex. 1001, code (60).

The '868 patent summarizes its forty-eight columns of disclosure as follows:

Systems, methods, and apparatuses for estimating a user equipment link quality based on a positioning of user equipment are provided. One method includes determining a plurality of link qualities (LQs) of the user equipment (UE) for a plurality of positionings of the UE, wherein at least one of the plurality of positionings includes at least a location or an orientation of the UE, storing information associated with the plurality of LQs for the plurality of positionings, estimating at least one future positioning of the UE, and estimating a future link quality (LQ) of the UE at the at least one future positioning of the UE based on the stored information associated with the plurality of LQs at the plurality of positionings of the UE.

Ex. 1001, code (57); *see* 37 C.F.R. § 1.72(b) (“The purpose of the abstract is to enable the Office and the public generally to determine quickly from a cursory inspection the nature and gist of the technical disclosure.”).

D. Illustrative Claim

Given Patent Owner’s disclaimer of claim 1–10 and 16–34 (IPR2024-01468, Ex. 3001), the '868 patent now includes only five claims, namely dependent claims 11–15. Claim 11 depends from claim 7, which in turn depends from independent claim 1. Claims 12–15 depend, directly or indirectly, from claim 11. Claims 1, 7, and 11 are reproduced below with

labels, such as “1[a],” added to limitations in the same manner as used by the parties.

1. [1[pre]] A method, comprising:

[1[a]] determining a plurality of link qualities (LQs) of a user equipment (UE) for a plurality of positionings of the UE, wherein at least one of the plurality of positionings includes at least a location or an orientation of the UE;

[1[b]] storing information associated with the plurality of LQs for the plurality of positionings;

[1[c]] estimating at least one future positioning of the UE; and

[1[d]] estimating a future link quality (LQ) of the UE at the at least one future positioning of the UE based on the stored information associated with the plurality of LQs at the plurality of positionings of the UE.

7. The method of claim 1, wherein a link quality positioning information includes at least one of the determined plurality of LQs, the stored information, the estimated future positioning or the estimated future LQ.

11. The method of claim 7, further comprising determining a UE environment information, wherein at least a portion of the link quality positioning information is based on the UE environment information.

Ex. 1001, 48:32–43, 48:62–65, 49:12–15.

E. Evidence of Record

Petitioner relies on the following published patent application evidence.

Name	Patent Document	Exhibit
Jarvinen	U.S. Patent Appl. Pub. No. 2008/0248822 A1, published October 9, 2008	1004
Fox	U.S. Patent Appl. Pub. No. 2012/0064908 A1, published March 15, 2012	1005

Pet. 2.

Petitioner also relies upon the Declaration of Stan McClellan, Ph.D. (Ex. 1012).

Patent Owner does not rely on any expert testimony of its own at this stage of the proceeding.

F. Asserted Challenges to Patentability

Petitioner challenges the patentability of the Challenged Claims (dependent claims 11–15) on the following basis. Pet. 2.

Claims Challenged	35 U.S.C. §	Reference(s)/Basis
11–15	103 ²	Jarvinen, Fox

III. INSTITUTION OF *INTER PARTES* REVIEW

We instituted *inter partes* review in the T-Mobile IPR on all Challenged Claims and all asserted grounds of unpatentability. IPR2024-01468, Paper 17. Petitioner challenges the same claims and asserts the same grounds of unpatentability as those on which we instituted the T-Mobile IPR, relying on substantially the same testimonial evidence. *See* Mot. 1 (“[Petitioner’s] petition is substantively the same as the T-Mobile IPR petition. It challenges the same claims, on the same grounds, relies on the same prior art, and includes the same substantive arguments as the T-Mobile

² The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 287–88 (2011), amended 35 U.S.C. § 103. Because the ’868 patent was effectively filed before March 16, 2013, the effective date of the relevant amendment, we preliminarily apply the pre-AIA version of § 103. *See* Ex. 1001, code (60). Neither party argues that the outcome of this case would differ based on applying the pre-AIA or post-AIA versions of these laws.

IPR.”). As noted above, Patent Owner does not refute the same. *See* Paper 11.

Because the issues presented in the instant Petition are identical to those in the T-Mobile IPR, we determine for the same reasons that there is a reasonable likelihood that Petitioner would prevail in showing that at least one of the Challenged Claims is unpatentable. Therefore, we institute *inter partes* review for the same reasons stated in our Decision on Institution in the T-Mobile IPR. *See* IPR2024-01468, Paper 17.

IV. MOTION FOR JOINDER

As the moving party, Petitioner bears the burden of proving that it is entitled to the requested joinder. *See* 37 C.F.R. § 42.20(c). The statutory provision governing joinder in *inter partes* review proceedings is 35 U.S.C. § 315(c), which reads:

If the Director institutes an *inter partes* review, the Director, in his or her discretion, may join as a party to that *inter partes* review any person who properly files a petition under section 311 that the Director, after receiving a preliminary response under section 313 or the expiration of the time for filing such a response, determines warrants the institution of an *inter partes* review under section 314.

A motion for joinder should (1) set forth reasons why joinder is appropriate; (2) identify any new grounds of unpatentability asserted in the petition; (3) explain what impact (if any) joinder would have on the trial schedule for the existing review; and (4) address specifically how briefing and discovery may be simplified. *See Kyocera Corp. v. Softview LLC*, IPR2013-00004, Paper 15 at 4 (PTAB Apr. 24, 2013); Patent Trial and Appeal Board, Consolidated Trial Practice Guide, 76 (Nov. 2019), available at <https://www.uspto.gov/sites/default/files/documents/tpgnov.pdf>.

Petitioner's Motion addresses each of these considerations. Mot. 1–8. According to Petitioner, its “[P]etition challenges the validity of the same claims of the ’868 patent on identical grounds to those in the T-Mobile IPR,” “[t]here are no substantive differences between [Petitioner's] and the T-Mobile IPR Petitioners' Petition,” and “[Petitioner] also relies on the same supporting evidence.” *Id.* at 4–5. Petitioner argues that its “petition will not raise any new issues of unpatentability and will not impose any additional burden on the Board or Patent Owner, or add additional complexity to the case,” and that joinder will not unduly burden or negatively impact the trial schedule. *Id.* at 6. Further, Petitioner agrees to take an “understudy” role, and “[u]nless and until the current Petitioners in [the T-Mobile IPR] cease to participate in the T-Mobile IPR, [Petitioner] will not assume an active role.” *Id.* at 7–8. Thus, according to Petitioner, Patent Owner will not suffer prejudice if the two proceedings are joined. *Id.* at 8.

Patent Owner has not disputed the above contentions by Petitioner and does not point to any particular prejudice relating to joining the two proceedings. In light of these considerations, Petitioner has shown that joinder to the T-Mobile IPR is appropriate in this case. Therefore, we *grant* Petitioner's Motion for Joinder.

V. CONCLUSION

Based on the evidence before us, we determine that Petitioner has established a reasonable likelihood that claims 11–15 of the ’868 patent are unpatentable. Accordingly, we institute trial on all relevant challenges in the Petition, and join this proceeding with the pending T-Mobile IPR.

We base our factual findings and conclusions at this stage of the proceeding on the evidentiary record developed so far. This is not a final

decision as to the construction of any claim term or the patentability of any claim. Any final decision shall be based on the full trial record, including any response timely filed by Patent Owner. Any arguments not raised by Patent Owner in a timely filed response may be deemed waived, even if they were presented in the Preliminary Response.

VI. ORDER

Upon consideration of the record before us, it is:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 11–15 of U.S. Patent No. 9,094,868 B2 is instituted with respect to all relevant grounds set forth in the Petition;

FURTHER ORDERED that Petitioner’s Motion for Joinder to pending IPR2024-01468 is *granted* and Petitioner (Samsung Electronics Co., Ltd.) is joined as a party to IPR2024-01468, pursuant to 37 C.F.R. § 42.122(b);

FURTHER ORDERED that all future filings are to be made only in IPR2024-01468;

FURTHER ORDERED that the grounds of unpatentability on which the Board instituted trial in IPR2024-01468 are unchanged and remain the only grounds on which trial has been instituted;

FURTHER ORDERED that the Scheduling Order and any of its modifications entered in IPR2024-01468 will govern the schedule of the joined proceedings;

FURTHER ORDERED that, unless and until T-Mobile (i.e., all T-Mobile IPR petitioners) is terminated from IPR2024-01468, Petitioner is bound by all filings by T-Mobile without a separate opportunity to be heard, whether orally or in writing (except for filings regarding termination or

settlement and filings where Petitioner receives permission from the Board to file an independent paper);

FURTHER ORDERED that Petitioner must obtain prior Board authorization to file any paper or take any action on its own in IPR2024-01468 (except a motion to modify these provisions on the ground that T-Mobile is no longer an active party);

FURTHER ORDERED that Petitioner's participation in the briefing, depositions, and oral argument shall be subject to T-Mobile's acquiescence to Petitioner's participation and, absent our express authorization, Petitioner shall not file papers or exhibits separate and apart from T-Mobile;

FURTHER ORDERED that the case caption in IPR2024-01468 for all further submissions shall be changed to reflect joinder of Petitioner, as indicated in the attached sample case caption; and

FURTHER ORDERED that a copy of this Decision be entered into the record of IPR2024-01468.

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Sample Case Caption for Joined Proceeding

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

T-MOBILE USA, INC., AT&T SERVICES, INC., CELLCO
PARTNERSHIP d/b/a VERIZON WIRELESS, ERICSSON INC.,
NOKIA OF AMERICA CORPORATION, and
SAMSUNG ELECTRONICS CO., LTD.,
Petitioner,

v.

HEADWATER PARTNERS II LLC,
Patent Owner.

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³ IPR2025-00426 has been joined with this proceeding.