

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.,
Petitioner,

v.

WILUS INSTITUTE OF STANDARDS AND TECHNOLOGY
INC.,
Patent Owner.

Case No. IPR2025-00934
U.S. Patent No. 11,159,210

**PATENT OWNER'S REQUEST FOR DIRECTOR REVIEW OF
INSTITUTION DECISION**

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I. Introduction

Patent Owner respectfully requests Director Review of the October 10, 2025 Decision Referring Petitions to the Board (Paper 11) and the November 3, 2025 Decision Granting Institution of *Inter Partes* Review (Paper 12). For the reasons stated below, Patent Owner believes the Director erred in concluding that Patent Owner's district court litigations were directed to a diverse range of subject matter. All of Patent Owner's patents challenged by Samsung cover inventions specifically about the format, structure, and information in Wi-Fi packets. The Director further erred in finding that purported material error by the examiner concerning the 802.11ax_D0.5 draft standard was sufficient to refuse discretionary denial. The Petition does not show that the D0.5 draft actually renders the claims obvious nor seek to correct whatever errors the examiner may have made concerning D0.5, but rather seeks to show obviousness based upon a later draft with additional disclosures, 802.11ax_D1.0. Likewise, the Board erred in concluding that Samsung had presented sufficient evidence of public accessibility of 802.11ax_D1.0, even after recognizing the overall weakness of Samsung's arguments. Patent Owner thus respectfully requests that the Director grant Director review and that he deny institution of *inter partes* review.

II. Legal Standard

Director review of a Board decision on institution is warranted when the request presents “(a) an abuse of discretion, (b) important issues of law or policy, (c) erroneous findings of material fact, or (d) erroneous conclusions of law.” Director Review Process, Section 2.B (available at <https://www.uspto.gov/patents/ptab/decisions/director-review-process>, last accessed March 26, 2025). Each of these bases is present here.

III. Discretionary Denial Issues

In the decision referring the petition in this and other IPRs brought by Samsung to the Board, the Acting Chief Administrative Patent Judge correctly found that “it is unlikely that a final written decision in these proceedings will issue before the district court trial occurs, and there is insufficient evidence the district court is likely to stay its proceeding even if the Board were to institute trial.” Paper 11 at 2. Nonetheless, the IPRs were referred to the Board for three reasons: (1) a lack of settled expectations, (2) the purported “large number and wide scope of the patents asserted in the district court litigation,” and (3) purported material error by the examiner during prosecution. *Id.* at 3. While the first factor is relevant to discretionary denial, the Director has not typically refused discretionary denial simply because of a purported lack of settled expectations, when the district court trial date is highly likely to

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precede a final written decision. Accordingly, the second and third factors were decisive to the decision to refer to the Board. Wilus respectfully submits that both of these factors were decided in error, based upon misleading representations by Samsung that Wilus was not afforded an opportunity to rebut.

Contrary to Samsung's arguments, the IPRs Samsung has brought against Wilus do not present the "diverse range of subject matter" at issue in *Tesla, Inc. v. Intellectual Ventures II LLC*, IPR2025-00217, Paper 9, or *Shenzhen Tuozhu Tech. Co., Ltd. v. Stratasys, Inc.*, IPR2025-00438, Paper 10. In *Tesla*, the patents covered topics across a range including target recognition, vehicle guidance, cameras, and wireless networking. *Tesla*, IPR2025-00217, Paper 8 at 6. These are fundamentally different technology areas, from different fields of art and covering distinct types of accused products. In *Shenzhen*, the patents ranged from remote control of a 3-D printer using video images, to heated build platforms for 3-D printers, to detection of 3-D printing material characteristics. *Shenzhen*, IPR2025-00438, Paper 9 at 8–9. Again, these patents are from different fields of endeavor: from computer vision on the one hand to mechanical engineering on the other.

The Wilus patents that Samsung is challenging, by contrast, all relate to features of the 802.11ax standard that improve efficiency and performance of

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wireless communications in congested spectrum. *See* IPR2025-00934, Paper 10 at 7–8. The related subject matter can be seen from the overlapping prior art in these petitions, including the various versions of 802.11 standards that are relied upon as purported prior art. For example, IPR2025-00934 asserts the draft 802.11ax_D1.0 standard, alone or in combination against all claims. (IPR2025-00934, Paper 2 at 32–60, Ex. 1004). IPR2025-00935 and -00936 each assert the Lee patent application directed to 802.11 WLANs, along with a proposed draft of the 802.11ax specification (IPR2025-00935, Paper 2 at 1–2, Ex. 1005 at [0002]–[0004], Ex. 1006; IPR2025-00936, Paper 2 at 1–2, Ex. 1005 at [0002]–[0004], Ex. 1006). IPR2025-01043 and -01044 each assert the Zhou patent application directed to 802.11 WLANs. (IPR2025-01043, Paper 2 at 1–3, Ex. 1004 at [0014]; IPR2025-01044, Paper 2 at 1–3, Ex. 1004 at [0014]). IPR2025-00933 and -00988 each assert the Josiam patent application directed to 802.11ax WLANs. (IPR2025-00933, Paper 2 at 1–2, Ex. 1005 at [0003]; IPR2025-00988, Paper 2 at 1–3, Ex. 1014 at [0003]). Likewise, IPR2025-01069 asserts the Bharadwaj patent application directed to 802.11ax WLANs. (IPR2025-01069, Paper 2 at 1–2, Ex. 1006 at [0002]–[0005]).

The fact that all eight of these patents are alleged to be rendered obvious by versions of the 802.11ax standard or patents that are directed to improvements that very same standard refutes any argument that the situation

here is comparable to those in *Tesla* or *Shenzhen*. If the mere assertion of patents from different families that are all directed to the same wireless communications standard is sufficient to meet the “diverse range of subject matter” factor from *Tesla* and *Shenzhen*, then the factor is almost meaningless. This finding from the discretionary denial decision should be reversed.

The reliance on purported examiner error in the decision referring to the Board was likewise erroneous. The alleged examiner error was in overlooking disclosures in the 802.11ax_D0.5 draft standard. Paper 11 at 4. But the prior art relied upon in the petition is a different draft standard, 802.11ax_D1.0. Paper 2 at 1–2. Samsung did not argue and the decision on discretionary denial did not find that the teachings that form the basis of the petition's obviousness challenge were present in the earlier D0.5 draft and that they were overlooked by the examiner. In other words, rather than seek to correct the examiner's purported error by asking the Board to reconsider the art that the examiner purportedly overlooked, Samsung seeks to use the purported errors concerning D0.5 as an excuse to instead present an obviousness theory based upon the later D1.0. This is not a proper reason to overcome the concerns of duplication, inconsistency, and wasted effort posed by a final written decision in this IPR many months after the district court trial

date, and accordingly the decision's findings on this third factor should be reversed.

IV. Samsung's Inconsistent Claim Construction Positions

In the November 3, 2025 Decision Granting Institution of *Inter Partes* Review (Paper 12) ("ID"), the Board did not recognize or note that Samsung had presented inconsistent claim construction positions between this IPR and the parallel district court litigation between Patent Owner and Samsung. *See* ID, at 8-9. Patent Owner respectfully contends that the Board overlooked this issue, the importance of which has been made clearer through recent precedential authority and other decisions.

As Patent Owner noted in its POPR, Samsung has contended in district court that all claims of the '210 patent are indefinite. Paper 9 at 6–8, Ex. 2017 at 1. Specifically, Samsung contends that the following phrase from the '210 patent's independent claims is indefinite: "a format of user field(s) included in a user specific field of the HE-SIG-B is identified based on a number of MU-MIMO users indicated by a subfield of the HE-SIG-A." Ex. 2017 at 1. As of this filing, Samsung still contends that all claims of the '210 patent are indefinite, which has caused Patent Owner to expend significant resources responding to and briefing the issue in district court, including in Patent Owner's claim construction brief that it filed with the district court on

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November 4, 2025. Samsung's responsive claim construction brief is due November 18, 2025, which Patent Owner expects will include Samsung's detailed arguments for indefiniteness.

Even now, Samsung has offered no explanation, in this *inter partes* review or in the district court litigation, why it has adopted inconsistent claim construction positions between the two proceedings. When the Patent Office transitioned IPRs away from the Broadest Reasonable Interpretation claim construction and to the same *Phillips* standard applied in district court, one goal was to "reduce the potential for inconsistency in the interpretation of the same or similar claim terms" between PTAB and district court proceedings. 83 Fed. Reg. at 51,350 (2018). Petitioner's adoption of inconsistent claim construction arguments between its district court position and its Petition generates the risk with which the Patent Office was concerned. If Petitioner prevails in this IPR and obtains a final written decision finding any challenged claim unpatentable, such a decision would both suggest the challenged claims are not indefinite under *Phillips* and be inconsistent with a district court finding the claims are indefinite.

Under *Tesla* and *Revvo*, such unexplained, materially inconsistent claim-interpretation positions between district court and the Board are themselves a sufficient basis for discretionary denial. *See Tesla, Inc. v.*

Intellectual Ventures II LLC, Case No. IPR2025-00340, Paper 18 at 4 (P.T.A.B. Nov. 5, 2025) (informative) (“Allowing a petitioner to advance a claim construction before the Board when that petitioner has made inconsistent indefiniteness arguments in district court fails to further, but instead detracts from, the Office’s goal of ‘providing greater predictability and certainty in the patent system.’”); *Revvo Techs., Inc. v. Cerebrum Sensor Techs., Inc.*, Case No. IPR2025-00632, Paper 20 at 4–5 (P.T.A.B. Nov. 3, 2025) (precedential) (“although a petitioner is not necessarily precluded from arguing different claim construction positions before a district court and the Board, the petitioner should explain sufficiently why the different positions are warranted.”).

Under the Director’s recent decisions in *Revvo* and in *Tesla*, this is grounds for denial of institution. As the Director noted in *Tesla*, “[a]llowing a petitioner to advance a claim construction before the Board when that petitioner has made inconsistent indefiniteness arguments in district court fails to further, but instead detracts from, the Office’s goal of ‘providing greater predictability and certainty in the patent system.’” *Tesla*, IPR2025-00340, Paper 18 at 4. Thus, “when a petitioner advances different positions before the Board and a district court, that petitioner is *required* to explain why those different positions are warranted.” *Id.* at 3. Here, Petitioner fails to provide an

explanation and could not plausibly do so. There was no judicial decision or other development that would justify advancing a different position in district court from its position at the PTAB. *See Revvo*, IPR2025-00632, Paper 20 at 5.

V. Ground 1: Public Accessibility of 802.11ax_D1.0

Patent Owner further requests Director Review of certain findings in the November 3, 2025 Decision Granting Institution of *Inter Partes* Review (Paper 12) (“ID”). In the ID, the Board appeared to agree with Patent Owner’s arguments disputing the prior art status of the 802.11ax_D1.0 reference. *See* ID, at 11-14. For example, the Board, rejecting one of Samsung’s main arguments, agreed with Patent Owner that “it would have been impossible to have become a member of the IEEE 802.11 Working Group after learning of the existence of 802.11ax_D1.0 on, or after, December 1, 2016, before the critical date of January 9, 2017.” *Id.* at 13. The Board noted also that the testimony of Samsung’s “public accessibility” expert, Dr. Hansen, was not supported by “any first-hand knowledge of any member of the 802.11 Working Group sharing a copy of 802.11ax_D1.0 prior to the critical date[.]” *Id.*; *see also id.* at 13 n. 10.

The Board, however, found that a “purpose of 802.11ax_D1.0 was to promote dialogue with interested artisans, which indicates public

accessibility.” ID, at 14. To support this conclusion, the Board cited testimony from Dr. Hansen (1) about a note on the cover of 802.11ax_D1.0 reading: “Permission is hereby granted for IEEE Standards Committee participants to reproduce this document for purposes of international standardization consideration”; and (2) “meetings to discuss 802.11ax_D1.0 were open to the public,” for which Dr. Hansen cited “Appendix J” to his declaration. *Id.* The Board further stated that the “current record is not well-developed on this issue either factually or legally,” and so declined to conclude, for purposes of institution, that Samsung had not shown that 802.11ax_D1.0 is prior art. *Id.*

Patent Owner respectfully contends that the Board erred. In making its decision, the Board failed to consider whether Samsung has demonstrated that 802.11ax_D1.0 was actually or potentially accessible by an interested person *outside* of the IEEE Working Group or the broader IEEE 802 organization. *See id.* Though the cover of 802.11ax_D1.0 grants “IEEE Standards Committee participants” permission to produce the document for “international standardization consideration,” this statement does not suggest that IEEE standards committee participants could share the 802.11ax_D1.0 draft with anyone *outside* of the IEEE Working Group or the broader IEEE 802 organization. As the ID notes, 802.11ax_D1.0 was “distributed in a restricted manner that required membership in the group working to . . . create

the draft and a password to gain access to the draft.” ID, at 11. The draft was, as Dr. Hansen testified, downloadable from a website that is still accessible today¹, and it still reads as follows:

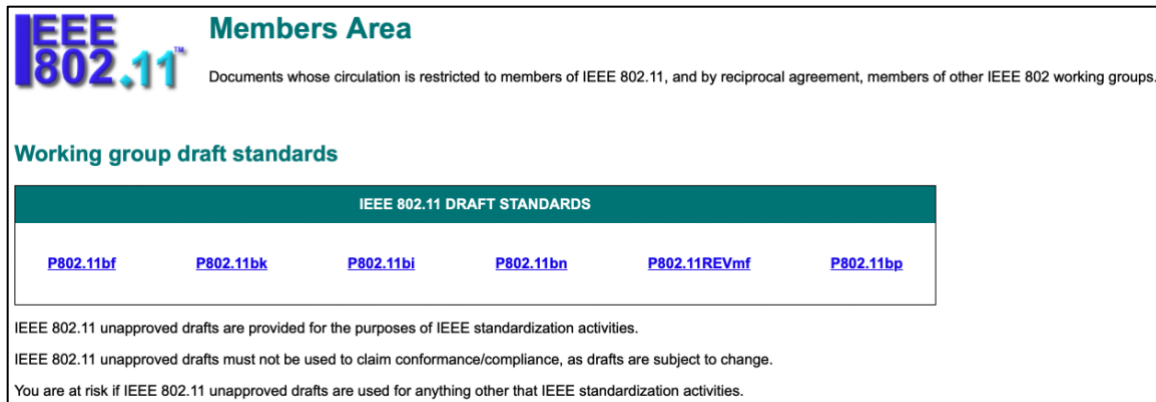
- The draft is password protected in accordance with IEEE 802 Policies and Procedures. To obtain the draft, use the username and the password supplied to active members for the 802.11 WG private area.

Indeed, Dr. Hansen's assertion that draft standards carried no expectation of confidentiality is belied not only by the evidence but by various IEEE 802 organization-created webpages. *See, e.g.,* <https://1.ieee802.org/documents/> (“IEEE 802.1 working group documents are mostly public access, however, drafts under development are private to working group participants.”). Indeed, the current “members only” webpage of IEEE 802.11 Working Group²—which is the same webpage where Dr. Hansen asserts 802.11ax_D1.0 was distributed to the Working Group before the critical date—shows the following:

¹ Available at https://www.ieee802.org/11/LetterBallots/LB225ax/LB225_instructions.html.

² <https://www.ieee802.org/11/private/index.shtml>. The specific URL of the balloting webpage distributed on December 1, 2016, was https://www.ieee802.org/11/LetterBallots/LB225ax/LB225_instructions.html, which provided a link to the “members only” portion of the website for downloading draft 1.0 at this URL: http://www.ieee802.org/11/private/Draft_Standards/11ax/Draft%20P802.11ax_D1.0.pdf.

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As the demonstrative screenshot shows, documents in the private, password-protected “members only” section of the IEEE 802.11 website are labeled “*Documents whose circulation is restricted to members of IEEE 802.11.*” Notably, this same page bears very similar language cited by the Board as evidence of public accessibility: drafts are “provided for purposes of IEEE standardization activities,” while still making clear the documents may not be circulated outside of IEEE 802.11.

Thus, at most, the reasonable interpretation of the statement on the cover of 802.11ax_D1.0 is that IEEE standards committee members are authorized to “reproduce” the document for the purposes of the committee—it does not imply that a committee member was granted permission to “reproduce” it to anyone else *outside* of the committee or the broader IEEE 802 organization (who would have no role in voting on the draft, in any event).

Likewise, the Board states that “Dr. Hansen also testifies that meetings to discuss 802.11ax_D1.0 were open to the public.” *Id.* at 14 (citing Ex. 1026

¶ 58 (citing Appendix J to declaration)). But Dr. Hansen does not testify that “meetings to discuss 802.11ax_D1.0 were open to the public” *before the critical date*, which is the operative question. The only meeting Dr. Hansen identifies in his declaration where 802.11ax_D1.0 was discussed was held in March 2017—*after* the critical date. *See* Ex. 1026, ¶ 58. Thus, no evidence of record suggests or supports a conclusion that the 802.11ax_D1.0 draft was accessible via a public meeting before the ’210 patent’s critical date.

“[A] work is not publicly accessible if the only people who know how to find it are the ones who created it.” *Samsung Elecs. Co. v. Infobridge Pte. Ltd.*, 929 F.3d 1363, 1372 (Fed. Cir. 2019) (“This is why *SRI* focused on the knowledge of those *outside* the authoring organization and why *Bayer* discounted the knowledge of various professors on a faculty committee reviewing student theses.” (emphasis added)). Here, the error is inherent to the Petition: it has provided no *evidence* that 802.11ax_D1.0 was accessible to anyone outside of the IEEE 802.11 Working Group, much less the IEEE 802 organization as a whole. And as Dr. Hansen’s testimony about “no expectation of confidentiality” was unsupported by any evidence—as the Board noted, it could not be the case that Samsung has demonstrated a reasonable likelihood through the Petition that 802.11ax_D1.0 was publicly available before the critical date.

VI. Ground 2: Bharadwaj/Sun Combination

Finally, the Board concludes that the Petition demonstrates a reasonable likelihood of success for its Ground 2, and particularly with respect to whether the asserted Bharadwaj/Sun combination discloses features [1.5]/[1.7]. *See* ID, at 24-25, 27-32. Patent Owner respectfully contends that the Board erred in finding that Bharadwaj teaches feature [1.5] and [1.7]. Specifically, Patent Owner believes the Board misapprehended its argument for why Bharadwaj did not disclose [1.5] and [1.7], which together require a PPDU whose “SIG-B compression field of the HE-SIG-A indicates full bandwidth multi User-Multiple Input Multiple Output (MU-MIMO)” *and* a “subfield of the HE-SIG-A” that “indicates a single user.” As Patent Owner argued in its POPR, Bharadwaj does not disclose or teach a PPDU packet that is flagged for full MU-MIMO where it is for only a “single user” (that is, a single terminal in communication with the access point). This is why Patent Owner argued that the asserted Bharadwaj reference failed to “teach or suggest full bandwidth MU-MIMO transmission for a single user.” POPR, at 17.

The Board, however, rejected Patent Owner's argument about Figure 5 of Bharadwaj. Patent Owner argued that the disclosure in Figure 5 mapped for feature [1.7] (highlighted in yellow at page 28 of the ID) failed because it did not teach a scenario where MU-MIMO transmission was flagged via the SIG-

B compression field of HE-SIG-A but simultaneously indicated only one user:

...the Petition maps Figure 5 of Bharadwaj as establishing limitation [1.7], Pet. at 72-73, and notes that Bharadwaj teaches per-user information for “two or more MU-MIMO users.” But where Figure 5 of Bharadwaj accounts for a single user (e.g., as expressed in the right-hand portion of object 345-D of Figure 5 that the Petition maps), it is for a “single user” (SU) transmission which does not use MU-MIMO techniques and never described, in either the Figure or in the text of Bharadwaj, as for MU-MIMO transmission.

POPR, at 17-18. In other words, where Bharadwaj arguably teaches a PPDU for a “single user” as feature [1.7] requires, there is no corresponding teaching that the PPDU is also for “full MU-MIMO transmission” as feature [1.5] requires. Finally, as Patent Owner also noted in the POPR, this was one of Patent Owner's arguments against institution for ground 1 of the Petition—which is why Patent Owner stated in its POPR, for ground 2, that: “The portions of Bharadwaj relied upon by the Petition exactly match the portions of 802.11ax_D1.0 mapped by the Petition for Grounds 1A and 1B (see Pet. at 70-71) Like for Grounds 1A and 1B, however, the Petition does not explain why these disclosures from 802.11ax_D1.0 teach or suggest full bandwidth MU-MIMO transmission for a single user.” POPR, at 16-17.

VII. Conclusion

For the foregoing reasons, Wilus respectfully requests that the Director grant Director Review and deny institution of this IPR.

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Dated: November 17, 2025

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CERTIFICATE OF SERVICE

I hereby certify that "Patent Owner's Request for Director Review of Institution Decision" was served on November 17, 2025 by email sent to:

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