

PUBLIC VERSION

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MURATA MANUFACTURING CO., LTD,
Petitioner,

v.

GEORGIA TECH RESEARCH CORPORATION,
Patent Owner.

IPR2025-00384
U.S. Patent No. 7,489,914

**PETITIONER'S OPPOSITION TO PATENT OWNER'S
DISCRETIONARY DENIAL BRIEF**

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PETITIONER’S EXHIBIT LIST

EX1001	U.S. Patent No. 7,489,914
EX1002	Prosecution History of U.S. Patent No. 7,489,914
EX1003	Second Declaration of Matthew B. Shoemake under 37 C.F.R. § 1.68
EX1004	<i>Curriculum Vitae</i> of Matthew B Shoemake
EX1005	U.S. Patent No. 6,128,508 (“Francisco”)
EX1006	JP 2001-267466 (“JP466”) including original Japanese language document, English translation, and Translator’s certification
EX1007	European Patent Application EP 1 189 345 A2 (“Okubora”)
EX1008	U.S. Patent Application Publication No. 2002/0118067 (“Hirayama”)
EX1009	U.S. Patent No. 5,995,814 (“Yeh”)
EX1010	Design and Implementation of High-Q Passive Devices for Wireless Applications Using System-On-Package (SOP) Based Organic Technologies, by Sidharth Dalmia, 2003 (“Dalmia”)
EX1011	“Concurrent Multiband Low-Noise Amplifiers—Theory, Design, and Applications,” Hashemi et al., IEEE Transactions On Microwave Theory And Techniques, Vol. 50, No. 1, January 2002 (“Hashemi”)
EX1012	<i>Fundamentals of Microsystems Packaging</i> , Rao Tummala, McGraw-Hill, Table of Contents and Chapter 11, 2001
EX1013	<i>Reserved</i>
EX1014	U.S. Patent No. 6,825,818
EX1015	U.S. Patent No. 5,457,734
EX1016	U.S. Patent No. 5,406,615
EX1017	<i>RF Microelectronics</i> , Behzad Razavi, Prentice Hall PTR, 1998
EX1018	U.S. Patent No. 5,821,820
EX1019	US Patent Application Publication No. 2002/0030545
EX1020	European Patent Application Publication No. EP 0 851 576 A2

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EX1021	A CMOS RF Bandpass Low Noise Amplifier for Multi-band Wireless Communication Applications, Mou et al., IEEE, 2002
EX1022	<i>The Wiley Electrical and Electronics Dictionary</i> , Steven M. Kaplan, 2004, pp. 628, 662, 630
EX1023	RF Characterization of a low cost multichip packaging technology for monolithic microwave and millimeter wave integrated circuits, Jayaraj et al., IEEE, 1995
EX1024	JP 2001345648 (“JP648”) including original Japanese language document, English translation, and Translator’s certification
EX1025	NIST Technical Note 1520, “Dielectric and Conductor-Loss Characterization and Measurements on Electronic Packaging Materials, 2001
EX1026	US Patent Application Publication No. 2004/0127182
EX1027	Embedded Passives Technology Implementation in RF Applications, Savic, et al., IPC Printed Circuits Expo, 2002
EX1028	US Patent Application Publication No. 2004/0113719
EX1029	US Patent Application Publication No. 2003/0063427
EX1030	<i>Microwave Engineering Second Edition</i> by David M. Pozar, Wiley, 1998
EX1031	Datasheet NE38018, NEC, 2000
EX1032	Characterization of Liquid Crystal Polymer for High Frequency System-in-a-Package Applications, Zou et al., IEEE Transactions On Advanced Packaging, Vol. 25, No. 4, 2002
EX1033	Liquid Crystal Polymers (LCP) for High Performance SOP Applications, 2002 Proceedings. 8th International Advanced Packaging Materials Symposium (Cat. No.02TH8617), Stone Mountain, GA, USA, 2002
EX1034	<i>Microwave Transistor Amplifiers Analysis and Design</i> , Second Edition, Guillermo Gonzalez, Wiley, 1997
EX1035	Complaint NDGA-1-24-cv-05268-1
EX1036	United States District Courts: Federal Court Management Statistics-Comparison within Circuit (September 30, 2024)
EX1037	JPA H06-97315 including original Japanese language document,

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	English translation, and Translator's certification
EX1038	Declaration Dr. Sylvia Hall-Ellis
EX1039	Declaration of H. Stewart (ProQuest)
EX1040	U.S. Application No. 10/402,313 and applications referred to therein
EX1041	I-24-cv-05268-JPB Docket retrieved 2025-05-14
EX1042	Sotera Stipulation dated May 15, 2025
EX1043 (New)	Declaration of Hiroshi Iwatsubo
EX1044 (New)	Evaluation report to JMD
EX1045 (New)	Mobile Vendor Market Share United States of America, Statscounter Global Stats
EX1046 (New)	Motion Success Northern District of Georgia on or after Jan. 1st 2020
EX1047 (New)	EP1375112

Petitioner, Murata Manufacturing Co, Ltd., opposes the request in Patent Owner’s Discretionary Denial Brief (Paper 9, “PO Brief”) because (i) denial is inappropriate under *Fintiv* and (ii) the additional factors set forth in the Acting Director’s “Interim Processes for PTAB Workload Management” (“Director Memo”) demonstrate why *inter partes* review is an appropriate use of Board resources.

I. Summary of Argument

With respect to *Fintiv*, five of the six *Fintiv* factors strongly weigh against denial. Petitioner diligently filed its Petition (Paper 2) less than three (3) months after Patent Owner filed its complaint in the U.S. District Court for the Northern District of Georgia (NDGA). EX1035. In this parallel litigation, ***no scheduling order*** has been issued, there has been ***no investment*** in substantive proceedings and, based on the median time-to-trial for NDGA, a final written decision (FWD) by the Board can be expected ***over a year before*** any district court trial. Moreover, Petitioner’s “*Sotera*” stipulation promotes judicial efficiency by ensuring that invalidity considerations triable in IPR will be solely before the PTAB.

Additional factors listed in the Director Memo, and further developed in subsequent decisions, also weigh against discretionary denial. ***First***, the United States has a compelling economic interest in ensuring that Petitioner has access to PTAB review. In the parallel litigation, Patent Owner has accused Petitioner’s radio-

frequency (RF) modules used in Apple, Samsung, and Google handsets—entities that together make up 80% of the U.S. handset market. EX1045. Patent Owner alleges Petitioner’s modules sold since 2017 are implicated and that sales of implicated modules totaled “approximately \$3.1 billion USD” in 2022 alone. EX1035, 5, 26. Petitioner, U.S. consumers and the USPTO itself have compelling interests in ensuring that post-expiration assertion of errantly granted, overbroad claims do not derail settled expectations. In contrast, Patent Owner has no compelling interest and no credibly settled expectation that its overbroad claims became incontestable at the PTAB. Patent Owner’s assertions related to the ’914 patent arose *only after expiration* of the challenged patent’s full statutory term and *eight (8) years after* publicly available reports of Petitioner’s commercialization of its now-accused, independently developed technology. EX1035, 24-26 (Patent Owner discussing 2016-2017 press releases). Patent Owner’s assertions apparently arise for the sole purpose of post-expiration monetization. EX2007, 4.

Second, a settled expectation of validity (or incontestability) is simply not credible. There is *no* evidence of commercialization, marking, licensing or assertion of any claim of the ’914 patent at any time during its *entire* patent term. *See, e.g.*, EX1035, 18, 23 (Patent Owner admitting that “no commercial products embodying the ’914 Patent have ever been sold by [Patent Owner] or any licensee of the ’914 Patent technology.”) These are precisely the reasons that the Director has explained

weigh against a patent owner’s claim of settled expectations and, here, are persuasive as to why the Board should review challenged claims years after their issuance date. *Intel Corp. v. Proxense LLC*, IPR2025-00327, Paper 12 at 2-3 (Acting Director Stewart June 26, 2025).

Communications between Petitioner and some of the ’914 patent inventors, acting for their start-up Jacket Micro Devices (“JMD”), reveal why the Patent Owner failed to commercialize, mark, license or assert throughout the entire life of the ’914 patent—the purported technology was itself a failure. These communications occurred **prior to grant** of the ’914 patent and concerned a particular substrate technology that JMD purported to offer Petitioner. During these communications, the application that later issued as the ’914 patent was pending before the Patent Office, but it was never specifically discussed. EX1043, ¶5. In any case, communications **ended** in 2008 after Petitioner’s evaluation of samples determined that the purportedly offered technology was not useable and after Petitioner communicated that conclusion to JMD. *See infra*, Section III.B; EX1043, ¶¶9-10 (H. Iwatsubo declaration); EX1044 (Evaluation Report).

JMD’s failure to demonstrate viability settled **Petitioner’s expectations** as to the inventors’ technology—it was unusable. Petitioner detailed these failures in its Evaluation Report communicated to JMD. EX1044, 4-20, 26 (illustrating delamination, voiding, deformation and manufacturing issues that rendered the

offered technology unusable). Neither Patent Owner, nor its inventors, nor JMD (which ceased operations before the patent issued) ever responded to Petitioner to show that they had remedied the demonstrated failures or that they could actually make and use the purportedly offered technology. EX1043, ¶11. This lack of response suggests that it was also ***Patent Owner's*** settled expectation that the failed technology could not be commercialized, reasonably licensed or asserted.

Petitioner believed that JMD, the inventors, and ultimately Patent Owner did not have a workable technology, and Petitioner reasonably expected that no patent incorporating the unworkable technology—let alone a later issued, never discussed, '914 patent—could or would ever be asserted. Petitioner had no reason to challenge the '914 patent. Moreover, Patent Owner's sixteen (16) years of inaction—from 2008 to 2024—reinforced Petitioner's conclusions and settled expectations.¹ Patent Owner and its '914 patent lay dormant for the ***entire*** patent term, all while Petitioner developed, invested in, and commercialized its own substrate technology. Petitioner's independent development (in reliance on its own settled expectations) led to innovation and commercialization that has benefited consumers. Thus, any settled expectations favor Petitioner. Patent Owner's inaction—since 2008 and

¹ Eight of these years of inaction occurred ***after*** public disclosure regarding the commercialization of Petitioner's now-accused technology. EX1035, 24.

throughout the entire term of the '914 patent—belies any supposed expectation of validity or incontestability.

Third, and most importantly, the merits of the Petition are strong and warrant review by a merits panel. The '914 patent claims a dual-band radio frequency (RF) device with conventional circuitry and a mere organic-based substrate—an obvious combination for which unpatentability is detailed in the Petition. Patent Owner offers *no* response on the merits. *See* IPR2025-00383, Paper 10 (waiving preliminary response); IPR2025-00384, Paper 9 (waiving preliminary response). Moreover, Patent Owner's own evidence recognizes that the claimed elements were known prior to the '914 patent. *See* EX2003, 15 (JMD's own presentation to Petitioner discussing dual-band RF devices and use of organic-based substrate).² The inventors apparently produced this evidence only to Petitioner, despite contemporaneous pendency before the Office of the application that led to the '914 patent. Apparently, no similar disclosure was made to the Office, contributing to grant of overly broad

² Also notably, in the Complaint (EX1035) the Patent Owner's story relies on its substrate technology including a multi-layer liquid crystalline polymer (LCP) substrate. The vast majority of challenged claims do not require this, which demonstrates IPR is necessary, as the '914 patent claim breadth is not aligned with Patent Owner's own understanding of its patented technology.

claims. The Board's technical expertise is particularly well-suited to review these '914 patent claims. In addition to the technical subject matter at issue, the claims recite a fundamental engineering principle of this conventional circuitry (frequency-dependent impedance) that is readily appreciable by the APJs.

Furthermore, the '914 patent claims priority as a *continuation-in-part*, but support is lacking in the priority application. *See* IPR2025-00384, Paper 2, 15-18 (demonstrating that claims of the '914 patent lack written description support in the parent application).³ Again, Patent Owner offers *no* response on the merits. *See* IPR2025-00384, Paper 9 (waiving preliminary response). In any case, the '914 patent is highly vulnerable to invalidation based on prior art. The technically trained APJs with their deep patent law expertise make the PTAB the best suited tribunal to vet the prior art and priority claim (as well as the inventor's own published material that was also not previously disclosed to the Office).

For these reasons and the reasons more fully detailed below, Petitioner respectfully requests that the Director decline to exercise her discretion to deny and, instead, refer the Petition to a merits panel of the PTAB for consideration of Petitioner's strong and comprehensive unpatentability grounds.

³ Petitioner filed two Petitions directed to the '914 patent due to this priority date dispute. *See* Consolidated Trial Practice Guide (November 2019), 59.

II. Discretionary Denial under *Fintiv* is Not Warranted.

The *Fintiv* factors, considered as a whole, do not warrant denial. *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (Mar. 20, 2020) (precedential). Every factor either favors institution or is neutral.

A. Factor 1 favors institution: well-reasoned motion to stay has been filed and historical record of NDGA indicates likelihood of grant.

A motion for stay in the parallel proceeding was filed by Petitioner, and no decision on the motion has been entered, as yet. At a minimum, this factor is neutral. *Sand Revolution II, LLC v. Continental Intermodal Group – Trucking LLC*, IPR2019-01393, Paper 24 at 7 (June 16, 2020) (informative). However, in this case, there are good reasons to expect that a stay will be granted. The well-reasoned motion explains, among other factors, that the early filing of the motion and IPR Petition as well as Patent Owner and Petitioner not being competitors—here Patent Owner's interest is not in protecting market share or preventing loss of goodwill, but rather monetary gains from enforcing an expired patent—support its grant. Judges in the NDGA have granted 100% of motions to stay pending IPR year-to-date, as of the filing of this paper. EX1046. A review of the last five years of motions to stay in NDGA, with a grant rate over 87%, also indicates likelihood of grant. *Id.* The only motion denied presented very different facts than here, where Petitioner has quickly filed its petition and no discovery or claim construction briefing has commenced. *See, 3Shape A/S v. Carestream Dental, LLC*, 1-22-cv-01829 (NDGA) Order dated

Jan. 5, 2023 (recognizing Defendants waited 7 months to file IPR and during that time discovery commenced and claim construction activities were underway). Thus, this factor favors institution.

B. Factor 2 favors institution: The parallel proceeding trial date is expected 13 months *after* FWD.

1. Expeditious filing of Petition means FWD is well before the expected trial date.

This factor strongly favors declining discretionary denial. The petition was expeditiously filed approximately three (3) months after the complaint was filed. EX1035. In the parallel proceeding, no scheduling order has been issued, nor has discovery commenced. Under NDGA local rules, the parallel litigation is effectively stayed pending a ruling on motions filed in April. Based on median time-to-trial in the NDGA, a final written decision (FWD) by the Board can be expected over *thirteen (13) months before* any trial in the district court. Thus, this factor strongly favors institution.

2. Patent Owner's allegations of Petitioner's delay are wrong.

Patent Owner concedes that *Fintiv* factor 2, like factors 3-4 below, favor declining to discretionarily deny the Petition. PO Brief, 29. The PO Brief however suggests that Petitioner's actions in negotiations and the parallel litigation are a cause of delay and as such, the factors should be "given little weight." PO Brief, 29. This is wrong.

First, disclosing details of pre-suit negotiations even if they were properly characterized (which they are not), is neither proper nor relevant for briefing on discretionary denial in an IPR. *Second*, while over a half dozen pages of the PO Brief (8-15) are dedicated to this allegation of “delay” arising from the pre-suit negotiations and parallel litigation, the sum-total of alleged “delay” is a few months. Patent Owner’s belief that the parties should have moved expeditiously stands in stark contrast to the fifteen years Patent Owner waited before first approaching Petitioner regarding the already-expired ’914 patent. *See* EX2007 (letter dated August 22, 2024).

Third, Patent Owner’s description of the parties’ most recent discussions mischaracterizes what actually occurred. In reality, Petitioner’s actions were (i) routine responses in a negotiation requiring patent valuation, (ii) well within Petitioner’s statutory right to seek IPR after being accused of infringement, and (iii) entirely consistent with NDGA local rules. In the few months between receiving Patent Owner’s letter (August 2024) and the complaint being filed (November 2024), Petitioner was diligently working to review the validity of the ’914 patent—information that is clearly relevant to the patent valuation needed for the “monetary resolution” demanded by Patent Owner. *See* EX2007, 4. Patent Owner’s grievances with the “delays” in the parallel litigation are not of Petitioner’s doing but are consequences of the local rules of the NDGA—*a venue selected by Patent Owner*.

As but one example, Patent Owner’s demand that counsel should have waived a requirement of the NDGA rules regarding service, when Patent Owner never formally sent the waiver request to the right party, and counsel was not yet engaged or otherwise authorized by Petitioner to do so, is improper and would have (at best) resulted in an invalid waiver causing further delay. And Patent Owner should have expected Petitioner to vigorously defend itself using all available defenses including a motion to dismiss. That the local rules effectively stay the case until that motion is decided is not a condition “engineered” by Petitioner, but rather a result dictated by NDGA. *See* PO Brief, 15. Patent Owner cannot credibly fault Petitioner for a fully-expected and routine timeframe for negotiation discussions and early litigation activities—together amounting to a timespan of mere months—when Patent Owner sat silent for years—indeed, for the entire patent term—and delayed its assertion for nearly eight years⁴ with no justification.

⁴ Patent Owner’s Complaint shows public documents regarding commercialization by Petitioner in 2016; the ’914 patent issued in 2009.

C. Factor 3 favors institution: Negligible relevant investment and expeditious filing.

Factor 3 strongly favors institution because, at institution, investment by the court and parties will have been minimal as to the activities pertinent to *Fintiv*—at present, no substantive pleadings have been filed outside of the complaint by Patent Owner and Petitioner's motions to dismiss and to stay, discovery has not opened, the parties have neither engaged in claim construction nor exchanged any infringement or invalidity contentions.

D. Factor 4 favors institution: Petitioner's *Sotera* stipulation.

Petitioner made a *Sotera* stipulation on May 15, 2025, which indicates its preference for the PTAB to consider the unpatentability of the challenged claims. EX1042. The IPR framework is not meant to, nor available to, address all aspects of validity. Rather, AIA provides for bifurcation of the unpatentability determination with prior art analysis at the PTAB and other aspects of validity or eligibility in the

district court.⁵ Given the technical nature of the dual-band RF devices and substrate technology at issue, and given the skill of the PTAB to address same, the efficiency and integrity of the patent system is best served by the PTAB reviewing the unpatentability/obviousness questions already before it (as well as the '914 patent's priority claim). No similar questions are before the district court—nor could they be any time soon. That is precisely the true alternative for which even AIA detractors have advocated.

⁵ A pending motion on subject matter ineligibility under 35 U.S.C. § 101 in the parallel litigation follows just this framework established by the AIA and is not a reason for denial. Indeed, no opportunity to contest subject matter eligibility of the '914 patent claims has ever existed at the USPTO because the only available framework came to be years after the '914 patent issuance. Moreover, as of the date of this opposition, NDGA has not taken up or decided the § 101 motion—indeed it may never do so as a motion to stay pending resolution of the IPR is also before the court. Despite Patent Owner's protestation, the reasoning of *Hulu, LLC v. Piranha Media Distribution, LLC*, IPR2024-01252 & IPR2024-01253, Paper 27 (Apr. 17, 2025) simply does not apply as the claims there were already found invalid—no such determination exists here.

E. Factor 5 is neutral: Petitioner is a defendant in the parallel litigation.

Petitioner is a defendant in the parallel litigation. That is true of most IPR petitioners, making this factor neutral. *See HP Inc. v. Slingshot Printing LLC*, IPR2020-01084, Paper 13 at 9 (Jan. 14, 2021); *see also NVIDIA Corp. v. Invensas Corp.*, IPR2020-00603, Paper 11 at 23 (Sept. 3, 2020) (this factor weighs against discretionary denial where the district court trial and IPR final written decision are expected “around the same time”).

F. Factor 6 favors institution: The merits of the Petition are strong.

Factor 6 favors institution because the Petition plainly shows that the ’914 patent claims no more than well-known subject matter. This is illustrated by reasoned and expert-supported obviousness challenges — including those relying on an inventor’s own published materials. In particular, the ’914 patent claims conventional circuitry—a dual-band RF device including its passive networks⁶—having frequency and impedance relationships that simply restate standard, well-understood engineering principals. The claimed devices also include an “organic-

⁶ In the context of independent claim 5, this is a low noise amplifier and matching networks.

based substrate.” Using organic materials for substrates⁷ was well-known prior to the '914 patent as shown in the Petition. The '914 patent claims recite commonly implemented circuits and materials and, as a result, the dispute is just the type of low-quality patent assertion that the AIA was designed to remedy.

Further, Patent Owner's own arguments and evidence suggest the strength of the invalidity positions. **First**, the merits of the Petition are so strong that Patent Owner offers **no** response. See IPR2025-00383, Paper 10 (waiving preliminary response); IPR2025-00384, Paper 9 (waiving preliminary response) in appealing for discretionary denial. And Patent Owner indicates it may face hurdles in developing its secondary considerations arguments. The hurdles Patent Owner fears arise if the prior art teaches that the claimed features were known—as it does here. **Second**, Patent Owner has repeatedly characterized its technology as using multi-layer liquid crystal polymer (LCP) substrates. EX2007, 1 (“multi-layer LCP substrates”); EX2001, 2 (inventor describing “multi-layer LCP substrates”), EX1044 (evaluation of JMD's LCP samples). Facially, the challenged claims require no such limitation, suggesting the claims are overbroad. EX1001, 26:16-31 reciting “an organic-based substrate.” **Third**, Patent Owner has already produced evidence that shows that the

⁷ One known organic material used for substrates was liquid crystalline polymer (LCP), the subject of certain '914 patent's dependent claims.

elements of its claims, and their combination, were known. *See* EX2003, *e.g.*, 15 (discussing dual-band RF (“GSM/WCDMA”) multi-layer modules and “Murata developing organic substrate based modules since 2002”), 10 (use of “Multilayer PTFE [an organic polymer] Substrate”).

In short, the merits are very strong and the issues are quite amenable to efficient adjudication by the PTAB on the 12-month timeline contemplated by the AIA, well before the parallel litigation likely meaningfully commences briefing, let alone trial. Given that, it is hardly surprising that Patent Owner wishes to derail an efficient merits determination by the PTAB.

G. The *Fintiv* factors as a whole favor institution.

In summary, each *Fintiv* factor strongly weighs against denial, or is neutral:

Factor	Weight	Reason
1 (stay)	against denial	strong reasons for granting requested stay; historical record of NDGA
2 (trial gap)	against denial	FWD over a year before trial under time-to-trial stats
3 (investment)	against denial	no court orders for '914 patent; expeditious filing
4 (overlap)	against denial	<i>Sotera</i> stipulation
5 (same party)	neutral	Petitioner is defendant
6 (merits)	against denial	merits strong; POPR waived

Because the *Fintiv* factors as a whole favor institution, the Director should not discretionarily deny institution under §314(a).⁸

III. The additional factors set forth in the Director Memo also favor institution.

The Director Memo invites the parties to “address all relevant [discretionary denial] considerations” and provides a list of potential factors. Director Memo, 2-3. These potential factors also favor institution here.

A. Compelling economic interests favor institution.

It is vital that companies, like Petitioner, that make large investments in the U.S.⁹ and provide technological components that are relied upon by both U.S. headquartered companies (*e.g.*, Apple, Google) and U.S. consumers (*e.g.*, their reliance on consumer handsets) have an effective and efficient mechanism for

⁸ Petitioner addressed *Advanced Bionics* and *General Plastics* factors in the Petition, which Patent Owner did not dispute. Petition, Section XIII.

⁹ Petitioner, Murata Manufacturing Co., Ltd, and the real party in interest, Murata Electronics North America, Inc., have locations throughout the world, with at least eight (8) U.S. locations including R&D and/or manufacturing facilities in Atlanta and Duluth, GA; Carrollton, TX; San Diego and San Mateo, CA; Westborough and Waltham, MA; and Woodbury, MN. *See, e.g.*, https://corporate.murata.com/en-us/company/muratalocations/affiliated_usa.

challenging invalid patents asserted against them. *See* EX1035, 5, 34-36; EX2007, 2-4. Congress created the AIA for precisely this purpose. 77 Fed. Reg. 48612, 48612 (Aug. 14, 2012) (“The purpose of the AIA ... is to establish a more efficient and streamlined patent system that will improve patent quality and limit unnecessary and counterproductive litigation costs.”); *see also Gen. Plastic Indus. Co., Ltd. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19 at 16-17 (Sept. 6, 2017) (“[W]e recognize that an objective of the AIA is to provide an effective and efficient alternative to district court litigation.”). Petitioner is seeking review of the ’914 patent consistent with this purpose of AIA post-grant proceedings: efficient, technically reliable assessments of validity. Denying Petitioner access to IPR in this scenario would frustrate the purpose of the AIA. For these reasons, compelling economic interests favor institution (and, at the very least, referral of the Petition to a merits panel).

B. Settled expectations favor Petitioner.

Contrary to Patent Owner's assertions, settled expectations squarely favor discretionary denial. The ’914 patent issued in February 10, 2009 and expired on July 27, 2024. But from early 2009 through August 2024 (when Patent Owner sent a letter concerning the expired ’914 patent), a period of 15 years, the ’914 patent was dormant. According to Patent Owner's Complaint, the ’914 patent was never commercialized, nor was any product marked. Patent Owner was inactive during this

15-year timespan, never asserting the '914 patent against Petitioner or anyone else. The record is likewise devoid of any evidence of meaningful licensing or use in the industry.

Thus, for 15 years, Patent Owner's inaction conveyed that the '914 patent was irrelevant to Petitioner's technology. If Patent Owner believed otherwise, it surely would have contacted Petitioner given Petitioner's publicized commercialization in 2016—especially given the billions of dollars in revenue Patent Owner asserts is at issue. *See* EX1035, 5, 24. The simple conclusion is that Patent Owner did not believe that the '914 patent had any relevance to Petitioner's technology. And it is all the more reasonable that Petition would have reached this same conclusion, creating a settled expectation that the '914 patent was not infringed by Petitioner and that it consequently did not need to be challenged at the PTAB.

Moreover, Patent Owner's inaction regarding the '914 patent was *after* communications between JMD and Petitioner that demonstrated the technology offered by the inventors did not work. Thus, the failure of JMD, the inventors, and Patent Owner itself to inform the Petitioner of any remedy of these failures created a further expectation that there was no workable technology relevant to Petitioner. Accordingly, Petitioner had no reason to challenge the '914 patent, which Patent Owner argues incorporates the very same technology that Petitioner determined—and told JMD—was unworkable.

1. **Patent Owner did not commercialize, assert, mark, license, or otherwise apply in Petitioner's technology space the '914 patent.**

The Acting Director has stated:

[P]ersuasive reasons why the Board should review challenged claims several years after their issue date [include as] example, a patent may have been in force for years but may not have been commercialized, asserted, marked, licensed, or otherwise applied in a petitioner's particular technology space, if at all.

Intel Corp. v. Proxense LLC, IPR2025-00327, Paper 12, 2-3 (P.T.A.B. June 26, 2025). Such persuasive reasons exist here.

Patent Owner contends that an unrecorded exclusive license¹⁰ to the technology disclosed in the '914 patent (prior to its issuance) was conveyed to JMD. *See* PO Brief 6. There were apparently no other efforts (beyond the failed efforts of JMD during the period from 2004 to 2008 prior to the issuance of the '914 patent) to commercialize technology that Patent Owner now argues is incorporated in the later issued '914 patent. EX1035, 18 ("JMD did not commercialize the inventions

¹⁰ This "license" does not disturb Petitioner's settled expectation as it indicates no commercial value to the '914 patent. This is merely the inventors acting under a different entity name.

covered by the '914 Patent."); 23 ("JMD sought other avenues for capitalizing the business, but did not have an opportunity to commercialize the multi-band radio frequency devices covered by the '914 patent."). JMD "ceased operations" in 2008 before the '914 patent even issued. EX1035, 23.

Patent Owner affirmatively relies on its failure to commercialize or license as a defense to marking requirements. As Patent Owner explains in its Complaint:

JMD effectively ceased its commercial operations by the end of 2008, and no products relating to any GTRC Multi-Layer Organic Patents were manufactured or sold by JMD in 2009 or thereafter.

[] As such, **no commercial products embodying the '914 Patent have ever been sold by GTRC or any licensee of the '914 Patent technology.**

[] Further, because **no products embodying the '914 Patent have ever been sold by a licensee of the '914 Patent** since the '914 Patent issued in February 2009, **no such products have existed that would be subject to the marking provisions** of 35 U.S.C. § 287.

EX1035, 23 (emphasis added). Thus, the '914 patent has not been commercialized nor has any ostensibly corresponding product been marked. Moreover, this is *not* a case where Patent Owner was filing suits against others in the industry. The '914

patent has never been asserted against any entity during its life, and was only asserted against Petitioner after expiration.

Accordingly, there is no evidence that the '914 patent—at any time from issuance to expiration—has ever been commercialized, asserted, marked, or commercially licensed. This is the very situation that the Acting Director described in *Intel Corp. v. Proxense LLC* as a persuasive reason for disturbing an expectation arising from the age of a patent such as the '914 patent. Here, Patent Owner's inaction contributed to Petitioner's very reasonable and settled expectation that the '914 patent would not be asserted and that it would not be an efficient use of judicial resources to request an IPR for a patent that would never be—and, indeed, throughout its full term, never was—asserted, commercialized, marked, or otherwise utilized in any way. After holding the '914 patent dormant for the entirety of its term, Patent Owner cannot now credibly and retrospectively argue that it had settled expectations of patent validity. Quite to the contrary, Patent Owner now appears to have merely laid in wait all while others, including Petitioner, developed and commercialized their own technology.

2. Patent Owner mischaracterizes the 2006-2008 communications with Petitioner.

Petitioner suggests that Patent Owner must have known about the '914 patent, apparently because the parties had discussions in 2006-2008. But the record is unambiguous: there was no discussion between Petitioner and JMD, the inventors,

or Patent Owner regarding the ’914 patent, which issued in 2009, until GTRC’s letter dated August 22, 2024—about a month after the patent expired. EX1043, ¶11.¹¹

Dr. White, a named inventor of the ’914 patent, declares that he presented a slide deck (EX2003¹²) to Petitioner in April 2007 that included a “reference to the title of the application that eventually issued at the ’914 patent.” *See* PO Brief, 7; EX2001, 4. This “title” was included in a multi-page table with eighteen (18) entries; there was no identification of the application by number. Hiroshi Iwatsubo, who Dr. White indicates was present in the meeting representing Petitioner, does not recall

¹¹ Murata Manufacturing Co., Ltd., Petitioner, is also referred to as “MMC.”

¹² This document has been heavily redacted, potentially altering the import of the document and its credibility as evidence. Dr. White’s declaration states “potentially confidential technical information” has been redacted, but the redactions on the cover page that repeat at the same position on each and every page do not appear to suggest this purpose. Further, submitting a redacted document is not the proper evidentiary procedure in the PTAB. Moreover, because the document has been altered by Patent Owner, Petitioner cannot evaluate its authenticity or ascertain that the excised information is not inconsistent with positioners advanced by Patent Owner. *See* 37 C.F.R. 42.51(b)(1)(iii) (requiring service of relevant information that is inconsistent with a party position).

any discussion regarding a then-pending application now identified by Patent Owner (U.S. Patent Application Pub. No. 2005/0248418, naming Govind et al., “the ’418 publication”) that led to the ’914 patent, nor is there any indication that the then-pending application was discussed. *See* EX1043, ¶5.

Rather, the communication between JMD and Petitioner was about considering and evaluating JMD’s specific substrate technology that, according to JMD, had been developed at GTRC and exclusively licensed to JMD.¹³ *See* EX1043, ¶4. Patent Owner appears to refer to this technology as its multi-layer liquid crystalline polymer (LCP) substrate for RF devices. *See* EX1035, 19; EX2007, 3. At all times during the parties’ communications, it was understood that RF devices with an organic-based substrate were neither novel nor non-obvious. *See, e.g.*, EX2003, 15. What was being investigated was whether JMD could demonstrate that its particular substrate technology worked. EX1043, ¶4.

During the course of the communications, samples of JMD’s technology were provided to Petitioner. *See* EX1035 (“To support Murata’s review and analysis of the new LCP technology, JMD supplied Murata with prototype passive components

¹³ Patent Owner has not shown exactly how this technology relates to the ’914 patent claims. For the purposes of this stage, Petitioner assumes Patent Owner’s assertion that this technology incorporated that of the ’418 publication and ’914 patent.

comprising LCP as a substrate.”); EX1043, ¶9. Evaluation of these samples illustrated that JMD was unable to demonstrate the viability of its offered substrate technology. EX1043, ¶¶9-10. Specifically, JMD’s samples exhibited significant delamination, voiding, distortion, weak connections, manufacturing issues—all problems that rendered the purported technology unsuitable for use. EX1043, ¶9; EX1044 (“Evaluation report to JMD”). This presentation and these problems were communicated to JMD around May 2008. EX1043, ¶9.

Petitioner’s evaluation of the samples of JMD’s offered technology included several tests including [REDACTED] [REDACTED]. EX1044. The testing results demonstrated that the samples were not suitable. EX1043, ¶¶9-10, EX1044, 26. Failures included [REDACTED] [REDACTED]. EX1044, 4-6 (discussing [REDACTED] [REDACTED]). The evaluation results also showed that [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] EX1044, 13, 16.

Delamination and voids were also identified throughout the samples. EX1044, 9-20, 26. [REDACTED] [REDACTED], exhibited throughout the samples. EX1044, 9, 12, 14,

15. Furthermore, [REDACTED]

[REDACTED]

[REDACTED]. EX1044, 10, 11. Similarly, [REDACTED]

[REDACTED]

[REDACTED]. EX1044, 19. Petitioner’s evaluation surmised that [REDACTED]

[REDACTED] was lacking and led to these failures. EX1044, 5. Petitioner identified lamination as a key aspect to providing substrates of suitable quality and reliability—and found it lacking in the JMD samples. EX1044, 26. Delamination, voiding and weak interfaces from poor lamination between bonded features can cause issues with the integrity of the electrical signals, overheating, mechanical instability, reduced reliability, manufacturing issues, and the like.

Dr. White also alleges that Petitioner indicated it would work with JMD to commercialize JMD’s technology including the invention in the patent application that would become the ’914 patent. *See* EX2001. This is incorrect. As Hiroshi Iwatsubo explains, he, like anyone else involved in the communications, would not and could not have made such a commitment to JMD or Dr. White. EX1043, ¶6. Petitioner has an extensive and structured approval process based on the “Ringi” decision-making process strictly followed by most Japanese corporations that simply

would not allow it. EX1044, ¶¶6-8. Moreover, any such commitment would have to be based on an understanding of viable technology. But here, Petitioner determined JMD's technology was not usable. EX1043, ¶10; EX1044, 26.

Thus, JMD was itself unable to make or use its purported technology and certainly failed to enable Petitioner to do so. By 2008, discussions between JMD and Petitioner ended. At that time, it was Petitioner's understanding that JMD, the inventors of the '914 patent, or Patent Owner would re-engage with Petitioner if their technology could be demonstrated to be viable. EX1043, ¶10. No one ever did. EX1043, ¶11. Thus, the settled expectations of the parties were that the '914 patent could not be commercialized, and thus would not be licensed, asserted, or otherwise utilized in any context.

Based on these discussions and based on the failed technology and the subsequent inaction by JMD, the '914 patent inventors, and Patent Owner, Petitioner developed a settled expectation that Patent Owner would not assert a patent related to the failed technology, including the later-issued '914 patent.¹⁴

¹⁴ It would be an inefficient use of PTAB resources to challenge patents that are not in controversy. *See Google et al. v. Mullen*, IPR2025-00227, Paper 13, 4 (“it is an inefficient use of Board resources to review [a] patent that has been dismissed from the litigation.”).

3. Petitioner's independent development path was based on its settled expectations that Patent Owner's technology did not work.

Petitioner's development path for its multi-band RF modules and associated substrate technology was independent of, and distinct from, the failed technology presented by JMD—it began long before meeting with JMD and continues through today.¹⁵ The '914 patent's citation to various of Petitioner's patents as prior art illustrates as much.¹⁶

In one aspect of its development efforts, Petitioner worked with Primatec, a company that had substrate know-how including use of the organic material liquid

¹⁵ Patent Owner's own evidence illustrates embedded passives in RF modules were in the market and Petitioner was "developing organic substrate based modules since 2002." EX2003, 15.

¹⁶ The '914 patent's own citations of Murata's development efforts are illustrative and include, but are not limited to, those discussing multi-layer substrates such as cited U.S. Patent Nos. 5,770,986; 6,583,687; 6,153,290; 5,384,434; JPH07161583A. To the extent Patent Owner argues the material liquid crystalline polymer (LCP) in particular is new, Petitioner had been recognizing LCP for use in packages for years prior to the '914 patent. *See, e.g.*, U.S. Patent Nos. 6,420,818; 6,965,680; JP2003229304.

crystalline polymer (LCP). *See, e.g.*, EX1047 (Primatec's EP1375112A2 having a priority date of 2002). Primatec's know-how differed substantially from that of JMD, and technology suitable for commercialization was developed. In November 2016, Petitioner acquired Primatec. *See, e.g.*, <https://corporate.murata.com/en-us/newsroom/news/company/general/2016/1101>. Petitioner has invested significant time and resources to develop substrate technologies resulting in numerous patents worldwide. These include, but are not limited to, WO 2016/143523 ("Composite sheet, method for producing same, resin multilayer substrate and method for producing resin multilayer substrate"), U.S. Patent No. 9,012,785 B2 ("Flexible Multilayer Substrate"); U.S. Patent No. 8,975,986 ("High-frequency signal line and electronic device including the same"); JP2011018726A ("Lcp multilayer substrate, and method of manufacturing the same"); U.S. Patent No. 9,374,886 ("Signal line path and manufacturing method therefor"); U.S. Patent No. 8,592,687 ("Signal line and circuit substrate"); U.S. Patent No. 8,461,943; U.S. Patent No. 9,401,532 ("High-frequency signal line and electronic device including the same").

4. Identified IDS citations in Petitioner's patent portfolio do not support Patent Owner's settled expectations.

Patent Owner identifies patents that are only loosely associated with the '914 patent and that were cited during prosecution of Petitioner's own applications apparently alleging that these cited patents indicate that Petitioner should have considered challenging '914 patent earlier. PO Brief, 18-19. But the citations do not

support Patent Owner’s argument.

There is at best a tenuous relationship between Patent Owner’s allegedly “related patents” and the ’914 patent. At bottom, these “related patents” are not the ’914 patent and are not in the priority chain of the ’914 patent. Rather, Patent Owner identifies a cited patent that itself claims priority to a provisional application also listed on the ’914 patent. *See* EX1001, (60). And its other citation examples are even further afield—a cited patent claiming priority to a provisional application to which the ’914 Patent does not claim priority¹⁷ and a cited patent that merely discusses in its specification a patent listed on ’914 patent (*see* EX1001, (63)). In short, Patent Owner does not, and cannot, demonstrate a requisite awareness of the ’914 patent.

More importantly, large technology companies, like Petitioner, develop very large patent portfolios. About 10,000 U.S. patents assigned to Murata Manufacturing

¹⁷ The ’914 patent purports to claim priority as a continuation-in-part (CIP) to U.S. Patent 6,900,708 (“the ’708 patent”), which on its face refers to provisional application (60/391,742); this provisional (60/391,742) is not mentioned in the priority fields of the ’914 patent, is not included in the recently mailed (January, 2025) filing receipt for the ’914 patent, and is not relied upon for priority assertions of the ’914 patent (EX1035, 9). Thus, Patent Owner previously determined it is not relevant to the ’914 patent.

Co, Ltd. (and its subsidiaries) issued since the '914 patent grant.¹⁸ It is common that patents include dozens of citations. In this context, filing IPRs for even one percent of the patents cited during the prosecution of Petitioner's own patents—1,200 IPRs—would be entirely untenable, and in the present case, should have no bearing on settled expectations.

5. Review of expired patents and patents issued prior to AIA has already been adjudicated and provides no settled expectations.

IPRs are applicable to patents issued prior to 2012. *Celgene Corp. v. Peter* 931 F.3d 1342 (Fed. Cir. 2019), *Oil States Energy Services, LLC v. Greene's Energy Group, LLC*, 584 U.S. 325 (2018). Patent Owner's request to find otherwise under the guise of settled expectations is contrary to explicit findings of the Federal Circuit. Patent Owner also argues that an expired patent supports a conclusion that PTAB's resources are better spent elsewhere. This is nonsensical. The PTAB's interest is ensuring *all* patents are valid especially those with the purported public impact present here. *See, e.g.*, EX2007, 4; EX1035, 5, 33-35.

¹⁸ USPTO public search tools (available at <https://ppubs.uspto.gov/pubwebapp>) presently return 9955 patents issued to a Murata entity since 2009 with a search field of: `murata.as. AND @py>="2009"`.

C. Institution should be granted to correct the deficiencies of the prosecution leading to the '914 patent's overly broad claims and improper priority claim.

Neither the PTAB nor any other forum has adjudicated the validity of the '914 patent. The PTAB is well-suited to address the deficiencies in the prosecution that led to the '914 patent's overly broad claims.

First, the '914 patent claims a dual-band RF device including circuitry (an active device and passive devices) and an organic-based substrate. These are merely conventional circuits and materials. Prior to the issuance of the '914 patent and while the application for the '914 patent was pending before the Office, Dr. White indicates he was presenting this very understanding to Petitioner. *See* EX2003, 15 (discussing a dual-band RF device including an active device (“TDK GSM/WCDMA Front End Module”) formed with its passives (“L and C,” which are passives of inductor and capacitor) “embedded” in a multi-layer substrate, recognizing that companies such as Petitioner were “Looking to Migrate to Organic Substrates,” and even recognizing that “Murata [had been] developing organic substrate based modules since 2002.”). In short, Dr. White's presentation recognized that *all* of the elements of claim 1 of the '914 patent were known. However, no such information was disclosed to the Office despite the contemporaneous and then-pending examination of the '914 patent. As a result, the '914 patent issued with overly broad claims.

Second, the '914 patent claims priority as a continuation-in-part (CIP) to the '708 patent. The '708 patent is entitled “Integrated **passive** devices fabricated utilizing multi-layer, organic laminates.” USP 6,900,708, (54). In contrast, the claims of the '914 patent *all* require circuitry that includes not just passive devices, but “an active device”. EX1001, 26:19, 48. Petitioner has demonstrated that there is no priority supporting disclosure within the '708 patent of an active device—only passives. *See* IPR2025-00384, Paper 2, 15-18 (demonstrating that claims of the '914 patent lack written description support in the parent application). This is unrebutted. *See* IPR2025-00384, Paper 9 (waiving preliminary response). The record of the Office's original examination leading to the '914 patent includes no analysis of the continuation-in-part priority claim, which by definition recognizes the '914 patent added new matter. In fact, a filing receipt that indicates the priority claim appears to have been mailed only after expiration of the '914 patent—in January of **2025**. Not only did the inventors fail to inform the Office that its continuation-in-part priority claim did not support its actual claims, they failed to disclose to the Office their own relevant published documents (*e.g.*, inventor's thesis) that were prior art to the proper priority date. Equities demand that the '914 Patent should not be shielded from PTAB review. To do so would reward Patent Owner for its failures.

D. Patent Owner's allegations of *possible* secondary considerations of non-obviousness should not shield the '914 patent from PTAB review.

Patent Owner invites the Acting Director to discretionarily deny institution of this IPR because obviousness challenges have been raised and Patent Owner *may*, at some later point in the proceeding(s), argue that there are secondary considerations of non-obviousness to be considered. Patent Owner's invitation to consider the ease of discovery should be declined as it is based on (i) bad policy, (ii) premature conjecture, (iii) misapprehension of the PTAB's considerable and established capacity to adjudicate the secondary considerations disputes that routinely come before it, and (iv) misplaced hypotheticals as to "evidence" Petitioner "may possess."

First, many (if not nearly all) post-grant challenges to a patent include an obviousness challenge that a patent owner may conceivably seek to oppose by arguing there are secondary considerations of non-obviousness. A patent owner merely raising a possibility of such an argument, that it *may* or *may not* pursue, should not be a reason for discretionary denial. To entertain such a factor would eviscerate the intent of AIA, instead incentivizing patent owners to routinely invoke the mere possibility of a self-serving, unsupported argument as a tactic to shield its patent from PTAB review. *Second*, Patent Owner's premise: that this proceeding *may* involve gathering evidence of the objective indicia of non-obviousness and that

there *may* be a possibility that Patent Owner may need to overcome hurdles or there may be a delay in gathering evidence in support for its argument (that it may or may not raise), is premature conjecture.

Third, should this issue arise, the PTAB framework is more than adequate to form a sufficient evidentiary record.¹⁹ PTAB has an established capacity to adjudicate secondary considerations disputes that routinely come before it. Patent Owner provides no specific examples of how the PTAB's framework would result in an unfair or incomplete record. Patent Owner's complaints regarding requirements for authorization from the Board or that its discovery requests must meet the *Garmin* standard are not indicative of deficiencies of the PTAB. They are rules and trial practices purposefully developed by the PTAB to ensure fairness, efficient administration of justice, and sufficiency of the record. Patent Owner's

¹⁹ Patent Owner's complaint rings hollow in that it has not, to-date, properly availed itself of the evidentiary framework for confidential information that **is** established under existing rules of practice and trial procedures established by the PTAB. Instead, Patent Owner submits a unilaterally and heavily redacted document (EX2003) and no confidential unredacted version has been filed under seal as required by the Trial Practice Guide. CTPG, 111 (November 2019).

bulleted factors (beginning at PO Brief, 23) are all clearly addressable within the framework of the PTAB, should they even arise.²⁰

Fourth, the Patent Owner's discovery requests will need to meet the *Garmin* standard. The conjecture in PO Brief suggests that Patent Owner's evidentiary demands may be based on no more than a "mere possibility of finding something useful" and, at least as presently previewed, are likely not suitable to raise additional discovery. *Garmin Int'l, Inc. v. Cuozzo Speed Techs. LLC*, IPR2012-00001, Paper 26. But failure to meet the standard is weak justification for discarding the standard. Further, the history between the parties shows that Patent Owner's assertion that Petitioner *may* have evidence of copying or failure (where it succeeded) is incorrect. Consistent with the discussion above, the only relevant information to be gained from Petitioner's communications with JMD appears to be that Patent Owner's substrate technology did not work.

²⁰ Translations, modifications of protective orders, expert testimony, and Board authorization are all routine practice in the PTAB. The Complaint itself (EX1035) illustrates Patent Owner can overcome many of the hurdles related to claim mapping, product knowledge, and alleged commercial success. The age of documents has not been established as an issue, and is nonetheless a factor brought on by Patent Owner's own delayed assertion.

E. The Petition properly relies on evidence-supported expert testimony in accordance with Federal Circuit precedent.

The foundational decisions upon which patent law is based—*Phillips*, *KSR*, etc.—require the adjudicator to evaluate the patent and prior art from the perspective of a POSITA. That perspective is established with evidence, often in the form of expert declarations. Attorney argument is insufficient. Petitioner's expert, Dr. Shoemake, provides that perspective with testimony supported by well over a dozen tertiary references in accordance with 37 CFR § 42.65 and *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 (Aug. 24, 2022) (precedential). The unpatentability grounds set forth in the Petition are fully supported by the references themselves—Dr. Shoemake's testimony serves to confirm, support, and explain the disclosures of the references from the perspective of a POSITA. For example, Dr. Shoemake explains how the prior art teaches (*e.g.*, through graphical representations) the claimed relationship between frequency and impedance that lies on fundamental engineering principles.

F. PTAB is a better venue.

The independent claims at issue in the present proceeding center around a dual RF frequency band device (*e.g.*, low-noise amplifier) having passive networks (*e.g.*, capacitors and inductors) that perform an impedance matching function and have an impedance that varies with frequency. The frequency dependence in impedance matching networks is a fundamental engineering principle. While this technology is

likely a difficult subject for non-scientists and engineers, it is particularly well-suited for the judges at the PTAB because of their expertise. *See Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1079 (Fed. Cir. 2015) (“[PTAB] members, because of expertise, may more often find it easier to understand and soundly explain the teachings and suggestions of prior art without expert assistance”); *see also, United States v. Arthrex, Inc.*, 594 U.S. 1, 41, (2021) (“Given the technical nature of patents, the need for expertise, and the importance of avoiding political interference, Congress chose to grant the APJs a degree of independence”); *Daiichi Sankyo, Inc. v. Vidal*, 681 F. Supp. 3d 490, 495 (E.D. Va. 2023) (“Post-grant and inter partes review are advantageous over district court litigation because they are conducted by Board panels of APJs who have relevant subject matter expertise for adjudicating complex scientific disputes compared to federal judges or lay jurors”).

Further, priority disputes are just the type of dispute that is well-suited for the PTAB's expertise. The technical background and detailed patent law knowledge required to accurately apply the 35 U.S.C. §112 requirements necessary to review the priority claims in the context of a person of skill in the art and determine the sufficiency of the '708 patent's disclosure is solidly within the subject matter expertise of the APJs. The APJs are well suited to determine whether a description merely renders a claimed invention obvious, but does not sufficiently describe the

invention for the purposes of the written description requirement of 35 U.S.C. § 112.

See Regents of the Univ. of Cal. v. Eli Lilly, 119 F.3d 1559, 1567 (Fed. Cir. 1997).

IV. The new Interim Process should not govern the decision to institute.

A. IPR as-filed aligned with the requirements.

Petitioner timely filed this Petition—in fact, well exceeding the within one year of service of a patent-infringement complaint. 35 U.S.C. § 315(b). The petitions also aligned with precedential Board decisions [1] *Apple Inc. v. Fintiv, Inc.*, No. IPR2020-00019 (P.T.A.B. Mar. 20, 2020), which gave rise to the so-called Fintiv factors discussed above; and [2] *NHK Spring Co. v. Intri-Plex Techs., Inc.*, No. IPR2018-00752 (P.T.A.B. Sept. 12, 2018), which explained that a petition will not be discretionarily denied even if a petitioner knew about the patent for over a decade, so long as the petitioner received no “tactical advantage” from the time period. Here, Petitioner received no tactical advantage of the delay—rather any advantage benefits Patent Owner as it waited for the market to develop based on Murata’s independently developed and patented technology, and its patent to expire hoping it would insulate it from an IPR based on a non-existent “right to be free from IPR”.

B. After the filing of this IPR, the Acting Director adopted new discretionary denial rules.

The above briefing addresses the USPTO’s most recent guidance on institution as best as Petitioner understands it. But, for at least the reasons articulated below, Petitioner respectfully requests the USPTO Director to maintain the

standards for institution in place at the time this Petition was filed, until such time as new guidance is issued following a notice and comment period, as required by the Administrative Procedure Act (“APA”).

Petitioner developed the Petition and corresponding litigation strategy based on the standards outlined in the June 21, 2022, Interim Procedure for Discretionary Denials issued by the Office (the “June 2022 Procedures”). After the Petition was filed, however, the USPTO rescinded the June 2022 Procedures and reverted to former procedures through a short posting on the USPTO website followed by the March 24, 2025 Memorandum of Chief Administrative Patent Judge Scott Boalick (the “Boalick Memo”). Two days later, on March 26, Acting Director Stewart issued the “Director Memo” introducing an entirely new “interim procedure” that bifurcates institution between “(i) discretionary considerations and (ii) merits and other non-discretionary statutory considerations.” Director Memo, 1. Under this new procedure, “the Director, in consultation with at least three PTAB judges” will determine whether discretionary denial is appropriate based on “all relevant considerations,” including several newly enumerated factors. *Id.* Three weeks after the Director Memo issued, the USPTO held an oral webcast setting forth additional substantive details of the new interim procedure not found in the Director Memo. Then, eight days after the webcast, the USPTO posted on its website “FAQs for Interim Processes for PTAB Workload Management” with even more substantive

details, some potentially in conflict with details provided during the oral webcast. Petitioner submits that the recission notice, the Boalick Memo, the Director Memo, the oral webcast, and the FAQs (together, the “Announcements”) do not satisfy the requisite statutory and constitutional obligations for new regulations.

By way of example, 35 U.S.C. § 316(a) mandates that “[t]he **Director shall prescribe regulations**” including regulations “(2) setting forth the standards for the showing of sufficient grounds to institute a review under section 314(a).” The Announcements fall short of 35 U.S.C. § 316(a) by:

- (1) Making changes to substantive rules or directives without going through notice-and-comment rulemaking, particularly given the agency’s representation that it will make any further changes to the institution process through notice-and-comment rulemaking. *See* 88 Fed. Reg. 24,503 (April 21, 2023). The Announcements violate the notice-and-comment requirements under the APA and are arbitrary and capricious.
- (2) Proposing considerations that lack clarity so that they fail to set “forth the standards for the showing of sufficient grounds to institute review.” 35 U.S.C. § 316(a). For example, many of the new “considerations” set forth in the Director Memo lack basis in Federal Circuit or PTAB case law such that petitioners cannot anticipate how the Director will apply them. *See* Director Memo, 2-3 (“[s]ettled expectations,” “reliance on expert testimony,”

“workload,” and “[c]ompelling economic, public health, or national security interests”).

(3) Lacking a sufficiently reasoned explanation for the changes in the factors relevant to institution, including changes that directly contradict the agency’s prior guidance in the June 2022 Procedures—such as the controlling effect of a *Sotera* stipulation and the relevance of compelling merits. The reference to “workload needs of the PTAB” in the Announcements does not explain how the changes will aid that goal.²¹ *See Food & Drug Admin. v. Wages & White Lion Invs., L.L.C.*, 145 S. Ct. 898, 906 (2025) (explaining that when an agency changes position, it must “offer ‘good reasons for the new policy’”); *see also F.C.C. v. Fox Television Stations, Inc.*, 556 U.S. 502 (2009) (agency changing position must show “that the new policy is permissible under the statute, that there are good reasons for it, and that the agency believes it to be better, which the conscious change of course adequately indicates”).

(4) Applying the Announcements retroactively to petitions filed prior to issuance of the new policies (such as in this case), thereby undermining stakeholders’

²¹ The Director Memo does not contain any objective data illustrating how the workload of the PTAB has changed, or, if it has changed, how such change impacts the PTAB’s ability to meet its statutory obligations.

reliance interests and prejudicing petitioners, including the Petitioner in this case, with respect to strategies between district court and USPTO proceedings. This is particularly true where the retroactive application of a new rule was not first subjected to notice-and-comment rulemaking under the Administrative Procedure, despite the agency's stated intent to follow such procedures. *See NetworkIP, LLC v. F.C.C.*, 548 F.3d 116, 122–23 (D.C. Cir. 2008).

- (5) Implementing the new bifurcated process without first collecting input from stakeholders or adequately apprising stakeholders of the logistics. The Director Memo lacks procedural details, and the later-created FAQs webpage that purportedly “controls the interim processes” is “frequently” updated. Ex.1066, 1 (encouraging stakeholders to “check back frequently for updates”). Further, there is no way for the parties to know who is designated to advise the Director and, thus, whether there are any conflicts of interest or other procedural concerns related to the process. *See, e.g.*, IPR2025-00250, Paper 14 at 1 (caption of Acting Director's decision on request for discretionary denial listing only the Acting Director).

In the face of this non-exclusive list of deficiencies in the Announcements, Petitioner urges the Board and Director to consider whether to institute based on the standards articulated in the June 2022 Procedures until such time as the Board issues

new regulations in accordance with 35 U.S.C. § 316 and the rulemaking procedures of the APA.²²

V. Conclusion

The *Fintiv* factors strongly weigh against denial. Petitioner diligently filed the Petition approximately three (3) months after Patent Owner filed its complaint in the NDGA. In this parallel litigation, no scheduling order has been issued, and based on the median time-to-trial for NDGA, FWD can be expected *over a year before* any district court trial. Petitioner’s “*Sotera*” stipulation promotes judicial efficiency.

Any “settled expectations” favor Petitioner. Patent Owner admits it did not commercialize, assert, mark, commercially license, or otherwise apply the ’914 patent claims. Petitioner presented Patent Owner with evidence that its technology could not be commercialized, leading to Petitioner’s settled expectation that the ’914 patent would not be asserted or otherwise utilized. Patent Owner was well-aware of Petitioner’s independent development that began long before the ’914 patent. Furthermore, there was public disclosure of commercialization of these efforts at least as early 2016. EX1035, 24. Patent Owner took no action. Thus, the settled expectations of the parties were that the ’914 patent was not assertable and thus,

²² If the Office alters the “Interim Processes” before the decision on GTRC’s request for discretionary denial, Petitioner requests authorization to address such changes.

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there was no reason to challenge its validity. Moreover, any settled expectations alleged by Patent Owner are outweighed by the fact that the '914 patent claims are highly vulnerable to invalidation based on prior art presented in the Petition.

Thus, for these and for the above reasons, Petitioner respectfully requests that the Director refrain from exercising her discretion to deny this petition, and instead pass it to a merits panel for consideration.

Respectfully submitted,

Date: July 15, 2025
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CERTIFICATE OF SERVICE

The undersigned certifies that, in accordance with 37 C.F.R. §42.6(e) and 37 C.F.R. §42.105, service was made on Patent Owner as detailed below.

Date of service July 15, 2025

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Documents served PETITIONER'S OPPOSITION TO PATENT OWNER'S
DISCRETIONARY DENIAL BRIEF
EX1043-EX1047
PETITIONER'S MOTION TO SEAL

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