

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ACCELIGHT TECHNOLOGIES, INC.,
Petitioner,

v.

APPLIED OPTOELECTRONICS, INC.
Patent Owner.

IPR2025-01566
U.S. Patent No. 10,042,116

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

TABLE OF CONTENTS

I. INTRODUCTION	1
II. BACKGROUND ON PATENT OWNER AOI’S PENDING LITIGATIONS AGAINST CIG, ACCELIGHT, AND EOPTOLINK.....	1
III. PATENT OWNER’S “SETTLED EXPECTATION” CLAIM BASED ON THE AGE OF THE PATENT IS OUTWEIGHED BY PETITIONER’S SETTLED EXPECTATION OF NO ASSERTION OF INFRINGEMENT	3
IV. CIG’s IPR DID NOT ADDRESS THE DISTINCT FACTS AND EVIDENCE PRESENTED HERE AND THEREFORE SHOULD NOT CONTROL THE INSTITUTION DECISION IN THIS PROCEEDING.....	4
V. THE DISCRETIONARY FACTORS SUPPORT INSTITUTION	6
A. Patent Owner’s Failure to Meet the Duty of Disclosure and Candor to the Patent Office and Related Errors by the Examiner During Prosecution Weigh Against Discretionary Denial	6
B. The Complex and Diverse District Court Litigation Weighs Against Discretionary Denial.....	8
C. Petitioner’s Broad Stipulation to Not Pursue Any Invalidity Challenges Under Section 102 or 103 in the District Court Weighs Against Discretionary Denial.....	11
D. Petitioner’s Search Disclosure Declaration Favors Institution.....	12
E. Judicial Efficiency and Consistency Strongly Weigh Against Denial.....	14
F. Contrary to Patent Owner’s Assertion, the Merits of the Petition are Compelling and Support Institution	14
VI. DENIAL UNDER § 325(d) IS NOT WARRANTED	17
VII. THE <i>FINTIV</i> FACTORS WEIGH STRONGLY AGAINST DENIAL	18
VIII. CONCLUSION	20

TABLE OF AUTHORITIES

CASES

<i>Ecto World, LLC v. RAI Strategic Holdings, Inc.</i> , IPR2024-01280, Paper 13 (Director May 19, 2025)	8, 18
<i>POSCO Co., Ltd. v. ArcelorMittal</i> , IPR2025-00370, Paper 10 (Director Jun. 25, 2025)	11
<i>Samsung Elecs. Co. v. Staton Techiya, LLC</i> , IPR2022-00302, Paper 13 (P.T.A.B. Jul. 11, 2022)	20
<i>Shenzhen Tuozhu Tech. Co. v. Stratasy, Inc.</i> , IPR2025-00438, Paper 10 (Director Jul. 17, 2025)	8, 9
<i>Taiwan Semiconductor Mfg. Co. v. Marlin Semiconductor Ltd.</i> , IPR2025-00847, Paper 11 (Director Sept. 3, 2025)	8
<i>Tesla, Inc. v. Intellectual Ventures II LLC</i> , IPR2025-00217, Paper 9 (Director Jun. 13, 2025)	8, 9

STATUTES

35 U.S.C. § 102	passim
35 U.S.C. § 103	passim

OTHER AUTHORITIES

37 C.F.R. § 42.14	13
-------------------------	----

PETITIONER’S UPDATED EXHIBIT LIST

Exhibit	Description
1001	U.S. Patent No. 10,042,116 to Ho et al. (“the ’116 patent”)
1002	Prosecution history of the ’116 patent
1003	Declaration of Michael Lebby, Ph.D.
1004	U.S. Patent Application Publication No. 2014/0183344 to Lee et al. (“Lee”)
1005	U.S. Patent Application Publication No. 2014/0169389 to Kim et al. (“Kim”)
1006	U.S. Patent Application Publication No. 2014/0341578 to Ho et al. (“Ho”)
1007	P. Bernasconi et al., <i>Design and Challenges in a 100 Gb/s Hybrid-Integrated Photonic Circuit</i> , 38TH EUROPEAN CONFERENCE AND EXHIBITION ON OPTICAL COMMUNICATIONS, Amsterdam, Netherlands, 2012, pp. 1-3, paper Tu.4.E.3. (“Bernasconi”)
1008	U.S. Patent No. 9,768,901 to Soldano et al. (“Soldano”)
1009	U.S. Patent Application Publication No. 2005/0286839 to Yoshikawa et al. (“Yoshikawa”)
1010	U.S. Patent Application Publication No. 2014/0161457 to Ho et al. (“Ho II”)
1011	U.S. Patent No. 5,351,327 to Lurie et al.
1012	Petitioner’s Search Disclosure Declaration (“SDD”)
1013	Joint Case Management Statement, <i>Applied Optoelectronics, Inc. v. Molex, LLC</i> , Case No. 4:23-cv-04787-JST (N.D. Cal.)
1014	Petitioner’s Opposition to Patent Owner’s Request for Discretionary Denial of Institution in IPR2025-00435 against U.S. 10,042,116

Exhibit	Description
1015	Time to Milestones for N.D. California, <i>Docket Navigator</i> , (accessed January 7, 2026)
1016	Petition for <i>Inter Partes</i> Review in IPR2025-01567, against U.S. 10,379,301, filed Sept. 26, 2025
1017	U.S. Patent No. 10,379,301 to Luo et al.
1018	U.S. Patent No. 9,509,433 to Ho et al.
1019	Patent Owner's Request to Director for Discretionary Denial of Institution of Petition for <i>Inter Partes</i> Review in IPR2025-00435 against U.S. 10,042,116
1020	Joint Administrative Motion to Stay Pending IPR Institution Decisions, <i>Applied Optoelectronics, Inc. v. Accelight Technologies, Inc.</i> , Case No. 4:24-cv-09041-HSG (N.D. Cal.), filed October 3, 2025
1021	Complaint for Patent Infringement, <i>Applied Optoelectronics, Inc. v. Accelight Technologies, Inc.</i> , Case No. 4:24-cv-09041-HSG (N.D. Cal.), filed December 13, 2024
1022	Declaration of William D. Sterling

I. INTRODUCTION

The Director should reject Patent Owner’s request for discretionary denial (Paper 9, “DD Req.”). Patent Owner’s primary argument for discretionary denial is the purported “settled expectation” arising from the age of the ’116 patent. However, patent age is just one discretionary factor and does not outweigh Petitioner’s reasonable expectation that its product, sold in the U.S. since 2018, would not face meritless infringement claims after nearly six years. Based on a holistic assessment of the following factors—(a) the complexity and interrelated nature of the six patents asserted in the parallel district court action, (b) Patent Owner’s failure to meet its duty of disclosure and related examiner errors during prosecution, (c) Petitioner’s stipulation to not pursue any invalidity grounds under §§ 102 or 103 in the district court case, (d) Petitioner’s Search Disclosure Declaration, (e) judicial efficiency and consistency gained by evaluating this IPR together with IPR2025-001567, and (f) the compelling merits of the Petition—the Director should deny the discretionary denial request. Additionally, the *Fintiv* factors, particularly the stay of the district court case, and § 325(d) considerations strongly weigh against discretionary denial.

II. BACKGROUND ON PATENT OWNER AOI’S PENDING LITIGATIONS AGAINST CIG, ACCELIGHT, AND EOPTOLINK

Patent Owner AOI has launched a series of litigations against perceived competitors to monetize Patent Owner’s patents—years after they were issued—by alleging infringement by products that have been in the U.S. market for almost as

long as the life of most of the asserted patents. To date, Patent Owner has filed actions against Molex, LLC; Cambridge Industries USA, Inc. (“CIG”); Accelight Technologies, Inc. (“Accelight”); and Eoptolink Technology USA Inc. (“Eoptolink”). Patent Owner has no intention of engaging in the merits of their lawsuits; instead, they have been harassing competitors by pressing for quick settlements before the cases reach any significant milestone in district court and before IPR petition(s) are filed or instituted. The undersigned counsel knows about Patent Owner’s litigation conduct because she is representing Petitioner Accelight in Case No. 4:24-cv-09041-HSG (N.D. Cal.) (“Accelight Litigation”), which is currently stayed in view of pending IPRs. Same counsel also represents Eoptolink in Case No. 5:24-cv-08165-NW (N.D. Cal.) (“Eoptolink Litigation”), where the parties have filed a joint motion to stay the case pending IPRs. Same counsel also previously represented Molex, LLC against Patent Owner in Case No. 4:23-cv-04787-JST (N.D. Cal.), which settled and has been dismissed.

In each case, Patent Owner has asserted a different set of patents, with some overlap among the asserted patents across the various suits. All asserted patents in the various lawsuits, however, relate to optical transceivers. In the Accelight Litigation, Patent Owner has asserted six patents (identified in the table on pages 9-10, below), each directed to technologies and components of optical transceiver modules. One of those patents, U.S. 9,448,367 (“’367 patent”), is also asserted in the

Eoptolink Litigation. Except for the '367 patent, the other five patents asserted in the Accelight Litigation have also been asserted against CIG in Case No. 3:24-cv-01010-JD (N.D. Cal.) (“CIG Litigation”), which is currently stayed.

III. PATENT OWNER’S “SETTLED EXPECTATION” CLAIM BASED ON THE AGE OF THE PATENT IS OUTWEIGHED BY PETITIONER’S SETTLED EXPECTATION OF NO ASSERTION OF INFRINGEMENT

Patent Owner argues that because the '116 patent issued in August 2018 and has been in force for longer than six years, it has “settled expectations” in the validity of the patent. DD Req., 14. But Patent Owner’s unsupported “settled expectation” claim carries little weight, given that **Patent Owner waited more than five years after the patent issued to assert it against any alleged infringer**, even though at least Petitioner’s product accused in the Accelight Litigation was offered for sale in the U.S. since March 2018. Ex. 1022, ¶¶3, 4. The '116 patent was first asserted against Molex, LLC in September 2023—five years after the patent issued—but the case quickly settled and was dismissed after Molex (represented by undersigned counsel) advised Patent Owner of the patent’s likely invalidity and the prospect of an IPR challenge. Ex. 1013, 8. Patent Owner’s subsequent actions against CIG and Accelight were also met with strong invalidity contentions and IPR challenges, further undermining any assertion of “settled expectation” in the patent’s validity.

Patent Owner’s purported “settled expectation” is further outweighed by Petitioner’s reasonable expectation that its product, which has been in the U.S.

market since 2018, would not face sudden infringement claims. Ex. 1022, ¶¶3, 4. With no prior communication between the parties regarding patents or alleged infringement, **Petitioner had no reason to anticipate an infringement action in December 2024 against a product that has been available in the U.S. for more than six years before Patent Owner filed suit.** Ex. 1021; Ex. 1022, ¶4.

IV. CIG’s IPR DID NOT ADDRESS THE DISTINCT FACTS AND EVIDENCE PRESENTED HERE AND THEREFORE SHOULD NOT CONTROL THE INSTITUTION DECISION IN THIS PROCEEDING

Patent Owner argues that because a prior IPR petition against the ’116 patent (IPR2025-00435) filed by CIG was discretionarily denied, the present IPR should also be denied institution. DD Req., 10. But as Acting Director Stewart noted in her discretionary denial decision in the CIG IPR, that determination was “based on the totality of the evidence and arguments the parties [] presented [in that case].” Ex. 2003, 2. In contrast, the arguments and evidence presented by Petitioner here were not before the Acting Director when she reviewed CIG’s opposition to Patent Owner’s discretionary denial request. *See generally* Ex. 1014, 5-19.

Specifically, CIG previously contended that the *Fintiv* factors and the strength of its petition supported institution. *See id.*, 6–13. Without addressing the merits or propriety of CIG’s opposition, Petitioner respectfully submits that the facts and evidence presented here, which are distinct from and more compelling than those in the CIG IPR, strongly support institution rather than discretionary denial. For

instance, CIG's opposition did not identify examiner errors during prosecution of the '116 patent or address the complexity of the district court litigations initiated by Patent Owner. Nor did CIG provide a broad stipulation to meaningfully reduce overlap between the district court and the PTAB. Additional facts and circumstances discussed in Sections V–VII below, which were not addressed in the CIG IPR, further weigh against discretionary denial of institution in this case.

Patent Owner also incorrectly states that because the '116 patent is asserted in the CIG Litigation, the validity of the '116 patent may be adjudicated by a district court before the final written decision in this case. DD Req., 18. Patent Owner is incorrect. The **CIG Litigation is currently stayed and will likely remain stayed** in view of the IPR petitions filed by Petitioner Accelight against four of the eight patents asserted in the CIG Litigation. *See* Section V.B, below. Moreover, even if the stay were lifted in early 2026 and a claim construction hearing was conducted soon after, trial in the CIG Litigation is unlikely to happen by April 2027 (when final written decision in this case is due) because 1) the median time-to-trial in the Northern District of California is 32.4 months and 2) the “parties invested little effort in the [CIG Litigation] prior to the stay (and none since).” Ex. 1015; Ex. 1014, 8–9 (discussing the parties' little investment in the CIG Litigation). The CIG Litigation is therefore not pertinent to whether IPR should be instituted in this case.

V. THE DISCRETIONARY FACTORS SUPPORT INSTITUTION

A holistic assessment of the factors outlined in Acting Director Stewart's Memorandum of March 26, 2025 confirms that discretionary denial is not warranted.

A. **Patent Owner's Failure to Meet the Duty of Disclosure and Candor to the Patent Office and Related Errors by the Examiner During Prosecution Weigh Against Discretionary Denial**

The challenged claims in this IPR recite a combination of standard optoelectronic components, such as a receiver optical sub-assembly (ROSA), a transmitter optical sub-assembly (TOSA), an arrayed waveguide grating (AWG) demultiplexer, a planar lightwave circuit (PLC), photodetectors, etc., that were well known, individually and collectively, before the '116 patent application was filed. Paper 1 (Pet.), 2; Ex. 1003, ¶46. The only claimed technique that could arguably be considered inventive is the direct optical coupling of photodetectors to demultiplexer outputs "to reduce fiber use and insertion loss," but the Petition demonstrates that it is not inventive. *See* Ex. 1001, 1:9-12, Title, Abstract. More importantly, **Patent Owner has claimed this identical subject matter across multiple patents in distinct, unrelated patent families, yet failed to disclose the existence of co-pending applications to the Patent Office.** For example, Patent Owner disclosed and claimed the same direct coupling technique between photodetectors and an optical demultiplexer in U.S. Patent No. 10,379,301 ("the '301 patent"), which is the subject of IPR2025-01567. Ex. 1016, 2; Ex. 1017, Abstract, 3:34-4:20.

Patent Owner has also claimed direct coupling between a demultiplexer and photodetectors in yet another patent, U.S. 9,509,433. Ex. 1018, Title, Abstract, 2:53-62, 3:15-18, 8:26-59. In fact, U.S. Patent Publication No. 2014/0341578 (Ex. 1006), which issued as Patent Owner's '433 patent, is § 102(a) prior art against both the '116 patent challenged here and the '301 patent. *See* Ex. 1006, ¶¶[0042], [0044], claim 1 (7:10-13) (disclosing and claiming direct coupling). But **Patent Owner never disclosed the '433 patent (or its publication) to the Office during prosecution.** By filing for and obtaining multiple patents on substantially the same invention—without claiming priority or properly disclosing the relationship between the subject matters of the patents to the Patent Office—Patent Owner has improperly extended the patent term for its alleged “direct coupling” invention, and also avoided double patenting and §§ 102 or 103 rejections based on its own prior art. Patent Owner's attempts to game the patent system through unjustified extension of patent term should not be allowed. Likewise, Patent Owner's failure to fulfill the duty of disclosure by submitting material prior art to the Office should not be condoned.

Relatedly, the Office overlooked and failed to consider Patent Owner's own prior filings on the same subject matter, i.e., direct coupling between a demultiplexer and photodetectors, during prosecution. For example, Patent Owner submitted the office actions received during prosecution of the related '301 patent in two back-to-back IDSs—albeit without articulating its disclosure of direct coupling—yet the

Office failed to evaluate the '301 patent application as material prior art and allowed the '116 patent application after a single non-final office action. Ex. 1002, 70-81, 121-181, 182-186. The examiner never discussed the '301 patent application, nor did the Office use the office actions/references that were submitted in IDSs as basis for any rejection. *Ecto World, LLC v. RAI Strategic Holdings, Inc.*, IPR2024-01280, Paper 13 at 5-6 (Director May 19, 2025) (precedential as to §A) (examiner materially errs by overlooking relevant teachings in prior art on an IDS). Significantly, the '433 patent was never even disclosed to the Office by Patent Owner, nor did the examiner find it through the Office's customary search practices. This further illustrates the searching and examination errors during prosecution of the '116 patent.

Even if the Director finds that the examiner's errors were not substantial, "it is an appropriate use of Office resources to review the potential error[s]." *Taiwan Semiconductor Mfg. Co. v. Marlin Semiconductor Ltd.*, IPR2025-00847 et al., Paper 11 (Director Sept. 3, 2025). Patent Owner's omission of material prior art, in breach of the duty of candor and disclosure to the Patent Office, also provides a compelling basis for use of Office resources to review the patentability of the challenged claims.

B. The Complex and Diverse District Court Litigation Weighs Against Discretionary Denial

A "complex and diverse" district court litigation "tip[s] the balance against discretionary denial." *Tesla, Inc. v. Intellectual Ventures II LLC*, IPR2025-00217, Paper 9 at 2 (Director Jun. 13, 2025); *see also Shenzhen Tuozhu Tech. Co. v.*

Stratasys, Inc., IPR2025-00438, Paper 10 at 3 (Director Jul. 17, 2025) (same). As the Director explained in *Tesla* and *Tuozhu*, “[t]he large number and vast scope of the patents asserted in the district court litigation ... weighs against discretionary denial, as the Board is better suited to review a large number of patents involving diverse subject matter.” *Tesla*, Paper 9 at 3; *Tuozhu*, Paper 10 at 3.

As in *Tesla* and *Tuozhu*, the Accelight Litigation is complex and diverse. It involves **six patents in six unique patent families covering interrelated technologies and components of optical transceivers**, as the table below shows.

Patent No.	Title	Technology	District Court Case	Accelight IPR?
10,042,116	Techniques for direct optical coupling of photodetectors to optical demultiplexer outputs and an optical transceiver using the same	Direct coupling of photodetectors to demultiplexed optical signals from arrayed waveguide grating (AWG) demultiplexer	Accelight Litigation CIG Litigation	Yes (IPR2025-01566)
10,379,301	Multi-channel parallel optical receiving device	Direct coupling of photodetectors to demultiplexed optical signals from AWG demultiplexer	Accelight Litigation CIG Litigation	Yes (IPR2025-01567)
10,788,690	Optical isolator array for use in an optical subassembly module	Optical isolator array with a magnetic base for mounting multiple optical isolators	Accelight Litigation CIG Litigation	Yes (IPR2025-01570)

Patent No.	Title	Technology	District Court Case	Accelight IPR?
		within an optical subassembly		
9,523,826	Pluggable optical transceiver module	Optical transceiver configured to be easily plugged in and unplugged from a host socket	Accelight Litigation CIG Litigation	Yes (IPR2026-00093)
10,313,024	Transmitter optical subassembly with trace routing to provide electrical isolation between power and RF traces	Transmitter optical subassembly (TOSA) having a feedthrough device that electrically isolates RF and power traces	Accelight Litigation CIG Litigation	No ¹
9,448,367	Multi-channel optical transceiver module including dual fiber type direct link adapter for optically coupling optical subassemblies in the transceiver module	Adapter for coupling external fiber optic connectors (such as LC connectors) with the internal components of a transceiver	Accelight Litigation Eoptolink Litigation	Yes IPR2026-00019

¹ Accelight has not filed an IPR petition against the '024 patent because the Accelight product accused of infringing the '024 patent has never been sold in the U.S. and Accelight has no intention of introducing it in the U.S., and therefore there are no damages associated with the alleged infringement of the '024 patent.

Given the vast number of interrelated patents in the Accelight Litigation, the PTAB is better suited to adjudicate the patentability of the '116 patent (and the other patents challenged through IPRs). More specifically, because the challenged patents pertain to closely related optical transceiver technologies with substantial overlaps in concepts and subject matters, the PTAB is in a better position than the district court to conduct a unified review of the interrelated technical issues presented by the patents. This approach will advance judicial efficiency and foster “consistency and predictability to the public.” *POSCO Co., Ltd. v. ArcelorMittal*, IPR2025-00370, Paper 10 at 3 (Director Jun. 25, 2025). The complexity of the parallel district court action tips the balance against discretionary denial.

C. Petitioner’s Broad Stipulation to Not Pursue Any Invalidity Challenges Under Section 102 or 103 in the District Court Weighs Against Discretionary Denial

In view of the United States Patent and Trademark Office’s (USPTO) Notice of Proposed Rulemaking, dated October 17, 2025, **Petitioner has stipulated to not pursue any invalidity challenges against the '116 patent under 35 U.S.C. §§ 102 or 103 in the Accelight Litigation** if IPR is instituted (and not later terminated). *See* Paper 6 (filed Nov. 20, 2025). Petitioner’s broad stipulation guarantees that the IPR proceeding will be a true alternative to the district court litigation for prior art-based invalidity challenges. Petitioner’s stipulation thus favors institution.

Patent Owner’s concern about “significant overlap between the issues”

asserted in the Petition and the district court litigation is disingenuous because it fails to address (or even acknowledge) Petitioner's broad stipulation to not pursue any prior-art based invalidity challenges in the district court. *See* DD Req., 12–14. Petitioner's broad stipulation ensures that there will be little (if any) overlap in the issues before the PTAB and the district court, thereby promoting judicial efficiency and reducing the risk of inconsistent decisions.

D. Petitioner's Search Disclosure Declaration Favors Institution

Pursuant to Director Squires's Memorandum dated November 17, 2025, titled Voluntary Search Disclosure Declarations as a Favorable Factor in Institution Decisions ("SDD Memorandum"), Petitioner submitted a Voluntary Search Disclosure Declaration ("SDD") (Exhibit 1012), along with a motion to seal and request for in camera review of the SDD. **The Petition relies on compelling prior art references that were not found by the Patent Office through its customary search practices.** *See, e.g.*, Exs. 1004–1011 (none of the cited references in the Petition were found by the Patent Office during prosecution).² Thus, the SDD "reveals new or underutilized pathways relevant to Office search practice," in the

² The Soldano reference (Ex. 1008) was cited by Patent Owner in an IDS; it was neither found by the examiner, nor applied by the examiner in a §§ 102 or 103 rejection. Ex. 1002, 82, 121–122.

field of art relevant to the '116 patent. *See* SDD Memorandum, 2. This serves as a favorable discretionary factor supporting institution. *Id.*

Petitioner's SDD was filed as "Filing Party and Board," with a motion to seal and an accompanying request for in camera review under 37 C.F.R. § 42.14. Therefore, it is curious how Patent Owner can criticize the SDD, which they have had no access to, as not "reveal[ing]" any search pathways that may be relevant to the Office's search strategies. DD Req., 19–20. Patent Owner's criticisms lack merit because the Petition relies on prior art that were not found by the Patent Office. This demonstrates that the SDD indeed identifies search considerations and/or pathways that were either overlooked or insufficiently examined during the examiner's search. Patent Owner's additional criticism that "Petitioner merely relies on U.S. patents and applications for its invalidity arguments," which allegedly do not require new or underutilized pathways, is also incorrect. *Id.* Patent Owner overlooks that the Bernasconi reference (Ex. 1007), which is the primary reference for grounds 3 and 4, is a non-patent literature document that Petitioner found through its search strategies disclosed in the SDD (and was not found by the examiner).

Petitioner submits that the SDD identifies strategies and pathways that may meaningfully improve the Office search practices, and respectfully requests that the Director consider the SDD as a favorable factor supporting institution.

E. Judicial Efficiency and Consistency Strongly Weigh Against Denial

The '116 patent at issue in this IPR and the '301 patent, which is the subject of IPR2025-01567, claim related subject matter. Specifically, both the '116 and the '301 patents are directed to a ROSA having an AWG demultiplexer with an angled/tapered surface to directly couple demultiplexed signals with respective photodetectors through reflection (instead of coupling using waveguides or fibers). Pet., 2; Ex. 1016, 2. Therefore, **there is substantial overlap in prior art asserted against these two patents.** Indeed, Lee (Ex. 1004), Kim (Ex. 1005), and Ho (Ex. 1006) asserted in this IPR are the same (and the only) references asserted in IPR2025-01567. Ex. 1016, 4. The PTAB can therefore efficiently and consistently extend its analyses of the core prior art references in this IPR to the challenged claims in IPR2025-01567, and vice versa. Streamlining the evaluation of the two IPRs will benefit the PTAB, the district court, and the Patent Owner by conserving resources and avoiding inconsistencies. This strongly weighs against discretionary denial.

In addition, Petitioner purposefully limited its challenge to only the asserted claims in the Accelight Litigation, which promotes efficiency for the PTAB and thus weighs in favor of institution.

F. Contrary to Patent Owner's Assertion, the Merits of the Petition are Compelling and Support Institution

Patent Owner erroneously argues that limitation 1[e] ("a tapered region disposed at the second end of the AWG chip ... exposed output interface region emits

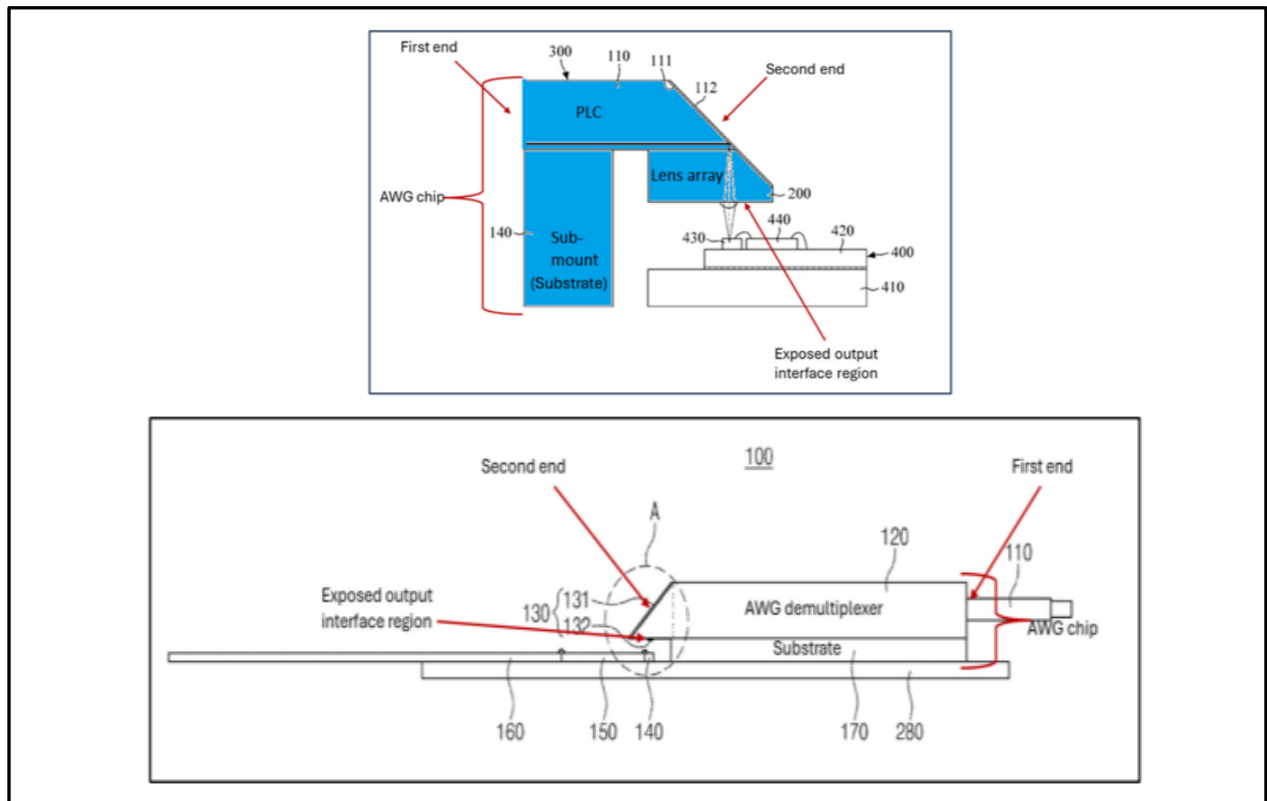
the received light from the AWG chip on the same side as the substrate without passing the received light through the substrate”) is not disclosed by any of the prior art references. DD Req., 15–17. Patent Owner is incorrect for the following reasons:

First, it is not clear why Patent Owner criticizes Soldano, which is a secondary reference in Ground 3, as not disclosing limitation 1[e], given that the Petition relies primarily on Bernasconi to address this limitation. Pet., 63-64. It seems **Patent Owner repeated the same arguments regarding Soldano that appeared in its request for discretionary denial in the CIG IPR, where Soldano was cited as a primary reference.** *Compare* DD Req., 15-17, *with* Ex.1019, 31-33. Patent Owner’s copy-pasted arguments about Soldano are inapplicable here, as Soldano is not relied upon for limitation 1[e] in this case; rather, it is cited primarily for its disclosure of an input coupling receptacle and output waveguides. Pet., 55-56.

Second, Patent Owner’s argument misconstrues limitation 1[e] to require “removing a portion of the substrate” to “expose the output interface region.” DD Req. 15-16. But nowhere does claim 1 recite removal of a portion of the substrate to expose the output interface region; instead, limitation 1[e] simply requires the AWG chip to have “an exposed output interface region” that receives demultiplexed light reflected by the “tapered region” of the AWG chip and emits the light “on the same side as the substrate without passing through the received light through the substrate.” *See* Ex. 1001, claim 1. That is, **claim 1 simply requires the AWG chip**

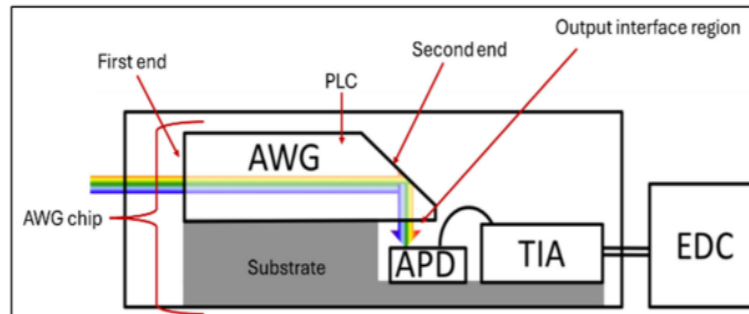
to have an “exposed output interface region”; it does not recite how the exposed region is formed. Therefore, Patent Owner’s assertion that the prior art cited by Petitioner fails to disclose limitation 1[e] is based on an unduly narrow interpretation of the limitation, which is not supported by the plain language of the claim.

Third, contrary to Patent Owner’s assertion, each of Lee, Kim, and Bernasconi discloses an AWG chip having “an exposed output interface region” to emit light “on the same side as the substrate without passing the received light through the substrate,” and thus meets limitation 1[e]. *See* Pet., 27–29, 63–65.



Pet., 27–29 (citing Ex. 1004, Fig. 2 and Ex. 1005, Fig. 3) (showing AWG chips of Lee and Kim having “exposed output interface region” to emit light “on the same

side as the substrate without passing the received light through the substrate”)



Id., 64 (citing Ex. 1007, Fig. 2(b)) (showing “exposed output interface region” of Bernasconi’s AWG chip that emits light without passing through the substrate)

Patent Owner’s meritless assertions regarding only limitation 1[e], and no other aspect of the Petition, underscore the strength of the prior art grounds in the Petition. The compelling merits of the Petition weigh against discretionary denial.

VI. DENIAL UNDER § 325(d) IS NOT WARRANTED

The Petition presents four unpatentability grounds: Ground 1 relies on Lee and Kim; Ground 2 relies on Ho, Lee, Kim, and Yoshikawa; Ground 3 relies on Bernasconi and Soldano; Ground 4 relies on Ho, Bernasconi, Soldano, and Yoshikawa. Pet, 4–5. **Of the six prior art references asserted in the Petition, only Soldano—a secondary reference in Grounds 3 and 4—was cited in an IDS.** Contrary to Patent Owner’s suggestion, Soldano was not discussed or applied in any prior art rejection. *Contra* DD Req., 11. Only a single rejection was issued during prosecution of the ’116 patent, and that rejection relied on Bai (U.S. Patent No. 7,532,783), Dallesasse (U.S. Patent No. 7,941,053), and Welch et al. (U.S. Patent

No. 7,058,263), which are not relied upon in the Petition. Pet. 10; Ex. 1002, 70–81.

Importantly, the references in Grounds 1 and 2 were never considered by the examiner. Nor did the examiner consider the combined teachings of Bernasconi and Soldano in Ground 3, or the combined teachings of the references in Ground 4. *Advanced Bionics* step one is therefore not satisfied. Patent Owner also erroneously contends, without any evidence, that the other references are cumulative to Soldano. That is incorrect because Soldano does not disclose “an exposed output interface region,” whereas Lee, Kim, and Bernasconi do. *See* Section V.F, above.

Because *Advanced Bionics* step one is not met, the Board need not reach *Advanced Bionics* step two, especially since the examiner did not apply Soldano as a basis for rejection during examination and the prosecution history thus provides little insight into the examiner’s consideration, if any, of Soldano. *See Ecto World*, IPR2024-01280, Paper 13 at 5–6. Nevertheless, as explained in Section V.A, above, the examiner materially erred by overlooking Patent Owner’s own prior art and other references submitted in IDSs. The examiner also erred by failing to conduct a comprehensive search and by overlooking that an “exposed output interface region,” which was the principal basis for allowance of claim 1, is indeed disclosed in several prior art references, including Lee, Kim, and Bernasconi. Pet., 9–10, 27–29, 64.

VII. THE *FINTIV* FACTORS WEIGH STRONGLY AGAINST DENIAL

Factor 1 (Stay): The Accelight Litigation is stayed pending IPR institution

decisions, and the stay is highly likely to continue if one or more IPRs are instituted. Ex. 2007. Therefore, this factor weighs strongly against discretionary denial.

Factor 2 (Trial Date): There is no trial date set for the Accelight Litigation. Because the case is stayed, a trial date before the Board's projected statutory deadline is highly unlikely. Therefore, this factor weighs strongly against discretionary denial.

Factor 3 (Parallel Proceeding): Contrary to Patent Owner's assertion, the Accelight Litigation is at an early stage. Ex. 1020, 2. No interrogatories or document requests have been propounded by either party; thus, fact discovery has barely started in the case. *See id.* While the parties have completed claim construction briefing, the *Markman* hearing was canceled in view of the parties' stipulated request to stay the case. Because the parties have invested very little in the Accelight Litigation thus far, this factor weighs strongly against discretionary denial.

Factor 4 (Issue Overlap): Petitioner has submitted a very broad stipulation in this IPR to not pursue any invalidity ground under §§ 102 or 103 if instituted. Petitioner's stipulation goes beyond any *Sotera* plus stipulation in meaningfully reducing overlap between the PTAB and the district court, and ensures that this **IPR will be a true alternative to the Accelight Litigation** for prior-art based invalidity defenses. This factor therefore weighs strongly against discretionary denial.

Factor 5 (Same Party): Because Petitioner and Patent Owner are the same parties as in the Accelight Litigation, and because the Board will likely issue a final

written decision prior to any trial in the district court, this factor weighs against discretionary denial. *Samsung Elecs. Co. v. Staton Techiya, LLC*, IPR2022-00302, Paper 13 at 18–19 (P.T.A.B. Jul. 11, 2022) (factor five weighs against denial when statutory deadline for final written decision is before trial date in parallel litigation).

Factor 6 (Other Considerations): The merits of the petition are strong. Patent Owner’s criticism of Soldano, which is applied as a secondary reference in only Grounds 3 and 4, is unwarranted as discussed above. *Supra* Section V.F. Patent Owner’s incorrect and handwaving arguments against Lee and Kim, applied in Grounds 1 and 2, fail to identify any legitimate weakness in Grounds 1 and 2. *Id.* This factor therefore also weighs against discretionary denial.

In sum, none of the *Fintiv* factors favors discretionary denial, and several factors weigh strongly against discretionary denial.

VIII. CONCLUSION

Patent Owner has not articulated any legitimate ground for discretionary denial, aside from referencing the “age” of the patent, which alone does not outweigh the numerous other factors and circumstances that support institution. Petitioner respectfully requests institution of IPR based on the merits of the Petition.

Dated: January 7, 2026

Respectfully submitted,

/Arpita Bhattacharyya/

Arpita Bhattacharyya, Reg. No. 63,681
Counsel for Petitioner

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), I certify that on January 7, 2026, a copy of **PETITIONER'S OPPOSITION TO PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL** and **EXHIBITS 1013-1022** were served upon the below-listed counsel by electronic mail:

Jo Dale Carothers - jcarothers@weintraub.com
Eric Caligiuri - ecaligiuri@weintraub.com

Dated: January 7, 2026

By: / Kate Rose /
Kate Rose