

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BOE TECHNOLOGY GROUP CO., LTD.,
Petitioner,

v.

OPTRONIC SCIENCES, LLC,
Patent Owner.

IPR2024-01315
Patent 8,158,477

PATENT OWNER'S SUR-REPLY

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Patent Owner's Exhibit List for IPR2024-01315

Pursuant to 37 C.F.R. § 42.63(e), Patent Owner Optronics Sciences LLC hereby submits its exhibit list associated with the above-captioned *inter partes* review of U.S. Patent No. 8,158,477.

Exhibit No.	Description
2001	Declaration of Benjamin T. Wang in Support of Motion to Appear <i>Pro Hac Vice</i>
2002	Declaration of Andrew D. Weiss in Support of Motion to Appear <i>Pro Hac Vice</i>
2003	Declaration of Christian W. Conkle in Support of Motion to Appear <i>Pro Hac Vice</i>
2004	Declaration of Paul A. Kroeger in Support of Motion to Appear <i>Pro Hac Vice</i>
2005	May 16, 2025 Disclaimer of Claims 1 and 3 of U.S. Patent Number 8,158,477 Under CFR 1.321(a)
2006	July 19, 2024 Preliminary Infringement Contentions in District Court Case No. 2:23-cv-00549-JRG

I. ADVERSE JUDGMENT SHOULD NOT BE ENTERED

Although Patent Owner acknowledges the Board has discretion to enter adverse judgment under 37 C.F.R. § 42.73(b), the Board should decline to treat Patent Owner's disclaimer as a request for adverse judgment as a matter of policy for three reasons. First, terminating this case as moot will incentivize the conservation of resources. Second, the '477 Patent is not invalid. Finally, Petitioner's request for adverse judgment is intended to create unfair and unjust estoppel effects that should be avoided.

II. MOOTING THIS CASE WILL CONSERVE RESOURCES

In the co-pending district court litigation, 29 claims across 9 patents were initially asserted. *See* Ex. 2006 at 1–2. **Solely** to simplify the issues before the court, preserve the resources of the Board, prevent additional costs to the parties, and to open valuable technology to the public, Patent Owner disclaimed claims 1 and 3 of the '477 Patent. Ex. 2005. This was neither an admission of invalidity nor an unequivocal request for adverse judgment. *Apple Inc. v. Zipit Wireless, Inc.*, IPR2021-01124, Paper 14 at 3–4 (PTAB Dec. 21, 2022) (vacating adverse judgment because “I do not understand counsel's statements to have been an unequivocal abandonment”) (precedential).

An entry of adverse judgment has negative effects that would discourage Patent Owner from making efforts to streamline the issues, resulting in increased

complexity in litigation, increased constraints on the resources of the Board, and increased costs for the parties to reach a final written decision.

Patent Owner should not be discouraged from taking streamlining actions that result in reduced costs to the parties and freeing administrative and judicial resources. If adverse judgment is entered, Patent Owner will be disinclined to take such streamlining measures in the future, and Patent Owner will be incentivized to fight on the merits in every case. *See* Paper 17 (identifying related cases).

The Board has declined to enter adverse judgment for similar policy reasons before. For example, in *Bestway (USA), Inc. v. Intex Mktg. Ltd.*, the Board declined to enter adverse judgment, reasoning that an entry of adverse judgment would discourage Patent Owner from filing disclaimers and encourage Patent Owner to litigate every AIA trial proceeding through Final Written Decision. *Bestway (USA), Inc. v. Intex Mktg., Ltd.*, PGR2024-00036, 2024 WL 4595093, at *4 (PTAB Oct. 28, 2024) (citing *Gen Elec. Co. v. United Techs. Corp.*, IPR2017-00491, Paper 9 (PTAB July 6, 2017) (precedential)).

The equities do not favor adverse judgment. Although Petitioner expended some effort in preparing the Petition (Paper 28 at 3), this was a sunk cost by the time Patent Owner decided whether to disclaim claims 1 and 3 of the '477 Patent. It was *Patent Owner's* decision to disclaim claims 1 and 3 the '477 Patent that spared Petitioner from incurring further expenses, including subsequent expert depositions,

technical briefing, and technical oral argument. It is Patent Owner who should be incentivized, not the Petitioner.

This is not a case where there is any risk of Patent Owner filing continuations with claims similar to the disclaimed claims. This is because prosecution is closed on the '477 Patent family, and there is no live continuation. Patent Owner is not seeking to amend any claims in IPR2024-01132. Moreover, despite Petitioner's baseless speculation (Paper 28 at 2), Patent Owner will not seek any sort of reissue patent that are patentably indistinct from the disclaimed claims—this will be contrary to the very efficiency gain that Patent Owner sought to achieve.

The Board should instead dismiss the petition as moot because claims 1 and 3 of the '477 Patent have been disclaimed. There are no claims left to rule on.

III. THE '477 PATENT IS NOT INVALID

The Board should not enter any adverse judgment of invalidity because the claims are not invalid in view of the prior art. Instead, the proceeding is now moot. Petitioner has not met its burden of proving invalidity. For example, the Petition relies on incorrect claim constructions, including for the terms “capping” and “passivation” Pet. at 18, 19, 41. For example, the Petition states “there is no special meaning ascribed to passivation layer other than it is a layer of insulation material.” Pet. at 41. Petitioner's claim constructions are wrong and cannot be used to support invalidity. As explained at length in co-pending, related IPR2024-01132, Paper 33,

the term “passivation” does not refer simply to any insulation—rather, passivation requires something more, such as rendering the surface of the layer below chemically passive or unreactive. *BOE Tech. Group Co., Ltd. v. Optronix Sciences LLC*, IPR2024-01132, Paper 33 (PTAB Sept. 17, 2025) ; *see also id.*, Paper 25 at 6–8 (PTAB May 7, 2025). Indeed, Petitioner submitted three dictionary definitions as evidence, and these dictionaries all define passivation as requiring more than being a mere insulator. *Id.*, Paper 30 at 3 and Exhibits 2012–2014 (PTAB July 30, 2025).

Petitioner relies on similarly erroneous constructions here and has not shown that the claims are invalid over the prior art under proper constructions of the terms. *See* Pet. at 41 (“While Anzai does not disclose the material for layer 19, it must be made of an insulation material”). Anzai does not disclose or render obvious all the elements of the challenged claims under proper claim constructions and all three of the Petition’s grounds fail. Indeed, Patent Owner provided nearly 50 pages of briefing in IPR2024-01132 regarding claim construction issues with Petitioner’s definitions of “passivation” and “capping,” but the Board does not need to render a claim construction opinion in this action because all the challenged claims have been disclaimed. *See* Director’s Sept. 16, 2025 Memo (“if the Board reaches an initial or final decision on a finding of fact or conclusion of law that is different than the prior finding or conclusion of the Office, district court, or the ITC, the Board shall explain

in the institution or final written decision why a different outcome is warranted”).
The Board should instead dismiss the Petition as moot.

IV. MOOTING THIS CASE AVOIDS UNJUST GAMESMANSHIP

Petitioner’s request for adverse judgment is not rooted in justice. As evident from Petitioner’s Reply, Petitioner’s underlying motivation is to create some sort of preclusion or estoppel to affect other patents such as U.S. Patent 7,586,121 in IPR2024-01132. *See* Reply at 2–3. Petitioner’s strategy is unjust and unfair because preclusion or estoppel usually requires that the issue be *actually litigated* before affecting other cases. As Petitioner admits, adverse judgment is rooted in the principles of “res judicata and collateral estoppel.” Reply at 4 (citing *In re Deckler*, 977 F.2d 1449, 1452 (Fed. Cir. 1992)).

Res judicata (or claim preclusion) applies only when (1) there is identity of parties (or their privies); (2) there has been an earlier final judgment on the merits of a claim; and (3) the second claim is based on the same set of transactional facts as the first. *Jet, Inc. v. Sewage Aeration Systems*, 223 F.3d 1360, 1362 (Fed. Cir. 2000). Collateral estoppel applies when (1) the identical issue was previously adjudicated; (2) the issue was actually litigated in the prior action; (3) the issue was necessary to the judgment in the prior action; and (4) the party against whom estoppel is asserted was fully represented in the prior action. *Kroy IP Holdings, LLC v. Groupon, Inc.*, 127 F.4th 1376, 1379 (Fed. Cir. 2025).

These requirements stem from the basic, fair rule that an argument that has been actually litigated should not be re-litigated later. In this IPR, the parties have not *actually litigated on the merits* whether the '477 is invalid because this case became moot as soon as the '477 Patent was disclaimed. Petitioner is trying to circumvent the underlying fundamental rule of fairness.

Petitioner is trying to circumvent requirements (2) and (3) of res judicata. Namely, there should not be any final judgment *on the merits* here; at best Petitioner has won judgment *through procedure*. Also, the '121 Patent has a patentably distinct set of claims (including, for example, apparatus claims having a “sixth conductive layer”), so IPR2024-01132 cannot be said to be based on the same set of facts as the '477 patent. No backdoor res judicata should apply to the '121 patent proceeding.

Petitioner is trying to circumvent requirements (1), (2), and (3) of collateral estoppel. As to (1), the '121 Patent is not identical to the '477 Patent, so identical issues are not being resolved here. For (2), the issues relating to the validity of the '477 Patent are not being *actually litigated* here because claims 1 and 3 of the '477 Patent were disclaimed: Patent Owner did not file a substantive Reply or retain an expert. For (3), none of the substantive issues on the merits are necessary for resolution because this case is moot.

Thus, neither the requirements of traditional res judicata nor collateral estoppel are met. The Board should not create opportunities for backdoor estoppel arguments that affect the '121 Patent by entering final judgment.

If the Board decides to enter adverse judgment by invalidating the '121 Patent, then to prevent potentially unjust collateral estoppel to other cases, the Board should make clear that its ruling is based on procedure and not merits such that collateral estoppel cannot attach from this case because the parties did not actually litigate the issues here.

It remains unclear what the full scope of “action inconsistent with adverse judgment” Petitioner believes might be taken in the IPR2024-01132 regarding the '121 Patent. The Board has not issued final claim construction orders or made any final rulings on specific grounds of invalidity. The Board has not ruled on the claim construction arguments presented in this Sur-Reply, so no claim construction estoppel should carry over. The Board has not yet applied the correct claim construction to Petitioner’s Anzai or Yamazaki theories.

The Board should not waste its time deciding these issues. The most efficient thing for the Board to do, rather than diving into the effort of claim construction and technical details that may affect multiple IPRs, is to simply terminate this IPR as moot. The parties should be free to fully litigate those issues in IPR proceedings without the backdoor estoppel that Petitioner unjustly seeks.

V. CONCLUSION

The Board should not exercise its discretion to enter adverse judgment. Instead, the Board should simply terminate this proceeding as moot. This is the best course of action. It will save everyone's resources, and the Board will not need to resolve moot questions of claim construction or invalidity. Mooting this proceeding will also prevent Petitioner's attempt to create backdoor estoppel. Most importantly, the '477 Patent is not invalid, so no judgment should be made that the '477 Patent is invalid.

Date: September 23, 2025

Respectfully submitted,

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CERTIFICATION REGARDING WORD COUNT

Pursuant to 37 C.F.R. §42.24(d), Patent Owner certifies that there are 1761 words in the paper excluding the portions exempted under 37 C.F.R. §42.24(a)(1).

Date: September 23, 2025

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CERTIFICATE OF SERVICE (37 C.F.R. § 42.6(e)(1))

The undersigned hereby certifies that the above document was served on September 23, 2025, by filing this document through the Patent Trial and Appeal Case Tracking System as well as delivering a copy via electronic mail upon the following attorneys of record for the Petitioner:

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