

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UPI SEMICONDUCTOR CORPORATION,

Petitioner,

v.

FORCE MOS TECHNOLOGY CO. LTD.,

Patent Owner

Inter Partes Review No. IPR2025-00920
U.S. Patent No. 7,812,409

PATENT OWNER'S PRELIMINARY RESPONSE

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Uniform Commercial Code § 2-31210

PATENT OWNER'S EXHIBIT LIST

Exhibit	Description
2001	Amended Complaint, as filed at ECF 13 in <i>Force MOS Tech., Co., Ltd. v. ASUSTeK Computer, Inc.</i> , No. 2:22-cv-460 (E.D. Tex. Mar. 7, 2023)
2002	ASUSTeK Computer, Inc., Consolidated Financial Statements (3rd Quarter 2019, September 30, 2019), (<i>available at</i> https://www.asus.com/event/investor/content/attachment_en/2019_q3_finacial_report.pdf)
2003	ASUSTeK Computer, Inc., Annual Report (2024), (<i>available at</i> https://www.asus.com/EVENT/Investor/Content/attachment_en/2024_Annual_Report.pdf)
2004	uPI Semi Corp., “Top 10 Shareholders”, (<i>available at</i> https://www.upi-semi.com/investor/shareholder-services/top-10-shareholders/)
2005	Plaintiff’s First Set of Requests for Production to ASUSTeK Computer, Inc., as served in <i>Force MOS Tech., Co., Ltd. v. ASUSTeK Computer, Inc.</i> , No. 2:22-cv-460 (E.D. Tex. Dec. 6, 2023)
2006	Plaintiff’s First Set of Interrogatories to ASUSTeK Computer, Inc., as served in <i>Force MOS Tech., Co., Ltd. v. ASUSTeK Computer, Inc.</i> , No. 2:22-cv-460 (E.D. Tex. Dec. 6, 2023)
2007	Email from C. McMahon re: ASUSTeK (Force MOS) Summary of Pre-Trial Conference (Dec. 4, 2024), as filed in <i>Inergy Technology Inc., v. Force MOS Technology Co., Ltd.</i> , Case No. 2024-Min-Gong-Shang-Zih No. 2, Taiwan Intellectual Property and Commercial Court: Ping Judicial Section, as Exhibit 37 to Inergy Technology Inc.’s Civil Answer Brief No. III (April 11, 2025)

Exhibit	Description
2008	Email string including email from C. McMahon re: ASUSTeK Mediation and Trial Update (Feb. 15, 2025), as filed in <i>Inergy Technology Inc., v. Force MOS Technology Co., Ltd.</i> , Case No. 2024-Min-Gong-Shang-Zih No. 2, Taiwan Intellectual Property and Commercial Court: Ping Judicial Section, as Exhibit 38 to Inergy Technology Inc.'s Civil Answer Brief No. III (April 11, 2025)
2009	LinkedIn, entry for C. Tseng (available at https://www.linkedin.com/in/tseng-catherine-518b9556/)
2010	Amended Final Judgment, <i>Force MOS Tech., Co., Ltd. v. ASUSTeK Computer, Inc.</i> , No. 2:22-cv-460 (E.D. Tex. June 13, 2025)
2011	Trial Transcript, Vol. 1 (Feb. 7, 2025), as filed at ECF 369 in <i>Force MOS Tech., Co., Ltd. v. ASUSTeK Computer, Inc.</i> , No. 2:22-cv-460 (E.D. Tex. Feb. 7, 2025)
2012	Defendant ASUSTeK Computer, Inc.'s Motion to Stay Pending Resolution of <i>Inter Partes</i> Reviews, <i>Force MOS Tech., Co., Ltd. v. ASUSTeK Computer, Inc.</i> , No. 2:22-cv-460 (E.D. Tex. Nov. 30, 2023)
2013	Memorandum Opinion and Order Denying Defendant ASUSTeK Computer, Inc.'s Motion to Stay Pending Resolution of <i>Inter Partes</i> Reviews, <i>Force MOS Tech., Co., Ltd. v. ASUSTeK Computer, Inc.</i> , No. 2:22-cv-460 (E.D. Tex. Apr. 11, 2024)
2014	Defendant ASUSTeK Computer, Inc.'s Patent Initial Disclosures (Invalidity Contentions), as served in <i>Force MOS Tech., Co., Ltd. v. ASUSTeK Computer, Inc.</i> , No. 2:22-cv-460 (E.D. Tex. July 18, 2023)
2015	IPR2024-00094, Petition, Paper No. 1 (Oct. 27, 2023)
2016	IPR2024-00094, Order Setting Oral Argument, Paper No. 31 (Jan. 21, 2025)
2017	IPR2024-00094, Final Written Decision, Paper No. 37 (May 16, 2025)

Exhibit	Description
2018	IPR2024-00094, Patent Owner's Request for Director Review of the Final Written Decision, Paper No. 38 (June 26, 2025)
2019	U.S. Patent Publication No. 2006/0273384 to Hshieh
2020	PTACTS Docket of IPR2024-00094 (accessed July 28, 2025)
2021	PACER Docket of Force Mos Technology Co., Ltd. v. ASUSTeK Computer, Inc., Case No. 2:22-cv-00460-JRG (E.D. Tex.) (accessed July 28, 2025)
2022	Trial Transcript (Redacted), Vol. 2 (Feb. 10, 2025), as filed at ECF 403-1 in <i>Force MOS Tech., Co., Ltd. v. ASUSTeK Computer, Inc.</i> , No. 2:22-cv-460 (E.D. Tex. Feb. 7, 2025)
2023	Jury Verdict as filed at ECF 358 in <i>Force MOS Tech., Co., Ltd. v. ASUSTeK Computer, Inc.</i> , No. 2:22-cv-460 (E.D. Tex. Feb. 7, 2025)
2024	Trial Transcript (Redacted), Vol. 3 (Feb. 11, 2025), as filed at ECF 403-2 in <i>Force MOS Tech., Co., Ltd. v. ASUSTeK Computer, Inc.</i> , No. 2:22-cv-460 (E.D. Tex. Feb. 7, 2025)
2025	uPI Company History, <i>available at</i> https://www.upi-semi.com/about-us/companyhistory/ (accessed July 28, 2025)
2026	Specification Sheet for UBIQ / uPI SEMI QM3016AM3 N-Channel 30V Fast Switching MOSFET
2027	Notice of Attorney Appearance by Charles M McMahon on behalf of ASUSTeK Computer, Inc., as filed at ECF 115 in <i>Force MOS Tech., Co., Ltd. v. ASUSTeK Computer, Inc.</i> , No. 2:22-cv-460 (E.D. Tex. Feb. 7, 2025)
2028	U.S. Patent No. 6,621,107
2029	U.S. Patent No. 7,345,342
2030	U.S. Patent No. 7,446,374

Exhibit	Description
2031	U.S. Patent No. 7,504,306

Patent Owner Force MOS Technology Co. Ltd. (“Force MOS” or “Patent Owner”) submits its Preliminary Response to the petition for *Inter Partes* Review of U.S. Patent No. 7,812,409 (the “’409 patent”), filed by uPI Semiconductor Corporation (“uPI” or “Petitioner”).

I. INTRODUCTION

As previously demonstrated in Patent Owner’s Request for Discretionary Denial (Paper No. 9), and further described below, this IPR has actually been filed on behalf of uPI’s customer—undisclosed real party-in-interest ASUSTek Computer Inc. (“ASUS”). Force MOS first asserted the ’409 Patent against ASUS in an amended complaint filed over two years ago in the Eastern District of Texas. That case has already proceeded to judgment, after a jury found claim 1 of the ’409 Patent valid and infringed by ASUS. The ’409 Patent was also subject to IPR2024-00094, ostensibly filed by one of ASUS’s other suppliers (Inergy Technologies), but which expressly identified ASUS as a real party-in-interest.

Petitioner and ASUS are more than merely supplier and customer. ASUS is Petitioner’s second largest shareholder and was previously a majority shareholder; ASUS’s officers, directors, and other employees hold positions of control at Petitioner. Petitioner’s products were specifically identified as infringing in the litigation long before this Petition was filed. And, Petitioner actively participated in the EDTX litigation, receiving detailed communications on its status from

ASUS's litigation counsel. Indeed, the Petition is specifically calculated to challenge the claim found infringed by ASUS at the EDTX trial—claim 1—with *four* grounds challenging claim 1. As such, there is little question that ASUS is the intended beneficiary of the present petition and should be found to be a real party in interest, or in privity, with Petitioner.

Thus, there are at least two reasons that this proceeding should deny institution. ***First***, 35 U.S.C. § 315(b) requires that a Petition must be filed no more than one year after “the date on which the petitioner, real party in interest, or privy of the petitioner is served with a complaint alleging infringement of the patent.” 35 U.S.C. § 315(b). Here, Patent Owner served an amended complaint for patent infringement asserting the '409 Patent against ASUS in the EDTX litigation on March 7, 2023, more than two years before the April 24, 2025 filing date of the Petition. There can be no question that ASUS has a preexisting, established relationship with the Petitioner, and that this Petition, if successful, would inure to the benefit of ASUS. Thus, ASUS is a real party in interest or privy of Petitioner, and the Petition is therefore time barred under the one-year bar of § 315(b).

Second, the Petition's cited obviousness references for all four asserted grounds only identify the same generic motivation to combine: that the asserted prior art references involve similar structures. But that is legally insufficient under Federal Circuit precedent. Indeed, the '409 Patent is directed to a novel

combination of cell features for a trenched power MOSFET—square shaped cells with truncated or rounded corners and a circular trenched contact—that together result in increased uniformity between the gate trench and the circular contact, thereby improving avalanche ruggedness. The Petition fails to explain how or why any of the purported combinations would result in the specific claimed ruggedness-improving layout claimed by the '409 Patent. As such, the Petition fails to address the purpose of the '409 Patent in improving the ruggedness of the MOSFETs, nor does it provide any other non-generic, non-conclusory reason to combine the cited references.

Because both reasons clearly demonstrate that institution is prohibited or, at minimum, institution is not adequately established by the arguments presented in the Petition, the Board should deny institution to avoid further unnecessary labor and expense from the Office and the parties.¹

¹ Both reasons explained in this Preliminary Response clearly and simply establish that the Petition is both barred and not adequately supported for any of the grounds alleged in the Petition. However, in the unlikely event that the Board institutes trial on the Petition, no adverse inference should be taken by the election not to make any argument in this Preliminary Response. Patent Owner explicitly reserves the right to argue for the patentability of the challenged claims for any other reason, and to dispute assertions made in the petition in this trial, if instituted. That any statement in the Petition is not explicitly addressed in this preliminary

II. FACTUAL BACKGROUND

A. U.S. Patent No. 7,812,409 (“the ’409 Patent”)

The ’409 Patent teaches improved cell layouts for trenched MOSFETs. Ex. 1001, Abstract. A MOSFET is a transistor which, like a switch, alters the flow of electric charge between two terminals (the source and the drain) in response to a change in potential of a third terminal (the gate). Trenched MOSFETs embed gate material into trenches so that the channel—where charge flows in the “ON” state—is vertical. *See* Ex. 1001, Fig. 1C. This allows for increased density and lower on-resistance, improving efficiency. Cell layouts for prior trenched MOSFETs—which used square-shaped cells and contacts—experienced “parasitic bipolar NPN latch up.” *Id.*, Fig. 1A, 1:15-20. This undesired current flow was especially pronounced near the cells’ corners in prior art devices. *Id.*

During prosecution of the ’409 Patent, the examiner acknowledged that there were prior art MOSFETs with square cells having rounded corners, such as the Pfirsch reference. Ex. 1002, 283-284, 322, 328, 356, 364. The examiner also acknowledged the existence of prior art MOSFETs with circular contacts. Ex. 1002, 323-326. However, the examiner ultimately accepted the patentee’s

response should not be construed as acquiescence to or agreement with any position taken in the Petition, nor should it be interpreted as a concession that the Petition has any merit.

argument that the prior art did not teach the unique cell layout recited in the claims. *Id.*, 259-261, 273-277, 306-308.

B. Procedural Background

On March 7, 2023, Patent Owner filed an amended complaint in Case No. 2:22-cv-460-JRG in the Eastern District of Texas (“the EDTX case”) against ASUSTeK Computer, Inc. (“ASUS”), alleging, among other things, infringement of the ’409 Patent. Ex. 2001 at 23, 27. The EDTX case against ASUS ultimately proceeded to a jury trial on February 7-13, 2025. Ex. 2021 (ASUS Docket) at 45-46 (ECF Nos. 349-361). In that case, Force MOS demonstrated that certain accused MOSFETs incorporated in ASUS products infringed claim 1 of the ’409 Patent and U.S. Patent No. 7,629,634. In particular, the accused MOSFETs included Petitioner uPI Semiconductor’s QM3016AM MOSFET. Ex. 2022 at 345:20-346:17, 366:20-367:9, 389:21-391:18.² The jury issued a verdict on February 13, 2025, finding for Force MOS on all issues—including the validity of the ’409 Patent—and awarding \$10.5 million in damages. Ex. 2023 (Dkt. 358,

² Some of the EDTX trial transcript and trial documents refer to “UBIQ” instead of “uPI.” UBIQ and uPI Semiconductor previously operated as two subsidiaries of uPI Group, but merged in 2019. Ex. 2011 (Trial Tr. Vol. 1) at 203:18-204:4; Ex. 2025 at 3 (“2019 Year” “uPI & UBIQ Semiconductor Merged – The Era of One uPI”); Ex. 2026 at 1 (“Ubiq is now part of uPI EMI”).

Verdict Form) at 6, 9. The District Court subsequently entered an amended judgment on June 13, 2025 in favor of Force MOS and against ASUS, confirming the validity of claim 1 of the '409 Patent. Ex. 2010 at 2.

On October 27, 2023, Inergy Technology, Inc.—an indirect supplier to ASUS of some of the MOSFETs accused of infringement—filed IPR2024-00094 challenging the '409 Patent. Ex. 2015 (IPR2024-00094, Pet.) at 82; Ex. 2011 (Trial Tr. Vol. 1) at 244:18-24; Ex. 2022 (Trial Tr. Vol. 2) at 623:8-13. ASUS was expressly identified as an admitted real-party-in-interest in IPR2024-00094, as was ASUS's indirect supplier Panjit International, Inc. Ex. 2015 (IPR2024-00094, Pet.) at 8. IPR2024-00094 was instituted and thereafter proceeded through trial, briefing, depositions, and the oral hearing on February 21, 2025. Exs. 2016, 2021. On May 16, 2025—after the EDTX case verdict but before the judgment—the Board issued a Final Written Decision in IPR2024-00094 finding claims 1, and 3-5 unpatentable, and finding claims 2 and 6 patentable. Ex. 2017 (IPR2024-00094, FWD). On June 16, 2025, Patent Owner timely filed a Request for Director Review of the Final Written Decision in IPR2024-00094, which remains pending. Ex. 2018.

On April 24, 2025—after the EDTX jury verdict, and after the oral hearing in IPR2024-00094, Petitioner uPI Semiconductor, Inc. filed the present IPR Petition challenging claims 1-5 of the '409 Patent. Pet. at 21. Notably, the Petition

only identifies uPI Semiconductor, Inc. as a real party-in-interest, but contains no argument or explanation of that issue. Pet. at 88.

On July 28, 2025, Patent Owner filed a Request for Discretionary Denial in this IPR (Paper 9), arguing, among other things, that the Petition should be discretionarily denied under *General Plastics* and *Fintiv* because ASUS and Petitioner have a privy and real-party-in-interest relationship. Petitioner filed a response disputing those arguments on August 25, 2025. Paper 10.

III. ARGUMENT

A. **THIS IPR IS BARRED UNDER THE ONE YEAR LIMIT OF § 315(B) WAS FILED ON BEHALF OF ASUS— AN UNDISCLOSED REAL PARTY-IN-INTEREST AND PRIVY TO ASUS**

This Petition is barred from institution pursuant to 35 U.S.C. 315(b) because an amended complaint asserting the '409 Patent was filed (and thus automatically served via ECF the same day) in Force MOS's EDTX case against ASUSTeK Computer, Inc. ("ASUS") on March 7, 2023, which was more than one year before this IPR's April 24, 2025 filing date. Ex. 2001 at 27-28; Paper 1; Fed. R. Civ. P. 5(b)(2)(E). Thus, the sole issue in dispute is whether ASUS and Petitioner have a privy or RPI relationship.

The Petition asserts that the sole real party-in-interest is "uPI Semiconductor Corporation." Pet. at 88. However, it is clear that ASUS is an undisclosed real

party-in-interest and privity in this IPR. The Patent Office's Rules explicitly require that the Petition must "identif[y] all real parties in interest" in an inter partes review petition. 37 C.F.R. § 312(a)(2)). The reason for this rule is because the Petition must be filed no more than one year after "the date on which the petitioner, real party in interest, or privity of the petitioner is served with a complaint alleging infringement of the patent." 35 U.S.C. § 315(b). The RPI and privity requirements "seek[] to protect patent owners from harassment via successive petitions by the same or related parties, to prevent parties from having a 'second bite at the apple.'" Office Patent Trial Practice Guide, 84 Fed. Reg. 64,280 at 12 (Nov. 21, 2019) ("Trial Practice Guide"). Further, regarding privity, "[a] common consideration is whether the non-party exercised or could have exercised control over a party's participation in a proceeding." *Id.* at 16.

"Determining whether a non-party is [an RPI] demands a flexible approach that takes into account both equitable and practical considerations, with an eye toward determining whether the non-party is a clear beneficiary that has a preexisting, established relationship with the petitioner." *Applications in Internet Time, LLC v. RPX Corp.*, 897 F.3d 1336, 1351 (Fed. Cir. 2018). Underlying the RPI inquiry includes "two questions lying at its heart [which] are whether a non-party 'desires review of the patent' and whether a petition has been filed at a nonparty's 'behest.'" *Id.* (quoting Trial Practice Guide, 77 Fed. Reg. at 48,759).

The inquiry focuses on “who, from a “practical and equitable” standpoint, will benefit from the redress that the chosen tribunal might provide . . . and should extend to parties to transactions and other activities relating to the property in question.” *RPX*, 897 F.3d at 1349. “[A] non-party may be a real party-in-interest even in the absence of control or an opportunity to control.” *Cisco Sys., Inc. v. Hewlett Packard Enter. Co.*, IPR2017-01933, Paper 9 at 12 (PTAB Mar. 16, 2018).

In the present case, publicly available information confirms that ASUSTek Computer Inc.—the defendant in the EDTX case—is a real party in interest or privity of Petitioner. As early as 2018, ASUS identified in its public financial reports that it then held a 50.99% ownership interest in Petitioner. Ex. 2002 (ASUS 2019 Q3 report) at 15. Further, ASUS’s most recent Annual Report confirms that ASUS’s ownership (either directly or indirectly through directors, supervisors and managers) remains at 22.10%. Ex. 2003 at 91. Moreover, this table specifically identifies Petitioner as an “Affiliated Enterprise” of ASUS. *Id.* at 90. Petitioner’s own website further identifies that ASUS is Petitioner’s second largest shareholder. Ex. 2004 at 1. ASUS’s substantial, and continuing, ownership in Petitioner, as well as ASUS’s identification of Petitioner as an affiliated enterprise, demonstrate that Petitioner is in privity with ASUS, the Defendant in the district court litigation. Moreover, ASUS’s officers, directors, and other employees hold positions of control at uPI. First, one of ASUS’s directors, S. Y. Hsu, is the

Chairman of Petitioner. Ex. 2003 at 8-9. Second, ASUS's Corporate Vice President, Albert Chang, is one of Petitioner's directors. Ex. 2003 at 19, 21. Third, ASUS's Chief Financial Officer, Nick Wu, is also one of Petitioner's directors. Ex. 2003 at 20, 21.

Still further, uPI's products have long been accused of infringing in the district court litigation against ASUS. For example, in Force MOS's Requests for Production served in the EDTX case on December 6, 2023, Force MOS identified in the list of accused ASUS products in the district court litigation as including products incorporating Petitioner's QM3016AM MOSFET. Ex. 2005 at 2; Ex. 2026. An identical list of accused products was included in Force MOS's interrogatories served the same day, also listing Petitioner's QM3016AM product. Ex. 2006 at 2. Moreover, Patent Owner demonstrated that such products infringe the '409 Patent at the EDTX trial. Ex. 2022 at 345:20-346:20, 389:21-391:18; Ex. 2010 at 2. And, uPi actively assisted ASUS by providing information to ASUS's expert witness for use at the trial. Ex. 2024 (Trial Tr. Vol. 3) at 829:23-831:2. As such, Petitioner's products have long been accused in the co-pending district court litigation against ASUS. And, as a supplier of components to ASUS, Petitioner has indemnification obligation to ASUS for infringement caused by inclusion of uPI's MOSFETs. *See* U.C.C. § 2-312; Ex. 1013; Paper 10 at 23.

Indeed, emails that have been made publicly available in Taiwan proceedings confirm uPI's participation in the EDTX litigation. In particular, ASUS's litigation counsel from Benesch Friedlander Coplan & Aronoff, Mr. Charles McMahon, sent detailed communications regarding the status of Force MOS's EDTX case against ASUS to Cathy Tseng (cathy_tseng@upi-semi.com). Ex. 2007; Ex. 2008;³ Ex. 2027 (Mr. McMahon's entry of appearance). Ms. Tseng's LinkedIn profile further confirms that Ms. Tseng has held the position of manager at uPI for over fifteen years. Ex. 2009 (Tseng LinkedIn Profile). This confirms that uPI was actively involved in the co-pending district court litigation.

Moreover, the fact that this petition was filed on behalf of ASUS is further demonstrated by the specific challenged claims and grounds. In particular, Petitioner asserts *four* distinct grounds all against claim 1 of the '409 Patent. Pet. at 21. Two of the grounds *only* challenge claim 1. *Id.* And, notably, claim 1 of the '409 Patent was the sole asserted patent in the trial against ASUS in the EDTX case, where the jury found the claim both valid and infringed. Ex. 2023 at 5-6; Ex. 2010 at 2. Thus, obviously ASUS would particularly benefit from claim 1 of the '409 Patent being held invalid. By contrast, if Petitioner were attempting to avoid

³ Ms. Tseng's full "upi-semi.com" email address appears in the email header later in the email chain, near the bottom of page 2 Ex. 2008.

liability from the '409 patent, it would have challenged all of the claims of the '409 Patent equally.

In a similar situation, the Board previously held that a retailer was RPI in an IPR filed by the supplier. *See Luminex International Co. v. Signify Holding BV*, IPR2024-00101, Paper 10 (PTAB May 9, 2024). The Board determined that the customer was RPI to the supplier. The Board noted that the “petitioner bears the burden of persuasion to demonstrate that § 315(b) does not bar institution based on a complaint served on a real party in interest or privy of the petitioner more than one year before petition filing.” *Id.* at 29 (citing *Worlds Inc. v. Bungie, Inc.*, 903 F.3d 1237, 1242 (Fed. Cir. 2018)). Specifically, the Board found that the supplier’s indemnification obligations showed that the petition was filed at the customer’s “behest,” making the customer RPI as to the supplier for purposes of the one-year bar. *Id.* at 37. The Board determined that the customer was therefore RPI of the supplier because it was “a clear beneficiary that has a preexisting, established relationship with the petitioner.” *Id.* at 42.

The prior Director reversed the Board’s decision in *Luminex*, but on grounds that are readily distinguishable from the present case. The Director found that “a standard, non-exclusive, manufacturer-customer indemnification agreement relating to patent infringement can be sufficient to support a finding of real party in interest and trigger the one-year time bar.” *Luminex International Co. v. Signify*

Holding BV, IPR2024-00101, Paper 20 at 11 (PTAB Nov. 21, 2024). However, the Director's decision that a mere supplier-customer relationship, with standard indemnification provisions, would not create RPI between the supplier and customer "without more." *Id.*

However, as shown above, the relationship between Petitioner and the defendant in the litigation involves *significantly* more in the present case. First, the Director expressed a concern that finding customers to be RPI of suppliers would encourage suits against customers "to escape the threat of potential IPR challenges by manufacturers, who become unwittingly time-barred." *Id.* at 14. However, in the present case there is no such concern because Petitioner's products were identified as infringing at least as early as December 6, 2023, also more than one year before Petitioner's filing. Ex. 2005 at 2; Ex. 2006 at 2. Second, the customer/defendant in the litigation has a significantly closer relationship to Petitioner than in a pure arms-length supplier-purchaser relationship. As shown above, ASUS is Petitioner's second largest owner, and has indeed held an ownership interest greater than 50% in the past. Ex. 2002 at 15; Ex. 2003 at 91; Ex. 2004. Further, ASUS's officers, directors, and other employees hold positions of control at uPI. Ex. 2003 at 8-9, 19-21. Third, Petitioner actively received information and communications from ASUS's litigation counsel regarding the ongoing status of the co-pending District Court Litigation. Ex. 2007; Ex. 2008. As

such, this case involves a substantially closer relationship between Petitioner and its customer than the relationship at issue in *Luminex*, and the Board should therefore find that ASUS is RPI with Petitioner and is also in privity with Petitioner for these reasons.

Furthermore, Petitioner itself, in its Opposition to Patent Owner's Request for Discretionary Denial (Paper 10), in fact further confirms that the relationship between Petitioner and ASUS is more than a mere supplier-purchaser relationship and resoundingly justifies applying the one-year bar in the present case. First, Petitioner concedes that Petitioner has, at all times, had indemnification agreements with ASUS. Paper 10 at 23-24; Ex. 1013. Petitioner also concedes that it provided assistance to Asus's EDTX litigation, including (along with ASUS's other suppliers) by reimbursing "all fees and costs expended in the EDTX litigation." *Id.* at 25. Petitioner also concedes that ASUS's litigation counsel in the EDTX litigation provided Petitioner with updates regarding the litigation. *Id.* Petitioner further concedes in its opposition that, despite Petitioner's longstanding indemnification obligation and its assistance provided to ASUS in ASUS's EDTX litigation, Petitioner did not even make a decision to file the present petition until after receiving the adverse jury verdict in the EDTX litigation. *Id.* at 30-31. All of these admissions further justify applying the one-year bar to Petitioner based upon Petitioner's participation in the EDTX litigation and intentional delay.

In Petitioner's Opposition to Patent Owner's Request for Discretionary Denial, Petitioner does not dispute that uPI's QM3016AM MOSFET was identified as an "Accused ASUS Product[]" in the EDTX case as early as the service of Patent Owner's discovery responses on December 6, 2023. Paper 10 at 28; Ex. 2005 at 2; Ex. 2006 at 2. However, Petitioner argues that treating ASUS as an RPI would be unfair in this IPR because Petitioner was not informed *by ASUS* that Petitioner's products were at issue in the EDTX litigation until May 2024. Paper 10 at 28. But that is a dispute between ASUS and Petitioner—it does not change the legal calculus required under the RPI test or section 315(b), which do not depend on District Court discovery procedures or the timeliness of indemnification demands. Congress could have required direct notice to third parties as a pre-condition for IPRs being subject to the section 315(b) bar of a privy or real-party-in-interest—but that is not the statute as enacted.

Because the defendant in the Litigation, ASUS, "is a clear beneficiary that has a preexisting, established relationship with the petitioner," it is a RPI and a privy. *RPX*, 897 F.3d at 1351; *see also Worlds Inc. v. Bungie, Inc.*, 903 F.3d 1237 at 1242, 1246.

B. THE PETITION FAILS TO SHOW A MOTIVATION OR REASON TO COMBINE FOR ANY OF THE GROUNDS IN THE PETITION

For each of the four grounds for which the Petition argues that the Petition should be instituted, the Petition only provides the same conclusory recitation which attempts to generically argue that all references cited in all grounds in the Petition are justified merely because they have similar structures. Pet. at 37, 39, 54, 64, 73. Petitioner's expert is similarly conclusory—opining that a POSITA would be motivated to combine the Bulucea reference with any of the other references simply because “Bulucea teaches a deep body diffusion region” and the other references teach a “Deep Body Trench Contact.” Ex. 1003 ¶¶ 120-121, 146. However, Petitioner's expert acknowledges that: (1) Bulucea and its deep body diffusion region do not satisfy the “circular trench contact” of claim 1 of the '409 Patent; and (2) the alleged Deep Body Trench Contacts of the secondary references are distinct from the deep body diffusion region of Bulucea. *Id.* Moreover, Petitioner and its expert fail to identify any *benefit* or other motivation for substituting Bulucea's deep diffusion region with the secondary references' alleged Deep Body Trench Contacts. *Id.*

The Federal Circuit has specifically held that an argument regarding motivation or reason to combine that “is generic and bears no relation to any specific combination of prior art elements” cannot support combination arguments.

ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc., 694 F.3d 1312, 1328 (Fed. Cir. 2012). This is because generic and conclusory reasoning “fails to explain why a person of ordinary skill in the art would have combined elements from specific references *in the way the claimed invention does.*” *Id.* (citing *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418, 127 S. Ct. 1727, 1741 (2007)) (emphasis original). And, most importantly, the Federal Circuit has repeatedly held that simply noting the similarities or substitutability of structures or teachings in two references is not enough to provide a motivation to combine them—there must be some articulated reason to actually do so. *See Personal Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 994 (Fed. Cir. 2017) (stating that references could be combined “does not imply a motivation to pick [the references] and combine them to arrive at the claimed invention.”); *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1074 (Fed. Cir. 2015) (“Obviousness concerns whether a skilled artisan not only could have made but would have been motivated to make the combinations or modifications of prior art to arrive at the claimed inventions.”); *Virtek Vision Int'l ULC v. Assembly Guidance Sys.*, 97 F. 4th 882, 886 (Fed. Cir. 2024) (reversing Board’s obviousness finding because “[t]here was no argument in the petition regarding why a skilled artisan would make [the] substitution.”).

However, the Petition does precisely what the Federal Circuit has forbidden. It makes the generic assertion that elements from different references *could* be

combined without providing the critical analysis explaining *why* a POSA *would* select and combine the elements of the references “*in the way the claimed invention does.*” *ActiveVideo*, 694 F.3d at 1328. In particular, for each ground, the Petition makes a rote assertion that there is a motivation to combine because Bulucea contains a deep body diffusion region and each secondary reference allegedly discloses a “Deep Body Trench Contact” using the same “principle.” Pet. at 36-37, 39, 54, 64, 73; Ex. 1003 ¶¶ 120-121, 146. However, by not explaining *why* a POSA would substitute the alleged Deep Body Trench Contact of the secondary references in place of Bulucea’s deep body diffusion region, the Petition only provides conclusory and generic analysis without any explanation for why a POSA would seek to make the combination.

Strictly applying the Federal Circuit’s motivation to combine requirements is especially important in this IPR to avoid the problem of hindsight bias. In particular, the ’409 Patent explicitly recites that “[t]he purpose of the truncated corners or the rounded corners of the gate trenches is to make the **space** between the trenched gate and the metal contact more uniform in the closed cell to *enhance the device ruggedness.*” ’409 Patent, 2:3-7 (emphasis added). This is reflected in the cell layout of claim 1 of the ’409 Patent, which recites both: (i) trenched gates that surround the cells to form cells with “rounded corners,” and (ii) a “circular trench contact” which is “disposed substantially in a central portion of said closed

cells.” The combination of these two features ensures relative uniformity in distance between the gate trench and trenched contact, all around the contact. *See* ’409 Patent, Fig. 3. However, Petitioner and its expert provide no analysis or explanation at all as to whether or why a POSA—at the time of the ’409 Patent’s filing—would recognize Bulucea’s teachings regarding “surface breakdown” or “dielectric breakdown” as having anything to do with cell layouts that ensure relatively *uniform* distances between *trenched* contacts and gate trenches. Ex. 1003, ¶¶ 123-146. As such, the Petition’s obviousness theories are plainly the product of hindsight reasoning, and wholly fail to provide a legally sufficient motivation for making the combinations recited in each of the four grounds presented.

IV. CONCLUSION

For the foregoing reasons, Patent Owner respectfully submits that the Board should deny institution of the Petition.

Dated: August 27, 2025

Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), I certify that on this 27th day of August, 2025, a true and correct copy of the foregoing **PATENT OWNER'S PRELIMINARY RESPONSE** was served by electronic mail on Petitioner's counsel at the following email addresses:

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CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITATION

This Preliminary Response complies with the type-volume limitation in 37 C.F.R. § 42.24. The Request contains 4,382 words, excluding the parts exempted from the type-volume limitation, as measured by the word processing software used to prepare the document.

This Preliminary Response complies with the general format requirements of 37 C.F.R. § 42.6(a) and has been prepared using Microsoft Word in 14-point Times New Roman.

Dated: August 27, 2025

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