UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS AMERICA, INC.,

SAMSUNG ELECTRONICS CO., LTD.,

Petitioners,

v.

MASSIVELY BROADBAND LLC,

Patent Owner.

IPR2025-01564
Patent 11,063,625

PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL

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Nvidia Corp. v. Neural AI, LLC,
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Polaris PowerLED Techs., LLC v. Samsung Elecs. Am., Inc.,
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Samsung Elecs. Co. v. iCashe, Inc.,
IPR2025-00639-00645, Paper 11 (PTAB Aug. 14, 2025) 9

Samsung Elecs. Co. v. One-E-Way, Inc.,
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SAS Institute, Inc. v. Iancu,
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Statutes

35 U.S.C. § 314(a) 1, 11, 16

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TABLE OF PATENT OWNER EXHIBITS

Exhibit No.	Description
2001	Complaint for Patent Infringement, Dkt. 1, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex. June 6, 2025)
2002	Quitclaim Assignment from Theodore S. Rappaport to MASSIVELY BROADBAND LLC, Dec. 31, 2024
2003	Texas A&M Hagler Institute for Advanced Study, Dr. Theodore (Ted) S. Rappaport, Class of 2024-25, hias.tamu.edu/fellow/dr-theodore-ted-s-rappaport/ (retrieved Oct. 22, 2025)
2004	Transcript of Pioneer Award Presentation, 2022 Brooklyn 6G Wireless Summit, April 27, 2022, available at ieeetv.ieee.org/channels/communications/pioneer-award-tom-wheeler-2022-b6gs-virtual
2005	National Academy for Engineering, Dr. Theodore S. Rappaport, www.nae.edu/250163/Dr-Theodore-Scott-Rappaport (retrieved Oct. 20, 2025)
2006	"NYU Professor Theodore S. Rappaport named to Wireless Hall of Fame," July 25, 2019, www.prnewswire.com/news-releases/nyu-professor-theodore-s-rappaport-named-to-wireless-hall-of-fame-300891117.html (retrieved Oct. 20, 2025)
2007	"WNCG Awarded NSF Industry Collaboration Center," Feb. 2, 2011, www.ece.utexas.edu/news/wncg-awarded-nsf-industry-collaboration-center (retrieved Oct. 20, 2025)
2008	"InterDigital Joins NYU WIRELESS as an Industrial Affiliate," Oct. 8, 2012, engineering.nyu.edu/news/interdigital-joins-nyu-wireless-industrial-affiliate (retrieved Oct. 20, 2025)

Exhibit No.	Description
2009	"Samsung Research America Joins NYU WIRELESS Industrial Affiliate Program," Jan. 30, 2019, wireless.engineering.nyu.edu/samsung-research-america-joins-nyu-wireless-industrial-affiliate-program/ (retrieved Oct. 20, 2025)
2010	Defendants' Answer to Plaintiff's Complaint, Dkt. 16, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex. Sept. 29, 2025)
2011	PTAB Trial Statistics, 2025 End of Year Outcome Roundup, Patent Trial and Appeal Board, Fiscal Year 2025, available at www.uspto.gov/sites/default/files/documents/Trial_StatsFY25_Q4.pdf (last accessed Nov. 6, 2025)
2012	U.S. Patent 10,523,258
2013	T.S. Rappaport et al., "Millimeter Wave Mobile Communications for 5G Cellular: It Will Work!" IEEE Access, May 10, 2013, pp. 335-349.
2014	S. Hur et al., "Proposal on Millimeter-Wave Channel Modeling for 5G Cellular System," IEEE J. Selected Topics Signal Processing, vol. 10, no. 3, April 2016, pp. 454-469
2015	T.S. Rappaport et al., "Smart Antennas Could Open Up New Spectrum For 5G," IEEE Spectrum, Aug. 28, 2014, spectrum.ieee.org/smart-antennas-could-open-up-new-spectrum-for-5g (retrieved Oct. 21, 2025)
2016	K. Haneda et al., "Indoor 5G 3GPP-like channel models for office and shopping mall environments," 2016 IEEE International Conference on Communications Workshops (ICC), Kuala Lumpur, Malaysia, 2016, pp. 694-99

Exhibit No.	Description
2017	K. Haneda et al., "5G 3GPP-Like Channel Models for Outdoor Urban Microcellular and Macrocellular Environments," 2016 IEEE 83rd Vehicular Technology Conference (VTC Spring), Nanjing, China, 2016, pp. 1-7
2018	First Amended Docket Control Order, Dkt. 25, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co.*, No. 2:25-cv-00608-JRG (E.D. Tex. Oct. 20, 2025)
2019	Lex Machina trial statistics for District Judge James Rodney Gilstrap, from Jan. 1, 2012 to Oct. 22, 2025
2020	Defendants' First Set of Interrogatories to Plaintiff, Oct. 21, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co.*, No. 2:25-cv-00608-JRG (E.D. Tex.)
2021	Oct. 21, 2025 Discovery Letter from Samsung, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co.*, No. 2:25-cv-00608-JRG (E.D. Tex.)
2022	RESERVED
2023	Excerpts from T. Rappaport et al., Millimeter Wave Wireless Communications, Pearson Education, Inc., 2015
2024	Office Action, dated April 19, 2019, for application Serial No. 15/898,315
2025	Declaration of Theodore S. Rappaport
2026	*MASSIVELY BROADBAND LLC v. Samsung Elecs. Co.*, No. 2:25-cv-00608-JRG, Dkt. 7 (E.D. Tex. June 25, 2025)
2027	*MASSIVELY BROADBAND LLC v. Samsung Elecs. Co*., No. 2:25-cv-00608-JRG, Dkt. 24 (E.D. Tex. Oct. 15, 2025)
2028	*MASSIVELY BROADBAND LLC v. Samsung Elecs. Co.*, No. 2:25-cv-00608-JRG, Dkt. 29 (E.D. Tex. Oct. 29, 2025)

Exhibit No.	Description
2029	Samsung's P.R. 3-3 and 3-4 Invalidity Contentions, Nov. 12, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co.*, No. 2:25-cv-00608-JRG (E.D. Tex.)
2030	Oct. 31, 2025 Discovery Letter from MBB, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co.*, No. 2:25-cv-00608-JRG (E.D. Tex.)
2031	Plaintiff's First Set of Common Interrogatories to Defendants, Oct. 31, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co.*, No. 2:25-cv-00608-JRG (E.D. Tex.)
2032	RESERVED
2033	U.S. Patent No. 7,676,194
2034	U.S. Patent No. 8,923,754
2035	U.S. Patent No. 9,667,337
2036	U.S. Patent No. 10,224,999
2037	U.S. Patent No. 10,797,783
2038	U.S. Patent No. 8,350,763
2039	U.S. Patent No. 8,593,358
2040	RESERVED
2041	U.S. Patent No. 11,876,548
2042	U.S. Patent No. 8,224,794
2043	U.S. Patent No. 8,515,925
2044	U.S. Patent No. 8,725,700

Exhibit No.	Description
2045	Samsung's Notice of Subpoena *Duces Tecum* and *Ad Testificandum* to Apple Inc., Nov. 11, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex.) (without Ex. C, Protective Order)
2046	Samsung's Notice of Subpoena *Duces Tecum* and *Ad Testificandum* to Blackberry Corp., Nov. 11, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex.) (without Ex. C, Protective Order)
2047	Samsung's Notice of Subpoena *Duces Tecum* and *Ad Testificandum* to D-Link System Inc., Nov. 11, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex.) (without Ex. C, Protective Order)
2048	Samsung's Notice of Subpoena *Duces Tecum* and *Ad Testificandum* to Netgear, Inc., Nov. 11, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex.) (without Ex. C, Protective Order)
2049	Samsung's Notice of Subpoena *Duces Tecum* and *Ad Testificandum* to Ruckus Wireless LLC, Nov. 11, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex.) (without Ex. C, Protective Order)
2050	Samsung's Notice of Subpoena *Duces Tecum* and *Ad Testificandum* to Sierra Wireless, Nov. 11, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex.) (without Ex. C, Protective Order)
2051	Samsung's Notice of Subpoena *Duces Tecum* and *Ad Testificandum* to Digital Envoy Inc., Nov. 12, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex.) (without Ex. C, Protective Order)

Exhibit No.	Description
2052	Samsung's Notice of Subpoena *Duces Tecum* and *Ad Testificandum* to Hewlett Packard Enterprise Co., Nov. 12, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex.) (without Ex. C, Protective Order)
2053	Samsung's Notice of Subpoena *Duces Tecum* and *Ad Testificandum* to SOTI US Inc., Nov. 12, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex.) (without Ex. C, Protective Order)
2054	Samsung's Notice of Subpoena *Duces Tecum* and *Ad Testificandum* to Green Dot, Corp., Nov. 12, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex.) (without Ex. C, Protective Order)
2055	Samsung's Notice of Subpoena *Duces Tecum* and *Ad Testificandum* to HP Inc., Nov. 12, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex.) (without Ex. C, Protective Order)
2056	Samsung's Notice of Subpoena *Duces Tecum* and *Ad Testificandum* to Open Mobile Alliance, Nov. 12, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex.) (without Ex. C, Protective Order)
2057	Samsung's Notice of Subpoena *Duces Tecum* and *Ad Testificandum* to Omnissa, LLC, Nov. 12, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex.) (without Ex. C, Protective Order)
2058	Samsung's Notice of Subpoena *Duces Tecum* and *Ad Testificandum* to Verve Group, Inc., Nov. 12, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex.) (without Ex. C, Protective Order)

Exhibit No.	Description
2059	Samsung's Notice of Subpoena *Duces Tecum* and *Ad Testificandum* to Linksys USA, Inc., Nov. 12, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex.) (without Ex. C, Protective Order)
2060	Samsung's Notice of Subpoena *Duces Tecum* and *Ad Testificandum* to Nokia of America Corp., Nov. 12, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex.) (without Ex. C, Protective Order)
2061	Samsung's Notice of Subpoena *Duces Tecum* and *Ad Testificandum* to Cisco Systems, Inc., Nov. 12, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex.) (without Ex. C, Protective Order)
2062	Samsung's Notice of Second Subpoena *Duces Tecum* and *Ad Testificandum* to Netgear, Inc., Nov. 17, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex.) (without Ex. C, Protective Order)
2063	Samsung's Notice of Subpoena *Duces Tecum* and *Ad Testificandum* to SageNet LLC, Nov. 21, 2025, *MASSIVELY BROADBAND LLC v. Samsung Elecs. Co. Ltd. et al.*, No. 2:25-cv-00608-JRG (E.D. Tex.) (without Ex. C, Protective Order)

Patent Owner MASSIVELY BROADBAND LLC ("MBB") submits this request for discretionary denial of IPR2025-01564 for Patent 11,063,625 ("'625 Patent") pursuant to the Board's "Interim Processes for PTAB Workload Management" memorandum, dated March 26, 2025 (www.uspto.gov/sites/default/files/documents/InterimProcesses-PTABWorkloadMgmt-20250326.pdf) ("Interim Memo") and the "Director Institution of AIA Trial Proceedings" memorandum, dated October 17, 2025 (www.uspto.gov/sites/default/files/documents/Director_Institution_of_AIA_Trial_Proceedings.pdf) ("Director Institution Memo").

I. INTRODUCTION

The Director should deny institution under 35 U.S.C. § 314(a) because review of the '625 Patent would not meaningfully advance the efficiency or workload-management goals that guide the Director's discretion. The challenged patent is one of twelve patents ("Asserted Patents") asserted in a single district court action pending in the Eastern District of Texas. Collectively, the Asserted Patents contain 340 claims, only a small fraction of which will be asserted at trial in that case, which already is progressing under a well-structured docket control order designed to narrow claims and prior art "***to reduce costs.***" Ex. 2018, 5. Petitioners, Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. (collectively, "Samsung") have not moved to stay the litigation, as the district court

customarily declines such stay requests before institution decisions. In light of this parallel proceeding, there are three reasons to deny institution here.

First, the '625 Patent issued more than four years ago, another patent in its family issued more than twelve years ago, and nine of the Asserted Patents have been in force for over six years, with an average tenure of 9.5 years, creating strong settled expectations of validity. Samsung's own conduct reinforces those circumstances. For nearly three decades, Samsung has regarded the sole inventor, Professor Theodore Rappaport ("Rappaport"), as a leader in the field, collaborated with him closely, invited him to its campuses, replicating one of his measurement systems at Samsung's own research complex, and repeatedly citing his foundational research in Samsung's own technical papers and patents. Ex. 2025, ¶¶ 16–28. Samsung never previously challenged any of the Asserted Patents, including the '625 Patent. That history provides an additional compelling equitable consideration favoring denial. *See e.g.*, Ex. 2025, ¶¶ 15-27.

Second, institution would be inefficient and duplicate the efforts of the district court. Twelve concurrent IPRs (one for each Asserted Patent) would require the Board to evaluate all 340 challenged claims across the Asserted Patents, whereas the district court's local rules and applicable docket control order will narrow the case to a small subset of those claims. The Board, therefore, would be required to expend substantially more effort than the court, including on claims

that will never be adjudicated, contrary to the Office's stated capacity and efficiency priorities set forth in the Director Institution Memo.

Finally, nearly every factor under the *Fintiv* framework favors denial: Samsung has not requested a stay; the parties and the court have already invested substantially in the litigation; the issues and parties are identical; and the Petition relies on a purported plain and ordinary meaning of a claim term that is materially different from the dictionary definition it cites. The only factor that does not weigh heavily in favor of denial is trial proximity, which is at best neutral; the projected final written decision for this IPR proceeding will issue only six weeks before trial, and Samsung's last-filed IPR will conclude merely one week before trial.

Taken together or standing alone, these considerations establish that institution would undercut longstanding expectations regarding the validity of the '625 Patent, duplicate the district court's work, and consume significant administrative resources. The Director should, therefore, exercise its discretion to deny institution.

II. FACTUAL BACKGROUND

A. The Patent Owner

Rappaport is the sole named inventor for the '625 Patent. Rappaport is a well-known, award-winning researcher, inventor and educator in wireless communications. Ex. 2001, ¶¶ 1, 246-248. He is credited as being the "father" of

5G cellular millimeter wave ("mmWave") (Ex. 2003, 3; Ex. 2004, 2; Exs. 2005-2006), having authored the seminal paper and book on the subject. Exs. 2013, 2023. His technical contributions in wireless communications are widely recognized in the industry, including by Samsung. Ex. 2001, ¶ 47; Ex. 2025, ¶¶ 10-28. He also established wireless research centers at Virginia Tech in 1990, University of Texas ("UT") in 2002, and New York University ("NYU") in 2012, each of which holds an annual wireless communications conference that he launched. Ex. 2025, ¶¶ 8-9. He also authored a seminal textbook on wireless communications. *Id*., ¶ 15.

Samsung, as a manufacturer and seller of equipment that employs Wi-Fi and cellular wireless communication technologies, including mmWave, has been a member, at various times, in all three of Rappaport's university research centers. Exs. 2007-2009; Ex. 2025, ¶ 17. For years, Rappaport and Samsung have collaborated extensively: Samsung funded and participated in research projects in Rappaport's labs, hosted Rappaport for lectures in Korea, and Rappaport and Samsung employees co-authored multiple technical papers. Ex. 2001, ¶¶ 250-257; Ex. 2010, ¶¶ 250-257; Exs. 2013-2017; Ex. 2025, ¶¶ 17-25. Samsung has also praised and cited Rappaport's work (Ex. 2025, ¶¶ 26-28) and filed his seminal textbook (*id*., ¶ 15) on wireless communications as an exhibit in an IPR. *See Samsung Elecs. Co. v. One-E-Way, Inc.*, IPR2025-01540, Ex. 1018.

Prior to December 31, 2024, Rappaport owned all of the Asserted Patents. On that date, he assigned all of the Asserted Patents to MBB, of which Rappaport is sole founder and manager. Ex. 2002; Ex. 2001, ¶ 8.

B. The Parallel District Court Litigation and the Related IPRs

On June 6, 2025, MBB sued Samsung in the Eastern District of Texas asserting the '625 Patent as one of twelve Asserted Patents from three patent families that involve similar subject matter – wireless communications. Ex. 2001, ¶ 2. After seeking and obtaining a 90-day extension to answer the complaint (Ex. 2026), Samsung commenced filing IPRs, filing one IPR petition for each Asserted Patent. *See* Paper 8. Samsung filed its first IPR on September 25, 2025 (IPR2025-01565) and filed its last of twelve IPRs on November 3, 2025 (IPR2026-00103). The Board has not yet reached an institution decision on any of the IPRs.

In the meantime, the parallel district court litigation has progressed substantially. Samsung filed its Answer on September 29, 2025, asserting forty-eight affirmative defenses, including invalidity of all of the Asserted Patents on numerous grounds. Ex. 2010, 54-63. Thereafter, the Court issued a discovery order, a protective order, and a docket control order, setting trial for May 17, 2027. Exs. 2027-2028, 2018. MBB has served preliminary infringement contentions (Ex. 1011); the parties have exchanged initial disclosures and written discovery requests (Exs. 2020, 2021, 2030, 2031), and made substantial document

productions. Samsung has also served extensive invalidity contentions (Ex. 2029) that overlap with the assertions in the IPRs. Additionally, Samsung recently served nineteen (19) subpoenas to companies in the industry seeking additional prior art to assert in the district court regardless of whether this IPR is instituted. Exs. 2045-2063.

C. The '625 Patent and Other Asserted Patents

The '625 Patent relates to wireless mobile devices with a steerable antenna to avoid radiating beams at high frequencies (10 GHz or above) in predetermined zones or spans of directions. Ex. 1001, Abstract. As shown in the table below: (i) nine of the twelve Asserted Patents have been in force for more than six years; and (ii) each family includes ***at least one patent in force for more than twelve years***.

Asserted Patent	Fam	Patent Issue Date	Tenure (Years)	Case No.	IPR File Date	Exp. FWD Date
7,676,194	A	09-Mar-10	15.6	IPR2026-00035	9-Oct-25	16-Apr-27
8,224,794	B	17-Jul-12	13.3	IPR2026-00103	3-Nov-25	10-May-27
8,350,763	C	08-Jan-13	12.8	IPR2025-01565	25-Sep-25	7-Apr-27
8,515,925	B	20-Aug-13	12.2	IPR2026-00032	12-Oct-25	16-Apr-27
8,593,358	C	26-Nov-13	11.9	IPR2025-01587	21-Oct-25	26-Apr-27
8,725,700	B	13-May-14	11.5	IPR2026-00086	24-Oct-25	29-Apr-27
8,923,754	A	30-Dec-14	10.8	IPR2025-01595	29-Sep-25	6-Apr-27
9,667,337	A	30-May-17	8.4	IPR2026-00033	22-Oct-25	27-Apr-27
10,224,999	A	05-Mar-19	6.7	IPR2025-01594	30-Sep-25	8-Apr-27
10,797,783	A	06-Oct-20	5.1	IPR2025-01605	14-Oct-25	22-Apr-27
11,063,625	**C**	**13-Jul-21**	**4.3**	**IPR2025-01564**	**26-Sep-25**	**6-Apr-27**
11,876,548	C	16-Jan-24	1.8	IPR2025-01563	9-Oct-25	16-Apr-27

The Asserted Patents are part of three families. Each member of the

Intelligent Wireless Broadband Relay patent family (family A in the table) shares a common specification (Exs. 2033-2037), as does each member of the Network Monitoring patent family (family B). Exs. 2042-2044. In the third family, the Smart Antenna patent family (family C), Patent Nos. 8,350,763 and 8,593,358 share a common specification (Exs. 2038, 2039), while the later two patents (the '625 Patent and Patent No. 11,876,548) are continuations-in-part that share an extended version of that specification. Exs. 1001; 2041.

Finally, the table also reflects the dates Samsung filed the IPRs and the projected statutory final written decision (FWD) dates, showing the last expected FWD, May 10, 2027 for IPR2026-00103, is merely one week before the anticipated trial date in the district court litigation (May 17, 2027).

III. THE DIRECTOR SHOULD EXERCISE HIS DISCRETION TO DENY THE PETITION

A. Settled Expectations Favor Discretionary Denial

As Acting Director, Deputy Director Coke Morgan Stewart repeatedly recognized that the length of time a patent has been in force is a compelling "relevant consideration" favoring discretionary denial. *See e.g.*, *Dabico Airport Solutions Inc. v. AXA Power ApS*, IPR2025-00408, Paper 21 at 2-3 (PTAB June 18, 2025) ("the longer the patent has been in force, the more settled expectations should be," favoring discretionary denial); *Kahoot! AS v. Interstellar Inc.*, IPR2025-00696, Paper 12 at 2 (PTAB July 31, 2025) (discretionary denial favored

where "challenged patent has been in force for over six years, creating strong settled expectations"). Here, the "settled expectations" strongly favor denial because the challenged '625 Patent was issued over four years ago following a lengthy prosecution that included an appeal, and is part of a family having a patent issued over 12 years ago, and nearly all of the other Asserted Patents are likewise mature, with an average tenure of the Asserted Patents being over nine years.

1. The '625 Patent Has Settled Expectations of Validity

For more than a decade, nobody ever challenged the validity of any Asserted Patent, including any patent in the '625 Patent family (family C), even though the inventor and predecessor owner, Rappaport, long has been widely recognized for his pioneering contributions to wireless communications – the very field of the '625 Patent. Standing alone, the lengthy period of unchallenged validity creates "settled expectations" for both the inventor and the public as it relates to MBB's patent rights, just as in *Dabico* and *Kahoot!*; *see also LifeVac, LLC, v. DCSTAR Inc.*, IPR2025-00454, Paper 11, 2 (Director July 11, 2025) (post-grant review favored because it would occur before expectations are strongly settled).

The '625 Patent was additionally subject to an *ex parte* appeal during its prosecution, in which the Board reversed §§102 and 103 rejections for the claims that Samsung now challenges (Ex. 1002, 38-45), which further reinforces the '625 Patent's settled expectations.

2. The *iRhythm* Decision Also Supports Discretionary Denial

In *iRhythm Techs., Inc. v. Welch Allyn, Inc.*, IPR2025-00363, Paper 10 (PTAB June 6, 2025), the then-Acting Director discretionarily denied institution for five patents where just one of the five had been in force for more than twelve years, but the others had lesser tenures. *See also Samsung Elecs. Co. v. iCashe, Inc.*, IPR2025-00639-00645, Paper 11 (PTAB Aug. 14, 2025) (discretionary denial for non-long tenured patents that were part of parallel litigation with other long tenured patents). Discretionary denial is likewise appropriate here.

Like the petitioner in *iRhythm*, Samsung appreciates Rappaport and his portfolio of multiple mature patents. Samsung has collaborated with Rappaport for nearly three decades through joint research projects, participation in his university research centers, co-authoring publications, inviting him to speak in Korea, and attending his industry conference keynote addresses. Ex. 2025, ¶¶ 15-27; Exs. 2007-2009, 2013-2017; Ex. 2010, ¶ 251. A patent examiner also made Samsung specifically aware of the application for the ’625 Patent by citing it during examination of a Samsung application. Ex. 2012, 2; Ex. 2024, 6 (citing Pub. 2013/0328723, issued as the ’625 Patent). Samsung never challenged any Asserted Patent, let alone any patent in the ’625 Patent family. That prolonged, knowing acquiescence, coupled with Samsung’s recognition of Rappaport’s contributions in the field, presents a textbook example of the “settled expectations” consideration

set forth in the PTAB Interim Process Memo and applied in *iRhythm; see also Nvidia Corp. v. Neural AI, LLC*, IPR2025-00606, Paper 18, 2-3 (PTAB July 31, 2025) (denial favored where petitioner has actual notice of the challenged patent but fails to seek early review). Nothing better demonstrates a patent's entitlement to settled expectations than a petitioner's prolonged awareness and affirmative acknowledgement of the inventor's work.

3. Exercising Discretion Here Serves the Office's Policy Objectives

Institution of an *inter partes* review on a four-year-old patent in a family over 12 years old—one of many similarly mature patents asserted in the same litigation—would not advance the efficiency or workload-management goals articulated in the Office's current policy directives. Both the Interim Process and Director Institution Memos emphasize that institution decisions must be guided by efficient allocation of PTAB resources and consistent application of discretionary considerations.

The Director Institution Memo explains that the Director will now personally determine whether to institute IPRs "[t]o improve efficiency, consistency, and adherence to the statutory requirements for institution of trial …." Director Institution Memo at 1. Under this unified process, the Office seeks to prioritize petitions that meaningfully advance the AIA's goal of timely and

efficient resolution of patentability disputes, while conserving the Board's capacity for matters presenting unsettled or significant questions of patentability.

Here, the '625 Patent has long been in force, as have most of the Asserted Patents, and Samsung has long been familiar with Rappaport's research and contributions in the same field. Denying institution under § 314(a) would align with the Director's formalized institution policy, furthering both the AIA's statutory framework and the Office's ongoing commitment to efficient, consistent, and judicious use of agency resources.

B. Proceeding with the IPRs Would Result in Duplication and Inefficiency

Institution across the twelve IPRs for the Asserted Patents, including the '625 Patent, would not promote efficiency. Rather than streamlining the dispute, twelve concurrent Board proceedings would duplicate and prolong resolution of overlapping issues already before the district court.

1. No Stay Has Been Requested and the District Court Does Not Consider Stays Until Institution

For good reason, Samsung has not yet sought a stay of the district court litigation. The Eastern District of Texas has a well-established practice of declining to consider a stay until after the PTAB decides whether to institute review. *See Nanco Techs. Ltd. v. Samsung Elecs. Co.*, No. 2:20-cv-00038-JRG, 2021 WL 3027335, *1 (E.D. Tex. Jan. 8, 2021) (describing consistent practice of

denying motions to stay when the PTAB has yet to institute). As a result, the litigation will advance for many months before any stay could even be considered.

2. It is Unlikely That All Twelve IPRs Will Be Instituted

The Director denied 60% of IPRs in FY2025 based solely on discretionary considerations. Ex. 2011, 6. The actual denial rate is greater than 60% because if a petition moves past the discretionary denial stage, the Director can still deny institution based on other considerations. Interim Process Memo, 1. Accordingly, it is extremely unlikely that all twelve of Samsung's petitions will be instituted, meaning that the district court will continue to adjudicate a substantial portion of the dispute regardless of the Board's actions.

3. A Stay Would Likely Be Denied Even if Requested

If Samsung moves for a stay of the parallel litigation in May 2026, when the last of the institution decisions is likely to issue, a stay is unlikely for the following reasons. ***First***, a stay is unlikely unless all twelve IPRs are instituted. *Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson*, No. 2:21-CV-00113-JRG, 2022 WL 17484264 (E.D. Tex. Jul. 7, 2022) (stay denied where IPRs for only two of three asserted patents were instituted because issues will not be simplified for patent that is not subject to instituted IPR); *Polaris PowerLED Techs., LLC v. Samsung Elecs. Am., Inc.*, No. 2:22-cv-00469-JRG, 2024 WL 4953802 (E.D. Tex. Dec. 3, 2024) (denying motion to sever and stay litigation where PTAB did not

institute IPRs on two of three asserted patents). As shown above, it is unlikely that all twelve IPRs will be instituted.

Second, the advanced stage of the litigation by the time the twelfth institution decision is made (May 8, 2026) will undermine the efficiencies sought to be achieved by a stay. The parties already have exchanged infringement and invalidity contentions and, by May 2026, will be well into fact discovery. Ex. 2018. At that point, any marginal benefit of splitting the case between forums would be far outweighed by the inefficiency of duplicative proceedings.

Third, staying the litigation will prejudice MBB by delaying vindication of its patent rights, with the IPR covering only a portion of Samsung's invalidity contentions. *See Lionra Techs. Ltd. v. Cisco Sys., Inc.*, No. 2:24-cv-00097-JRG, 2025 WL 1239317, at *2-4 (E.D. Tex. Apr. 28, 2025).

4. Even if the Court Ultimately Grants a Stay, the Case Will Likely Return to District Court

Even if all petitions were instituted and the district court granted a stay, the case would likely return to the court for further proceedings. Approximately twenty-four percent (24%) of challenged claims in instituted-IPRs are ultimately found patentable in final written decisions. Ex. 2011, 14. Thus, a significant number of the 340 claims across the twelve Asserted Patents are statistically likely to survive even if all IPRs are instituted, making it practically certain that the

district court will need to adjudicate infringement, validity, and damages for numerous surviving claims even after the IPRs conclude. Granting institution, therefore, would not avoid parallel proceedings; it would merely stage them sequentially, prolonging the overall resolution while duplicating efforts.

5. The District Court's Efficient Claim-Narrowing Procedures

The district court's case-management framework ensures that only the material issues are litigated, further confirming that institution of Samsung's petitions would not promote efficiency. Under E.D. Tex. Local Patent Rule 3-1(a), the patent owner must identify the specific claims asserted in its infringement contentions, immediately focusing the litigation on those that matter. *See* Ex. 1013 (MBB's preliminary contentions for '625 Patent). The district court case's Docket Control Order in the parallel litigation goes even further, as it requires the parties to "Submit Proposed Order Focusing Patent Claims and Prior Art ***to Reduce Costs***" by January 12, 2026. Ex. 2018 at 5 (emphasis added). That order recognizes that claim focusing reduces costs and promotes judicial efficiency. The district's model order further contemplates that the patent owner will elect no more than 32 claims by the completion of claim construction discovery. *See* www.txed.uscourts.gov/sites/default/files/forms/ModelPatentOrder.pdf. Although the parties are not presently committed to a specific number of claims, this model order demonstrates that, at a minimum, the number of claims of the Asserted

Patents to be finally adjudicated in district court will be narrowed by an order of magnitude.

By contrast, once an IPR is instituted, the Board must evaluate every challenged claim, regardless of its materiality to the dispute. *SAS Institute, Inc. v. Iancu*, 584 U.S. 357, 363 (2018). Because Samsung challenged all 340 claims across its twelve petitions, including all thirty-three claims of the '625 Patent (Pet. 4), the Board's workload—requiring full claim-by-claim analysis—would likely be approximately ten times greater than the district court's given its claim-narrowing procedures. Rather than streamlining the dispute, institution would expand and duplicate the work of both tribunals.

Finally, the three Asserted Patent families concern closely related wireless-communication technology and share, respectively, common or related specifications. That overlap allows the district court to evaluate all validity issues together, but would require the Board to conduct duplicative, piecemeal analysis across twelve separate petitions—further weighing against institution.

6. Overall Inefficiency

The Interim Processes Memo (at p.3) emphasizes that the Board must manage its caseload to "maintain PTAB capacity," while the Director Institution Memo (at p.1) highlights that institution decisions should "improve efficiency, consistency, and adherence to statutory requirements …." Together, these policy

statements reaffirm that AIA trial proceedings should be instituted only where they ***meaningfully advance*** the efficient and balanced administration of the Office, consistent with 35 U.S.C. § 316(b), which directs consideration of "the efficient administration of the Office, and the ability of the Office to timely complete [AIA and PGR] proceedings."

Institution here would have the opposite effect. Samsung has challenged twelve Asserted Patents, many of which, like the '625 Patent, have strong settled expectations. There is no litigation stay. The prospects of full institution of all twelve IPRs is statistically remote. And the Board's workload would be significantly more burdensome relative to the district court's—requiring comprehensive claim-by-claim adjudication even for claims that the court's own procedures will already have narrowed "to reduce costs." As a result, rather than streamlining the resolution of the dispute, institution would multiply the effort across forums, delay final resolution, and consume substantial administrative and party resources without achieving material simplification.

Accordingly, discretionary denial under § 314(a) is warranted. Denial would conserve both judicial and administrative resources, avoid duplication, and uphold the workload-management principles articulated by the Director and by Congress in § 316(b).

C. The *Fintiv* Factors Support Denial

Parallel litigation, assessed under the factors enunciated in *Apple Inc. v. Fintiv, Inc*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential), remains a relevant consideration for discretionary denial. PTAB Workload Management Memo at 2. Here, most *Fintiv* factors strongly favor denial.

Factor 1 – Stay. Samsung has not requested a stay, and the Eastern District of Texas rarely grants stays before institution. *See Nanco Techs., supra.* Even after institution, a stay would be unlikely for the reasons explained above. *See Koninklijke*, *supra*, (stay denied where IPRs for only two of three asserted patents were instituted and due to advanced stage of litigation); *Polaris PowerLED, supra* at *2 (same). This factor favors denial.

Factor 2 – Proximity of Trial to Final Written Decision. The district court trial is set to commence May 17, 2027 (Ex. 2018, 1), which is consistent with the median time-to-trial statistics for this venue. Ex. 2019 (median 655 days to trial for cases pending being between Jan. 1, 2022 and Oct. 22, 2025 before Judge Gilstrap; 655 days from the complaint date (June 6, 2025) is March 23, 2027). That is roughly six weeks after the projected FWD date (April 6, 2027) for this IPR. Also, the projected FWD date for Samsung's last-filed IPR (IPR2026-00103) is just one week before the start of the trial. Given the close proximity between the trial date and projected final decisions here, the proximity is neutral or slightly

favors denial because the district court will have expended substantial effort preparing the case for trial by the time of the final written decisions.

Factor 3 – Investment in the Parallel Proceeding. The parties have already exchanged infringement and invalidity contentions and commenced fact discovery. Exs. 1011, 2020, and 2021. Thus, the court and the parties have already invested substantially in the proceeding, and their investment will continue unabated through at least April 2026. *Fintiv* Factor 3 weighs in favor of denial.

Factor 4 – Overlap of Issues. In the parallel litigation, Samsung asserts the same invalidity grounds as presented in the Petition. Ex. 2029, 41-44, 62-70 (citing same references relied on in petition). Although Samsung filed a stipulation (Paper 7) incorporating the standard *Sotera* commitment and additionally disclaiming a small set of specific references, that stipulation remains far from dispositive of overlap between the two fora. *See Formycon AG v. Regeneron Pharm., Inc.*, IPR2025-00233, Paper 15, 11 (PTAB Jun. 2, 2025).

Samsung's stipulation is also materially narrower than the standard the Office has proposed. The Notice of Proposed Rulemaking (90 Fed. Reg. 48341 (Oct. 17, 2025)) would require a petitioner, as a precondition to institution, to stipulate not to pursue any § 102 or § 103 invalidity ground in any other proceeding if an IPR is instituted. Samsung declined to make that commitment and expressly reserved its ability to advance additional invalidity theories in

district court. Indeed, Samsung recently (post-filing its IPR petitions) served nineteen (19) subpoenas upon different industry participants seeking additional prior art to assert in the parallel litigation. Exs. 2045-2063. Samsung thus seeks to invoke the Board's resources while strategically and simultaneously pursuing evidence from third parties that Samsung undoubtedly will use to relitigate substantially the same invalidity issues in the district court litigation—precisely the inefficiency the proposed rule is designed to prevent.

Because Samsung's stipulation omits significant categories of invalidity grounds and leaves substantial overlap in prior art, expert testimony, and claim construction, Factor 4 weighs against institution.

Factor 5 – Identity of Parties. The parties are identical in both fora, *see* Pet.; Ex. 2001; Ex. 2010, which further favors denial under Factor 5.

Factor 6 – Other Circumstances. In addition to the "settled expectations" and efficiency considerations discussed above, Samsung's reliance on a supposed "plain and ordinary" construction for the claim term "nulls," which appears in all of the '625 Patent's independent claims, underscores the weakness of the Petition. Samsung's purported plain-and-ordinary construction for the term materially differs from the very technical dictionary it cites as support.

Specifically, Samsung's Petition asserts that it "applied the plain and ordinary meaning" of the claim terms and that the Board does not need to construe

any claim limitations to institute review. Pet. 9. Yet in its analysis, Samsung asserts that "nulls" are "minima in the radiation pattern." *Id.* at 22. To support this construction, Samsung cites the IEEE Standard for Definitions of Terms for Antennas, which defines "directional-null" as a "***sharp*** minimum in a radiation pattern." *Id.* (citing Ex. 1012, 24 (emphasis added)). Samsung's Petition and its expert, however, ignored the dictionary's requirement that a null exhibit a ***sharp*** minimum. Neither analyzed whether the relied-upon prior art disclosed sharp minima in its radiation patterns. Pet. at 22, 62-63; Ex. 1003, ¶¶ 101-102, 229-233. This error dooms the merits of Samsung's Petition. *See e.g.*, *Intel Corp. v. PACT XPP Schweiz AG*, IPR2020-00532, Paper 12, 16 (PTAB Sep. 10, 2020) (denying institution where the dictionary evidence contradicted petitioner's asserted plain-and-ordinary meaning of claim term).

Holistic Analysis (Balancing of *Fintiv* Factors). Balancing the *Fintiv* factors holistically, three factors—1 (stay), 3 (investment), and 5 (identity)—strongly favor denial, and Factors 4 (overlap) and 6 add strong additional weight. Factor 2 (trial proximity) is at best neutral for Samsung. On balance, the overall circumstances demonstrate that instituting this IPR would not meaningfully advance the efficiency goals of the AIA.

IV. CONCLUSION

For the reasons set forth above, MBB respectfully requests that the Petition

be denied as an inefficient use of the Board's time and resources.

Dated: December 5, 2025

Respectfully submitted,

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CERTIFICATION OF WORD COUNT UNDER 37 C.F.R. § 42.24(d)

The undersigned hereby certifies that the foregoing contains 4,424 words according to the word count of the word-processing software used to prepare the foregoing.

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CERTIFICATION OF SERVICE

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