

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LTD.,

Petitioner

v.

ADVANCED INTEGRATED CIRCUIT PROCESS LLC,

Patent Owner

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Case IPR2025-00832

Patent 8,796,779

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**PATENT OWNER'S REPLY TO PETITIONER'S OPPOSITION TO  
PATENT OWNER'S DISCRETIONARY DENIAL BRIEF**

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Patent Trial and Appeal Board

U.S. Patent and Trademark Office

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## EXHIBIT LIST

| Exhibit | Description                                                                                                                                                                                                                        |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EX2001  | <b>Complaint for Patent Infringement</b> , Dkt. No. 1, <i>Advanced Integrated Circuit Process LLC v. Taiwan Semiconductor Manufacturing Company Limited</i> , Case No. 2:24-cv-00623, (E.D. Tex. Filed August 1, 2024)             |
| EX2002  | <b>Complaint for Patent Infringement</b> , Dkt. No. 1, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Case No. 2:24-cv-00730, (E.D. Tex. Filed September 6, 2024)                         |
| EX2003  | <b>Consolidation Order</b> , Dkt. No. 12, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623, (E.D. Tex. Filed December 6, 2024)                 |
| EX2004  | <b>Docket Sheet</b> , <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Case No. 2:24-cv-00730, (E.D. Tex.) (Printed July 7, 2025)                                                           |
| EX2005  | <b>Docket Control Order</b> , Dkt. No. 51, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623, (E.D. Tex. Filed February 14, 2025)               |
| EX2006  | <b>Second Docket Control Order</b> , Dkt. No. 55, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623, (E.D. Tex. Filed February 21, 2025)        |
| EX2007  | <b>First Amended Docket Control Order</b> , Dkt. No. 59, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623, (E.D. Tex. Filed February 27, 2025) |
| EX2008  | <b>Third Amended Docket Control Order</b> , Dkt. No. 83, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623, (E.D. Tex. Filed April 9, 2025)     |
| EX2009  | <b>Docket Sheet</b> , <i>Advanced Integrated Circuit Process LLC v. Taiwan Semiconductor Manufacturing Company Limited</i> , Case No. 2:24-cv-00623, (E.D. Tex. Dated April 23, 2025)                                              |
| EX2010  | <b>Notice of Compliance (re: P.R. 3-1 and 3-2 disclosures)</b> , Dkt. No.                                                                                                                                                          |

| <b>Exhibit</b> | <b>Description</b>                                                                                                                                                                                                                                                                                                        |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                | 45, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623, (E.D. Tex. Filed January 30, 2025)                                                                                                                                              |
| EX2011         | <b>Plaintiff’s Unopposed Motion for Leave to Amend Infringement Contentions</b> , Dkt. No. 54, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623, (E.D. Tex. Filed February 20, 2025)                                                  |
| EX2012         | <b>Plaintiff’s Unopposed Motion for Leave to Amend Infringement Contentions Against Defendant United Microelectronic Corporation</b> , Dkt. No. 64, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623, (E.D. Tex. Filed March 7, 2025) |
| EX2013         | <b>Defendant Taiwan Semiconductor Manufacturing Company Limited’s Notice of Compliance and Service of Invalidity Contentions</b> , Dkt. No. 104, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623, (E.D. Tex. Filed May 1, 2025)      |
| EX2014         | <b>Defendant United Microelectronic Corporation’s Notice of Compliance and Service of Invalidity Contentions</b> , Dkt. No. 106 <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623, (E.D. Tex. Filed May 2, 2025)                       |
| EX2015         | <b>Scheduling Order</b> , Dkt. No. 28, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Case No. 2:24-cv-00730, (E.D. Tex. Filed December 11, 2024)                                                                                                                                |
| EX2016         | <b>Defendant TSMC’s Invalidity Contentions</b> , <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623, (E.D. Tex. Served May 1, 2025)                                                                                                     |
| EX2017         | <b>Defendant United Microelectronics Corporation’s Invalidity Contentions</b> , <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623, (E.D. Tex. Served May 1, 2025)                                                                      |
| EX2018         | <b>Declaration of Kemper Diehl</b> , dated July 11, 2025                                                                                                                                                                                                                                                                  |
| EX2019         | <b>Protective Order</b> , Dkt. No. 71, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623, (E.D. Tex. Filed March 20, 2025)                                                                                                             |

| <b>Exhibit</b> | <b>Description</b>                                                                                                                                                                                                                                                                                                                   |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EX2020         | <b>Joint Notice Resolving Discovery Disputes Set for Hearing (Dkt. Nos. 78, 80, 89, 90)</b> , Dkt. No. 102, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623, (E.D. Tex. Filed April 30, 2025)                                                   |
| EX2021         | <b>Defendant Taiwan Semiconductor Manufacturing Company Limited’s Motion to Stay Pending <i>Inter Partes</i> Review</b> , Dkt. No. 99, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623, (E.D. Tex. Filed April 28, 2025)                        |
| EX2022         | <b>United Microelectronics Corporation’s Motion to Dismiss Plaintiff’s Claims for Direct Infringement and Pre-Suit Indirect Infringement</b> , Dkt. No. 15, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623, (E.D. Tex. Filed December 6, 2024) |
| EX2023         | <b>Defendant Taiwan Semiconductor Manufacturing Company Limited’s Reply in Support of its Motion to Stay Pending <i>Inter Partes</i> Review</b> , Dkt. No. 109, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623, (E.D. Tex. Filed May 20, 2025) |
| EX2024         | <b>Plaintiff’s Opposition to Defendant Taiwan Semiconductor Manufacturing Company Limited’s Motion to Stay</b> , Dkt. No. 108, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623, (E.D. Tex. Filed May 12, 2025)                                  |
| EX2025         | <b>Exhibit 779-01</b> to Defendant TSMC’s Invalidity Contentions, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623 (E.D. Tex. Served May 1, 2025)                                                                                                |
| EX2026         | <b>Exhibit 779-03</b> to Defendant TSMC’s Invalidity Contentions, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623 (E.D. Tex. Served May 1, 2025)                                                                                                |
| EX2027         | <b>Lex Machina Time-to-Trial Statistics Report</b> for trials before The Honorable Rodney Gilstrap, Federal District Judge in the Eastern District of Texas, during the period from July 1, 2024 to July 1, 2025                                                                                                                     |
| EX2028         | RESERVED                                                                                                                                                                                                                                                                                                                             |
| EX2029         | RESERVED                                                                                                                                                                                                                                                                                                                             |

| <b>Exhibit</b> | <b>Description</b>                                                                                                                                                                                                                                                                                                                                   |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EX2030         | RESERVED                                                                                                                                                                                                                                                                                                                                             |
| EX2031         | <b>Redaction to TSMC’s Sealed Motion for Issuance of Letter Rogatory for Nuvoton Technology Corporation – Japan</b> , Dkt. No. 119, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623 (E.D. Tex. Filed June 27, 2025)                                             |
| EX2032         | <b>Exhibit A to TSMC’s Sealed Motion for Issuance of Letter Rogatory for Nuvoton Technology Corporation – Japan</b> , Dkt. No. 116-1, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623 (E.D. Tex. Filed June 20, 2025)                                           |
| EX2033         | <b>Exhibit B to TSMC’s Sealed Motion for Issuance of Letter Rogatory for Nuvoton Technology Corporation – Taiwan</b> , Dkt. No. 114-2, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623 (E.D. Tex. Filed June 20, 2025)                                          |
| EX2034         | <b>Redaction to TSMC’s Sealed Motion for Issuance of Letter Rogatory for Nuvoton Technology Corporation – Taiwan</b> , Dkt. No. 118, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623 (E.D. Tex. Filed June 27, 2025)                                            |
| EX2035         | <b>Recorded Assignment</b> from Panasonic Corporation to Panasonic Semiconductor Solutions Co., Ltd. (August 17, 2020)                                                                                                                                                                                                                               |
| EX2036         | <b>Recorded Assignment by Change of Name</b> from Panasonic Semiconductor Solutions Co., Ltd. to Nuvoton Technology Corporation Japan                                                                                                                                                                                                                |
| EX2037         | Reserved                                                                                                                                                                                                                                                                                                                                             |
| EX2038         | Reserved                                                                                                                                                                                                                                                                                                                                             |
| EX2039         | Reserved                                                                                                                                                                                                                                                                                                                                             |
| EX2040         | <b>Order Granting to Taiwan Semiconductor Manufacturing Company Ltd.’s Motion for Letters Rogatory to Nuvoton Technology Corporation</b> (Letter Rogatory No. 1), Dkt. No. 122, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623 (E.D. Tex. Filed July 25, 2025) |
| EX2041         | <b>Order Granting to Taiwan Semiconductor Manufacturing Company Ltd.’s Motion for Letters Rogatory to Nuvoton</b>                                                                                                                                                                                                                                    |

| Exhibit | Description                                                                                                                                                                                                                                   |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         | <b>Technology Corporation</b> (Letter Rogatory No. 2), Dkt. No. 123, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623 (E.D. Tex. Filed July 25, 2025)     |
| EX2042  | <b>Docket Navigator Time-to-Trial Statistics Report</b> for trials before the Honorable Rodney Gilstrap, Federal District Judge in the Eastern District of Texas, during the period from August 18, 2024 to August 18, 2025                   |
| EX2043  | <b>Lex Machina Time-to-Trial Statistics Report</b> for trials before The Honorable Rodney Gilstrap, Federal District Judge in the Eastern District of Texas, during the period from July 1, 2024 to August 18, 2025                           |
| EX2044  | <b>FAQs for Interim Processes for PTAB Workload Management</b> from <a href="https://www.uspto.gov/patents/ptab/faqs/interim-processes-workload-management">https://www.uspto.gov/patents/ptab/faqs/interim-processes-workload-management</a> |
| EX2045  | <b>Defendant TSMC Ltd.’s Answer</b> , Dkt. No. 75, <i>Advanced Integrated Circuit Process LLC v. United Microelectronics Corporation</i> , Consolidated Case Nos. 2:24-cv-00730, -00623 (E.D. Tex. Filed March 31, 2025)                      |

First, the factors meriting discretionary denial in *Taiwan Semiconductor Manufacturing Company Ltd v. Advanced Integrated Circuit Process LLC*, IPR2025-00682 and IPR2025-00683, Paper 17 (PTAB Aug. 14, 2025) (Acting Dir. C.M. Stewart) [hereinafter, “*TSMC Denial*”], also justify discretionary denial here. There, as here, “it is unlikely that a final written decision in [the subject] proceedings will issue before district court trial [scheduled for June 2026] occurs.” *Id.* at 2. Because that was true for a final written decision projected on October 18, 2026, *id.*, it is *a fortiori* true for the November 12, 2026 date projected in this proceeding. Also, the ’779 patent is 11 years old, *see* EX1001 at (45), and therefore gives rise to the same “strong settled expectations,” *see TSMC Denial*, at 2.

TSMC’s counter arguments have already been considered and rejected. The scheduled June 2026 trial date accords with statistical evidence from Lex Machina and Docket Navigator, EX2043 at 1; EX2042, but TSMC again argues from different data that the **maximum** delay could be seven months, *i.e.*, a January 2027 trial date. Opp. at 44 (citing EX1152 at 3). The Director considered the possibility of a January 2027 trial date and still discretionarily denied. *TSMC Denial*, at 2. The Director also rejected TSMC’s claim of “settled expectations” to continue infringing the ’779 patent due to the absence of earlier enforcement. *See id.* at 2–3.

In addition, the discretionary denial of IPR2025-00682 and -683 practically ensures that the district court will not grant a stay in the parallel litigation. *See, e.g.*,

*AGIS Software Development LLC v. Google LLC*, No. 19-cv-361-JRG, 2021 U.S. Dist. LEXIS 24195, at \*9 (E.D. Tex. Feb. 9, 2021) (“It has been [the district court’s] consistent and long established practice to deny motions to stay pending IPR . . . when the PTAB [has] instituted review on less than all asserted claims of all asserted patents.”).

Second, fatal to TSMC’s opposition is its failure to dispute that, under the very unusual facts here, institution coupled with a stay would violate AICP’s due process rights. TSMC does not dispute that Mise is necessary to Grounds 2 and 6 of the Petition (the *only* Grounds challenging claims 8–11), earlier invention date evidence could eliminate those grounds, and the PTAB (unlike the district court) cannot secure this discovery because it is in Japan, which is not a signatory to the Hague Convention. Indeed, TSMC itself has already sought this evidence in the district court, reflecting its significant relevance. *See* EX2031 at 4; EX2032 at 3, 17. The district court has granted those motions. EX2040; EX2041. TSMC’s failure to mention this, while faulting AICP for supposed inaction, Opp. at 59, is misleading if not dishonest. And TSMC’s remaining arguments amount to mere speculation that foreign third-party discovery will be unproductive.

Third, TSMC delayed filing its new stipulation until after AICP’s discretionary denial brief, contravening guidance to file such a stipulation “as soon as practicable, so that a patent owner may address [its] impact [in its brief].”

EX2044 at 5. Given its vaunted experience filing IPRs, *see, e.g.*, Opp. at 34, 61, TSMC surely knew how to draft a stipulation that eliminated the risk of duplicative litigation. Instead, it filed one stipulation with its Petition, Pet. at 85, and switched to a broader stipulation (in coordination with fellow IPR petitioner UMC) only *after* reviewing AICP’s *Fintiv* arguments. EX1034; EX1084.

The timing and the coordination together reveal TSMC’s attempt to game the outcome of the discretionary denial process. This defeats the purpose of timely filing stipulations, *i.e.*, promoting efficiency (both here and in the district court). Indeed, TSMC’s “strategy” has already reduced the efficiency of the bifurcated discretionary denial process by requiring additional briefing. Giving the stipulation full weight at this late stage will only encourage TSMC and other parties to similarly ignore USPTO guidance and delay their stipulations. Such gamesmanship should instead be discouraged, and the stipulation should be given little weight.

Fourth, TSMC asserts (for the first time in any forum) that AICP’s predecessor engaged in “unfair dealings” with the USPTO. TSMC alleges the failure to disclose (1) Torii and (2) the Japanese Examiner’s rejection in a related application based on three Japanese references—Fujiwara, Irino, and Suzuki—which were identified in an international search report. Opp. at 18. Notably, TSMC has never made a similar allegation, or asserted inequitable conduct, in the parallel proceeding. EX2045. Moreover, there is no evidence the Japanese references are

material. All three were cited as Category “X” (meaning they have “particular relevance”) only for claim 1. EX1002 at 108. They were marked as Category “A” (“not considered to be of particular relevance”) for claims 2–19. *Id.* Claim 1 was subsequently amended, *see id.* at 294, and there is no evidence that the Japanese references are material to any issued claims. And TSMC never identified any evidence of deceptive intent by the prosecuting attorney on the ’779 patent who, allegedly aware of Torii, did not disclose it. Opp. at 21.

Fifth, TSMC’s Petition included only a conclusory, one-sentence assertion of error by the Examiner during prosecution. Pet. at 85. TSMC does not expand on this assertion now and thus cannot substantiate this argument. Opp. at 8. Instead, TSMC relies on alleged errors in overlooking Torii, Fujiwara, Irino, and Suzuki, *id.* at 8–11, none of which is discussed in the Petition as the basis for a material error. Indeed, Fujiwara, Irino, and Suzuki are not even asserted as a basis for any Petition Ground, nor are they material to issued claim 1, as shown above. Also, Torii was not before the Examiner (as TSMC points out, *id.* at 21), so it could not have been “**overlook[ed]**.” *Id.* at 9.

Sixth, TSMC’s alleged significance to U.S. interests, broadly, is irrelevant to this specific case. TSMC fails to substantiate its claim that it is the accused products (not “TSMC’s technology” more broadly) that are responsible for the alleged “extraordinarily broad impact . . . on the U.S. national security, economy,

innovation, and public interest.” Opp. at 29. TSMC’s claim that AICP accused “military-grade products manufactured by TSMC” lacks any evidence that those specific “FPGA chips” are used by the *U.S.* military. *Id.* at 31. Moreover, the alleged importance of “high-performance chips” and “advanced processors” to the “American AI-dominance strategy” suggests that the accused technology is *not* implicated. *Id.* at 32; *see id.* at 22 (“[The accused product] went into volume production by at least October 2011.”). There is no evidence that the old, accused technology has any significance to the national interest, and the ’779 patent presents no risk of disruption because AICP will not seek injunctive relief. What TSMC requests here—namely, special treatment for large foreign companies accused of infringing U.S. patents based solely on those companies’ size, influence, and products—would not only open the floodgates to similar arguments by numerous foreign products manufacturers who are infringing American intellectual property rights but also undermine domestic investment in the development of new technologies. The patent system best serves national interests by encouraging innovation, not (as TSMC suggests) by giving special treatment to politically connected infringers. Opp. at 29–33.

Dated: August 19, 2025

Respectfully submitted,

By: / Russell A. Chorush /  
Russell A. Chorush (Reg. No. 55,869)  
Attorney for Patent Owner  
Advanced Integrated Circuit Process, LLC

**CERTIFICATE OF SERVICE**

The undersigned certifies that pursuant to 37 C.F.R. § 42.6(e), a copy of the foregoing **Patent Owner's Reply to Petitioner's Opposition to Patent Owner's Discretionary Denial Brief, including Exhibits 2040-2045**, was served to the following counsel of record for Petitioner addressed as follows:

| <b>Lead Counsel for Petitioner</b>                                                                                                                                                   | <b>Back-up Counsel for Petitioner</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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|--|-------------------------------------------------------------------------------------------------|

Dated: August 19, 2025

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