

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CAMBRIDGE INDUSTRIES USA, INC.,

Petitioner

v.

APPLIED OPTOELECTRONICS, INC.,

Patent Owners

Case: IPR2025-00436

U.S. Patent No. 10,313,024

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

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Patent Trial and Appeal Board
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TABLE OF CONTENTS

	<u>Page</u>
TABLE OF EXHIBITS	1
I. INTRODUCTION	2
II. DISCRETIONARY DENIAL IS NOT WARRANTED	4
A. The <i>Fintiv</i> Factors Weigh Heavily Against Discretionary Denial.....	4
1. All of the <i>Fintiv</i> Factors Disfavor Discretionary Denial	4
a. Factor 1 (Stay) Weighs Heavily Against Discretionary Denial.....	5
b. Factors 2 (Trial Date) and 3 (Parallel Proceedings) Are Moot.....	7
c. Factor 4 (Issue Overlap) Disfavors Discretionary Denial.....	8
d. Factor 5 (Same Party) Does Not Support Discretionary Denial.....	9
e. Factor 6 (Other Considerations) Disfavors Discretionary Denial.....	10
B. The Merits of the Petition Are Compelling.....	12
1. The Prior Art Was Not Previously Considered	12
2. Patent Owner’s Situational Interpretation of Claim Terms	13
3. Patent Owner Ignores the Explicit Teachings of Mizobuchi	15
4. Patent Owner Fails to Acknowledge a POSITA’s Knowledge	17

C. The Process Set Out In Exhibit 2001 May Violate the APA.....	21
III. CONCLUSION.....	22
CERTIFICATION UNDER 37 C.F.R. § 42.24.....	23
CERTIFICATE OF SERVICE.....	24

TABLE OF AUTHORITIES

	Page(s)
Cases	
<i>Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH</i> , IPR2019-01469, Paper No. 6 (P.T.A.B. Feb. 13, 2020)	12
<i>Apotex Inc. v. UCB Biopharma Sprl</i> , IPR2019-00400, Paper No. 17 (P.T.A.B. July 15, 2019).....	5
<i>Apple Inc. v. Fintiv, Inc.</i> , IPR2020-00019, Paper No. 11 (P.T.A.B. Mar. 20, 2020).....	<i>passim</i>
<i>Applied Optoelectronics, Inc. v. Cambridge Industries USA, Inc.</i> , No. 3:24-cv-01010-JD (N.D. Cal.).....	1
<i>Arthrocare Corp. v. Smith & Nephew, Inc.</i> , 406 F.3d 1365 (Fed. Cir. 2005)	19
<i>Nalox-1 Pharms., LLC v. Opiant Pharms., Inc.</i> , IPR2019-00685, Paper No. 11 (P.T.A.B. Aug. 27, 2019).....	8
<i>Next Caller, Inc. v. TrustID, Inc.</i> , IPR2019-00963, Paper No. 8 (P.T.A.B. Oct. 28, 2019).....	3, 7, 10
<i>Precision Planting, LLC v. Deere & Co.</i> , IPR2019-01052, Paper No. 19 (P.T.A.B. Jan. 7, 2020)	5
<i>SAS Inst., Inc. v. Iancu</i> , 584 U.S. 357 (2018)	22
Statutes	
5 U.S.C. § 553.....	21
35 U.S.C. § 2.....	21
35 U.S.C. § 314.....	8, 21, 22
35 U.S.C. § 316.....	21, 22

Administrative Procedures Act..... 21

America Invents Act 3, 21

Other Authorities

37 C.F.R. § 42.6..... 24

37 C.F.R. § 42.24..... 23

37 C.F.R. § 42.105..... 24

TABLE OF EXHIBITS

Exhibit	Short Name	Description
Ex. 1001	'024 Patent	U.S. Patent No. 10,313,024
Ex. 1002	'024 Patent File History	File History of U.S. Patent No. 10,313,024
Ex. 1003	Kirk Declaration	Expert Declaration of Dr. Andrew G. Kirk
Ex. 1004	Kirk CV	<i>Curriculum Vitae</i> of Dr. Andrew G. Kirk
Ex. 1005	Scheduling Order	Doc. No. 30, Scheduling Order, <i>Applied Optoelectronics, Inc. v. Cambridge Industries USA, Inc.</i> , No. 3:24-cv-01010-JD (N.D. Cal.)
Ex. 1006	Mizobuchi	U.S. Patent No. 9,568,694
Ex. 1007	Akashi	U.S. Patent App. Pub. No. 2014/0140665 A1
Ex. 1008	Hartzell	U.S. Patent App. Pub. No. 2005/0175350 A1
Ex. 1009	Claim Construction Statement	Joint Claim Construction Pre-hearing Statement, Dkt. 34, December 16, 2024, in <i>Applied Optoelectronics, Inc. v. Cambridge Industries USA, Inc.</i> , No. 3:24-cv-01010-JD (N.D. Cal.)
Ex. 1010	Excerpt from Infringement Claim Charts	Excerpt from Patent Owner's L.R. 3-1 & 3-2 Disclosures, June 6, 2024, in <i>Applied Optoelectronics, Inc. v. Cambridge Industries USA, Inc.</i> , No. 3:24-cv-01010-JD (N.D. Cal.)
Ex. 1011	Pisano Declaration	Declaration of Nicola A. Pisano collecting exemplary Stay Orders entered by Judge Haywood Gilliam and Data Showing Success Rates for Motion to Stay
Ex. 1012	Interim Process FAQs	FAQs for Interim Processes for PTAB Workload Management
Ex. 1013	Further Excerpt from Infringement Claim Charts	Further Excerpt from Patent Owner's L.R. 3-1 & 3-2 Disclosures, June 6, 2024, in <i>Applied Optoelectronics, Inc. v. Cambridge Industries USA, Inc.</i> , No. 3:24-cv-01010-JD (N.D. Cal.)
Ex. 1014	Supplemental Kirk Declaration	Supplemental Declaration of Dr. Kirk

I. INTRODUCTION

Petitioner Cambridge Industries USA, Inc. (“Petitioner” or “CIG USA”) submits this brief in opposition to Patent Owner’s Request for Discretionary Denial of the instant IPR petition for the ’024 patent. Patent Owner’s brief mentions, but then ignores, that the parallel district court litigation between Patent Owner and Petitioner was indefinitely *stayed* by Judge Donato on April 4, 2025, pending outcome of the PTAB proceedings. That fact, which satisfies *Fintiv* factor 1, weighs heavily against discretionary denial. *Fintiv* factors 2-5, which are subsumed in factor 1, likewise do not support denial. For example, Patent Owner’s claim that the parties have invested substantial resources in the parallel proceeding lacks merit; prior to entry of the stay, the parties did no more than was required by the Patent Local Rules of the U.S. District Court for the Northern District of California, and nothing since entry of the stay.

Patent Owner tries to conflate its later-filed district court case against a *different* and unrelated defendant (Accelight Technologies), pending before a *different* district court judge (Judge Gilliam), as supporting discretionary denial. Yet Judge Gilliam routinely stays litigation for PTAB proceedings and scheduled his *Markman* hearing for October 31, 2025, well after the expected institution decision here. If this IPR is instituted, Judge Gilliam surely will grant Accelight’s expected request to stay that case; that case too is unlikely to reach its *Markman* hearing.

Patent Owner's host of other considerations under *Fintiv* factor 6 and the Director's Memo, Exhibit 2001, are many shades weaker than its "judicial efficiency" claim. For example, Patent Owner derides Petitioner's reliance on expert testimony. Yet that testimony serves the approved purpose of guiding the Board to the relevant portions of the cited references. It does not, as in *Next Caller* (cited by Patent Owner) substitute unbased opinion for claim limitations missing from the cited references. The remaining factors enumerated in Ex. 2001 likewise are either neutral or do not support discretionary denial.

Patent Owner's contention that the Petition lacks merit also fails. Neither Mizobuchi (Ex. 1006, U.S. Patent No. 9,568,694) nor Akashi (Ex. 1007, US 2014/0140665 A1) was considered by the Office during prosecution of the '024 patent. As demonstrated in the Petition, both references *anticipate* the limitations of all claims of the '024 patent, notwithstanding Patent Owner's assertions in Paper No. 8.

The Director (and Board) should institute the instant IPR to effectuate the purposes of the AIA and prevent targeting of legitimate businesses with improvidently granted low-quality patents.

II. DISCRETIONARY DENIAL IS NOT WARRANTED

A. The *Fintiv* Factors Weigh Heavily Against Discretionary Denial

Neither the factors listed in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper No. 11 at 5-6 (P.T.A.B. Mar. 20, 2020) (precedential) (“*Fintiv*”) nor the Director’s Memorandum (Exhibit 2001) favor discretionary denial of this Petition. Here, *Fintiv* factors 1-5 disfavor a discretionary denial for at least the reason that Patent Owner’s parallel litigation against Petitioner is stayed pending resolution of these PTAB proceedings. Moreover, Patent Owner’s litigation against unrelated entity Accelight, pending before a different judge, likely will be stayed. Patent Owner also misstates the significance of *Fintiv* factor 6 considerations and the additional factors set forth in Ex. 2001, which are either neutral or do not support a discretionary stay.

1. All of the *Fintiv* Factors Disfavor Discretionary Denial

Tacitly admitting that *Fintiv* factor 1 (Stay) militates strongly against a discretionary denial, Patent Owner focuses on other *Fintiv* factors, without ever discussing the first *Fintiv* factor: “whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted.” There is an obvious reason why *Fintiv* lists the stay factor first – if a stay has been granted (as here), the rest of the *Fintiv* factors become much less important, if not entirely moot.

Patent Owner addresses *Fintiv* factors 2-6, out of order, to distract as much as possible from the fact that Judge Donato has stayed Patent Owner's parallel litigation against Petitioner pending outcome of the PTAB proceedings. Patent Owner instead suggests that its district court litigation against an unrelated entity (Accellight Technologies) before a different judge (Judge Gilliam) should take precedence in the *Fintiv* analysis. But as explained below, Judge Gilliam routinely stays his litigations when the underlying patents are (or may be) involved in PTAB proceedings. Petitioner addresses *Fintiv* factors 1-6 below in numerical sequence.

a. Factor 1 (Stay) Weighs Heavily Against Discretionary Denial

As Patent Owner acknowledges, Paper No. 8 at 9, the parallel district court proceeding between it and Petitioner was stayed on April 4, 2025. This factor militates strongly against discretionary denial here. *See, e.g., Fintiv*, fn 9: *Precision Planting, LLC v. Deere & Co.*, IPR2019-01052, Paper No. 19 at 10 (P.T.A.B. Jan. 7, 2020) (finding that the district court stay of the parallel district court case ***rendered moot*** the patent owner's argument for discretionary denial of the petition); *Apotex Inc. v. UCB Biopharma Sprl*, IPR2019-00400, Paper No. 17 at 31–32 (P.T.A.B. July 15, 2019) (finding that the district court ***stay of the parallel district court case predicated on the inter partes review means that the trial will not occur before the Board renders a***

final decision). Judge Donato has requested a status report on July 7, 2025; there is no reason to believe he would lift the stay just weeks before the institution decision.

Patent Owner makes much of its district court litigation against Accellight Technologies, pending before Judge Gilliam in the Northern District of California. As shown in Exhibit G to Exhibit 1011, Judges in the Northern District of California typically grant stays after IPR institution, with 76% of all post-institution motions to stay pending *inter partes* review granted or granted in part over the past 12 years. In particular, as shown in Exhibit H to Exhibit 1011, ***Judge Gilliam has granted all such motions*** since 2016, and there is no reason to suspect he will not do so again here. Exhibits A-F to Exhibit 1011 provide examples of Judge Gilliam’s routine orders staying his litigations pending the outcome of PTAB proceedings. The Scheduling Order (Ex. 2003) entered by Judge Gilliam sets the date of his claim construction hearing for October 31, 2025, two months *after* the expected institution date for this IPR, August 28, 2025. Patent Owner and Accellight will not have submitted their claim construction briefs by the institution date, providing ample time for Accellight to request a stay, which Judge Gilliam surely will grant if this IPR proceeds.¹ This factor weighs heavily against discretionary denial.

¹ Patent Owner implies that Judge Gilliam, at a Case Management Conference in *Accellight*, decided to “move forward” after submission of a Notice reporting filing of the instant IPRs by Petitioner. However, neither the Notice nor any aspect of the IPRs

b. Factors 2 (Trial Date) and 3 (Parallel Proceedings) Are Moot

In view of the stay in Petitioner's case pending resolution of this IPR, and expected stay in *Accelight*, concern about the trial dates in parallel district court proceedings are moot.² Following successful conclusion of this IPR, Judges Donato and Gilliam may set trial dates for any remaining patents. But even if some aspect of the '024 patent survives, the resulting litigations will be greatly streamlined, resulting in judicial economy and litigation savings to the Petitioner, and probably Accelight as well. *Fintiv* factors 2 and 3 thus weigh against discretionary denial.

Prior to entry of the stay, the parties did no more in the parallel litigation than the exchanges required to comply with the Patent Local Rules for the United States District Court for the Northern District of California. Neither party identified an expert for their claim construction briefing, few documents were produced in response to discovery requests, and no depositions were scheduled or taken prior to entry of the stay. Contemporaneous with entry of the stay, Judge Donato vacated the scheduled *Markman* hearing. Contrary to Patent Owner's assertion, the parties invested little

was mentioned at that 8-minute conference. *See* Exhibit 1011, ¶¶ 3-4.

² The entire analysis set forth in *Next Caller, Inc. v. TrustID, Inc.*, IPR2019-00963, Paper No. 8 (P.T.A.B. Oct. 28, 2019), was based on the advanced state of the parallel litigation, and absence of a stay of that litigation.

effort in the parallel litigation prior to the stay (and none since).³ No greater effort should be expected in the *Accelight* case, as it is very likely to be stayed once the defendant there requests a stay.

In similar situations as here, non-identity of the Defendant in an on-going parallel proceeding and the Petitioner weighed against discretionary denial. *See Fintiv* at fn. 26, citing to *Nalox-1 Pharms., LLC. v. Opiant Pharms., Inc.*, IPR2019-00685, Paper No. 11 at 6 (P.T.A.B. Aug. 27, 2019) (distinguishing *NHK* because in *NHK*, “the Board considered ‘the status of the district court proceeding between the parties’” and, in the *Nalox-1* case, the petitioner was not a party to the parallel district court litigations). Here, Petitioner’s district court litigation is stayed and Petitioner is not a party to the on-going district court litigation with Accelight, which is likely also to be stayed.

c. Factor 4 (Issue Overlap) Disfavors Discretionary Denial

Stay of Petitioner’s parallel proceeding, together with Petitioner’s stipulation, discussed below, obviates any concern about the issue overlap of *Fintiv* factor 4, even

³ Patent Owner faults Petitioner for waiting eleven months to file its IPR petition, notwithstanding the one-year provision of 35 U.S.C. § 314(a) and the guidance previously in effect. Further, Petitioner had no reason to file sooner as Patent Owner’s settlement demand amounted to a fraction of Petitioner’s cost to challenge the asserted patents via IPRs. Only after Patent Owner’s settlement demands grew exponentially, at a court-ordered mediation conducted in late August 2024, did it become evident that the parallel litigation could not be resolved.

if Petitioner's parallel litigation someday, post-IPR, resumes.

Judge Donato evidently stayed Patent Owner's litigation against Petitioner to defer to the Board's technical expertise. Petitioner also stipulated in its Petition, pursuant to guidance in effect when the Petition was filed, that it would not pursue invalidity against the asserted claims in the district court using the specific combination of prior art references presented in this Petition. *See* Paper No. 2 at 46. Patent Owner's contention that the litigation, if ever resumed, will address the same issues as the Petition is illusory. If this IPR proceeds, either there will be no further litigation on the '024 patent or it will be highly streamlined.

Patent Owner further contends, without evidence, that there may be substantial issue overlap in its *Accelight* case. Petitioner has no knowledge of the prior art relied upon by Accelight in that case, nor has Patent Owner presented evidence to the Board that Accelight is relying on the same prior art as Petitioner proffered in its now-stayed litigation. As *Accelight* is likely to be stayed upon request, this factor is neutral.

d. Factor 5 (Same Party) Does Not Support Discretionary Denial

Petitioner is the defendant in the *now-stayed* case before Judge Donato, rendering this factor neutral, if not entirely moot. Petitioner is not remotely related to the defendant in Patent Owner's *Accelight* case. And as discussed above, that case too is very likely destined to be stayed.

e. Factor 6 (Other Considerations) Disfavors Discretionary Denial

All other factors discussed in *Fintiv* or the Director's Memo, Exhibit 2001, are neutral or favor denial of Patent Owner's request for discretionary denial, including those related to the Petition's merits, discussed separately below.

For example, citing *Next Caller* and Ex. 2001, Patent Owner argues, Paper No. 8 at 22, that Petitioner's expert declaration by Dr. Andrew Kirk, Ex. 1003, is a basis for discretionary denial. In contradistinction to the expert declaration in *Next Caller*, Dr. Kirk's declaration performs the ***approved*** function of directing the Board to relevant passages of the cited references. *See, e.g.*, FAQs for Interim Processes for PTAB Workload Management, Ex. 1012 at ¶ 21. Dr. Kirk does not, unlike the expert in *Next Caller*, proffer opinions to supply critical limitations without disclosing the facts or data on which his opinion is based. *See Next Caller* at 31-32. Proper use of expert testimony here does not support discretionary denial.

Whereas Petitioner had not invested substantial effort in the parallel litigation prior to entry of the stay, Petitioner made a significant investment of time and resources to prepare and file this IPR. Patent Owner should not be permitted to frustrate that effort by relying on its later case against an unrelated party. If instituted, this IPR will enhance judicial economy by saving ***two*** courts from repeating the same work of construing the claims and holding trials, while also reducing the likelihood of

inconsistent jury verdicts. Institution of this IPR likely will save Petitioner CIG USA (and probably also Accelight) millions of dollars litigating their respective district court cases, and may obviate the need for the trials on the '024 patent.

Patent Owner's further contention, Paper No. 8 at 25, that litigation between Patent Owner and Petitioner may one day resume on Patent Owner's **other** patents, following conclusion of this IPR, does not support discretionary denial. As Patent Owner points out, Petitioner has challenged all of the claims of five of the eight patents asserted in the now-stayed parallel litigation. If Petitioner's IPRs proceed, the litigation workload of the court and the parties will be substantially reduced, if not completely obviated, thereby effectuating the purpose of argues IPR proceedings.

Patent Owner further asserts, Paper No. 8 at 17, that "there are settled expectations of the parties that the '024 patent is valid and enforceable." While this factor, enumerated in the Director's memo, is not explained in detail, it only makes sense in the context of an implicit or explicit understanding that **both** parties regarded the claims as valid, e.g., as reflected in a license agreement. It cannot be the case that a never-asserted patent achieves a patina of validity simply by the passage of time. Moreover, Petitioner had no expectation or belief that the '024 patent was or is valid. Apart from Patent Owner's letter sent to a different entity just prior to suit, Petitioner was unaware of the '826 patent until the parallel proceeding was filed.

Finally, Patent Owner contends, Paper No. 8 at 25, that the absence of a change in the law affecting patentability supports discretionary denial. Yet withdrawal of the previous *Fintiv* guidance constitutes a significant change in the relevant law, potentially greatly reducing the utility of the IPR procedure by elevating timing considerations over the importance of previously unseen prior art that supports a compelling ground for invalidity. In view of the strong merits of this challenge, this factor is neutral.

B. The Merits of the Petition Are Compelling

1. The Prior Art Was Not Previously Considered

While discretionary denial may consider whether a reference was previously evaluated by the Office during prosecution under *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper No. 6 (P.T.A.B. Feb. 13, 2020) (precedential), it is unlikely that the Director's Memo contemplated that the discretionary denial briefing process set forth in Ex. 2001 would lead to successive challenges to the merits of previously unseen prior art references, first in the discretionary denial brief, and then again in the Patent Owner's Preliminary Response. Here, neither Mizobuchi nor Akashi were before the Office during prosecution of the '024 patent. Nonetheless, Petitioner provides the following response demonstrating that the merits of the Petition are compelling, and do not support discretionary denial.

The Petition sets forth a strong showing of unpatentability of the claims of '024 patent. Patent Owner's arguments to the contrary ignore the teachings of the prior art, ignore the common knowledge of persons of skill in the art, and conflict with its own infringement constructions of the limitations "light engine driving circuit" and "light engine interface region" of the claims in the now-stayed parallel district court litigation.

2. Patent Owner's Situational Interpretation of Claim Terms

Patent Owner's constructions of key claim terms of the '024 patent appear infinitely malleable responsive to the needs of the moment in which Patent Owner finds itself. In Patent Owner's infringement contentions in the parallel district court litigation, the terms "light engine driving circuit" and "light engine interface region" were not disputed nor briefed to the court. Instead, Patent Owner's infringement contentions identify that "light engine driving circuit" as consisting of conductive traces and components on the substrate that communicate RF and power signals between the substrate, the light engine interface region, feedthrough device and light engine. *See* Ex. 1010 at 11 (identifying externally-modulated laser "EML" driver); Ex. 1013 at 10-11 (identifying circuit traces).

In Paper No. 8, however, Patent Owner collapses the "light engine driving circuit" to a single component. Whereas Patent Owner identifies with arrows various

circuit board traces and components as constituting the claimed “light engine interface region” for purposes of infringement, Patent Owner faults the Petition for a similarly imprecise annotation at page 14 of the Petition for purposes of this IPR. *Cf.* Ex. 1010 at 10 and Ex. 1013 at 10-11 to Paper No. 8 at 21.

In particular, in Paper No. 2 at 12, Petitioner states that Mizobuchi includes: “A light engine driving circuit, located on the substrate, provides RF and power signals to drive the hermetically sealed light engine to output one or more channel wavelengths. Ex. 1006, FIGS. 2, 3A, 3:57-64, 12:27-41.” Ex. 1006 teaches at 3:57-64 that:

*Although it is not illustrated, the first circuit board 2 includes a clock data recovery (CDR) circuit, a power supply circuit, a **microcontroller**, and so forth. The CDR shapes waveforms of the electrical signals output from the transmitter and receiver integrated optical sub-assembly 1, and **the microcontroller controls the entirety of the optical module 100 including the transmitter and receiver integrated optical sub-assembly 1.***

As explicitly set forth above, the first circuit board (“substrate”) of Mizobuchi, includes the CDR circuit, power supply circuit, and the microcontroller, which together with the circuit traces serve as the claimed “light engine driving circuit.” Specifically, the microcontroller controls the entirety of the optical module operation via the circuit traces on the substrate to communicate with the light engine interface region, feedthrough device and light engine as required by the claim. Nothing in the Petition or Mizobuchi says otherwise.

With respect to the errant arrow for “light engine interface region” in the annotation of FIG. 2 of Akashi, Paper No. 2 at 14 (also copied to 29 and 33), a POSITA would readily have understood that the arrow should be pointing to the electrical traces of the feedthrough devices (flexible printed circuits 125) that carry the electrical signals to the hermetically sealed housing.

3. Patent Owner Ignores the Explicit Teachings of Mizobuchi

In contrast to its expansive interpretation of the “light engine driving circuit” for infringement, Patent Owner misleadingly points to “driver integrated circuit (IC) 14” of FIG. 3A of Mizobuchi as corresponding to *Petitioner’s* identification of the claim limitation. Next Patent Owner argues that IC 14 is *in* the light engine and thus not on the substrate. Patent Owner’s argument is entirely without merit: Petitioner and its expert identify the components identified at 3:57-64 (CDR, power supply circuit, microcontroller and traces on the first circuit board) collectively as the claimed “light engine driving circuit” located on the substrate, not just the CDR and power supply.

Moreover, Petitioner and Dr. Kirk do *not* identify IC 14 as constituting the claimed “light engine driving circuit” nor can Patent Owner’s contention be reconciled with its identification of the circuit components in its infringement claim charts, Exhibits 1010 and 1013. Annotated FIG. 2 of Mizobuchi in the Petition (reproduced

below) includes the label “light engine driving circuit” pointing at “2” on the first circuit board, which is *entirely consistent* with Petitioner’s analysis.

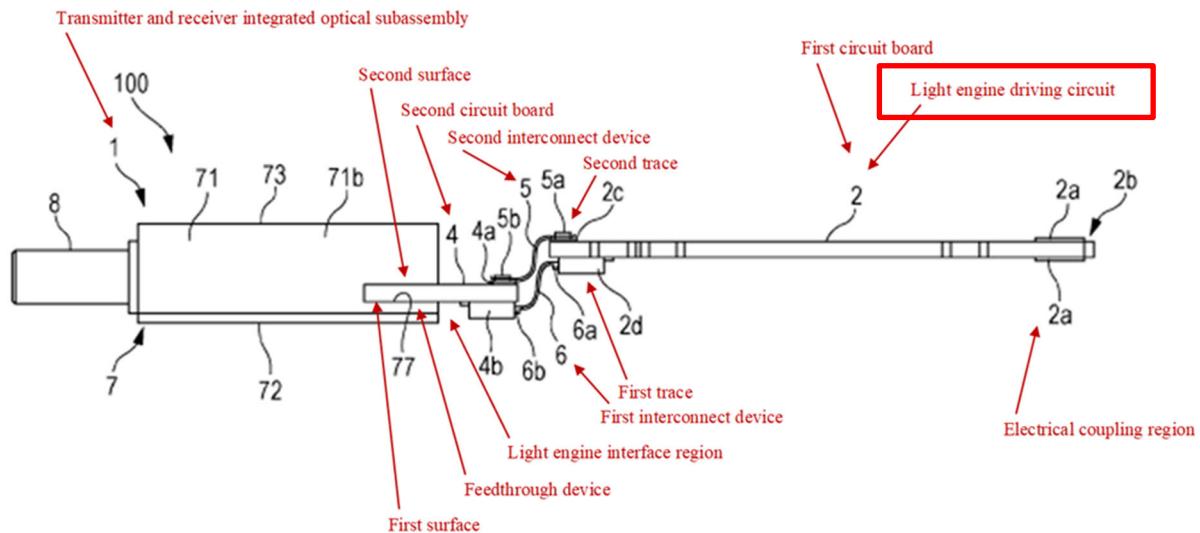


FIG. 2 (Mizobuchi)

Indeed, the light engine driving circuit on the first circuit board as identified in the Petition is coupled to the light engine interface region, which in turn communicates through the feedthrough device with the laser components located within the hermetically sealed housing, precisely as required by the claim 1. Nothing shown in FIG. 3A of Mizobuchi, reproduced at page 20 of Paper No. 8, suggests that the Petition identified IC 14 as the claimed “light engine driving circuit.” Further, a POSITA would have understood that the term “circuit,” as used in the ’024 patent, would not correspond to a single sub-component, as Patent Owner argues in its brief.

Patent Owner’s effort to misinterpret the plain language of the Petition and distract from the teachings of Mizobuchi should be rejected. The merits of the

Petitioner's unpatentability analysis based on Mizobuchi are compelling and weigh heavily against discretionary denial.

4. Patent Owner Fails to Acknowledge a POSITA's Knowledge

Patent Owner's arguments against the merits of Petitioner's invalidity analysis of the '024 patent based on Akashi are even more tenuous than its misdirected arguments about Mizobuchi. First, Patent Owner asserts that Akashi does not explicitly "disclose a light engine driving circuit disposed on the substrate." Paper No. 8 at 21. Second, Patent Owner quibbles with Petitioner's arrow placement in its annotated figure. Neither argument supports discretionary denial.

Patent Owner's contention that Akashi does not disclose "a light engine driving circuit on the substrate" is inconsistent with its identification of circuit traces in Exhibit 1013 as constituting that claim element. As discussed, *supra*, the claimed "circuit" consists of the portion of the closed path located on the substrate (identified as substrate 107). A POSITA in the field of circuit design would have understood that Akashi necessarily includes the components required to effectuate the purposes of the optical module, even if specific electrical components are not depicted in FIG. 1. Indeed, taking Patent Owner's argument to its illogical conclusion, Akashi's omission of the complete route of the optical fibers in FIG. 1 should be interpreted to mean that those

fibers are not connected to optical connector 102. No POSITA would attribute such an interpretation to FIG. 1.

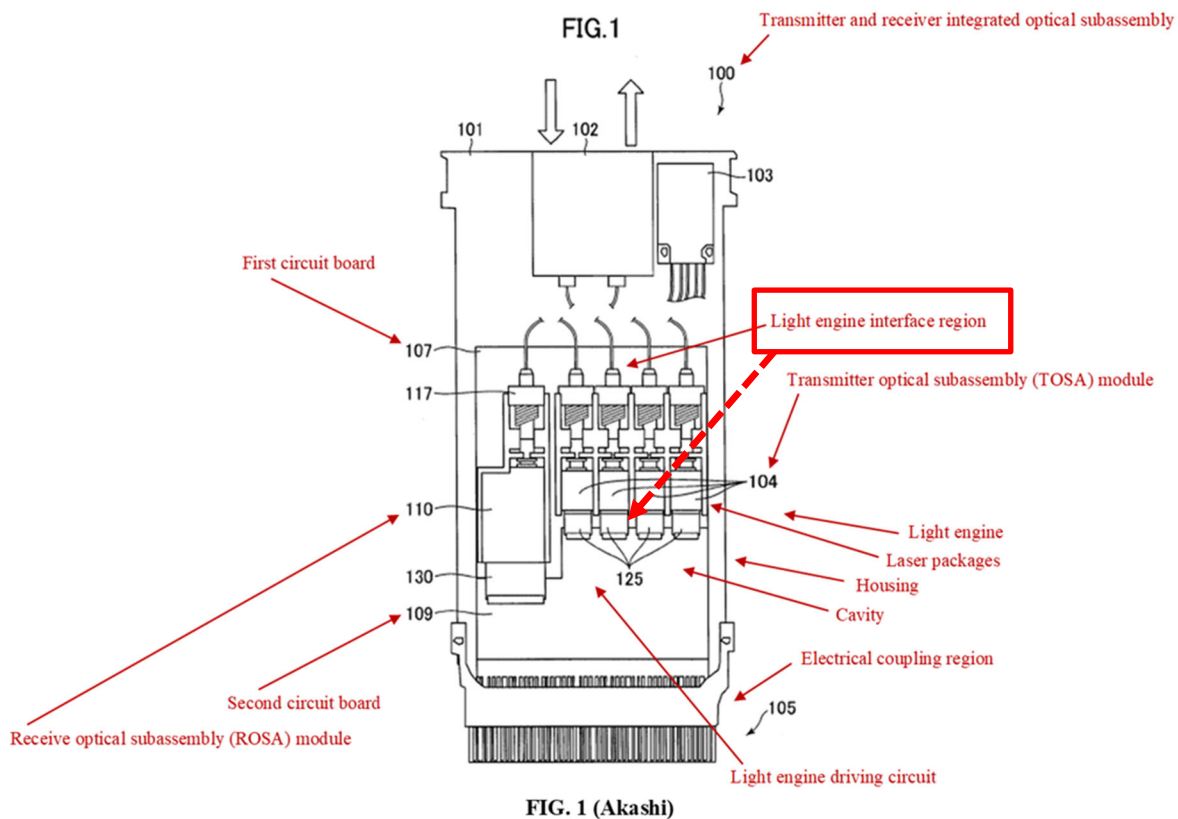
The Petition identifies the claimed “light engine driving circuit” as being located on substrate 107, as would have been understood by one of ordinary skill in the art. *See* Ex. 1007 at FIG. 1, ¶¶ [0026]-[0027], Ex. 1003, ¶ 124; *cf.* Paper No. 8 at 21 to Paper No. 2 at 30. Specifically, Akashi discloses: “The first substrate 107 is a circuit board on which four transmitter optical sub-assemblies (TOSA) 104 that are each an optical module for transmission and one receiver optical sub-assembly (ROSA) 110 that is an optical module for reception are placed.” Ex. 1007 at ¶ [0026]. In view of this disclosure, Dr. Kirk explained that “a POSITA would have understood that Akashi discloses a light engine driving circuit disposed on the substrate 107 that provides a RF signal and a power signal to drive the hermetically sealed light engine to output one or more channel wavelengths.” Ex. 1003 at ¶ 124. Otherwise, the optical module described in Ex. 1007 simply would not work.

Patent Owner does not challenge Dr. Kirk’s explanation regarding the knowledge or understanding of one of ordinary skill in the art. Nor does Patent Owner offer any contrary explanation as to how one of ordinary skill in the art would understand how the TOSA and ROSA – which are located on substrate 107 (“a circuit board” per Ex. 1007 at ¶ [0026]) – would operate absent a light engine driving circuit.

Dr. Kirk's testimony regarding the understanding of one of ordinary skill in the art is sufficient for purposes of an invalidation analysis based on anticipation. *See Arthrocare Corp. v. Smith & Nephew, Inc.*, 406 F.3d 1365, 1373-74 (Fed. Cir. 2005) (“[E]ven if a piece of prior art does not expressly disclose a limitation, it anticipates if a person of ordinary skill in the art would understand the prior art to disclose the limitation and could combine the prior art description with his own knowledge to make the claimed invention.”).

Patent Owner's second contention seizes on an error in Petitioner's description and annotation of FIG. 1 of Akashi, asserting that “Petitioner has not identified the claimed light engine interface region.” Paper No. 8 at 21-22. Specifically, Patent Owner notes “that the region pointed to by Petitioner is the region containing optical fibers.” As explained in the accompanying Supplemental Declaration of Dr. Kirk, Ex. 1014, the statement in the Petition, adapted from Exhibit 1003, ¶ 123 is incorrect, but would have been understood as such by a POSITA. *See* Ex. 1014, ¶¶ 6-9. Moreover, that POSITA conclusion is reinforced by the last sentence of Ex. 1003, ¶ 123, which expressly states: “... the light engine interface region *is configured to electrically couple with the hermetically sealed light engine via the second circuit board.* [Akashi] ¶¶ [0026]-[0027]” (emphasis added).

Accordingly, as explained in Ex. 1014, the light engine interface region is not “adjacent to optical connector 117.” Instead, correct placement of the arrow for the light engine interface region of the TOSA should be directed to the area adjacent to flexible circuits 125, as shown in dotted line below:



As further explained in Ex. 1014, ¶ 8, the error in Ex. 1003, ¶ 123, would not have confused a POSITA about the disclosure of Akashi. Instead, a POSITA would have understood that Akashi provides a compelling basis for anticipation of the '024 patent. Accordingly, this factor does not support Patent Owner's request for discretionary denial.

C. The Process Set Out In Exhibit 2001 May Violate the APA

Petitioner submits that the Director’s Memo dated March 26, 2025, Exhibit 2001, may violate the Administrative Procedures Act (“APA”) because it exceeds the Director’s authority and may violate the America Invents Act (“AIA”).

The AIA does not specifically authorize the Director to deny IPR petitions based on the factors set forth in Ex. 2001. The PTAB’s application of the *Fintiv* factors arguably has already led to unpredictable outcomes among similarly situated IPR petitioners. Ex. 2001 appears to exacerbate that problem by introducing several additional, highly malleable factors. For example, with respect to the guidance provided in Ex. 1012 for expert testimony, Petitioners may face discretionary denial for having either *too much* or *too little* expert testimony – literally, a “Goldilocks’ problem.” The PTAB guidance on expert testimony leaves too great a hazard for Petitioners to “guess wrong,” with dire results.

Further, the procedure set out in Exhibit 2001 may be procedurally invalid because it was issued without complying with the notice-and-comment rulemaking requirements of the APA. *See* 5 U.S.C. § 553(b), (c); 35 U.S.C. §§ 2(b)(2), 316(a).

And finally, discretionary denial is not specifically authorized for any basis other than set forth in 35 U.S.C. § 314(a). The Director lacks absolute discretion regarding whether to institute an IPR; instead that discretion is limited to the bases

authorized in 35 U.S.C. § 314; 35 U.S.C. § 316(a)(2). *Cf. SAS Inst., Inc. v. Iancu*, 584 U.S. 357, 363-364 (2018). For these additional reasons Petitioner requests that the Director deny Patent Owner's request for discretionary denial.

III. CONCLUSION

Petitioner respectfully requests that the Director deny Patent Owner's request for discretionary denial.

Date: May 27, 2025

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CERTIFICATION UNDER 37 C.F.R. §42.24

Petitioner certifies that the word count in this Petition is 4,490 words, as counted by the word-processing program (Microsoft Word for Office 365) used to generate this paper, where such word count excludes the table of contents, table of authorities, mandatory notices, certificate of service, appendix of exhibits, and this certificate of word count. This paper is in compliance with the 14,000-word limit set in 37 C.F.R. §42.24(a)(1)(i).

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §§ 42.6(e), 42.105, the undersigned hereby certifies that true and correct copies of the above-captioned PETITIONER'S OPPOSITION TO PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL OF INSTITUTION and all associated exhibits were served in their entireties on May 27, 2025, upon the Patent Owner at the correspondence address of record for the subject patent as listed on the USPTO's Patent Center via Priority Mail Express®:

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