

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LTD.,

Petitioner,

v.

MARLIN SEMICONDUCTOR LIMITED.

Patent Owner.

Case No. IPR2026-00220

U.S. Patent No. 8,076,735 B2

**PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL OF
INSTITUTION**

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TABLE OF EXHIBITS

Exhibit	Description
2001-2100	<i>Reserved</i>
2101	Website: Foundries to Grow Faster than Integrated Circuits in 2016 (https://marketrealist.com/2015/12/foundries-grow-faster-integrated-circuits-2016/)
2102	Website: Ranked: Semiconductor Foundries by Revenue Share (www.visualcapitalist.com/ranked-semiconductor-foundries-by-revenue-share/)
2103	Website: US Patent No. 8,076,735 B2 – Semiconductor device with trench of various widths – Google Patents (https://patents.google.com/patent/US8076735B2/en?q=8%2c076%2c735)
2104	Declaration of Paul Ahern Regarding Patent Owner’s Request for Discretionary Denial of Institution
2105	Memorandum from John A. Squires, Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office, to All PTAB Users (Mar. 11, 2026)
2106	Intel, Leading American Chip Design and Manufacturing for More Than 50 Years (https://www.intel.com/content/dam/www/central-libraries/us/en/documents/2025-04/chips-design-manufacturing-fact-sheet.pdf)
2107	Intel, US Semiconductor Manufacturing, CHIPS Act (https://www.intel.com/content/www/us/en/corporate/usa-chipmaking/home.html)
2108	Samsung, New CHIPS Act Incentives for Samsung Fuel American Innovation (https://download.semiconductor.samsung.com/resources/others/samsung-factsheet-chips-122024-final.pdf)
2109	Forbes, Samsung CHIPS Act Grant Brings Its Leading Edge Plus R&D To Texas (https://www.forbes.com/sites/willyshih/2024/04/15/samsung-chips-act-grant-brings-their-leading-edge-plus-rd-to-texas/)

Patent Owner Marlin Semiconductor Ltd. (“Patent Owner”) respectfully requests that the Director exercise discretion and deny institution of Petitioner Taiwan Semiconductor Manufacturing Company Ltd.’s (“TSMC”) Petition for inter partes review IPR2026-00220 (“Petition”) of U.S. Patent No. 8,076,735 (the “’735 patent”). *See* March 26, 2025, Memorandum titled “Interim Processes for PTAB Workload Management.”

I. INTRODUCTION

Discretionary denial is appropriate here because there are settled expectations in the ’735 patent, which has been in force for over fourteen years, having been issued on December 13, 2011. Moreover, Petitioner has been on both actual and constructive notice of the ’735 patent for many years. The original patentee was, like TSMC, another Taiwanese semiconductor foundry, United Microelectronics Corporation (“UMC”), one of TSMC’s main competitors. UMC owned the patent for over nine years, a time period during which TSMC learned of or should have learned of the patent, given the size and sophistication of TSMC and UMC’s nature as TSMC’s main business competitor in the very technological space of the ’735 patent’s subject matter, semiconductor manufacturing. Further, Patent Owner itself offered Petitioner a license to the ’735 patent over a year ago, which Petitioner rejected.

Accordingly, the Board should exercise its discretion and deny institution of the Petition.

II. BACKGROUND

The Patent Office issued the '735 patent on December 13, 2011, over fourteen years ago. Ex. 1001. The '735 patent is titled "Semiconductor Device With Trench Of Various Widths," and, consistent with that title, it discloses and claims innovative semiconductor devices.

The '735 patent issued to UMC, a NYSE company based in Taiwan that has been a leading semiconductor designer and manufacturer for 45 years.

Petitioner TSMC is heavily involved in the manufacture and sale of semiconductor transistors, and has been a close and direct competitor of UMC since 1987, as explained below, and was or should have been well-aware of UMC and its semiconductor business and patent portfolio.

Patent Owner and Petitioner are involved in litigation regarding other patents, not including the '735 patent, before the International Trade Commission, 337-TA-1443, and in the Eastern District of Texas, Case No. 2-25-cv-00171.

III. SETTLED EXPECTATIONS IN THE '735 PATENT WARRANT DISCRETIONARY DENIAL

"Although there is no bright-line rule on when expectations become settled, in general, the longer the patent has been in force, the more settled expectations should be." *Dabico Airport Solns. Inc. v. AXA Power ApS*, IPR2025-00408,

Decision, Paper 21 (PTAB June 18, 2025). Here, the '735 patent has been in force for over fourteen years, longer than many patents for which institution has been denied due to settled expectations. *See, e.g., id.* (“[T]he challenged patent has been in force almost eight years, creating settled expectations.”); Ex. 1001. For example, in *Cambridge Industries USA, Inc. v. Applied Optoelectronics, Inc.*, IPR Nos. 2025-00433 and -00435, Paper No. 11 (PTAB June 27, 2025), at 3, the PTAB and the prior Director found that there were strong “settled expectations” as to the challenged patents because they had been in force for seven and nine years, respectively, and, for that reason, discretionarily denied the petitions. Indeed, settled expectations have been found in patents as little as three years old. *Samsung Electronics Co., Ltd. v. GenghisComm Holdings, LLC*, IPR2025-00788, -789, -790, -791, -792, -793, Paper 11 (PTAB Aug. 22, 2025).

Further, Petitioner has been, or should have been, well aware of the '735 patent for many years. The original patentee was United Microelectronics Corporation, UMC, another semiconductor foundry located in Taiwan, like Petitioner TSMC. Ex. 1001. In 2015, for example, UMC was TSMC's main competitor. Ex. 2101 (December 2015 article stating, “Taiwan (EWT) is the largest semiconductor manufacturer, housing the world's top two foundries, namely TSMC (TSM) and UMC (United Microelectronics).”) And UMC has continued to be a primary competitor to TSMC since then, and is still one of TSMC's largest

competitors—as recently as January of last year, UMC was ranked number 3 in semiconductor foundry market share, where TSMC was number 1. Ex. 2102. As a very large company—which TSMC’s briefing on this issue in other IPR proceedings goes out of its way to point out in great detail—TSMC carefully monitors its competitors and their patent grants. *Taiwan Semiconductor Mfg. Co. Ltd. v. Marlin Semiconductor Ltd.*, IPR2025-00847, Paper 10 (PTAB Aug. 15, 2025), at 31-46.

Indeed, TSMC has actually been aware of the ’735 patent for many years through TSMC’s prosecution of its own patents. For example, the ’735 patent was cited during the prosecution of two TSMC patent applications, and family members of the ’735 patent were cited during the prosecution of eleven TSMC patents. Ex. 2103 (“Cited By” section). This actual awareness favors denial. *IRhythm Tech., Inc. v Welch Allyn, Inc.*, IPR2025-00363, -00374, -00376, -00377, and -00378, Paper 10 at 3 (PTAB June 6, 2025) (“Petitioner’s awareness of Patent Owner’s applications and failure to seek early review of the patents favors denial and outweighs the above-discussed considerations.”).

The ’735 patent has also been commercialized, at least in the form of licensing. For example, Intel Corporation and Samsung Electronics Co., Ltd. have taken licenses to the ’735 patent. Ex. 2104. Further, a license to the ’735 patent was offered to TSMC over a year ago by Patent Owner. *Id.* TSMC refused and delayed filing IPRs until it got sued on other patents by Patent Owner. *Id.* Thus, not only

has TSMC been on notice of the '735 patent (which is not required for settled expectations to attach), but the patent has been the subject of actual licenses as to others and attempted licensing efforts as to TSMC specifically.

Petitioner may argue that Patent Owner acquired the '735 patent only five years ago and therefore has not owned it long enough to acquire settled expectations in it, as it has argued in other proceedings. *See, e.g.*, IPR2025-00847, Paper 10, at 26-30. But that is not the proper analysis, and Petitioner has pointed to no cases where the fact that a patent has been sold has been found to be relevant. IPR2025-00847, Paper 10, at 26-30. Indeed, as explained below, the decisions on this matter confirm that it is irrelevant. *DataDome S.A. v. Arkose Labs Holdings, Inc.*, IPR2025-00693, Paper 13 (PTAB Aug. 14, 2025) (denying institution due to settled expectations where patent owner acquired the challenged patent a few years prior). The settled-expectation analysis concerns the age of the patent, among other things, not the length of ownership by any individual entity. This is seen not only in the analysis itself in the decisions issued by the prior Acting Director, but in the rationale for why actual notice of a patent is not required for settled expectations to attach: the patent is published and made available for interested entities to learn about it. Prior Acting Director Stewart has held that “patent applications (after 18 months) and issued patents are almost always publicly available to provide notice to the public, other inventors, competitors, and commercial interests . . . [a]s such, actual notice

of a patent or of possible infringement is not necessary to create settled expectations.” *Dabico*, IPR2025-00408, Paper 21 at 3. There is no relevance in that rationale as to who owns the patent at any given moment or how long they have owned it. Instead, the focus is on the patent itself, the fact that it has been in force for a sufficient amount of time, and that it is sufficiently available to interested entities.

This follows the general principle that the full set of rights as to a patent, as with property generally, gets transferred with the sale of the patent. Entities purchasing patents expect that the settled expectations of the prior owner, if they exist, carry forward and that the purchaser steps into the shoes of the prior owner, acquiring the same expectations the prior owner had at the time of transfer. Moreover, as a public policy matter, a rule that selling a patent diminishes the rights of a patent owner to something less than the full set of rights would contravene the foundational principle that patents are transferable property rights, as it would diminish the patent’s value upon transfer.

Indeed, in cases following nearly the same exact fact pattern of this case, discretionary denial has been granted. In *DataDome S.A. v. Arkose Labs Holdings, Inc.*, IPR2025-00693, Paper 13, decided August 14, 2025, just as here, the patents were owned by an entity that acquired them a few years prior, not the original patentee. *Id.* In total, one of the patents had been in force for 10 years, “creating

strong settled expectations for Patent Owner.” *Id.* Further, just as Petitioner argues here, in that case, “Ppetitioner argue[d] that *it* had settled expectations that the challenged patents would not be asserted against it because the previous patent owner never asserted the challenged patents.” *Id.* However, in that case, just like here, Patent Owner sent letters identifying the challenged patent and offering a license, an offer that was rejected by the petitioner. *Id.* The prior Acting Director found that “Ppetitioner’s assertions of settled expectations do not overcome Patent Owner’s strong settled expectations” and the petition was discretionarily denied. The same result is appropriate here.

Nor is it dispositive that the patent is not in litigation elsewhere and thus there is no trial date regarding validity. For example, in *Intel Corp. v. Proxense, LLC*, IPR Nos. 2025-00327, -00328, and -00329, Paper No. 12 at 2 (PTAB June 26, 2025), the PTAB and the prior Director discretionarily denied the three petitions—even though there was no underlying district court trial date—because there were settled expectations as to the three challenged patents since they had been in force for nine years and, therefore, inter partes review was not “an appropriate use of Board resources.”

The cases Petitioner has cited in other proceedings do not support referral to a panel. The decision in *Anthony Inc. v. ControlTec, Inc.*, IPR2025-00559, Paper 12 (July 16, 2025), did not discuss settled expectations at all, and found that the

Examiner specifically made “a material error” during prosecution, not alleged or shown in the Petition here. The decision in *Tesla v. Navy*, IPR2025-00341, Paper 12 (PTAB June 13, 2025) and *Tesla v. Intell. Ventures II*, IPR2025-00339, Paper 10 (PTAB June 13, 2025), did not discuss settled expectations and instead focused on the fact that “Petitioner has filed a broad stipulation” and “the district court proceeding involves eleven patents spanning nine different families that involve a diverse range of subject matter,” and “the Board previously determined there was a reasonable likelihood that similar claims of an ancestor patent were unpatentable in three separate proceedings with respect to some of the challenged patents in these proceedings,” none of which is argued or shown in the Petition here. In the decision in *Amazon.com, Inc. v. NL Giken, Inc.*, IPR2025-00250, IPR2025-00407, Paper 14 (PTAB May 16, 2025), there was no discussion of settled expectations. The decision in *Savant Techs. LLC v. Feit Elec. Co.*, IPR2025-00260, Paper 16 (PTAB June 12, 2025), did not discuss settled expectations, either, and instead focused on the question of repeated petitions on different claims, which the prior Acting Director found not concerning due to the timing of Patent Owner’s assertion of additional claims in litigation.

IV. COMPELLING ECONOMIC, PUBLIC HEALTH, AND NATIONAL SECURITY INTERESTS FAVOR DENIAL

The settled expectations as to the '735 patent, described above, warrant denial of the petition. As explained above, that result is important for economic policy interests in creating transparent, predictable, and consistent markets for patents.

TSMC may argue, as it has in other proceedings, that its importations of chips into the U.S. is a large and important operation, and as an entity it files a lot of patent applications and spends a lot of money in the U.S., and thus it should be afforded special treatment by the PTAB and should be permitted to seek invalidation of a patent for which settled expectations has attached. IPR2025-00847, Paper 10, at 31-46.

The prior Acting Director recently found these arguments not supporting referral to a panel. *Taiwan Semiconductor Mfg. Co. Ltd. v. Marlin Semiconductor Ltd.*, IPR2025-00848, Paper 11, at 3 (PTAB Sept. 3, 2025). Moreover, TSMC in fact has it backward in every regard. Marlin is a small company whose lawsuit against TSMC protects the U.S. computer chip industry from importation of the infringing products that TSMC is attempting to bring into the country to illegally compete with the products of U.S. companies. Here, Patent Owner offered TSMC a license to the '735 patent but TSMC refused. Instead of paying a fair amount to be permitted to practice the '735 patent in the United States, TSMC chose to rely on

a different strategy, one based on litigation tactics and ever-increasing legal expense. Since filing IPRs on the five patents in suit in the ITC, Case Number 337-TA-1443, TSMC has sought to increase its leverage against its much smaller litigation rival by seeking *inter partes* review of eleven additional patents that are not in suit. See IPR2025-01265; IPR2025-01054; IPR2025-01082; IPR2025-01444; IPR2025-01484; IPR2025-01527; IPR2026-00061; IPR2026-00058; IPR2026-00130; IPR2026-00220; IPR2026-00261. These patents have been in effect ten years, nine years, eighteen years (expired), seventeen years (expired), nearly eight years, ten years, fourteen years, eighteen years, nine years, fourteen years, and fifteen years, respectively, and all have had settled expectations attach. Petitioner should not be rewarded for this approach.

Ultimately, TSMC's desire to import infringing products does not justify disturbing the settled expectations in the '735 patent, and much less so when the motivation is to create litigation pressure in hopes that Patent Owner will be forced to abandon its suit in the ITC. Although TSMC has complained that the ITC case is an "attempt to block U.S. access to the most advanced TSMC technologies," blocking infringing products from entering the country illegally is necessary to protect local industry. IPR2025-00847, Paper 10, at 31-46. Without such enforcement, infringing products will overtake U.S. development.

Regardless, the ITC matter is not directly at issue here, as the '735 patent is not in litigation. Simply put, there is nothing that should disturb the settled expectations in the '735 patent, and the petition should be denied.

The Patent Office's recent guidance further favors discretionary denial. On March 11, the Office issued new guidance stating:

When determining whether to institute IPR and PGR proceedings, the Director will consider:

- (1) the extent to which any products accused of infringement in a parallel proceeding are manufactured in the United States or are related to investments in American manufacturing operations;
- (2) the extent to which any products made, sold, or licensed by the patent owner that compete with the accused products are manufactured in the United States; and
- (3) whether the petitioner is a small business that has been sued for infringement of the patent at issue.

Ex. 2105 at 2. Here, all three factors support denying the Petition. **First**, although the '735 patent has not been asserted in litigation, Patent Owner has asserted other patents in litigation against Petitioner's foreign-made products, as explained above. Petitioner filed this IPR regarding an unasserted patent in direct response to that litigation, attempting to put pressure on Patent Owner to settle or dismiss its claims. **Second**, Patent Owner has licensed the '735 patent to Intel and Samsung. Ex. 2104. Both Intel and Samsung—competitors to Petitioner TSMC in the semiconductor manufacturing industry—manufacture semiconductor transistors in the United

States. Exs. 2106, 2107, 2108, 2109. ***Third***, Petitioner TSMC is certainly not a small business and has not been sued for infringement of the patent at issue.

V. CONCLUSION

For the above reasons, the Petition should be discretionarily denied.

Dated: March 23, 2026

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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. §42.24(d), Patent Owner hereby certifies, in reliance on the word count of the word-processing system (Microsoft Office Word 2010) used to prepare this preliminary response, that the number of words in this paper is 2,593. This word count excludes the tables of contents, tables of authorities, certificate of word count, certificate of service, and table of exhibits.

Dated: March 23, 2026

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CERTIFICATE OF SERVICE

I certify that a copy of Patent Owner's Request For Discretionary Denial was served by electronic mail on the following counsel of record:

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