

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 IPR2025-01044
U.S. Patent No. 11,516,879

**PETITIONER'S OPPOSITION TO
PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL**

TABLE OF CONTENTS

I.	Introduction.....	1
II.	The Petition Should Not be Denied on Discretionary Grounds	6
A.	The Complexity of the Litigation and Diverse Technology of the Asserted Patents Favors Institution	6
B.	Wilus Has Little to No Settled Expectations in the '879 Patent or the Other Patents at Issue	10
1.	The '879 Patent is Young, Having Been in Force Barely Four Years	10
2.	Wilus's Allegations of Licensing and Notice are Misleading and Fail to Demonstrate Any Settled Expectations	11
3.	Wilus's Misconduct in Concealing its Potentially Essential Patent Claims During Participation in the Wi-Fi 6 Standard Setting Process Should Nullify Any Claims to Settled Expectations	14
C.	Examiner Error in Issuing Wilus's Patents Warrants Board Review .	17
1.	The Examiner Overlooked Important Disclosure in Cherian and Zhou	17
2.	The Examiner Failed to Conduct an Adequate Search That Would Have Led to the Kim Reference.....	21
D.	Discretionary Denial is Not Warranted Under <i>Fintiv</i>	29
1.	Factor 1: No Stay Has Been Requested	29
2.	Factor 2: The Court's Trial Date is Speculative and the Evidence Strongly Suggests a Trial Date Within a Month of the Board's Expected Final Written Decision Date.....	31
3.	Factor 3: Limited Resources Would Have Been Expended by the Time of the Decision on Institution	35

4.	Factor 4: No Overlap Between This IPR and the District Court Proceeding.....	36
5.	Factor 5: The Same Parties are in the Co-Pending Litigation ..	41
6.	Factor 6: Wilus’s Identified “Other Circumstances” Lack Merit and Do Not Weigh in Favor of Discretionary Denial.....	41
E.	Additional Considerations Counsel Against Discretionary Denial	42
1.	The Extent of the Petition’s Reliance on Expert Testimony	42
2.	Compelling Economic, Public Health, or National Security Interests	44
III.	Conclusion	45

EXHIBITS

- SAMSUNG-1001 U.S. Patent No. 11,516,879 to Ahn, et al. (“the ’879 Patent”)
- SAMSUNG-1002 Excerpts from the Prosecution History of the ’879 Patent (“the Prosecution History”)
- SAMSUNG-1003 Declaration and Curriculum Vitae of Dr. Matthew Valenti
- SAMSUNG-1004 U.S. Pub. No.: 2017/0202023 (“Zhou”)
- SAMSUNG-1005 Provisional Patent Application No. 62/278,268 (“Zhou-Prov”)
- SAMSUNG-1006 U.S. Pub. No.: 2017/0325264 (“Cherian”)
- SAMSUNG-1007 Provisional Patent Application No. 62/333,745 (“Cherian-Prov”)
- SAMSUNG-1008 U.S. Pub. No.: 2018/0034595 (“Kim”)
- SAMSUNG-1009 U.S. Pub. No.: 2018/0352572 (“Cariou”)
- SAMSUNG-1010 U.S. Patent No.: 9,197,482 (“Bharghavan”)
- SAMSUNG-1011 Complaint, Wilus Institute of Standards and Technology Inc., v. Samsung Electronics Co., Ltd., et al., 2-24-cv-00765 (EDTX) filed September 20, 2024
- SAMSUNG-1012 IEEE-802.11-16/1180r0
- SAMSUNG-1013 Excerpts from the Prosecution History of U.S. Patent 11,116,035
- SAMSUNG-1014 ADS for Zhou-Prov Provisional Patent Application No. 62/278,268
- SAMSUNG-1015 ADS for Cherian-Prov Provisional Patent Application No. 62/333,745
- SAMSUNG-1016 *CWAP: Certified Wireless Analysis Professional, Official Study Guide*, McGraw Hill, 2004.
- SAMSUNG-1017 *802.11: Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications Standard*, IEEE

Computer Society, 2012

SAMSUNG-1018 U.S. Pub. No.: 2010/0195664 (“Ho”)

SAMSUNG-1019 Patent Trial and Appeal Board (PTAB) Boardside Chat: Interim Processes Relating to institution in AIA Proceedings (Apr. 17, 2025)

SAMSUNG-1020 Coke Morgan Stewart, Interim Processes for PTAB Workload Management (Mar. 26, 2025)

SAMSUNG-1021 Stipulation

SAMSUNG-1022 IEEE 802.11-16/0024r1

SAMSUNG-1023-1100 [Reserved]

SAMSUNG-1101 Memorandum from Coke Morgan Stewart, Acting Dir., USPTO, to All PTAB Judges (Mar. 26, 2025), <https://www.uspto.gov/sites/default/files/documents/InterimProcesses-PTABWorkloadMgmt-20250326.pdf>

SAMSUNG-1102 *Taylor*, Samsung Semiconductor USA, <https://semiconductor.samsung.com/us/sas/company/taylor/> (last visited May 24, 2025)

SAMSUNG-1103 *Samsung Electronics Unveils a US\$200bn Investment Plan in the U.S.*, Bus. Korea (July 25, 2022), <https://www.businesskorea.co.kr/news/articleView.html?idxno=97177>

SAMSUNG-1104 *Samsung Electronics to Receive up to \$6.4 Billion in Direct Funding under the CHIPS and Science Act*, Samsung Semiconductor USA (Apr. 14, 2024), <https://semiconductor.samsung.com/us/sas/local-news/samsung-electronics-to-receive-up-to-6-4-billion-in-direct-funding-under-the-chips-and-science-act/>

SAMSUNG-1105 *President Trump Says Samsung Is Planning a Massive Investment in the US, Calls It an Aftermath of His Tariff Policy*, wccftch (May 1, 2025), <https://wccftch.com/president-trump-says-samsung-is-planning-a-massive-investment-in-the-us/>

- SAMSUNG-1106 Order Granting Stay in *Maxeon Solar PTE. LTD. v. Hanwha Solutions Corp.*, No. 2:24-CV-00262-JRG (E.D. Tex. May 5, 2025) (Gilstrap, J.)
- SAMSUNG-1107 Order Granting Stay in *Cellspin Soft, Inc. v. Bytedance Ltd.*, No. 2:23-CV-00496-JRG-RSP (E.D. Tex. Jan. 26, 2025) (Payne, J.)
- SAMSUNG-1108 Motion Success for Stay Pending IPR (Post-Institution) (E.D. Tex.), DocketNavigator (last visited August 27, 2025)
- SAMSUNG-1109 LegalMetric, Individual Judge Report for Judge James Rodney Gilstrap Patent Cases December 2011 to January 2025
- SAMSUNG-1110 Complaint, *Wilus Inst. of Standards and Tech. Inc., v. Samsung Elecs. Co., Ltd., et al.*, No. 2-25-cv-00070 (E.D. Tex filed January 23, 2025)
- SAMSUNG-1111 U.S. District Court for the Eastern District of Texas Calendar Events Set for 6/1/2026 for Judge Rodney Gilstrap
- SAMSUNG-1112 [Reserved]
- SAMSUNG-1113 Wi-Fi 6 Patent Brochure, Sisvel (Mar. 21, 2025), https://www.sisvel.com/xlin7ipl485u/1kNkzUZptdvqKbYiX1DSfi/f518e18ee158be974d3c83f7cd7173be/Wi-Fi_6_Pool_patent_brochure.pdf
- SAMSUNG-1114 U.S. Pat. App. Pub. No. US 2015/0264617 A1 (“Choudhury US Publication”)
- SAMSUNG-1115 Woojin Ahn et al., *Clarification on applying MU EDCA parameter set* (Nov. 9, 2016) IEEE 802.11-16/1425r1
- SAMSUNG-1116 Osama Aboul-Magd, *TGax November 2016 Meeting Agenda* (Sep. 30, 2016) IEEE 802.11-16/1310r5
- SAMSUNG-1117 Letter from Kyung-rae Cho, Manager, Wilus Inst. of Standards. & Tech., Inc., to PatCom Administrator, IEEE-SA Standards Bd. Pat. Comm. (Jan. 15, 2021)
- SAMSUNG-1118 Yasuhiko Inoue, *IEEE 802.11 TGax November 2016 San Antonio Meeting Minutes* (Nov. 29, 2016) IEEE 802.11-

16/1466r1

- SAMSUNG-1119 Abhishek Patil et al., *Proposed Resolution for CID 193 (BSS Color Disable Indication)* (Nov. 9, 2016) IEEE 802.11-16/1413r8
- SAMSUNG-1120 IEEE-SA Standards Board Bylaws, IEEE-SA Bd. Govs. (Nov. 2019)
- SAMSUNG-1121 IEEE-SA Standards Board Operations Manual, IEEE-SA Standards Bd. (Nov. 2019)
- SAMSUNG-1122 U.S. District Court – Judicial Caseload Profile (E.D. Tex), Admin. Off. U.S. Cts. (June 2025)
- SAMSUNG-1123 Osama Aboul-Magd, *TGax March 2017 Meeting Agenda* (Jan. 27, 2017) IEEE 802.11-17/0199r6
- SAMSUNG-1124 Yasuhiko Inoue, *IEEE 802.11 TGax March 2017 Vancouver Meeting Minutes* (Jun. 5, 2017) IEEE 802.11-17/0454r0

I. INTRODUCTION

Samsung Electronics Co., Ltd. (“Samsung”) seeks review of 12 patents asserted against it by Wilus Institute of Standards & Technology Inc. (“Wilus”), including U.S. Pat. No. 11,516,879 (“the ’879 patent”). The factors set forth in Acting Director Stewart’s March 2025 memo and subsequent decisions support institution: Samsung brings a timely challenge to young patents (~3.5 years old on average) that were issued in error and cover a wide range of diverse wireless technologies. Indeed, these challenges will require the trier-of-fact to make detailed factual findings with implications not just for Samsung, but for the entire U.S. consumer electronics market as well.

As background, Wilus is a foreign non-practicing entity, which alleges to have developed a wide range of wireless communication technologies included in the latest generation of Wi-Fi, 802.11ax (or Wi-Fi 6). Wilus has accused Samsung and other consumer electronics makers of allegedly infringing 12 of its patents by implementing the new Wi-Fi 6 standard. Samsung has filed petitions for *inter partes* review of all 12 patents. The subject of this proceeding, the ’879 patent, is one of them. It relates to enhanced distributed channel access prioritization, particularly in scenarios involving contention-based channel access and multi-user uplink (UL-MU) transmissions. But apart from its parent patent, the ’035 patent, is of a wholly distinct technical field in Wi-Fi communication relative to the other 10 patents that

Wilus has asserted and of which Samsung seeks review.

In fact, *all eight patent families relate to different fields in Wi-Fi communication*, ranging from low-level signal processing and spectral efficiency to higher-level contention resolution and aggregation strategies. Wilus's assertion of a "large number and vast scope of [] patents" directed toward "a diverse range of subject matter" in the parallel district court proceeding is the precise situation for which "the Board is better suited to review" issues of validity, just as was the case in *Tesla, Inc. v. Intellectual Ventures II LLC*, IPR2025-00217, Paper 9 at 2-3 (Jun. 13, 2025).

In addition, Wi-Fi 6 is a new technology, and consequently, Wilus's patents are also young: less than three years old in the instant proceeding and *less than three and a half years old on average* across the twelve challenged patents. Accordingly, Wilus has not yet developed settled expectations in its recently issued patents. *See Cambridge Indus. USA, Inc. v. Applied Optoelectronics, Inc.*, IPR2025-00433, Paper 12 at 2-3 (Stewart June 26, 2025) (finding that patents issued in 2019 and 2020, even earlier than the 2022 issue date of the '879 patent, have "not been in force for a significant period of time" and thus Patent Owner's settled expectations "[did] not favor discretionary denial").

Further, as discussed in more detail below, Examiner error occurred in the Office's issuance of the Wilus patents.¹ For the '879 patent, the Examiner overlooked highly relevant disclosures from both the Cherian and Zhou references, failing to recognize that Cherian, combined with Zhou, discloses the features of the '879 patent that led, in part, to allowance of the '879 patent. Had the Examiner i) properly applied Cherian and Zhou and ii) better understood the claim terms, the '035 and '879 patents would have never issued. Because of the lack of understanding of the claim terms, the Examiner's search failed to consider terminology used in the art (and in the '879 Patent specification) to describe the features that led to allowance. As explained in more detail below, a better understanding of the terms of art used in the specification and figures of the '879 patent would have led the Examiner to well-known and defined methodologies such as those disclosed in the Kim reference (applied in Ground 1 of the Petition). Use of PTAB resources is thus appropriate to correct errors made during examination of the Wilus patents.

¹ See also IPR2025-00935, Paper 11 at 16-24 addressing Examiner error in issuing asserted U.S. Pat. No. 11,129,163; IPR2025-00936, Paper 11 at 16-24 addressing Examiner error in issuing asserted U.S. Pat. No. 11,700,597; and IPR2025-00934, Paper 10 at 17-33 addressing Examiner error in issuing asserted U.S. Pat. No. 11,159,210.

To sum, at least the three reasons discussed above (and reproduced below) justify the use of PTAB resources in the dispute between Wilus and Samsung:

- 1) Large number and vast scope of asserted patents;
- 2) Early challenges to patents where expectations have not been settled;
and
- 3) Correction of errors that occurred during examination.

Each of these justifications has been identified by the Acting Director as warranting use of PTAB resources. And each is applicable to the Wilus/Samsung dispute for reasons similar to prior cases where the Acting Director referred petitions to the Board.

Although each of these factors alone justifies referral of the present Petition, taken collectively, these factors strongly favor institution and override any concerns about parallel proceeding overlap. This is particularly true here where Samsung has eliminated potential overlap by offering a sweeping *Sotera*-plus stipulation that includes foregoing the use of the asserted art in combination with system art (or any prior art) in accordance with the Acting Director's *Motorola* decision. And, as discussed below, the median time-to-trial statistics suggest trial after the FWD deadline for four of the asserted patents and within about six weeks for the other eight patents. With the statistics suggesting such a small gap (or none), and with Samsung's broad

stipulation, the justifications identified throughout “tip the balance against discretionary denial.” *Shenzhen Tuozhu Tech. Co., Ltd. v. Stratasys, Inc.*, IPR2025-00438, Paper 10 at 3 (Stewart July 17, 2025) (declining to discretionarily deny based on *Fintiv* where the patent owner did not have sufficient settled expectations and the patent owner asserted a vast scope of diverse patents).

Finally, the merits of the Petition are strong and well-supported by competent expert testimony and contemporaneous third-party evidence, including dozens of patents and printed publications that corroborate the obviousness of the claimed subject matter. Tellingly, Wilus identified ***no substantive deficiency*** in the merits of the Petition’s prior art challenges. This is unsurprising in light of plentiful evidence cited in the Petition that well establishes how the claims are directed to features known in the art or disclosed by others. Not only Samsung, but the public broadly, share an interest in ensuring that all claims of the ’879 patent receive proper scrutiny from the Board—particularly as Wilus continues to mount an aggressive litigation campaign against multiple defendants for their use of the ubiquitous Wi-Fi communication standard that most Americans use every day.

Thus, under these facts and given the present record, Samsung respectfully requests that the Director decline Wilus’s request to discretionarily deny institution of this IPR and refer Samsung’s Petition for a determination on the merits.

II. THE PETITION SHOULD NOT BE DENIED ON DISCRETIONARY GROUNDS

Wilus seeks to shield the '879 patent from an adjudication on the merits by requesting discretionary denial of this IPR proceeding. Wilus purports that an assessment of the *Fintiv* factors and two additional considerations recited in Acting Director Stewart's Memorandum of March 26, 2025, counsels in favor of discretionary denial. Paper 8 at 8-27. However, contrary to Wilus's contentions, as explained below, a holistic evaluation of the *Fintiv* factors and the additional considerations in the Stewart Memorandum and subsequent decisions confirm that discretionary denial of the Petition is not warranted.

A. The Complexity of the Litigation and Diverse Technology of the Asserted Patents Favors Institution

Wilus's assertion of a "large number and vast scope of [] patents" directed toward "a diverse range of subject matter" in the parallel district court proceeding is the precise situation for which "the Board is better suited to review" issues of validity, just as was the case in *Tesla, Inc. v. Intellectual Ventures II LLC*, IPR2025-00217, Paper 9 at 2-3 (PTAB Jun. 13, 2025). Here, the '879 patent is but one of 12 patents spanning eight different families that Wilus has asserted against Samsung in

District Court.² *Cf. Shenzhen*, IPR2025-00438, Paper 10 at 3 (“Petitioner explains that the parallel district court proceeding involves *nine different patents spanning six families* that involve a diverse range of subject matter. The large number and vast scope of the patents asserted in the district court litigation weighs against discretionary denial[]” (emphasis added)).

Samsung asks the Office to apply much-needed scrutiny to each of the asserted patents, spanning a broad range of wireless technologies, including:

- enhanced distributed channel access prioritization (U.S. Patent Nos. 11,116,035 and 11,516,879);
- legacy and modern device coexistence via physical layer frame designs (U.S. Patent No. 10,313,077);

² Wilus’s infringement claims against Samsung have been consolidated into *Wilus Inst. of Standards & Tech. v. HP Inc.*, No. 2:24-cv-00752-JRG (E.D. Tex) for US Patent Nos. 10,313,077, 10,687,281, 11,470,595, 11,159,210, 11,129,163, 11,700,597, 11,116,035, and 11,516,879, and have been consolidated into *Wilus Inst. of Standards & Tech. v. HP Inc.*, No. 2:25-cv-00069-JRG (E.D. Tex.) for U.S. Patent Nos. 10,911,186, 11,716,171, 11,664,926, and 12,004,262. Even considering the district court proceedings separately, the district court action asserting the ’879 patent involves eight patents spanning five distinct families.

- overlapping basic service set interference management through BSS coloring (U.S. Patent Nos. 11,129,163 and 11,700,597);
- multi-user uplink transmission synchronization through block acknowledgments (U.S. Patent Nos. 11,716,171 and 10,911,186);
- random access mechanisms for unassociated devices using trigger frames (U.S. Patent No. 12,004,262);
- signaling user-specific fields and spatial stream configurations in multi-user MIMO transmissions (U.S. Patent No. 11,159,210);
- discontinuous channel bandwidth allocation in fragmented spectra (U.S. Patent Nos. 10,687,281 and 11,470,595); and
- aggregated MAC protocol data units with multi-traffic ID block aggregation (U.S. Patent No. 11,664,926).

Although these patents relate to Wi-Fi, as illustrated above, the subject matter of the challenged patents covers a broad array of wireless communication technologies that range from low-level signal processing and spectral efficiency to higher-level contention resolution and aggregation strategies. Indeed, the diverse nature of the asserted patents is illustrated by the lack of overlap in prior art applied against the different families of patents. Such diverse technology and complex litigation strongly favors institution. *Tesla*, IPR2025-00217, Paper 9 at 2-3. As was the case in *Tesla* and *Shenzhen*, “the Board is better suited to review a large number of patents

involving diverse subject matter.” *Id.*; *accord Shenzhen*, IPR2025-00438, Paper 10 at 3.

Not only is the subject matter of Wilus’s asserted patents technically disparate but given the lengthy priority claims of Wilus’s patents and the race-to-the-patent-office nature of standards development in the AIA-era, many of the grounds presented in Samsung’s petitions will require the trier of fact to make complex factual findings as to the effective filing date of both the asserted art and the challenged patents. *See, e.g.*, Pet. 2-3 (involving a priority analysis of the asserted art); IPR2025-01043, Paper 2 at 2-4 (same); IPR2025-00933, Paper 2 at 2 (same); IPR2025-00936, Paper 2 at 2-3 (same); IPR2025-01110, Paper 2 at 5-12 (presenting intervening art grounds challenging the priority date of the challenged patent); IPR2025-01111, Paper 2 at 6-14 (same); IPR2025-00988, Paper 2 at 1-3, 6-8 (presenting grounds which involve an analysis of the priority date of both the challenged patent and the asserted art).

These kinds of factual determinations are precisely where the Board’s combination of technical acumen and patent law expertise would prove especially valuable. While such an analysis would be standard for the Board, the complexity of the priority issues would be unfairly prejudicial to Samsung in a jury trial and may result in Wilus being able to assert rights in technology that others disclosed or patented first, including Samsung itself in some cases. *See, e.g.*, IPR2025-00988, Paper 2 at

1-3 (demonstrating that the technology claimed by the '281 patent was included in provisional patent applications filed by Samsung *months before* the subject matter was disclosed in Wilus's provisional applications). Interests of efficiency, justice, and the promotion of a strong patent system favor Board review of the Wilus patents, including referring the present petition for adjudication on the merits.

B. Wilus Has Little to No Settled Expectations in the '879 Patent or the Other Patents at Issue

1. The '879 Patent is Young, Having Been in Force Barely Four Years

The '879 patent issued on November 29, 2022, and has thus been in force for less than *three years*. Because the '879 patent has not been in force “for a significant period of time,” Wilus “has not developed strong settled expectations that favor discretionary denial.” *Cambridge Indus.*, Paper 12 at 2-3 (Stewart June 26, 2025) (finding that patents issued in 2019 and 2020 have “not been in force for a significant period of time” and thus Patent Owner’s settled expectations “[did] not favor discretionary denial”).

Wilus also is still pursuing a continuation in this family (*see* U.S. Patent App. No. 19/010,192), further confirming that any rights related to these patents are not settled. With active prosecution, the public would benefit from Board re-

view since a substantive review of the petition's grounds would help guide examination of the pending and future continuations and help ensure the examiners reach the correct patentability decisions in current and future Wilus applications.

2. *Wilus's Allegations of Licensing and Notice are Misleading and Fail to Demonstrate Any Settled Expectations*

Wilus's arguments with respect to purported "industry-wide licensing" and "actual notice" (*see* Paper 8 at 27–28) are inapposite where, as here, the patents at issue have been in force for only a short period of time. The *Dabico* case cited by Wilus is based on a circumstance, not present here, that settled expectations had been developed over a considerable length of time in which the patent at issue has been in force. *Dabico Airport Sols. Inc. v. AXA Power ApS*, IPR2025-00408, Paper 21 at 2-3 (Stewart June 18, 2025) ("[T]he challenged *patent has been in force almost eight years, creating settled expectations*. . . . There may be persuasive reasons why the Office should review the challenged patent, but, in the absence of any such information, *the Office is disinclined to disturb the settled expectations* of Patent Owner in this instance." (Emphases added.)). Wilus's recently issued patents lack the same type of settled expectations.

Although evidence that a challenged patent has never been "commercialized, asserted, marked, licensed, or otherwise applied" may "weigh *against* Patent Owner's claim of strong settled expectations," *Shenzhen*, IPR2025-00438, Paper 10 at 3 (quoting *Intel Corp v. Proxense LLC*, IPR2025-00327, Paper 12 at 2–3

(Stewart June 26, 2025)), Wilus cites no authority for the converse proposition, namely, that the presence of such commercialization evidence somehow accelerates the settling of expectations in recently-issued patents. The same is true with respect to a petitioner's notice of the challenged patent. *Dabico* confirms that settled expectations are not derived from "actual notice of a patent or possible infringement," but rather "the longer the patent has been in force, the more settled expectations should be." IPR2025-00408, Paper 21 at 2-3. This aligns with the Office's goal to incentivize early challenges to a patent's validity, *id.*, as Samsung does here and in the related petitions.

Wilus's other arguments related to settled expectations are meritless. For example, Wilus points to the "Sisvel Wi-Fi 6 Patent Pool" as evidence of "industry-wide licensing." Paper 8 at 26 (citing WILUS-2009). But that patent pool contains over 2,000 patents from various patent holders, including Huawei, MediaTek, Panasonic, and Phillips. *See generally* SAMSUNG-1113. It would be unreasonable for Wilus or the public to draw conclusions as to the validity of the '879 patent based on its licensing alongside thousands of other patents—it's far too attenuated. As recent USPTO decisions make clear, settled expectations must be based on specific, direct evidence such as patent age and public awareness—**not** generalized licensing behavior. *See, e.g., iRhythm Techs., Inc. v. Welch Allyn, Inc.*, IPR2025-00363, Paper 10 at 3 (Stewart June 6, 2025); *Cambridge Indus.*, Paper 12 at 2–3. Companies often

enter into such agreements for pragmatic reasons—avoiding litigation, ensuring access to standardized technologies, and reducing transaction costs—**not because** they affirm the validity of any specific patent in the pool.

Regarding Samsung’s alleged “actual notice” of the ’879 patent, Wilus points to an April 2022 demand letter (WILUS-2010) and an April 2023 list of references cited by the examiner during prosecution of a Samsung patent (WILUS-2013). Paper 8 at 27. This time frame is significantly shorter than other decisions where the Office has found such notice relevant for purposes of determining settled expectations. *See, e.g., iRhythm Techs.*, Paper 10 at 3 (Stewart June 6, 2025) (finding that Petitioner’s knowledge of a 13-year-old patent for over 12 years weighed in favor of Patent Owner’s settled expectations). Moreover, while Wilus’s demand letter lists the ’879 patent (among hundreds of patents), this letter does not include half of the patents Wilus has asserted against Samsung and failed to give Samsung sufficient notice of which patents Wilus thought Samsung infringed. *See* WILUS-2010 (not including U.S. Patent Nos. 11,470,595, 11,716,171, 11,516,879, 11,700,597, 11,664,926, 12,004,262). Surely, Samsung should not have been expected to challenge hundreds of patents simply because Sisvel sent Samsung a letter listing them. Collectively adjudicating the validity of only the patents at issue

(as opposed to a much larger universe), including the '879 patent, ultimately conserves the resources of the parties, the judiciary, and the Board. *See Embody*, IPR2025-00248, Paper 13 at 2-3.

3. *Wilus's Misconduct in Concealing its Potentially Essential Patent Claims During Participation in the Wi-Fi 6 Standard Setting Process Should Nullify Any Claims to Settled Expectations*

Further, Wilus undermined any settled expectations through its failure to disclose during the IEEE standard-setting process. Far from fostering transparency, Wilus concealed its patent rights during the IEEE 802.11ax standardization process, violating disclosure obligations and misleading implementers.

For example, Wilus' named inventors were present during IEEE Task Group ax (TGax) discussions (*see* SAMSUNG-1115) and were aware of the priority applications to the '879 patent, KR 10-2016-0114822 filed on September 7, 2016, KR 10-2016-0116877 filed on September 10, 2016, KR 10-2016-0116965 filed on September 12, 2016, KR 10-2016-0117898 filed on September 13, 2016, KR 10-2016-0122488 filed on September 23, 2016, and KR 10-2016-0147189 filed on November 6, 2016. On November 7, 2016, the Working Group Chair expressly reminded participants of their duty to disclose relevant IP. *See* SAMSUNG-1116, 7-10; SAMSUNG-1118, pp. 2-3. Although another Korean application (10-2017-0022227) was filed on February 20, 2017, subsequent TGax sessions held on March 13, 2017 continued to include Intellectual Property Rights (IPR) policy reminders, reinforcing the

obligation to disclose. *See* SAMSUNG-1123, 7-10; SAMSUNG-1124, p. 2.

In particular, the IEEE-SA Patent Policy and associated guidance oblige participants to disclose issued patents and **pending** patent applications. SAMSUNG-1120 § 6 (“‘Patent claim(s)’ shall mean one or more claims in issued patent(s) or **pending** patent application(s).”) The policy strongly encourages early identification of such claims and instructs participants to disclose any patent claim(s) or patent application claim(s) they are personally aware of that may be essential to the standard—even if those claims are not yet granted. *Id.*

The November 2016 and March 2017 meeting slides and instructions explicitly provided participants an opportunity to disclose “patent claim(s)/patent application claim(s)” that may be essential. *See* SAMSUNG-1116, 7-10; SAMSUNG-1123, 7-10. Wilus’s failure to disclose its pending Korean applications that provide the alleged priority claim for the ’879 patent violated this expectation of transparency. *See* SAMSUNG-1118, pp. 2-3; SAMSUNG-1124, p. 2.

Moreover, Wilus had multiple later opportunities to disclose its patent rights as the applications matured. The IEEE-SA Patent Policy does not limit disclosure obligations to a single point in time. Under §6.3.4 of the Standards Board Operations Manual, multiple Letters of Assurance may be submitted over time, and participants may provide updated assurances as claims evolve. SAMSUNG-1121, § 6.3.4. Wilus

could and should have disclosed its rights when the Korean applications were published or issued, when the '879 patent was filed (March 6, 2019) or published (July 4, 2019), or during subsequent IEEE meetings. Its continued silence during these later stages further undermines any claim of good faith.

Instead, Wilus delayed its Letter of Assurance until January 2021, nearly five years later—well after the standard was adopted and widely implemented. *See* SAM-SUNG-1117. This delay deprived implementers of the opportunity to assess the patent's relevance or validity during the critical development window.

The IEEE-SA's policies and guidance documents—including §6.3.4 of the Standards Board Operations Manual—make clear that multiple Letters of Assurance may be submitted over time, and that early disclosure of potential claims is essential to preserving transparency and trust in the standard-setting process. SAM-SUNG-1121 § 6.3.4. Thus, **industry participants reasonably expected that Wilus had no relevant IP**, and Wilus's silence created a false sense of security—**not** a “settled expectation” of validity, but instead a **settled expectation of non-assertion**.

At bottom, “early challenges to the patents tip the balance against discretionary denial.” *Zhuhai CosMX Battery Co., Ltd. v. Ningde Amperex Technology Ltd.*, IPR2025-00385, Paper 9 at 3 (Stewart July 2, 2025). Here, Samsung brings a timely challenge to young patents—less than three years old in the instant proceeding and

less than three and a half years old on average across the 12 proceedings challenging Wilus's asserted patents. This short period of time is insufficient to afford Wilus settled expectations in the patents at issue.

C. Examiner Error in Issuing Wilus's Patents Warrants Board Review

Several errors occurred during examination of the Wilus patents challenged by Samsung, and Board resources are well-spent to correct those errors.³ *See Microsoft Corp. v. Partec Cluster Competence Cent. GmbH*, IPR2025-00318, Paper 9 at 3 (Stewart June 12, 2025); *Padagis US LLC v. Neurelis, Inc.*, IPR2025-00464, Paper 12 at 3 (Stewart July 16, 2025). As explained below, the Examiner erred in multiple ways during examination of the '879 patent.

1. The Examiner Overlooked Important Disclosure in Cherian and Zhou

To start, there were no prior art rejections in the '879 patent prosecution. The '879 patent being the child of the parent '035 patent, the Examiner appears to have

³ *See also* IPR2025-00935, Paper 11 at 16-24 addressing Examiner error in issuing asserted U.S. Pat. No. 11,129,163; IPR2025-00936, Paper 11 at 16-24 addressing Examiner error in issuing asserted U.S. Pat. No. 11,700,597; and IPR2025-00934, Paper 10 at 17-33 addressing Examiner error in issuing asserted U.S. Pat. No. 11,159,210.

found the claims allowable for the same reasons as the parent. SAMSUNG-1002, 38.

Allowable Subject Matter

4. Claims 21-23, 25-31, renumbered as 1-10, are allowed.
5. The following is an examiner's statement of reasons for allowance: prior art of record fails to teach or fairly suggest the combination of limitations specified in the base claims.

SAMSUNG-1002, 38.

In the parent '035 patent prosecution, the Examiner applied Cherian in view of IEEE 802.11-16/1180r0 for a first rejection and Cherian in view of Zhou (both references used in Ground 1 of the Petition) for a second rejection. SAMSUNG-1013, 732, 737.

7. Claims 21, 22, 24, 25, 33, 34, 36 and 37 are rejected under 35 U.S.C. 103 as being unpatentable over Cherian in view of Zhou et al. (US 2017/0202023 A1, hereinafter "Zhou").

SAMSUNG-1013, 737.

In fact, similar to the Petition, the Examiner cited to the provisional applications of both Cherian and Zhou in support of the rejection. SAMSUNG-1013, 737-740. However, the original rejection lacked specificity with respect to the rejection of dependent claims 22-25. *Id.*, 737-740. In response to the generalized and non-

specific rejection of these dependent claims, Wilus amended the independent claims of the '035 patent application to include a combination of features recited in claims 22-25 and canceled claims 22-25. SAMSUNG-1013, 929-930, 700-701. The claim amendments correlate to claim elements [1.4] and [1.5] in the '035 petition (elements [1.5] and [1.6] in the '879 petition). Samsung's Petition presents a more thorough and technically accurate analysis of the features of these claims using the same references, showing with greater specificity how each claim element is disclosed or rendered obvious. Pet., 20-63 (all of claim 1), 39-61 (the amended elements [1.5] and [1.6] that lead to allowance in the '035 patent). The Petition's improved mapping of these features highlights that the original rejection (of the features originally described in claims 22-25, and then crafted into the features amended into the independent claims) was not fully developed and that the Examiner's conclusions were based on an incomplete understanding of the prior art. This lack of understanding is exhibited by i) the lack of specificity in the rejection of the features described in claims 22-25 and the ultimate amendment to the independent claims, and ii) the inadequate searching of prior art demonstrated by the lack of proper terminology used in the search terms (discussed in more detail below). It appears the these same errors carried forward from the prosecution of the '035 patent, into the prosecution of the '879 patent.

For example, Cherian discloses using a timer with a value corresponding to

the period of time during which Uplink Multi-User (UL-MU) transmissions should occur. Pet., 40 (citing SAMSUNG-1007, 0058, 0063). Elements [1.5] and [1.6] (the elements amended to gain allowance) concern whether or not the MAC Protocol Data Unit (MPDU) requests an “immediate response” (e.g., an ACK signal) from the Access Point, and using that condition to determine when the timer is used. First, if no ACK is requested [1.5] uses the timer “when” transmission of the trigger-based PPDU ends and, second, if an ACK is requested, [1.6] uses the timer upon receipt of the ACK signal. *Id.* As shown below in Kim’s Tables 6 and 7, Kim provides an example of ACK policies that would govern both of the above-described conditions.

After this amendment in the parent ’035 application, the Examiner subsequently allowed the claims without considering Kim (or any other reference equivalent to Kim’s disclosure), which clearly teaches the subject matter added by amendment e.g., ACK policies for whether or not an ACK is requested. Had Kim been found and applied, i) the prior dependent claims 22-25 would have been rejected and ii) the amended claims would also have been rejected. The failure to identify and apply Kim, which presents simplified and commonly known acknowledgement policies for transmissions, represented a further material error in prosecution, as the allowance of the claims was not based on a complete or accurate consideration of the most relevant prior art.

2. *The Examiner Failed to Conduct an Adequate Search That
Would Have Led to the Kim Reference*

In addition, a thorough search, in either the parent '035 application or the '879 application, should have led the Examiner to the Kim reference (US 2018/0034595) asserted in Ground 1. This is particularly true given the generic and well-known nature of what Kim contributes to the teachings. Specifically, Kim teaches a series of acknowledgement (ACK) policies regarding whether transmitters and receivers are required to acknowledge signals and under what conditions. Pet., 13, 40-45; SAMSUNG-1008, Tables 6-7, 0093-0110. For example, Kim's Tables 6 and 7 (below) demonstrate at least one example of how Kim simply states the well-known nature of ACK policy configurations.

TABLE 6

ACK Policy == 00

Normal ACK or Implicit Block ACK Request.

In a frame that is a non-A-MPDU frame or VHT single MPDU:

The addressed recipient returns an ACK or QoS +CF-ACK frame after a short interframe space (SIFS) period, according to the procedures defined in ACK procedure and HCCA transfer rules. A non-DMG STA sets the ACK Policy subfield for individually addressed QoS Null (no data) frames to this value.

Otherwise:

The addressed recipient returns a Block ACK frame, either individually or as part of an A-MPDU starting an SIFS after the PPDU carrying the frame, according to the procedures defined in Block ACK procedure, Generation and transmission of Block ACK frames by an HT STA or DMG STA, Operation of HT-delayed block ACK, Rules for RD initiator, Rules for RD responder, and Explicit feedback beamforming.

Pet., 44-45 (citing SAMSUNG-1008, Table 6).

TABLE 7

ACK Policy == 01

No ACK

The addressed recipient takes no action upon receipt of the frame.
The ACK Policy subfield is set to this value in all individually addressed frames in which the sender does not require acknowledgment. The ACK Policy subfield is also set to this value in all group addressed frames that use the QoS frame format except with a TID for which a block ACK agreement exists.

This value of the ACK Policy subfield is not used for QoS Data frames with a TID for which a block ACK agreement exists.

The ACK Policy subfield for group addressed QoS Null (no data) frames is set to this value.

Pet., 44-45 (citing SAMSUNG-1008, Table 7).

The above noted ACK policies are among the known ACK policy configurations taught and known in the art at the time.

The search record reveals that, before and after the amendment that led to allowance for the '035 patent (the '035 petition's elements [1.4] and [1.5] and the '879 petition's elements [1.5] and [1.6]) which remained in the claims of the '879 patent, the Examiner too narrowly searched for the claim language without considering and searching for other terms related to the same concept or even the concepts in general e.g., "ACK policy," "QoS policy."

For example, seen below is a search performed by the Examiner in response to the amendment entered in the '035 patent prosecution on September 20, 2020.

S24	36	(mu\$2 or multi\$2 user) same (parameter or edca) same (timer or time\$out or count\$4 or count\$down or reset\$4 or set\$4) with ((enabl\$4 or request\$4) near3 (respons or feedback or ack or acknowledg\$5) or enabl\$4 immediat\$4 response or "deid" or enabl\$4 ("not" or "no") immediat\$4 response or "denir")	US-PGPUB; USPAT; DERWENT	NEAR	ON	2020/12/26 14:13
-----	----	---	--------------------------------	------	----	------------------

SAMSUNG-1013, 54.

The Examiner’s search, as evidenced by the query “(respons or feedback or ack or acknowledg\$5) or enabl\$4 immediat\$4 response or "deid" or enabl\$4 ("not" or "no") immediat\$4 response or "denir”)” demonstrates an improper emphasis on the outcome of a communication event, specifically an “immediate response,” instead of the underlying “acknowledgement policy” that dictates such behavior. This analytical oversight is critical, as the provided sources (information within the specification and material in the IDS) clearly delineate “Ack Policy” as a distinct, configurable, and granular mechanism within the Medium Access Control (MAC) layer. As cited on the cover of the ’035 patent and ’879 patent (seen below) and in Figure 10a (seen below), the Examiner should have searched for “ACK polices” that would have resulted in the polices disclosed in Kim.

Kiseon Ryu, “Ack Policy for UL MU Ack transmission”, IEEE 802.11 -15/1346r 1, Internet URL:<https://mentor.ieee.org/802.11/dcn/15/11-15-1346-01-00ax-ack-policy-for-ul-mu-ack-transmissio.ppx>, Nov. 8, 2015.

SAMSUNG-1001, Cover.

Additionally, the specification further describes the context of ACK policies:

“[t]he wireless communication terminal receiving the A-MPDU may determine whether the QoS data requests an Ack according to the value of the ACK Policy subfield of the QoS Control field of the MAC header.” SAMSUNG-1001, 24:1-3.

The Examiner’s search terms, while including “ack” and “acknowledg\$5,” dilute their specificity by broadly linking them with “respons” and “feedback,” and by improperly framing the intent around “immediate response” or “no immediate response.” This approach is insufficient to capture the nuanced definitions, configurations, and strategic implications of “ACK policies” as direct MAC layer controls. Terms such as “ACK Policy subfield,” “Block Ack Policy,” “Implicit Block Ack Request,” “Delayed Block Ack,” “Multi-User Block Ack (M-BA),” and specific policy values (e.g., Ack Policy ==00, Ack Policy ==01) would have been far more effective in identifying the pertinent disclosures related to acknowledgment strategies. Thus, the Examiner’s search fundamentally mischaracterized the nature of the relevant concepts by treating the *result* of an acknowledgment action (i.e., immediate or no immediate response) as equivalent to the *policy* governing that action.

Finally, the cited Cooperative Patent Classification (CPC) codes searched by the Examiner are too generic to cover these specific MAC layer acknowledgment policies and the Examiner’s overly broad inclusion of codes did not focus on the amended features. The number of results from the Examiner’s search, nearly

110,000 results, demonstrates that the search was too broad. Instead focusing on the key features in amendment would have likely yielded better results. For example, the Office classified Kim with at least the H04L 5/0055 code. SAMSUNG-1008, Cover.



US 20180034595A1

(19) **United States**
(12) **Patent Application Publication** (10) **Pub. No.: US 2018/0034595 A1**
Kim et al. (43) **Pub. Date: Feb. 1, 2018**

(54) METHOD FOR TRANSMITTING AND RECEIVING POLICY INDICATOR-BASED ACKNOWLEDGEMENT/NON-ACKNOWLEDGEMENT SIGNAL IN WIRELESS LAN SYSTEM, AND DEVICE THEREFOR (71) Applicant: LG Electronics Inc., Seoul (KR) (72) Inventors: Jeongki Kim, Seoul (KR); Kiseon Ryu, Seoul (KR); Hangyu Cho, Seoul (KR)	Publication Classification (51) Int. Cl. <i>H04L 1/16</i> (2006.01) <i>H04L 1/18</i> (2006.01) <i>H04L 5/00</i> (2006.01) (52) U.S. Cl. CPC <i>H04L 1/1671</i> (2013.01); <i>H04L 5/0055</i> (2013.01); <i>H04L 1/1854</i> (2013.01); <i>H04W 72/042</i> (2013.01) (57) ABSTRACT
--	--

SAMSUNG-1008, Cover.

The Examiner searched the H04L 5/0055 code, which may have resulted in the Kim reference, but because the Examiner included an additional seven other codes, the 109,764 results were too vast, lowering the chances of the Examiner finding Kim or a similar reference.

S27	109,764	(H04W80/02 or H04W28/0268 or H04W74/0808 or H04W40/244 or H04W74/08 or H04L5/0055 or H04W84/12 or H04W74/00 or H04W72/0446).cpc.	US-PGPUB; USPAT; DERWENT	NEAR	ON	2020/12/26 14:30
S28	19	S26 not S25	US-PGPUB; USPAT; DERWENT	NEAR	ON	2020/12/26 14:30
S29	227	(mu\$2 or multi\$2 user) same trigger and (parameter or edca) same (timer or time\$out) with (respons or feedback or ack or acknowledg\$5)	US-PGPUB; USPAT; DERWENT	NEAR	ON	2020/12/26 14:35

SAMSUNG-1013, 55.

Notably, in the prosecution of the '879 patent, the Examiner only searched for two hours—apparently relying on the work done in the parent '035 patent prosecution. SAMSUNG-1002, 66-60. Specifically, the time stamps of searching for the '879 patent result in an hour and 16 minutes on August 30, 2022, then 3 minutes on September 2, 2022, then 14 minutes on September 8, 2022. SAMSUNG-1002, 66-69.

The Examiner also, again, failed to specifically search for CPC code H04L 5/0055 code and instead cited to the same search done for the '035 patent. *Compare SAMSUNG-1013, 55 with SAMSUNG-1002, 62.*

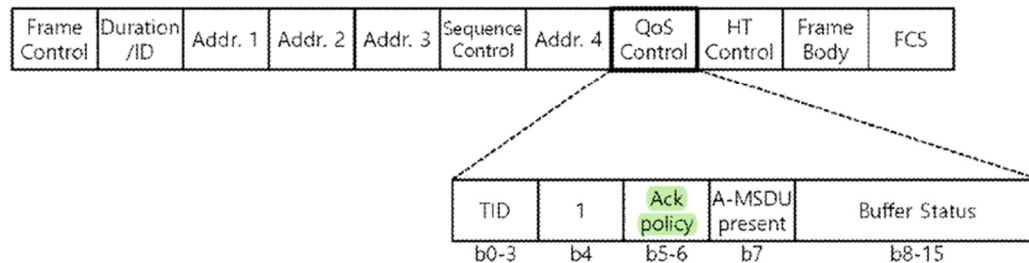
L27	109764	(H04W80/02 or H04W28/0268 or H04W74/0808 or H04W40/244 or H04W74/08 or H04L5/0055 or	(US-PGPUB; USPAT; DERWENT)	NEAR	ON	ON	2020/12/26 02:30 PM
-----	--------	--	----------------------------	------	----	----	---------------------

SAMSUNG-1002, 62.

For these reasons, the Examiner's search was flawed because the Examiner searched for either an "immediate response" or "not or no" "immediate response"

and did not perform searches with key terms from the claims such as “ACK policy,” “QoS policy,” “PPDU,” “MPDU,” or “trigger-based PPDU” or other terms and CPC codes that would have resulted in Kim or an equivalent reference. SAMSUNG-1013, 52-56. Such terms were known in the art, indeed, the ’035 and ’879 patents show the general and well-known frame structure and employment of “QoS Control field[s]” in FIG. 10a. SAMSUNG-1001, FIG. 10 and 17.

(a)



SAMSUNG-1001, FIG. 10a.

The lack of proper searching led initially to the lack of proper rejections to prior dependent claims 22-25, and eventually to the lack of proper rejection of the amendment to the independent claims that led to allowance. This is shown by the generalized rejection offered for original claims 22-25. SAMSUNG-1013, 737-740, 52-56 (Showing the search strategy lacking a search for “MPDU,” “PPDU,” and “trigger-based”).

Because the Examiner, relying too heavily on the work done in the parent ’035 patent’s prosecution, overlooked highly relevant disclosure of acknowledgement

protocols well-known in the art and discussed in Kim’s disclosure (among other publications teaching similar ACK policies), and failed to perform straight-forward search strategies that would have led to Kim, the Examiner erred in issuing the ’879 patent. Board resources are thus well-spent to correct the Examiner’s error and to prevent further errors in the examination of this family of applications, which remains pending.

D. Discretionary Denial is Not Warranted Under *Fintiv*

Wilus urges discretionary denial based on a misguided application of the *Fin-tiv* factors that does not override the important justifications for PTAB review discussed above. As explained below, the *Fintiv* factors weigh against discretionary denial. *See Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 5-6 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv I*”).

1. Factor 1: No Stay Has Been Requested

Fintiv Factor 1 looks to “whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted.” This factor is neutral given that no litigation stay has been requested and no evidence clearly establishes how the district court would resolve such a request even if a stay were requested upon institution.

As a starting point, neither party has requested a stay of the litigation. Wilus does not dispute this fact. Paper 8 at 9. Still, attempting to tilt this factor in its favor,

Wilus starts by citing various, unrelated cases from the Eastern District of Texas where a motion to stay was filed in the co-pending litigation *prior to institution in the IPR* and the motion was denied. *Id.* (citing *Trover Group, Inc. v. Dedicated Micros USA*, No. 2:13-cv-1047-WCB, 2015 WL 1069179, at *6 (E.D. Tex. Mar. 11, 2015) (“This Court's survey of cases from the Eastern District of Texas shows that when the PTAB *has not yet acted on a petition* for inter partes review, the courts have uniformly denied motions for a stay.” (emphasis added))). However, the critical inquiry under this factor is whether “evidence exists” that a stay will be “granted *if a proceeding is instituted.*” *Fintiv I*, at 6.

Wilus cites no case that precludes the possibility of a stay being granted in the Eastern District of Texas *after institution*. On the contrary, Wilus acknowledges, as it must, that EDTX does not automatically deny stays *after institution*, Paper 8 at 10-12, although Wilus still paints a misleading picture that the outcome of any stay requested after institution here would almost certainly be denied. In actuality, among decisions made in EDTX last year on motions to stay that were brought *after institution*, 28 percent of these motions were granted (i.e., 7 of 25 cases). SAMSUNG-1108. To date in 2025, EDTX has granted 39 percent of post-institution motions to stay (i.e., 7 of 18 cases). *Id.* Wilus also omits the fact that Judge Gilstrap and Magistrate Judge Payne have granted post-institution motions for stay where the defendant/petitioner has made a strong stipulation to be bound by IPR estoppel—exactly

as Samsung has done here with a stipulation (SAMSUNG-1022) that is far broader than even the IPR estoppel provisions. *See, e.g.*, SAMSUNG-1106; SAMSUNG-1107.

Despite its denials, Wilus’s brief ultimately wades into baseless speculation on how “likely” it is for the District Court to grant a stay of the co-pending litigation. Paper 8 at 10-12. But motions to stay invoke fact- and case-specific considerations, and it would be highly prejudicial to Samsung for adverse inferences to be drawn from rulings on stay motions being denied in different and unrelated cases. Indeed, for these reasons, the Board has repeatedly refused to “attempt to predict” how a District Court will rule on such stay motions. *See, e.g., Hulu, LLC v. SITO Mobile R&D IP, LLC*, IPR2021-00298, Paper 11 at 10-11 (May 19, 2021) (because “neither party has produced evidence that a stay has been requested[,]” “[w]e decline to infer, based on actions taken in a different case with different facts, how the District Court would rule should a stay be requested by the parties in the parallel case here.”) (quoting *Fintiv I*); *Sand Revolution II, LLC v. Continental Intermodal Group-Trucking LLC*, IPR2019-01393, Paper 24 at 7 (June 16, 2020) (informative).

2. *Factor 2: The Court’s Trial Date is Speculative and the Evidence Strongly Suggests a Trial Date Within a Month of the Board’s Expected Final Written Decision Date*

Fintiv Factor 2 looks to “proximity of the court’s trial date to the Board’s

projected statutory deadline for a final written decision” as part of a holistic evaluation of fairness and efficiency, which includes considering which forum will assess the patentability of the challenged claims. *See Fintiv I*, at 5-6; *see also Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15 at 7-17 (PTAB May 13, 2020) (informative) (“*Fintiv II*”) (explaining that, in evaluating the *Fintiv* factors, the Board “takes a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review”); *Illumina, Inc. v. Natera, Inc.*, IPR2019-01201, Paper 19 at 6 (PTAB Dec. 18, 2019) (“We have considered the positions of the parties and find that, on this record, considerations of efficiency, fairness, and the merits of the grounds in the Petition do not weigh in favor of denying the Petition.”).

Wilus contends that this factor weighs in favor of discretionary denial because “[t]he trial date [June 1, 2026] is scheduled *six months* before the date of FWD (December 2, 2026).” Paper 8 at 12 (emphasis original). But there is a wealth of evidence—including statistics cited by Wilus itself—establishing the uncertainty of the scheduled trial date. *See Sand Revolution II*, Paper 24 at 8 (finding that *Fintiv* factor 4 weighs against discretionary denial where the evidence demonstrates the trial date is uncertain).

First, statistics suggest that trial will occur much later. Wilus concedes that the median time-to-trial for the Eastern District of Texas has increased to 25.9 months according to official statistics from the Federal Court’s website. Paper 8 at

13. Wilus contends, however, that “even considering these statistics, the trial would still have already occurred several months (e.g., in September 2026) before the FWD in December 2026.” *Id.* But this is misleading and incorrect. Wilus filed its complaint asserting the ’879 patent on September 20, 2024. SAMSUNG-1004. With a September 20, 2024 filing date, the 25.9 median statistic suggests that trial will occur on November 16, 2026—over two months after Wilus’s listed date of September 2026 and only about two weeks before the FWD deadline.⁴

With a gap of only two weeks, the FWD could precede trial, assuming the ID and FWD issue before statutory deadlines, which is common. To aid in the ability of the FWD to precede trial, Samsung requests its typical 3-month period for the Petitioner Reply be shortened by up to two months. With this adjustment in schedule, the FWD date would be able to precede the expected trial date, and factor 2 weighs in favor of institution.

⁴ Since Wilus filed its brief, the Administrative Office of the U.S. Federal Courts has released new statistics through June 2025 indicating a 25.1 month median time-to-trial in the Eastern District of Texas. *See* SAMSUNG-1122. This places the projected trial date on October 23, 2026—within six weeks of the Board’s deadline to issue a Final Written Decision.

At worst, factor 2 is neutral because the PTAB precedent considers the *proximity* of the parallel proceeding to the FWD. When the FWD is due shortly after the expected trial date—here, about two weeks later—this factor receives little weight. *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 at 15 (PTAB December 1, 2020).

To be sure, the prospect of the currently scheduled trial date being delayed is significant given that Judge Gilstrap *currently has 10 trials simultaneously scheduled* to start jury selection on June 1, 2026, only one of which is the Wilus litigation. *See* SAMSUNG-1111. By advocating for discretionary denial based on the scheduled jury selection date, Wilus assumes without basis that Judge Gilstrap will prioritize its litigation over the other cases scheduled to begin jury selection on the same day. Even if none of the 10 cases were favored over the others, the likelihood that Wilus’s litigation would be the one selected to start jury selection on June 1, 2026, is small—just one in 10.

Wilus also fails to acknowledge the significant amount of time required to reach a final judgment ripe for any appeal—after the resolution of post-trial motions. A recent analysis of cases before Judge Gilstrap shows that post-trial motions are not resolved on average for 6.9 months after a jury trial. SAMSUNG-1109, 2. Even if jury selection for trial in the Wilus litigation did begin on June 1, 2026, the “final resolution” (if it occurs at all) would likely not occur until 2027 after the Board’s

Final Written Decision.

As a final point, Wilus ignores that four of the patents asserted as part of its litigation campaign against Samsung came later. Specifically, Wilus asserted U.S. Patent Nos. 10,911,186, 11,664,926, 11,716,171, and 12,004,262 against Samsung in a complaint filed on January 23, 2025. SAMSUNG-1110. Per the 25.1 month median time-to-trial statistic, trial is expected to occur for these patents on February 25, 2027. With petitions filed against these patents in June 2025, the FWDs (expected in December 2026 and January 2027) are due months earlier. Because *Fintiv* does not support denial for these petitions, Board resources are best dedicated to resolving validity for the overall complex and diverse dispute, rather than providing a piecemeal review of just the four patents Wilus chose to assert against Samsung in a later complaint. *See Embody*, IPR2025-00248, Paper 13 at 2-3.

3. *Factor 3: Limited Resources Would Have Been Expended by the Time of the Decision on Institution*

Fintiv factor 3—which considers the “amount and type of work already completed in the parallel litigation by the court and the parties at the time of the institution decision”—also favors institution.

As of the Petition’s filing, the parties had only exchanged infringement and invalidity contentions. *See WILUS-2001*, 5. As of the filing of this paper, the case has not otherwise advanced much since the filing of the Petition, e.g., no depositions

have been scheduled or have occurred. The parties have only just recently even *identified* potential terms for construction, and the date of this paper’s filing will mark the first exchange of the parties’ *preliminary* claim constructions. *Id.*

Wilus’s assertions of the “substantial time and resources” that would be invested in the District Court as of the Decision on Institution (December 2, 2025) are misleading. *See* Paper 8 at 14-17. For example, while claim construction briefing will have been completed before the decision on institution, ***the claim construction hearing will not have occurred.*** *See SAP Am., Inc. v. Cyandia, Inc.*, IPR2024-01495, Paper 13 at 7 (PTAB Apr. 7, 2025) (finding that *Fintiv* factor 3 weighs against discretionary denial where, as is the case here, the *Markman* hearing is scheduled two weeks after the decision on institution is due). Moreover, the deadlines for expert discovery (Feb. 17, 2025) and dispositive motions (Feb. 23, 2026) would remain months away. WILUS-2001.

By the time a Decision on Institution is entered in this proceeding, far more investment will remain in the litigation. This further counsels against discretionary denial, or at worst, renders Factor 3 neutral.

4. *Factor 4: No Overlap Between This IPR and the District Court Proceeding*

Fintiv factor 4—which considers overlap between issues raised in the Petition and in the parallel proceeding—strongly favors institution. Samsung’s broad stipulation—even more sweeping than that made in *Sotera*—eliminates any potential

overlap between this proceeding and Wilus’s district court action. *See* SAMSUNG-1022. Specifically, Samsung filed a stipulation (SAMSUNG-1022) providing that, if the PTAB institutes review, Samsung will not pursue in District Court litigation:

- “the specific grounds asserted in *inter partes* review in this proceeding, or any other ground that could have been reasonably raised in this proceeding (i.e., any ground that could have been raised under §§ 102 or 103 on the basis of prior art patents or printed publications). *See Sotera Wireless, Inc. v. Masimo Corporation*, IPR2020-01019, Paper 12 (PTAB Dec. 1, 2020)”; and
- “combinations of the prior art asserted in this proceeding with unpublished system prior art (or any other type of prior art). *See Motorola Solutions, Inc. v. Stellar, LLC*, IPR2024- 01205, IPR2024-01206, IPR2024-01207 & IPR2024-01208, Paper 19 (PTAB Mar. 28, 2025).”

Wilus attempts to dismiss Samsung’s stipulation as being “of limited value” and failing to provide “a true alternative to the district court proceeding,” but, in doing so, misrepresents the scope of Samsung’s stipulation. Paper 8 at 19 (citations omitted). To be clear, Samsung’s stipulation here is more robust than the *Sotera* stipulation addressed in *Motorola*. Samsung’s stipulation guarantees that, if instituted, none of the prior art asserted in the Petition will be used in the District Court proceeding—even in combination with unpublished system art.

Wilus contends that a recent Federal Circuit decision holding that IPR estoppel does not preclude a petitioner from relying on prior art asserted in a petition as evidence that the claimed invention was known or used by others, on sale, or in public use “at the very least suggests the possibility that Samsung could present in the district court precisely the same combinations of prior art references.” Paper 8 at 19-20 (citing *Ingenico Inc. v. IOENGINE, LLC*, 136 F.4th 1354, 1366 (Fed. Cir. 2025)). But the *Ingenico* decision in no way affects the scope of Samsung’s stipulation. Indeed, Samsung’s broad stipulation covers not only unpublished system art (see *Motorola Solutions, Inc. v. Stellar, LLC*, IPR2024-01205, Paper 19 (PTAB Mar. 28, 2025)), but also precludes Samsung from combining “the prior art asserted in this proceeding” with “*any other type of prior art.*” SAMSUNG-1022 (emphasis added). In short, Wilus’s speculative arguments are not grounded in the reality of Samsung’s broad stipulation.

What Wilus demands is that Samsung essentially waive *all* invalidity defenses because “[s]ystems implementing IEEE 802.11ac” (Wi-Fi 5) or the “knowledge of one of skill in the art” may overlap with the prior art presented in the petition. Paper 8 at 20-21. But this goes far beyond merely preventing overlap between the proceedings—it asks Petitioner to “forgo *any use of patents or printed publications as evidence of prior art*, whether alone or as a combination, and *under any ground*, including public use, public sale, and otherwise available to the public grounds.” Paper

8 at 22 (emphasis added). Neither *Sotera* nor *Motorola* ask this much of a petitioner, and neither should Wilus. Rather, Samsung has provided a “broad” stipulation on par with those offered by the petitioners in *Tesla* and *Shenzhen*. See *Tesla*, Paper 10 at 2; *Shenzhen*, Paper 10 at 3. This “broad stipulation ... weighs strongly in favor of not exercising discretion to deny institution.” *Sotera*, Paper 12 at 19.

Wilus next contends that “Samsung’s stipulation does not prevent the same references from being raised in the Co-Pending litigation by another Defendant [(HP)]” because “Samsung’s carefully worded stipulation does not prevent the art used in this Petition or similar prior art arguments to be made again in the Co-Pending Litigation.” Paper 8 at 23. Wilus again asks too much of Samsung—it cannot offer stipulations on behalf of an unrelated co-defendant in a consolidated proceeding. Instead, Samsung “*has done its part* to ‘mitigate[] any concerns of duplicative efforts between the district court and the Board, as well as concerns of potentially conflicting decisions.’” *Luminex Int’l Co., Ltd. v. Signify Holdings B.V.*, IPR2024-00101, Paper 20 at 29-30 (Vidal Nov. 21, 2024) (emphasis added) (quoting *Sotera*, Paper 12 at 18–19) (finding unpersuasive Patent Owner’s arguments that Petitioner’s *Sotera* stipulation is ineffective because “it only concerns its own actions” and not its co-defendants). By Wilus’s reasoning, if a petitioner is not a party to the district court action, then *Fintiv* factor 4 should weigh *against* the non-party petitioner because it has no ability to control the grounds presented by the defendants in district

court. This is not the case. *See, e.g., POSCO Co., Ltd. v. ArcelorMittal*, IPR2025-00370, Paper 10 at 2 (Stewart June 25, 2025).

Finally, Wilus's argument that "Samsung's failure to address potential subsequent *ex parte* reexaminations in its stipulation is another reason it should be given little weight" has no merit. Paper 8 at 23. As an initial matter, Factor 4 concerns overlap between the IPR and a parallel proceeding, but no parallel *ex parte* reexamination exists in this case. This is because Samsung has never filed a request for *ex parte* reexamination on the '879 patent. Wilus's objection is thus speculative at best. Wilus's concerns are also drastically overplayed because if IPR is instituted and proceeds to a Final Written Decision, Samsung would be estopped from using the Petition grounds, or any other grounds that could have been reasonably raised in an IPR, in an *ex parte* reexamination. 35 U.S.C. § 315(e)(1).

In sum, there will be virtually no overlap between this proceeding and the parallel District Court litigation if IPR is instituted. Samsung's petitions include prior art grounds that have never been raised in the District Court (i.e., grounds 1D-2C based on Choudhury), and Samsung's stipulation is even more expansive than *Sotera* thus ensuring that the Office's goals of "efficiency and integrity" will be achieved by "not duplicating efforts" and "resolving materially different patentability issues." *Apple, Inc. v. SEVEN Networks, LLC*, IPR2020-00156, Paper 10 at 19 (PTAB June 15, 2020); *Sand Revolution II*, Paper 24 at 12; *Google LLC v. Flypsi*,

Inc., IPR2023-00360, Paper 9 at 36-39 (PTAB Aug. 2, 2023). Therefore, *Fintiv* factor 4 strongly favors institution.

5. *Factor 5: The Same Parties are in the Co-Pending Litigation*

Fintiv Factor 5—The parties in this IPR are also parties in the co-pending Texas litigation.

6. *Factor 6: Wilus’s Identified “Other Circumstances” Lack Merit and Do Not Weigh in Favor of Discretionary Denial*

Fintiv factor 6—which considers other circumstances that impact the exercise of discretion, including the merits—strongly favors institution.

Wilus makes a baseless assertion that “Petitioner failed to show a reasonable likelihood of success on any challenged claims.” Paper 8 at 23-24. Tellingly, however, Wilus failed to identify, let alone allege, even a single deficiency in the Petition’s analysis of the prior art grounds or their relevance to the ’879 patent’s claims.

The Petition’s merits are strong, asserting two prior art references—Lee and Choudhury—that each alone render obvious all features of the independent claims. The Petition also includes pre-priority drafts of the accused 802.11ax (Wi-Fi 6) standard and prior art references from other standards contributors, including engineers from LG, Qualcomm, and Nokia. A review of both the draft standard as of the ’879 patent’s priority date and the work of those directly involved in developing the standard demonstrates a compelling case of unpatentability. The

Board should be permitted to make this determination.

In summary, a holistic evaluation of the *Fintiv* factors and other discretionary criteria discussed above strongly counsel against discretionary denial at least because this proceeding will allow a just and efficient resolution of the patentability of the '879 patent's claims, while significantly ameliorating overlapping or duplicative functions being performed in the co-pending litigation.

E. Additional Considerations Counsel Against Discretionary Denial

The expert testimony submitted with the Petition supports institution because it offers well-reasoned testimony supported by a wealth of evidence that demonstrates why each of Lee and Choudhury render obvious all features of the independent claims. In addition, Samsung's compelling contribution to the U.S. economy weighs in favor of institution when compared against the non-existent contributions by Wilus—a non-practicing entity that does not make any products and only seeks to impose a tax on the widely-adopted Wi-Fi technology used by most Americans every single day.

1. The Extent of the Petition's Reliance on Expert Testimony

The Petition is supported by the expert declaration of Dr. Matthew Valenti. *See* SAMSUNG-1003. Dr. Valenti's declaration includes testimony, which is not only guided by years of education and experience, but is further corroborated by ample documentary evidence including dozens of additional exhibits that confirm

and amplify the positions and unpatentability arguments advanced in the Petition.

While identifying no instance where the expert declaration relied on bare testimony to fill a gap in the art, Wilus nonetheless contends that Dr. Valenti’s “declaration is riddled with conclusory statements and is essentially a mirror image of the Petition.” Paper 8 at 25. This is not so. In fact, Dr. Valenti’s declaration “provide[s] helpful context [and] [] explain[s] terms of art.” ⁵ Paper 8 at 25 (citing Interim Process FAQ No. 22). For example, Dr. Valenti provides corroborated testimony describing the state of the art of Basic Service Sets in the 802.11 (Wi-Fi) standard. *See* SAMSUNG-1003 ¶¶ 51-66 (citing corroborating exhibits 1012, 1016, 1017, and 1022). Dr. Valenti also provides corroborated testimony regarding how a POSITA would have understood the operation of a wireless communication terminal with respect to Trigger-based Transmissions and UL-MU transmissions (SAMSUNG-1003 ¶¶ 57-59 (citing SAMSUNG-1012, 1016, and 1022)). Additionally, Dr. Valenti provides detailed technical explanations supporting the petition’s proposed obviousness combinations and motivations to combine. *Id.* ¶¶ 90-108. Dr. Valenti’s robust testimony is confirmed and corroborated by several third-party references. *See generally* SAMSUNG-1003 ¶ 20; Exs. 1012-1022.

⁵ Indeed, the Petition includes a comprehensive glossary of key terms used in the ’879 patent.

In short, the petition advances strong and meritorious grounds that are supported by Dr. Valenti's focused and corroborated expert testimony. This factor favors institution.

2. *Compelling Economic, Public Health, or National Security Interests*

Wilus contends that the '879 patent—along with the eleven other patents it has asserted against Samsung—are practiced not just by Samsung's products but are in fact essential to the IEEE 802.11ax (Wi-Fi 6) standard. *See* Paper 8 at 3. Indeed, Wilus has brought patent infringement actions against other consumer device makers, including HP—Samsung's co-defendant in the District Court litigation. Paper 8 at 3–4. Thus, *the validity of Wilus's patents is not a matter confined to the parties—it implicates entire sectors of the U.S. economy.* Wi-Fi is a ubiquitous standard, embedded in billions of devices and serving as the backbone of modern commerce, education, healthcare, and government operations. Allowing invalid patents that purport to cover such a standard to persist functions as a market-wide tax, distorting competition and inflating costs for manufacturers and consumers alike. As Samsung's petitions demonstrate, Wilus's asserted patents lack merit: they cover technology developed and patented by others, including Samsung itself. Permitting such patents to remain in force extracts wealth not in exchange for genuine innovation, but *for the benefit of a foreign non-practicing entity*, to the detriment of American industry and consumers that rely on the ubiquitous Wi-Fi technology every day.

Unlike Wilus, which has never produced a product based on its alleged innovations, Samsung is responsible for substantial and sustained investments and economic activity in the United States. For example, Samsung’s investment in the US totals **\$47 billion** since 1978 (SAMSUNG-1102), and Samsung proposes **\$191 billion** in further investment, largely in Texas. SAMSUNG-1103. Further, “[s]ince 1996, Samsung Semiconductor has invested **\$18 billion** in operating two fabs at its Austin, Texas, campus—making it **one of the largest direct foreign investments in United States history.**” SAMSUNG-1104 (emphasis added). Additionally, Samsung’s investment is ongoing, with “President Trump Say[ing] Samsung Is Planning a ‘Massive Investment’ In The US.” SAMSUNG-1105. Thus, Samsung’s substantial and ongoing investment (e.g., in US-made semiconductors) presents a compelling economic interest, and supports the U.S.’s national security interests.

Such considerations weigh heavily against discretionary denial and Samsung respectfully requests an opportunity for the strong grounds presented in its petition seeking review of the ’879 patent to be considered by the Board.

III. CONCLUSION

For the foregoing reasons, a holistic evaluation of the complex and diverse litigation between the parties, the *Fintiv* factors and the additional considerations laid out in the Stewart Memorandum strongly weigh against discretionary denial.

Petitioner therefore respectfully requests that this case proceed to an institution determination on the merits.

Respectfully submitted,

Dated September 17, 2025

/Jeremy J. Monaldo/

W. Karl Renner, Reg. No. 41,265
Jeremy J. Monaldo, Reg. No. 58,680
John C. Phillips, Reg. No. 35,322
Usman A. Kahn, Reg. No. 70,439
Jonathan C. Driesslein, Reg. No. 82,202
Fish & Richardson P.C.
60 South Sixth Street, Suite 3200
Minneapolis, MN 55402
T: 202-783-5070
F: 877-769-7945

Attorneys for Petitioner

CERTIFICATION UNDER 37 CFR §42.24

Under the provisions of 37 CFR § 42.24(d), the undersigned hereby certifies that the word count for the foregoing Petitioner's Opposition to Patent Owner's Request for Discretionary Denial totals 9,235 words, which is less than the 14,000 words allowed under 37 CFR § 42.24.

Respectfully submitted,

Dated September 17, 2025

/Jeremy J. Monaldo/

W. Karl Renner, Reg. No. 41,265

Jeremy J. Monaldo, Reg. No. 58,680

John C. Phillips, Reg. No. 35,322

Usman A. Kahn, Reg. No. 70,439

Jonathan C. Driesslein, Reg. No. 82,202

Fish & Richardson P.C.

60 South Sixth Street, Suite 3200

Minneapolis, MN 55402

T: 202-783-5070

F: 877-769-7945

Attorneys for Petitioner

CERTIFICATE OF SERVICE

Pursuant to 37 CFR §§ 42.6(e)(4) and 42.205(b), the undersigned certifies that on September 17, 2025, a complete and entire copy of this Petitioner's Opposition to Patent Owner's Request for Discretionary Denial and Accompanying Exhibits were provided by email to the Patent Owner by serving the correspondence email address of record as follows:

Reza Mirzaie
Neil A. Rubin
Philip X. Wang
Linjun Xu
RUSS, AUGUST & KABAT
12424 Wilshire Boulevard, 12th Floor
Los Angeles, CA 90025

Email: rak_Wilus@raklaw.com

 /Diana Bradley/
Diana Bradley
Fish & Richardson P.C.
60 South Sixth Street, Suite 3200
Minneapolis, MN 55402
bradley@fr.com