

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PHISON ELECTRONICS CORPORATION,

Petitioner

v.

VERVAIN, LLC,

Patent Owner

Post-Grant Review Case No. PGR2025-00011

Patent 11,967,370

**PETITIONER’S OPPOSITION TO PATENT OWNER’S REQUEST FOR
DISCRETIONARY DENIAL UNDER 35 U.S.C. § 314(a)**

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Micron Technology, Inc. v. Vervain, LLC,

IPR2021-01550, (PTAB Apr. 11, 2022)----- 1, 2, 12

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LIST OF EXHIBITS

Exhibit	Description
1001	U.S. Patent No. 11,967,370 titled “LIFETIME MIXED LEVEL NON-VOLATILE MEMORY SYSTEM,” to Rao
1002	Declaration of Carl Sechen, Ph.D.
1003	U.S. Provisional Application No. 61/509,257, titled “IMPROVED LIFETIME MIXED LEVEL NAND FLASH SYSTEM” by Rao
1004	U.S. Patent No. 7,855,916, titled “NONVOLATILE MEMORY SYSTEMS WITH EMBEDDED FAST READ AND WRITE MEMORIES,” to Rao
1005	U.S. Patent No. 8,891,298, titled “LIFETIME MIXED LEVEL NON-VOLATILE MEMORY SYSTEM,” to Rao
1006	Excerpts from prosecution history of ’298 patent
1007	U.S. Patent No. 9,196,385, titled “LIFETIME MIXED LEVEL NON-VOLATILE MEMORY SYSTEM,” to Rao
1008	Excerpts from prosecution history of ’385 patent
1009	U.S. Patent No. 9,997,240, titled “LIFETIME MIXED LEVEL NON-VOLATILE MEMORY SYSTEM,” to Rao
1010	Excerpts from prosecution history of ’240 patent
1011	U.S. Patent No. 10,950,300, titled “LIFETIME MIXED LEVEL NON-VOLATILE MEMORY SYSTEM,” to Rao
1012	Excerpts from prosecution history of ’300 patent
1013	U.S. Patent No. 11,830,546, titled “LIFETIME MIXED LEVEL NON-VOLATILE MEMORY SYSTEM,” to Rao

1014-1024	<i>Intentionally omitted</i>
1025	Excerpts from Rino Micheloni, et al., <i>INSIDE NAND FLASH MEMORIES</i> (Springer 2010)
1026	Excerpts from <i>NONVOLATILE MEMORY TECHNOLOGIES WITH EMPHASIS ON FLASH: A COMPREHENSIVE GUIDE TO UNDERSTANDING AND USING NVM DEVICES</i> (Joe E. Brewer & Manzur Gill eds. Wiley-IEEE Press 2008)
1027	Excerpts from MICROSOFT COMPUTER DICTIONARY (5 th ed. 2002)
1028-1029	<i>Intentionally omitted</i>
1030	Yu Cai et al., <i>Program Interference in MLC NAND Flash Memory: Characterization, Modeling and Mitigation</i> (IEEE 2013)
1031	Kang-Deog Suh et al., <i>A 3.3 V 32 Mb NAND Flash Memory with Incremental Step Pulse Programming Scheme</i> , 30 IEEE J. Solid State Circuits 1149 (Nov. 1995)
1032	Eitan Yaakobi et al., <i>Error Characterization and Coding Schemes for Flash Memories</i> (2010 IEEE Globecom Workshops, Miami, FL at 1856-60)
1033	Evans, Chris, “Enterprise MLC: How flash vendors are boosting MLC write endurance” (June 3, 2011)
1034	Nelson Duann, SLC & MLC Hybrid (Silicon Motion Flash Memory Summit, Santa Clara, CA, Aug. 12, 2008)
1035	Ashish Jagmohan et. al., <i>Adaptive Endurance Coding for NAND Flash</i> (2010 IEEE Globecom Workshops, Miami, FL at 1841-45)
1036	Sungjin Lee et al., <i>FlexFS: A Flexible Flash File System for MLC NAND Flash Memory</i> (2009 USENIX Annual Technical Conference, San Diego, CA, June 14-19, 2009)

1037	Minyoung Sung & Kanghee Kim, <i>Asymmetric Flash Volume Management</i> , 58 <i>IEEE Transactions on Consumer Electronics</i> 455 (May 2012)
1038	Greg Atwood et al., Intel StrataFlash™ <i>Memory Technology Overview</i> , Intel Technology J. (Q4 1997)
1039	Taehee Cho et al., “A 3.3 V 1 Gb multi-level NAND flash memory with non-uniform threshold voltage distribution,” 2001 <i>IEEE International Solid-State Circuits Conference. Digest of Technical Papers</i> , ISSCC (Cat. No.01CH37177) (2001)
1040	U.S. Patent No. 6,456,528, titled for “SELECTIVE OPERATION OF A MULTI-STATE NON-VOLATILE MEMORY SYSTEM IN A BINARY MODE” to Chen
1041	U.S. Patent No. 8,078,794, titled “HYBRID SSD USING A COMBINATION OF SLC AND MLC FLASH MEMORY ARRAYS,” to Lee et al.
1042	U.S. Patent Appl. Pub. No. 2008/0140918, titled “HYBRID NON-VOLATILE SOLD STATE MEMORY SYSTEM” by Sutardja
1043	U.S. Patent Appl. Pub. No. 2009/0327591, titled “SLC-MLC COMINATION FLASH STORAGE,” by Moshayedi
1044	U.S. Patent Appl. Pub. No. 2010/0172179, titled “SPARE BLOCK MANAGEMENT OF NON-VOLATILE MEMORIES,” by Gorobets et al.
1045	U.S. Patent No. 8,634,240, titled “NON-VOLATILE MEMORY AND METHOD WITH ACCELERATED POST-WRITE READ TO MANAGE ERRORS,” to Gavens et al.
1046	U.S. Patent No. 8,806,301, titled “DATA WRITING METHOD FOR A FLASH MEMORY, AND CONTROLLER AND STORAGE SYSTEM USING THE SAME,” to Yu et al.

1047	U.S. Patent Appl. Pub. No. 2010/0115192, titled “WEAR LEVELING METHOD FOR NON-VOLATILE MEMORY DEVICE HAVNG SINGLE AND MULTI LEVEL MEMORY CELL BLOCKS,” by Lee
1048	U.S. Patent Appl. Pub. No. 2011/0271043, titled “SYSTEM AND METHOD FOR ALLOCATING AND USING SPARE BLOCKS IN A FLASH MEMORY,” to Segal et al.
1049	U.S. Patent Appl. Pub. No. 2011/0153912, titled “MAINTAINING UPDATES OF MULTI-LEVEL NON-VOLATILE MEMORY IN BINARY NON-VOLATILE MEMORY,” by Gorobets et al.
1050	U.S. Patent No. 5,930,167, titled “MULTI-STATE NON-VOLATILE FLASH MEMORY CAPABLE OF BEING ITS OWN TWO STATE WRITE CACHE,” to Lee et al.
1051	U.S. Patent Appl. Pub. No. 2010/0172180, titled “NON-VOLATILE MEMORY AND METHOD WITH WRITE CACHE PARTITIONING,” by Paley et al.
1052	<i>Intentionally omitted</i>
1053	U.S. Patent Appl. Pub. No. 2009/0268513, titled “MEMORY DEVICE WITH DIFFERENT TYPES OF PHASE CHANGE MEMORY,” by De Ambroggi et al.
1054	U.S. Patent Appl. Pub. No. 2009/0307418, titled “MULTI-CHANNEL HYBRID DENSITY MEMORY STORAGE DEVICE AND CONTROL METHOD THEREFOR,” by Chen et al.
1055	U.S. Patent Appl. Pub. No. 2010/0058018, “MEMORY SCHEDULER FOR MANAGING INTERNAL MEMORY OPERATIONS,” by Kund et al.
1056	U.S. Patent App. Pub. No. 2009/0172267, “REFRESH METHOD OF A FLASH MEMORY,” by Oribe et al.

1057	U.S. Patent No. 5,936,971, titled “MULTI-STATE FLASH EEPROM SYSTEM WITH CACHE MEMORY, to Harari et al.
1058	PCT Pub. No. WO 03/027828, “METHOD OF WRITING DATA TO NON-VOLATILE MEMORY,” by Gorobets et al.
1059-1060	<i>Intentionally omitted</i>
1061	Duane H. Oto et al., <i>High-Voltage Regulation and Process Considerations for High-Density 5 V-Only E²PROM’s</i> , SC-18 IEEE J. Solid State Circuits 532 (Oct. 1983)
1062	Gheorghe Samachisa et al., <i>A 128K Flash EEPROM Using Double-Polysilicon Technology</i> , SC-22 IEEE J. Solid State Circuits 676 (Oct. 1987)
1063	Masaki Momodomi et al., <i>An Experimental 4-Mbit CMOS EEPROM with a NAND-Structured Cell</i> , 24 IEEE J. Solid State Circuits 1238 (Oct. 1989)
1064	Tae-Sun Chung et al., <i>A survey of Flash Translation Layer</i> , 55 J. Systems Architecture 332-43 (2009)
1065	Yoshihisa Iwata et al., <i>A High-Density NAND EEPROM with Block-Page Programming for Microcomputer Applications</i> , 25 IEEE J. Solid-State Circuits 417 (Apr. 1990)
1066	Simona Boboila and Peter Desmoyers, <i>Write Endurance in Flash Drives: Measurements and Analysis</i> , Usenix Conference (Feb. 2010)
1067	SiliconSystems, <i>Increasing Flash SSD Reliability</i> , StorageSearch.com (April 2005)
1068	Taehee Cho et al., <i>A Dual-Mode NAND Flash Memory: 1-Gb Multilevel and High-Performance 512-Mb Single Level Modes</i> , 36 IEEE J. Solid State Circuits 1700 (Nov. 2001)

1069	Ken Takeuchi, <i>A Multipage Cell Architecture for High-Speed Programming Multilevel NAND Flash Memories</i> , 33 IEEE J. Solid-State Circuits 1228 (Aug. 1998)
1070	Garth Goodson & Rahul Iyer, <i>Design Tradeoffs in a Flash Translation Layer</i> , HPCA [High Performance Computer Architecture] WEST 2010 Conference, Bangalore, India
1071	Taeho Kgil et al., <i>Improving NAND Flash Based Disk Caches</i> , Int’l Symposium on Computer Architecture 327 (IEEE 2008)
1072	Seongcheol Hong & Dungkun Shin, <i>NAND Flash-based Disk Cache Using SLC/MLC Combined Flash Memory</i> , 21, 22 (2010 Int’l Workshop on Storage Network Architecture and Parallel I/O)
1073-1079	<i>Intentionally omitted</i>
1080	Docket list for <i>Vervain, LLC v. Phison Electronics Corp.</i> , No. 1:24-cv-00259 (W.D. Tex., filed March 8, 2024)
1081	Docket list for <i>Vervain, LLC v. Kingston Technology Company, Inc.</i> , No. 1:24-cv-00254 (W.D. Tex. filed March 7, 2024)
1082	First Amended Complaint, Doc. No. 9 in <i>Vervain, LLC v. Phison Electronics Corp.</i> , No. 1:24-cv-00259 (W.D. Tex.)
1083	Signed Agreed Scheduling Order, Doc. No. 16 in <i>Vervain, LLC v. Phison Electronics Corp.</i> , No. 1:24-cv-00259 (W.D. Tex.)
1084	“Interim Processes for PTAB Workload Management,” issued March 26, 2025
1085	Active Cases Before Judge Alan D. Albright as of June 2, 2025
1086	Statistics on Median Time-to-Trial between June 2, 2024 and June 2, 2025

1087	“Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation,” issued March 24, 2025
1088	Western District of Texas Calendar Year 2024 Statistical Public Report
1089	Amended Order Assigning the Business of The Court (January 31, 2025)
1090	Consolidated Trial Practice Guide (Nov. 2019)
1091	Docket Entry No. 61, Redacted Copy of 59 Unopposed Sealed Motion FOR LEAVE TO AMEND FINAL INVALIDITY CONTENTIONS by Phison Electronics Corporation by Phison Electronics Corporation, filed on April 2, 2025 in <i>Vervain, LLC v. Phison Electronics Corp.</i> , No. 1:24-cv-00259 (W.D. Tex., filed March 8, 2024)
1092	Email from PO’s Counsel re: Reduction to No More Than Five Asserted Claims Per Patent and Sixteen Total Across the Eight Patents-in-Suit (June 9, 2025)
1093	Docket list for <i>Vervain, LLC v. Micron Technology Inc., et al.</i> , No. 6:21-cv-00487 (W.D. Tex. filed May 10, 2021)
1094	Docket list for <i>Vervain, LLC v. Western Digital Corp. et al.</i> , No. 6:21-cv-00488 (W.D. Tex. filed May 10, 2021)

I. INTRODUCTION:

Phison Electronics Corporation (“Phison” or “Petitioner”) respectfully requests the Board deny Vervain, LLC’s (“Vervain’s” or “Patent Owner’s”) Request for Discretionary Denial of Post Grant Review (“PGR”) of U.S. Patent No. 11,967,370 (“the ’370 patent”) (Paper 9, “PO’s Request”), because the *Fintiv*¹ and other factors set forth in the Acting Director’s “Interim Processes for PTAB Workload Management” issued March 26, 2025 (“Director Memo”) do not warrant such a denial. The PTAB’s previous institution of proceedings in IPR2021-01548, IPR2021-01549 and IPR2021-01550 further demonstrate that the “efficiency and integrity of the system are best served by . . . instituting review.” *Fintiv* at 6.

Regarding *Fintiv* Factor 1, there is no evidence that the district court would deny a stay if one were requested. In addition, regarding Factor 2, as of June 2, 2025, Judge Albright has 273 active cases pending before him, and the scheduled trial date significantly deviates from the median time-to-trial and is subject to change.

Regarding Factor 3, discovery is still ongoing, no dispositive motions have been filed nor has there a meaningful investment by the court on the merits of

¹ *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (P.T.A.B. Mar. 20, 2020) (precedential).

invalidity or a written claim construction order yet issued. All these conditions weigh against discretionary denial.

Regarding Factor 4, the majority of the Challenged Claims in this PGR will likely not be adjudicated in the parallel litigation, and the number of invalidating prior art references will likely be reduced before trial, see Ex. 1092 (Email from PO's Counsel re: Reduction to No More Than Five Asserted Claims Per Patent and Sixteen Total Across the Eight Patents-in-Suit). Thus, there will be minimal overlap between the issues raised in the Petition and the district court proceeding. Petitioner has a clear interest in obtaining a determination on the validity of all Challenged Claims in this forum.

Regarding Factor 5, although Petitioner is also a defendant in the related district court action, as stated above regarding Factor 4, there will be minimal overlap between the issues raised in the Petition and the district court proceeding, and thus substantially different issues are raised in the Petition than will be raised at trial in the district court proceedings. The identity of the parties should therefore be considered neutral to preserve the Board's role as an efficient and accessible forum for resolving patentability disputes.

Finally, regarding Factor 6, the merits of the Petition are strong. The Board previously instituted IPR2021-01548, IPR2021-01549 and IPR2021-01550, which were filed by Micron Technology, Inc., challenged patents that share the same

common specification as the '370 patent, and relied on substantially the same foundational prior art. This further supports the strength of the invalidity grounds presented in this Petition. Moreover, there are no settled expectations to weigh against institution. To the contrary, Patent Owner has filed—and is likely to continue filing—parallel actions following the same enforcement pattern against Phison and its customers. Instituting this PGR would allow the Board to conclusively address the validity of all Challenged Claims in a single proceeding, thereby avoiding duplicative litigation and administrative actions, and conserving both judicial and party resources.

Moreover, the '370 patent was recently issued on April 23, 2024. Pursuant to *Imperative Care, Inc., v. Inari Medical, Inc.*, IPR2025-00289, Paper 9 (P.T.A.B. Jun. 12, 2025), “[e]arly challenges to patents favor robust, predictable patent rights and weigh against discretionary denial.”

Taken together, these factors confirm that institution will promote procedural efficiency, reduce litigation burdens, and further the public interest in ensuring that invalid patent claims will not remain in force. Accordingly, the Director should decline to exercise her discretion to deny institution.

II. *FINTIV* ANALYSIS DOES NOT SUPPORT DISCRETIONARY DENIAL:

A. Factor 1 Supports Institution: The Absence of a Stay Request Does Not Support Discretionary Denial.

Patent Owner’s argument that a stay is unlikely is speculative and should be given no weight. PO’s Request at 12-13. The Board has consistently held that it “will not attempt to predict how the district court ... will proceed” on the question of a stay because “the court may determine whether or not to stay any individual case ... based on a variety of circumstances and facts.” *Sand Revolution II, LLC v. Continental Intermodal Group–Trucking LLC*, IPR2019-01393, Paper 24 at 7 (P.T.A.B. June 16, 2020) (informative). See also *Hulu, LLC v. SITO Mobile, Ltd.*, IPR2021-00298, Paper 11 at 10–11 (P.T.A.B. May 19, 2021).

While Petitioner has not yet sought a stay, courts frequently consider stay requests after institution. Notably, in *Sonrai Memory Ltd. v. Western Digital Technologies, Inc.*, the district court currently presiding over the parallel proceeding granted a stay pending the outcome of *inter partes* review even though the litigation had already reached an advanced stage. There, the court conducted a Markman hearing and opened fact discovery at a time when two of the three IPRs had not yet been instituted, and the PTAB’s final written decision for the last-filed IPR was expected to issue approximately four months after the scheduled trial date. Nonetheless, the Court determined that the potential for simplifying the issues through IPR outweighed the procedural maturity of the case and the timing gap

between the expected trial and the final written decision. See *Sonrai Memory Ltd. v. Western Digital Technologies, Inc.*, 2022 WL 3108818 (W.D. Tex. Aug. 4, 2022).

Patent Owner also contends that a stay is unlikely because the Board has denied institution in two other proceedings—PGR2024-00047 and PGR2024-00048—and, therefore, even if institution is granted in this PGR, not all asserted patents will be subject to the Board’s review. PO’s Request at 13. This argument is misplaced and misconstrues the relevance of those non-instituted proceedings to the question of whether a stay would ultimately be granted. Courts have consistently held that a stay may be appropriate even when only a subset of asserted patents is subject to IPR, particularly where the patents share overlapping claim terms, specifications, or technical disclosures. In *Acqis, LLC v. EMC Corp.*, 109 F. Supp. 3d 352 (D. Mass. 2015), the court granted a stay even though only two of the eleven asserted patents were under IPR. The court rejected the argument that a stay would be ineffective simply because most asserted patents were not subject to review. Instead, it emphasized the “similarity of inventive disclosure” and shared specifications among the patents, and concluded that the instituted IPRs were likely to simplify the litigation as a whole. *Id.*

Moreover, as in *Acqis*, a stay is appropriate even at an advanced stage of litigation where there is no undue prejudice to the patent owner. There, the court observed that while “substantial document and written discovery” had taken place

and “a claim construction opinion had been issued,” significant work remained for both the court and the parties. *Id.* The plaintiff’s claim of prejudice was unavailing, particularly where the plaintiff was a non-practicing entity, had no competing products, and had not sought preliminary injunctive relief. *Id.*

The same is true here. Vervain is not a competitor of Phison, does not manufacture or sell products, and has not alleged irreparable harm. Its interests in this litigation are purely monetary. Like the plaintiff in *Acqis*, Vervain did not seek a preliminary injunction, further undermining any claim of undue prejudice from delay. These facts would support a stay and weigh against discretionary denial.

In sum, the Board should not credit Patent Owner’s unsupported speculation about the likelihood of a stay. Courts can and do grant stays post-institution. For at least the above reasons, Factor 1 supports institution or is at least neutral in the *Fintiv* analysis.

B. Factor 2 Supports Institution: The District Court’s Scheduled Trial Date Significantly Deviates from the Median Time-to-Trial and Is Subject to Change.

Patent Owner contends that the district court’s scheduled trial date of December 15, 2025, weighs against institution because it precedes the Board’s projected statutory deadline for a final written decision on August 14, 2026, and is

“highly unlikely” to move. PO’s Request at 14. This argument, however, disregards the actual litigation landscape in the Western District of Texas.

Although Judge Albright has indicated that he does not generally move trial dates, the current scheduled trial date of December 15, 2025, which sets trial only 21 months after the March 8, 2024 Complaint, significantly deviates from the statistical norms in his courtroom. Ex. 1083. As of June 2, 2025, Judge Albright has 273 active cases pending before him. Ex. 1085 (Active Cases Before Judge Alan D. Albright as of June 2, 2025). Over the past 365 days, the median time-to-trial for cases before Judge Albright has been approximately 32 months, placing the more realistic trial date around November 2026—well after the Board’s projected statutory deadline for a final written decision. *See* Ex. 1086 (Statistics on Median Time-to-Trial between June 2, 2024 and June 2, 2025). This substantial gap between the scheduled and statistically expected trial dates strongly suggests that trial will likely occur after the Board’s decision, weighing against discretionary denial.

The Board and the Acting Director have recognized that median time-to-trial statistics are a more reliable benchmark than scheduled trial dates. *See Amazon.com, Inc. v. NL Giken Inc.*, IPR2025-00250, Paper 14 at 2 (P.T.A.B. May 16, 2025) (Acting Director found discretionary denial inappropriate where the median time-to-trial statistics suggested trial would occur after the projected final written decision—even though the scheduled date was earlier); *see also* Ex. 1087 (“Interim Procedure

for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation,” issued March 24, 2025) (instructing panels to consider time-to-trial data when assessing Factor 2).

This statistical discrepancy can be explained by the recent reassignment of Judge Albright from the Waco Division—which received 809 filings in 2024—to the significantly busier Austin Division, which had 1,765 filings during the same period. Ex. 1088 at 1 (Western District of Texas Calendar Year 2024 Statistical Public Report). As part of this transition, Judge Albright retains responsibility for his entire Waco docket (excluding patent cases) while also absorbing 40% of the Austin Division’s caseload. Ex. 1089 (Amended Order Assigning the Business of the Court). Given this substantial expansion of Judge Albright’s caseload, it is increasingly likely that the currently scheduled trial will be delayed—potentially placing it closer to, or even beyond, the Board’s projected Final Written Decision deadline in this PGR, which weighs against discretionary denial. See *Ericsson Inc.*

v. XR Commc 'ns LLC, IPR2024-00868, Paper 8 at 29 (P.T.A.B. Dec. 13, 2024) (trial scheduled less than five months before FWD did not support discretionary denial).

In sum, the December 2025 trial date is speculative and likely to shift given recent statistical trends and judicial resource constraints. For at least the above reasons, Factor 2 supports institution or, at a minimum, is neutral in this case.

C. Factor 3 Supports Institution: Limited Investment in the Merits of Invalidity Weighs Against Discretionary Denial.

Patent Owner argues that the parties and court have invested significantly in the parallel litigation, but this is incorrect. PO's Request at 15-16. Under *Fintiv* Factor 3, the Board has made clear that the relevant inquiry focuses not on overall litigation progress, but on how much investment has occurred in the specific validity issues raised in the Petition. See *Sand Revolution II, LLC v. Continental Intermodal Group—Trucking LLC*, IPR2019-01393, Paper 24 at 10–11 (P.T.A.B. June 16, 2020). In *Sand Revolution II, LLC*, despite claim construction proceedings, scheduling orders, and other procedural developments, the Board found that the district court's and the parties' investment in the substance of the invalidity case was minimal, noting that "much of the district court's investment relates to ancillary matters untethered to the validity issue itself" and that "the district court's two-page *Markman* Order in this case does not demonstrate the same high level of investment of time and resources as the detailed *Markman* Order in *Fintiv*." *Id.*

The same reasoning applies here. Although fact discovery would have just closed by the time the Board issues its institution decision in August 2025, expert reports and exchanged rebuttal expert reports will only be in their early stages and are not scheduled to conclude until late August 2025. Ex. 1083. The district court has yet to issue a written claim construction order, no expert depositions have taken place, and neither dispositive nor Daubert motions have been filed. These facts show that the parties and the district court have not yet meaningfully engaged with the invalidity issues raised in this Petition. For at least the above reasons, Factor 3 strongly supports institution.

D. Factor 4 Supports Institution: The Majority of Challenged Claims Will Not Be Adjudicated in the Parallel Litigation.

Patent Owner asserts that there is “significant overlap” between the issues raised in this Petition and those being litigated in district court. PO’s Request at 17. This is incorrect. This Petition challenges 18 claims, whereas Patent Owner has proposed to reduce the number of asserted claims to no more than 5 per patent and 16 total across the eight patents-in-suit by the time it serves its Final Election of Asserted Claims in the parallel litigation. Ex. 1092. Accordingly, most of the challenged claims will likely not be adjudicated in the parallel litigation.

The Board has found Factor 4 weighs in favor of institution where only a subset of challenged claims is being litigated. See *Hanwha Sols. Corp. v. Maxeon Solar PTE. LTD.*, IPR2024-01203, Paper 17, 18-19 (Feb. 26, 2025) (“While some

overlap of issues may exist, complete overlap does not exist and resolution of the companion trial will not address the non-overlapping claims... Accordingly, we determine that *Fintiv* factor 4 weighs slightly against exercising our authority to deny institution.”) For at least the above reasons, Factor 4 strongly supports institution.

E. Factor 5 Is at Least Neutral: Party Identity Should Not Justify Discretionary Denial.

Petitioner is also the defendant in the parallel district court litigation. However, as stated above regarding Factor 4, there will be minimal overlap between the issues raised in the Petition and the district court proceeding, and thus substantially different issues are raised in the Petition than will be raised at trial in the district court proceedings. *See Fintiv* at 14 (noting that the issue of whether a Petitioner is related to a defendant in a parallel proceeding is ultimately about whether “the issues are the same as, or substantially similar to, those already or about to be litigated, or other circumstances weigh against redoing the work of another tribunal”) As such, this overlap does not meaningfully support discretionary denial, and Factor 5 is at least neutral. Holding otherwise would undermine the very purpose of the PGR framework, which was designed to provide an alternative forum for resolving patentability issues raised in infringement actions. *See, e.g.*, H.R. Rep. No. 112-98, at 164 (2011) (describing Congress’s goal of expanding “opportunities for low-cost, efficient alternatives to litigation as a way of resolving disputes about the validity of issued patents”).

F. Factor 6 Supports Institution: The Petition Is Compelling and Consistent with Prior Board Institutions Based on Similar Prior Art.

1. The Merits of the Petition Are Strong.

This factor considers other circumstances, including the petition’s merits, that may affect discretionary denial. *Fintiv* at 14. Here, the merits of the Petition are compelling.

The Board previously instituted IPR2021-01548, IPR2021-01549, and IPR2021-01550, which challenged U.S. Patent Nos. 9,196,385 (“the ’385 patent”), 9,997,240 (“the ’240 patent”), and 10,950,300 (“the ’300 patent”), respectively. See *Micron Technology, Inc. v. Vervain, LLC*, IPR2021-01548, Paper No. 11 (PTAB Apr. 8, 2022); *Micron Technology, Inc. v. Vervain, LLC*, IPR2021-01549, Paper No. 10 (PTAB Apr. 8, 2022); and *Micron Technology, Inc. v. Vervain, LLC*, IPR2021-01550, Paper No. 11 (PTAB Apr. 11, 2022). While the ’370 patent did not issue until April 23, 2024, it is plainly based on the same common specification. The Board’s decisions to institute those proceedings, which relied on Dusjia as a key reference, demonstrates that the same foundational prior art could be sufficiently persuasive to merit review. The Gavens reference, as a continuation-in-part of a continuation-in-part of Dusjia, contains everything disclosed in Dusjia and more, further reinforcing the strength of the present Petition. Accordingly, the ’370 patent should be evaluated on the merits, just as the Board did with the ’385, ’240, and ’300 patents.

**2. Petitioner’s Expert Testimony Is Consistent with Binding
Precedent and the Director’s March 26, 2025
Memorandum.**

Patent Owner’s criticism of Petitioner’s reliance on expert testimony is contrary to binding precedent. PO’s Request at 29. The Federal Circuit has made clear that both claim construction and obviousness must be construed from the standpoint of a person of ordinary skill in the art (POSITA). The Federal Circuit’s *en banc* decision in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005) expressly recognized that “the ordinary and customary meaning of a claim term is the meaning it would have had to person of ordinary skill in the art in question at the time of the invention.” Similarly, in *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398 (2007), the Supreme Court held that the obviousness inquiry requires assessing whether a POSITA would have recognized that combining prior art elements yields predictable results, and whether such a combination would have been within the ordinary skill in the field.

The Board acknowledges the probative value of expert testimony, as clearly articulated in *Consolidated Trial Practice Guide* (Nov. 2019): “Expert testimony may be presented to establish the scope and content of the prior art for determining obviousness and anticipation. Such testimony may be helpful in evaluating, for example, the ‘prior art as viewed with the knowledge of one of skill in the art at the time of invention.’ *Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1297

(Fed. Cir. 2002).” Ex. 1090 at 36. The Director’s March 26, 2025 Memorandum (“Director Memo”) further confirms that the contents of the Consolidated *Trial Practice Guide* are among the factors to be considered in the exercise of discretion. Ex. 1084 at 2.

Here, Petitioner submits the declaration of Dr. Carl Sechen, whose testimony is based on technical analysis and supporting references, consistent with the requirements of 37 C.F.R. § 42.65 and the Director Memo. His declaration provides the legally required POSITA perspective and directly supports the Petition’s claim construction and obviousness grounds. Rather than being a weakness, the Petitioner’s expert testimony is a critical strength of the Petition.

3. The Absence of Settled Expectations Weighs in Favor of Institution.

Patent Owner’s assertion of settled expectations is unfounded. PO’s Request at 30. The previous litigation Patent Owner refers to was dismissed by stipulation of the parties, preventing any final disposition of issues on the merits. Ex. 1093 at Dkt. 192 (Docket list for *Vervain, LLC v. Micron Technology Inc., et al.*, No. 6:21-cv-00487 (W.D. Tex. filed May 10, 2021)), 1094 at Dkt. 184 (Docket list for *Vervain, LLC v. Western Digital Corp. et al.*, No. 6:21-cv-00488 (W.D. Tex. filed May 10, 2021)). This proceeding arises within the context of a broader litigation campaign targeting multiple defendants. The Board’s determination will have direct consequences not only for Petitioner but also for its customers. For example, Patent

Owner has also sued Kingston Technology Co., a downstream customer that sources the accused products from Petitioner. Ex. 1081.

As acknowledged in Patent Owner’s Complaint, Petitioner is a market leader in NAND Flash products. Since its incorporation in 2000, Petitioner has supplied its products to a broad customer base. Ex. 1082. Several of these products, which Patent Owner has repeatedly accused of infringement in the parallel litigation (some only recently being withdrawn from the Patent Owner’s infringement contention), have been on the market for years—well before the 2011 critical date. Ex. 1091. Petitioner thus has a compelling interest in securing invalidation of all Challenged Claims to eliminate ongoing exposure to baseless infringement allegations and to protect both its business operations and its customers’ interests.

4. Instituting This Petition Would Be an Efficient Use of The Board’s Resources.

Institution is warranted because the challenged patents include both method and apparatus claims and raise complex issues concerning divided and indirect infringement, particularly given the involvement of third-party actors and multiple system configurations. Petition at 69. These complications would benefit from the Board’s technical expertise and focused analysis under the PGR framework.

Moreover, as detailed at subsection 3 *supra*, Patent Owner has filed parallel suits following the same enforcement template against both Phison and a downstream customer, creating substantial overlap in the accused products and

asserted claims. This multi-defendant litigation strategy heightens the risk of inconsistent claim construction, duplicative validity assessments, and confidentiality challenges among co-defendants. *Id.* A Board determination would promote consistency and judicial efficiency across forums by addressing the common invalidity issues in a centralized, expert-driven proceeding.

Additionally, compared to the 18 claims challenged in this Petition, Patent Owner will likely assert no more than 5 claims by the time it serves its Final Election of Asserted Claims in the parallel litigation, and possibly none by the time dispositive motions are filed. Ex. 1092. Even if Petitioner successfully invalidates a subset of claims in the district court, Patent Owner may still assert the remaining, unadjudicated claims against Petitioner's customers or other users in future litigation. Institution of this PGR would enable the Board to conclusively resolve the validity of all Challenged Claims, thereby avoiding repeated lawsuits, PGRs and IPRs, and conserving judicial and party resources.

5. Instituting This Petition Would Not Burden the Board's Resources.

The America Invents Act (AIA) was enacted to provide a cost-effective and technically rigorous forum to weed out unpatentable claims early, before years of expensive district court discovery and trial. PGR and IPR proceedings serve an essential public function in ensuring that only valid patent rights survive.

Here, the Petition presents a strong challenge to claims of questionable validity. Meanwhile, Patent Owner is pursuing multiple overlapping lawsuits against Petitioner and its customers, asserting related claims from the same patent family. This strategy not only increases the risk of inconsistent outcomes, but also imposes duplicative burdens on the Board, district courts, and the parties, all of whom must repeatedly address the same invalidity and infringement issues in parallel or successive proceedings. Without institution, there is a substantial risk of repeated litigation and serial PGRs/IPRs over the same subject matter.

A single, comprehensive PGR that addresses all challenged claims would promote efficiency, conserve judicial and agency resources, and avoid duplicative proceedings of the same disputes. Far from straining the Board's resources, institution in this case would fulfill the AIA's core objectives. For at least the above reasons, Factor 6 strongly supports institution.

III. CONCLUSION

In view of the above, Petitioner respectfully request that the Director deny Patent Owner's request for discretionary denial, and instead pass it to a merits panel for consideration.

Date: June 16, 2025

Respectfully submitted,
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CERTIFICATION OF SERVICE (37 C.F.R. § 42.6(e))

The undersigned hereby certifies pursuant to 37 C.F.R. §§ 42.6(e) that the above-captioned Petitioner's Opposition to Patent Owner's Request for Discretionary Denial of Institution (and any new exhibits), was served in its entirety on June 16, 2025, via electronic mail upon the following counsel of record for Patent Owner:

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CERTIFICATION OF WORD COUNT (37 C.F.R. § 42.6(e))

The undersigned hereby certifies that the attached Petitioner's Opposition to Patent Owner's Request for Discretionary Denial of Institution, including footnotes, but not the cover page, exhibit list, table of contents, table of authorities, mandatory notices, and certifications, contains 3,835 words, as measured by the Word Count function of Microsoft Word. This is less than the limit of 14,000 words as specified by 37 C.F.R. § 42.24(a)(i).

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