

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ACCELIGHT TECHNOLOGIES, INC.,
Petitioner,

v.

APPLIED OPTOELECTRONICS, INC.
Patent Owner.

IPR2025-01567
U.S. Patent No. 10,379,301

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

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35 U.S.C. § 102	1, 8, 12, 19
35 U.S.C. § 103	1, 8, 12, 19

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PETITIONER’S UPDATED EXHIBIT LIST

Exhibit	Description
1001	U.S. Patent No. 10,379,301 to Ho et al. (“the ’301 patent”)
1002	Prosecution History of the ’301 patent
1003	Declaration of Dr. Michael Lebby
1004	U.S. Patent Publication No. 2014/0169389 to Kim et al., published June 19, 2014
1005	U.S. Patent Publication No. 2014/0341578 to Ho et al., published Nov. 20, 2014
1006	U.S. Patent Publication No. 2014/0183344 to Lee et al., published July 3, 2014
1007	U.S. Patent No. 10,042,116 to Ho et al., issued Aug. 7, 2018 (the ’116 patent”)
1008	Petitioner’s Search Disclosure Declaration (“SDD”)
1009	Joint Case Management Statement, <i>Applied Optoelectronics, Inc. v. Molex, LLC</i> , Case No. 4:23-cv-04787-JST (N.D. Cal.)
1010	Time to Milestones for N.D. California, <i>Docket Navigator</i> , (accessed January 7, 2026)
1011	Petitioner’s Opposition to Patent Owner’s Request for Discretionary Denial of Institution in IPR2025-00435 against U.S. 10,042,116
1012	U.S. Patent No. 9,509,433 to Ho et al.
1013	Chinese Patent Publication No. 105866904 A, published Aug. 17, 2016
1014	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 Oct. 3, 2025
1015	Petition for <i>Inter Partes</i> Review in IPR2025-01566, against U.S. 10,042,116, filed Sept. 26, 2025

Exhibit	Description
1016	Complaint for Patent Infringement, <i>Applied Optoelectronics, Inc. v. Accelight Technologies, Inc.</i> , Case No. 4:24-cv-09041-HSG (N.D. Cal.), filed Dec. 13, 2024
1017	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 main arguments for discretionary denial are the purported “settled expectation” arising from the age of the ’301 patent and a prior institution denial in a separate IPR brought by an unrelated party. However, patent age is just one discretionary factor and does not outweigh Petitioner’s reasonable expectation that its product, sold in the United States since before the ’301 patent even issued, would not face meritless infringement claims after nearly six years. The denial of institution in a different IPR—based on entirely different prior art and unpatentability grounds—is also not dispositive of whether institution should be denied in this proceeding.

Based on a holistic assessment of—(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 IPR2025-001566, and (f) the compelling merits of the Petition—the Director should deny the discretionary denial request. Additionally, there are no § 325(d) concerns in this proceeding and the *Fintiv* factors 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 stipulated 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 10-12, 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 ’301 patent issued in August 2019 and has been in force for about 6.5 years, it has “settled expectations” in the validity of the patent. DD Req., 11. But Patent Owner’s unsupported claim of “settled expectation” carries little weight, given that **Patent Owner waited over four years after the patent issued to assert it**, despite the fact that at least Petitioner’s product accused in the Accelight Litigation had been offered for sale in the U.S. market since March 2018, i.e., prior to the issuance of the ’301 patent. Ex. 1017, ¶¶2-4. The ’301 patent was first asserted against Molex, LLC in September 2023—i.e., four years after the patent was 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. 1009, 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. 1017, ¶¶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. 1016; Ex. 1017, ¶4.

IV. CIG's IPR DID NOT ADDRESS THE DISTINCT PRIOR ART REFERENCES AND ADDITIONAL FACTS PRESENTED HERE AND THEREFORE SHOULD NOT CONTROL THE INSTITUTION DECISION IN THIS PROCEEDING

Patent Owner argues that because a prior IPR petition against the '301 patent filed by CIG (IPR2025-00434) was denied based on the merits, the present IPR should also be denied institution, **even though the present IPR presents different prior art references and grounds than the CIG IPR.** *See* DD Req., 9. Specifically, the denial of institution in the CIG IPR was because the Shen and Soldano references asserted in that proceeding did not disclose every limitation of independent claims 1

and 7. Ex. 2003, 15-18, 23-26. But those same references, Shen and Soldano, are not relied upon in the present Petition. Instead, the unpatentability grounds here are based on Kim (Ground 1) and Ho in view of Lee (Ground 2), neither of which were previously considered by the examiner or the PTAB.¹ Accordingly, the outcome of the CIG IPR does not control the institution decision in this proceeding.

Without addressing the merits of CIG's prior art references and grounds due to space limitations, Petitioner respectfully submits that the prior art and other 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 did not identify examiner errors during prosecution of the '301 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 of issues before the district court and the PTAB. Additional facts and circumstances discussed in Sections V and VI 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 '301 patent is asserted in

¹ There are no § 325(d) concerns in this proceeding because the references Kim (Ex. 1004), Ho (Ex. 1005), and Lee (Ex. 1006) relied on in the Petition were never considered by the examiner.

the CIG Litigation, the validity of the '301 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. 1010; Ex. 1011, 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 an optical receiving device, such as a receiver optical sub-assembly (ROSA), having an arrayed waveguide grating (AWG) demultiplexer, which was well known and routinely used in optoelectronic

devices long before the effective filing date of the '301 patent. Pet., 2; Ex. 1003, ¶45. Indeed, Patent Owner's own prior filing, U.S. 2014/0341578 ("Ho," Ex. 1005), discloses all these elements. Ex. 1003, ¶58. **But Patent Owner did not disclose Ho or any of its other prior filings on related subject matter to the Patent Office.**

The only claimed technique that could arguably be considered inventive is the direct optical coupling of photodetectors to AWG demultiplexer outputs using an angled surface of the AWG, but the Petition demonstrates that it is not inventive. Ex. 1001, 5:7-19 (claim 1). More importantly, **Patent Owner has claimed this identical subject matter across multiple patents in distinct, unrelated patent families, yet failed to disclose the co-pending applications to the Patent Office.** For example, Patent Owner disclosed and claimed the same direct coupling technique between photodetectors and an AWG demultiplexer in U.S. Patent No. 10,042,116 ("the '116 patent"), which is the subject of IPR2025-01566, but did not disclose the '116 patent to the Office. Ex. 1007, Title, Abstract, 1:9-12; Ex. 1003, ¶46.

Patent Owner has also claimed direct coupling between a demultiplexer and photodetectors in yet another patent, U.S. 9,509,433. Ex. 1012, Title, Abstract, 8:26-59. In fact, U.S. Patent Publication No. 2014/0341578 ("Ho," Ex. 1005), which issued as Patent Owner's '433 patent, is § 102(a) prior art against both the '301 patent challenged here and the '116 patent. *See* Ex. 1005, ¶¶[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 Office—Patent Owner has improperly extended the patent term for its alleged “direct coupling” invention, and avoided double patenting and §§ 102 or 103 rejections based on its own prior art. Notably, the Petition highlighted Patent Owner’s failure to submit its own related patent filings to the Office, but Patent Owner does not address this in its discretionary denial request. Pet., 3. Patent Owner’s silence concedes its attempt to improperly extend the patent term for the alleged “direct coupling” invention. Patent Owner’s attempts to game the patent system through unjustified extension of patent term should not be allowed.

Even more notably, **Patent Owner did not disclose the prosecution history or prior art cited for Chinese Patent Application No. CN 2016103460078**, which issued as CN 105866904 and serves as the priority application for the '301 patent. Ex. 1001, cover page; Ex 1013. Patent Owner’s failure to fulfill the duty of disclosure by submitting material prior art to the Office should not be excused.

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 action received during prosecution of the related '116 patent in an IDS—albeit

without articulating its disclosure of direct coupling—yet the Office failed to evaluate the '116 patent application as material prior art. Ex. 1002, 100-117. The examiner never discussed the '116 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 not disclosed to the Office, nor did the examiner find it through the Office's customary search practices. The examiner also failed to inquire about prosecution of the priority application, CN 2016103460078. This further illustrates the searching and examination errors during prosecution of the '301 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 July 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	Optical isolator array with a magnetic base for	Accelight Litigation	Yes (IPR2025-01570)

Patent No.	Title	Technology	District Court Case	Accelight IPR?
	subassembly module	mounting multiple optical isolators within an optical subassembly	CIG Litigation	
9,523,826	Pluggable optical transceiver module	Optical transceiver configured for easy plugging and unplugging 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 ²
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

² 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 '301 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 '301 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., 9-11. Petitioner's stipulation ensures that there will be minimal (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 1008), along with a motion to seal and request for in camera review of the SDD (Paper 7). **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. 1004-1006 (none of the cited references in the Petition were found by the Office during prosecution). Thus, the SDD "reveals new or underutilized pathways relevant to Office search practice," in the field of art relevant to the '301 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 compelling prior art references that were neither found by the Patent Office, nor identified by Patent Owner. This demonstrates that the SDD indeed identifies search considerations and/or pathways that were either overlooked or insufficiently examined during the examiner’s search.

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 ’301 patent at issue in this IPR and the ’116 patent, which is the subject of IPR2025-01566, 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 optical signals with respective photodetectors through reflection (instead of coupling using waveguides or fibers). Pet., 2; Ex. 1015, 2. Therefore, **there is substantial overlap in prior art asserted in the two IPRs**. Indeed, the three prior art references, Kim (Ex. 1004), Ho (Ex. 1005), and Lee (Ex. 1006), asserted in this IPR are also asserted in IPR2025-01566. Ex. 1015, 3. The PTAB can therefore efficiently and consistently extend its

analyses of the prior art references in this IPR to the challenged claims in IPR2025-01566, 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 (claims 1-4) 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

Ground 1 (Kim): Contrary to Patent Owner’s assertion, Kim discloses, teaches, or suggests every limitation of claim 1. First, Patent Owner incorrectly asserts that the Petition uses “general knowledge” to supply the “optoelectronic diodes” element in claim 1. Kim expressly discloses photodetectors 140 and describes them as “surface-illuminated type.” Ex. 1004, ¶[0028]. The Petition then correctly states that a POSITA would recognize “surface-illuminated” photodetectors as “optoelectronic diodes.” Pet., 24. This is not improper gap-filling because Kim need not disclose “optoelectronic diodes” *ipsis verbis*; Kim’s express disclosure of photodetectors 140, which a POSITA would have understood as optoelectronic diodes, is sufficient to establish obviousness.

Second, Patent Owner incorrectly asserts that Kim does not disclose “bonding

wire.” *See* DD Req., 13. Patent Owner omits that the Petition identifies Figure 4 of Kim as showing optoelectronic diode 140 wire-bonded to light receiving chip 150. Pet., 25-26; Ex. 1003, ¶72. This sufficiently discloses “bonding wire.” *In re Meng*, 492 F.2d 843, 847 (C.C.P.A. 1974) (a drawing may render an invention obvious).

Third, Patent Owner misstates that claim 1 requires the optical fiber connector to be disposed “on” the end of the carrier; in fact, claim 1 recites that the connector is “disposed in an end of the carrier.” Ex. 1001, 4:63-64. Additionally, claim 1 recites that the connector is connected to an input end of the AWG. *Id.*, 5:2-4. Considering these two limitations together, a POSITA would have understood that the optical fiber connector is connected to the AWG *at* an end region of the carrier, which the Petition clearly shows. Pet., 26-30. This interpretation is fully supported by the ’301 patent. Ex. 1001, 3:9-14 (“An optical fiber connector 4 may be disposed at another end of the carrier 8. ...An input end 61 of the arrayed waveguide grating 6 may be connected to the optical fiber connector 4[.]”) (emphasis added).

Fourth, claim 1 does not require the AWG to be disposed directly on a top surface of the carrier. Indeed, claim 1 expressly states that the optoelectronic diodes and the light receiving chip are “disposed directly on the same top surface of the end of the carrier,” whereas for the AWG, claim 1 only requires that it is disposed on a top surface of the carrier at the midpoint. The Petition clearly shows that Kim’s AWG 120 is disposed *indirectly* on a top surface of carrier 180/280 via supporting part

170, and a midpoint of the carrier underlies the AWG. Pet., 28-29.

Lastly, the Petition does not rely on “general knowledge” to fill gaps in the prior art. Patent Owner’s contrary assertions reflect a misunderstanding of the Petition and incorrectly suggest that prior art must provide an *ipsis verbis* disclosure of claim elements. For instance, the Petition does not “gap-fill” by stating that a POSITA would have recognized Kim’s pre-amplifier 150 to be a “light receiving chip,” as the ’301 patent itself describes its trans-impedance amplifier (TIA) as a light receiving chip. Ex. 1001, 3:1-9; Pet., 22. Patent Owner’s remaining assertions are likewise incorrect and conflate reliance on general knowledge with what a POSITA would have understood from express disclosures in the prior art references.

Ground 2 (Ho in view of Lee): Patent Owner’s incorrect and unsubstantiated criticisms of Ground 2 further underscore the strength of the Petition. First, Patent Owner’s argument that Lee’s PLC 110 is “not clearly directed to a [*sic*] AWG chip” is not only incorrect, but also irrelevant because the Petition relies on Ho’s disclosure of AWG demultiplexer 235. Pet., 61-63; Ex. 1006, ¶¶[0008]-[0009] (Lee disclosing that PLC 110 may be used as an AWG demultiplexer). Likewise, whether Lee’s PLC 110 is disposed on a substrate or sub-mount 140 is not pertinent because the Petition clearly shows that Ho’s AWG 235 is disposed on a top surface of Ho’s carrier 238. Pet., 61-63. Contrary to Patent Owner’s assertion, the Petition expressly states that AWG 235 is disposed *indirectly* on the top surface of carrier 238 via a submount.

Pet., 62. Neither claim 1, the specification, nor the file history of the '301 patent requires the AWG to be disposed directly on the carrier. Patent Owner's misconstrues claim 1 as requiring direct placement of the AWG on the carrier.

Second, Patent Owner's argument that Ho in view of Lee does not show an optical fiber connector disposed "in an end" of the carrier is incorrect. *See* DD Req. 17. As discussed above, claim 1 requires the optical fiber connector to be coupled to the input end of the AWG at an end region of the carrier, which the Petition shows. Pet., 60-63. This interpretation is supported by the '301 patent. Ex. 1001, 3:9-14.

Third, a POSITA would have been motivated to modify Ho in view of Lee, even though Ho teaches its own method of coupling an AWG to photodetectors, because the direct coupling technique of Lee is more effective and reliable than the passive alignment technique outlined in Ho. Pet., 46-50. Moreover, to establish obviousness, "[i]t's not necessary to show that a combination is 'the *best* option, only that it be a *suitable* option.'" *Intel Corp. v. Qualcomm Inc.*, 21 F.4th 784, 800 (Fed. Cir. 2021) (citation omitted; emphases in original); *Intel Corp. v. PACT XPP Schweiz AG*, 61 F.4th 1373, 1381 (Fed. Cir. 2023) (showing "'improvement' in a categorical sense" is not required to establish obviousness).

VI. 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. 2006. 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. 1014, 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. July 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 criticisms of the Petition’s merits are either unsupported, predicated on incorrect claim constructions, or improperly rely on a requirement for *ipsis verbis* disclosure of the claim limitations in the prior art references. *Supra* Section V.F. 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.

VII. CONCLUSION

Patent Owner has not articulated any legitimate ground for discretionary denial, aside from referencing the “age” of the patent and the institution denial in the CIG IPR, which alone do 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/

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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 1009-1017** 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