

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

WECREVENTION, INC.,
Patent Owner.

IPR2026-00243
Patent 12,154,652

**PETITIONER'S OPPOSITION TO PATENT OWNER'S
REQUEST FOR DISCRETIONARY DENIAL**

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	APPLE’S SIGNIFICANT INVESTMENTS IN AMERICAN MANUFACTURING WARRANT REFERRAL	2
III.	HOLISTIC CONSIDERATION OF THE FINTIV FACTORS FAVORS REFERRAL	7
A.	Factor 1: Neither Party Has Requested Stay (Neutral)	7
B.	Factor 2: the Board’s FWD is Statistically Likely to Issue Months Ahead of District Court Trial (Favors Referral)	7
C.	Factor 3: Apple Diligently Filed Five Petitions Within Four Months of WeCrevention’s Complaint (Favors Referral).....	9
D.	Factor 4: Apple’s <i>Sotera</i> + Stipulation Ensures that IPR would serve as a True Alternative to District Court Litigation (Strongly Favors Referral).....	10
E.	Factor 5: the WDTX and PTAB Parties are the Same, and Institution would Allow for Efficient Resolution of Invalidity (Favors Referral)	12
F.	Factor 6: the Petition Compellingly Demonstrates that the Patent Issued only a Consequence of Material Error (Strongly Favors Referral).....	13
IV.	REFERRAL IS WARRANTED TO REMEDY MATERIAL ERRORS.....	13
A.	The Examiner Overlooked Disclosure, by a Reference of Record (Takahashi), of the Feature that was the Basis for Allowance.....	13
B.	The Examiner Erroneously Relied on Applicant Arguments that Distinguished the Art Based on Non-Existent Requirements of the eDP Standard.....	16
C.	The Examiner’s Flawed Search Failed to Identify an Additional Prior Art Reference (Endo) that Further Disclosed eDP Features	17

V.	REFERRAL IS WARRANTED BECAUSE APPLE’S SETTLED EXPECTATIONS OUTWEIGH WECREVENTION’S BASELESS ASSERTION OF EXPECTATIONS IN THE ’652 PATENT	18
A.	The ’652 Patent is Young, Having Issued Less Than 2 Years Prior to Apple’s Petition Filing	18
B.	WeCrevention Presents No Evidence of Licensing or Commercialization	19
C.	Apple’s Settled Expectations Have Accrued for Years	19
VI.	CONCLUSION.....	20

LIST OF EXHIBITS

- EX1001 U.S. Patent No. 12,154,652 to Yuan et al. (“the ’652 Patent”)
- EX1002 Prosecution History of the ’652 Patent (“the Prosecution History”)
- EX1003 Declaration and Curriculum Vitae of Dr. David Liu
- EX1004 U.S. Patent Application Publication No. 2010/0290300 (“Takahashi”)
- EX1005 U.S. Patent Application Publication No. 2012/0327726 (“Tsern”)
- EX1006 U.S. Patent Application Publication No. 2010/0142247 (“Schuette”)
- EX1007 U.S. Patent Application Publication No. 2012/0327062 (“Endo”)
- EX1008 U.S. Patent Application Publication No. 2011/0063927 (“Dono”)
- EX1009 U.S. Patent Application Publication No. 2012/0140578 (“Goto”)
- EX1010 U.S. Patent No. 7,738,311 (“Youn”)
- EX1011 Nakagome et al., “Review and future prospects of low-voltage RAM circuits,” IBM Journal of Research and Development, vol. 47, no. 5.6, p. 525-552 (2003)
- EX1012 Keeth et al., *DRAM Circuit Design: Fundamental and High-Speed Topics*, IEEE Press (2008)
- EX1013 “Low Power Double Data Rate 3 (LPDDR3),” JESD209-3, JEDEC Solid State Technology Association (May 2012)
- EX1014 VESA Embedded DisplayPort Standard Version 1.3, Video Electronics Standards Association (2011)
- EX1015 Craig Wiley, “The New Generation Digital Display Interface for Embedded Applications,” DisplayPort Developer Conference (2010)

EX1016	Prosecution History of U.S. Patent No. 10,998,017
EX1017	Excerpts from Daintith et al., <i>A Dictionary of Computing, Sixth Edition</i> , Oxford University Press (2008)
EX1018	Excerpts from Harry Newton, <i>Newton's Telecom Dictionary, 24th Edition</i> , Flatiron Publishing (2008)
EX1019	Excerpts from Downing et al., <i>Dictionary of Computer and Internet Terms, Tenth Edition</i> , Barron's Educational Series, Inc. (2009)
EX1020	Itoh, <i>VLSI Memory Chip Design</i> , Springer Series in Advanced Microelectronics, Springer-Verlag Berlin Heidelberg New York (2001)
EX1021	Oct. 7, 2025 Complaint, <i>WeCrevention, Inc. v. Apple Inc.</i> , Civil Action No. 7:25-CV-458 (W.D. Tex)
EX1022	Micron Electronics, Inc., "DDR3 SDRAM" (2006)
EX1023	U.S. Patent No. 6,271,679
EX1024	"DDR2 SDRAM Specification," JESD79-2F, JEDEC Solid State Technology Association (November 2009)
EX1025	U.S. Patent Application Publication No. 2010/0061165
EX1026	Jacob et al., <i>Memory Systems: Cache, DRAM, Disk</i> , Morgan Kaufmann Publishers (2008)
EX1027	RESERVED
EX1028	RESERVED
EX1029	Fairchild Semiconductor 74VCXH162244 datasheet (2005)
EX1030	Texas Instruments SN74AUP1G07 datasheet (2012)

- EX1031 Wayne Wolf, *Modern VLSI Design: IP-Based Design, Fourth Edition*, Prentice Hall (2009)
- EX1032 Barth et al., “A 45 nm SOI Embedded DRAM Macro for the POWER™ Processor 32 MByte On-Chip L3 Cache,” in *IEEE Journal of Solid-State Circuits*, vol. 46, no. 1, pp. 64-75, Jan. 2011
- EX1033 J. Barth, “eDRAM to the Rescue,” SRC eDRAM (2009)
- EX1034 U.S. Patent No. 7,626,883
- EX1035 U.S. Patent No. 6,847,578
- EX1036 U.S. Patent No. 8,901,009
- EX1037 U.S. Patent No. 8,471,362
- EX1038 U.S. Patent No. 7,829,410
- EX1039 U.S. Patent No. 7,892,943
- EX1040 U.S. Patent No. 8,148,763
- EX1041 U.S. Patent No. 7,736,987
- EX1042 RESERVED
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- EX1044 Lee et al., “Tiered-latency DRAM: A low latency and low cost DRAM architecture,” 2013 IEEE 19th International Symposium on High Performance Computer Architecture (HPCA)
- EX1045 Harvard et al., “A scalable I/O architecture for wide I/O DRAM,” 2011 IEEE 54th International Midwest Symposium on Circuits and Systems (MWSCAS)

- EX1046 Prosecution History of U.S. Patent No. 11,894,098
- EX1047 “VESA Publishes Embedded DisplayPort Standard Version 1.5,”
<https://www.prnewswire.com/news-releases/vesa-publishes-embedded-displayport-standard-version-1-5--301410053.html/>
(accessed Dec. 24, 2025)
- EX1048 Gillingham, “Unleashing the Power of Embedded DRAM” (2005)
- EX1049 AP Memory, AD351216F-x 512Mb LPDDR3, “512Mb LPDDR3 Specification” (2022)
- EX1050 U.S. Patent Application Publication No. 2009/0080234
- EX1051 Combined Civil and Criminal Federal Court Management Statistics
(Dec. 31, 2025) | United States Courts (uscourts.gov), available at:
[fcms_na_distprofile1231.2025.pdf](https://www.uscourts.gov/fcms_na_distprofile1231.2025.pdf)
- EX1052 Petitioner’s Stipulation
- EX1053 RESERVED
- EX1054 RESERVED
- EX1055 Director John A. Squires, Memorandum on Additional Discretionary
Institution Considerations – U.S. Manufacturing and Small Business
Use of AIA Proceedings (March 11, 2026).
- EX1056 Complaint for Patent Infringement, *WeCrevention, Inc. v. Apple Inc.*,
No. 7:25-CV-458, Dkt. 1 (W.D. Tex. Oct. 7, 2025).
- EX1057 Plaintiff’s Rule 7.1(a)(1) Disclosure Statement, *WeCrevention, Inc. v.*
Apple, Inc., No. 7:25-CV-458, Dkt. 4 (W.D. Tex. Oct. 7, 2025).
- EX1058 Apple press release: “Apple will spend more than \$500 billion in the
U.S. over the next four years,”
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[than-500-billion-usd-in-the-us-over-the-next-four-years/](#) (February 24, 2025)

- EX1059 Apple press release: “Apple accelerates U.S. manufacturing, with Mac mini production coming later this year,”
<https://www.apple.com/newsroom/2026/02/apple-accelerates-us-manufacturing-with-mac-mini-production/> (February 24, 2026)
- EX1060 Apple press release: “Apple increases U.S. commitment to \$600 billion, announces American Manufacturing Program,”
<https://www.apple.com/newsroom/2025/08/apple-increases-us-commitment-to-600-billion-usd-announces-ambitious-program/> (August 6, 2025)
- EX1061 RESERVED
- EX1062 Apple press release: “Apple announces expanded partnership with Amkor for silicon packaging,”
<https://www.apple.com/newsroom/2023/11/apple-announces-expanded-partnership-with-amkor-for-silicon-packaging/> (November 30, 2023)
- EX1063 Apple press release: “Apple adds new partners to its American Manufacturing Program,”
<https://www.apple.com/newsroom/2026/03/apple-adds-new-partners-to-its-american-manufacturing-program/> (March 26, 2026)
- EX1064 Apple press release: “Apple Manufacturing Academy accelerates AI use in U.S. supply chains,”
<https://www.apple.com/newsroom/2026/05/apple-manufacturing-academy-accelerates-ai-use-in-us-supply-chains/> (May 5, 2026)
- EX1065 Amended Scheduling Order, *WeCrevention, Inc. v. Apple, Inc.*, No. 7:25-CV-458, Dkt. 1 (W.D. Tex. Apr. 14 2026).
- EX1066 RESERVED
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- EX1068 Scott R. Boalick, Memorandum on “Guidance on USPTO's rescission of ‘Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation’” (March 24, 2025)
- EX1069 Complaint for Patent Infringement, *WeCrevention, Inc. v. Dell Inc.*, No. 25-cv-01040-1 (E.D. Tex. Oct. 10, 2025)
- EX1070 Complaint for Patent Infringement, *WeCrevention Inc. v. Lenovo Group Limited et al.*, No. 25-cv-01008 (E.D. Tex. Oct. 3, 2025)
- EX1071 Prosecution History of the ’017 Patent
- EX1072 Prosecution History of the ’098 Patent
- EX1073 Etron Technology, Inc., Annual Report 2023, <https://etron.com/wp-content/uploads/2024/06/2023%E5%B9%B4%E5%B9%B4%E5%A0%B1EN.pdf> (April 27, 2024)
- EX1074 Apple press release: “Apple and Corning partner to manufacture 100 percent of iPhone and Apple Watch cover glass in Kentucky,” <https://www.apple.com/newsroom/2025/08/apple-corning-to-manufacture-all-iphone-apple-watch-cover-glass-in-kentucky/> (August 6, 2025)
- EX1075 Apple Mac mini Product Page, <https://www.apple.com/mac-mini/>

I. INTRODUCTION

WeCrevention's Request for Discretionary Denial should be denied, and the Director should proceed to consider the merits of Apple's IPR petition. Multiple reasons support referral of Apple's Petition.

First, Director Squires's March 11, 2026 memorandum strongly favors referral. EX1055, 1-3. As detailed below, the products accused of infringement are at the center of Apple's historic, ongoing investments in American manufacturing.

Second, the *Fintiv* factors further favor referral. Apple diligently filed all five petitions within four months of WeCrevention's October 7, 2025 complaint, and Apple further filed a broad *Sotera+* stipulation ensuring this IPR will serve as a true alternative to district court litigation. EX1052. Critically, the projected FWD deadline is statistically likely to precede trial by many months (if not years) given relevant median time-to-trial statistics, an expectation further reinforced by the need for reassignment in view of Judge Albright's recently-announced retirement.

Third, referral is warranted based on the instant Petition's demonstration that the '652 Patent issued as a consequence of material errors committed during original examination. For example, the Takahashi reference, which was of record during prosecution, plainly discloses the claim features that were the basis of allowance. EX1002, 20; EX1003, 47-48. The Petition's Grounds 1A-1D demonstrate

obviousness of the Challenged Claims based in part on the Takahashi disclosures overlooked by the Examiner. EX1002, 20; EX1003, 47-48.

Finally, Apple has recognized settled expectations, and WeCrevention lacks the same. The '652 Patent issued less than two years ago in late 2024; moreover, Apple has committed more than \$600 billion to U.S. manufacturing over four years, with the accused A16 chip being among the Apple chips being produced in Arizona.

More than individually, these factors demonstrate that a holistic assessment supports a decision to refer and institute.

II. APPLE'S SIGNIFICANT INVESTMENTS IN AMERICAN MANUFACTURING WARRANT REFERRAL

The considerations set forth in Director Squires's March 11, 2026 memorandum ("Director's Memorandum") strongly favor referral and institution of Apple's Petition. EX1055, 1-2. Apple continues to drive one of the largest investments in American manufacturing ever undertaken by any private enterprise; Apple has committed more than \$600 billion to innovative manufacturing within the United States, and the chips at the heart of Apple's American investments are at the heart of Apple's accused products. EX1058, 1-3; EX1060, 1.

In its discretionary denial brief (Paper 7, "DD Brief"), WeCrevention incorrectly argues that this factor only considers that "iPhones, MacBooks, and iPads containing LPDDR5 or LPDDR5x DRAM ... are assembled overwhelmingly

overseas.” (DD Brief, 5). But that position ignores the Director’s express guidance to consider a product’s entire supply chain when analyzing this factor: “***not only assembly of the final product*** in the United States, but ***also the extent to which components of a product are made in the United States.***” Director’s Memorandum, 2-3 (emphasis added).

WeCrevention accuses “Apple products that include LPDDR5 DRAM” and points to iPhone, iPad, and MacBook product lines. EX1056, 4-5. Its contentions identify the “ASIC processor” used in those products, specifically targeting the A16 chip and M2 chips. *Id.* at 4-5, 6-7. Thus, WeCrevention has implicated Apple’s activities manufacturing the accused iPhones and especially those regarding Apple’s silicon processors such as the A-series and M-series.

Apple’s use of and investment in U.S.-manufactured components for the accused products (iPhone, MacBook, and iPad) heavily favors referral and institution. Although WeCrevention has not specifically identified Mac mini, like the identified accused products, Mac mini uses an M-series processor. EX1075, 9-11. And Mac mini is produced in Apple’s Houston facility. EX1059, 2-3.

Additionally, the “A16 chip” (*see* EX1056, 16-51, *passim*) that powers some of the accused iPhones is among the Apple chips produced at TSMC’s recently constructed multibillion dollar Arizona semiconductor fab. EX1058, 4. Yet, WeCrevention completely ignores the A16 chip and associated U.S. manufacturing

in its DD Brief. The fact that the A16 chip that WeCrevention accuses of infringement in the parallel district court proceeding is manufactured in the United States and is at the center of Apple's investments in American manufacturing speaks directly to Apple's commitment to U.S. manufacturing, and strongly favors referral and institution of Apple's petition as an alternative to district court litigation. EX1055, 2.

WeCrevention also ignores that Apple's extensive U.S. chip manufacturing extends across the entire supply chain for its products. Apple's U.S. partners supply advanced chips for Apple in 24 factories across 12 states, including Arizona, Colorado, Oregon, and Utah. EX1058, 4. And Apple is the largest consumer of output from a new Arizona semiconductor fabrication facility that has been employing more than 2,000 workers to mass produce advanced Apple chips on U.S. soil since January 2025. *Id.* In that same year, 2025, Apple sourced more than 20 billion American made chips, and Apple is on track in 2026 to source, from the aforementioned Arizona facility alone, over 100 million advanced American made chips. EX1059, 4-5. Apple's commitment to sourcing U.S. manufactured chips is not a recent one: it dates back to at least 2022.

Apple has also supported a \$7 billion semiconductor advanced packaging facility in Peoria, Arizona, where Apple is the first and largest customer of Amkor. EX1059, 4-5. And Apple has partnered with GlobalWafers America on a \$4 billion

silicon wafer facility in Sherman, Texas that will produce silicon wafers for chips manufactured in the United States. *Id.*; EX1059, 4; EX1060, 5.

Apple similarly committed an additional \$2.5 billion in August 2025 to produce 100 percent of the cover glass for iPhone in Corning's Harrodsburg, Kentucky facility, with the entirety of Corning's plant having been dedicated to Apple's cover glass production and the Kentucky facility's workforce expanding by roughly fifty percent. EX1074, 1-2; EX1059, 5; EX1060, 3.

Apple also has made commitments to expand its American manufacturing footprint. Apple announced a \$500 billion U.S. spending and investment commitment in February, 2025, and Apple then expanded its commitment to \$600 billion just six months later, in August, 2025, under the American Manufacturing Program. EX1058, 1-2; EX1060, 1-2. As part of that commitment, Apple has doubled its U.S. Advanced Manufacturing Fund from \$5 billion to \$10 billion. EX1058, 4. Apple has also committed to hiring approximately 20,000 new U.S. employees over four years, the vast majority in R&D, silicon engineering, software development, and AI. *Id.* Apple directly supports more than 450,000 supplier and partner jobs, and approximately 2.9 million U.S. jobs in total. *Id.*; EX1060, 3.

Thus, the accused products, which deeply reflect and are a direct result of Apple's tremendous investments in innovative American manufacturing operations, fall squarely within the proper application of the Director's Memorandum. Indeed,

even the LPDDR5 and LPDDR5x DRAM components that WeCrevention’s briefing describes as “integral to the accused Apple products,” and on which that briefing focuses, are sourced in part from Micron, a leading American memory manufacturer. DD Brief, 7.

Apple’s historic and ongoing investments in American manufacturing stand in stark contrast to WeCrevention’s conspicuous lack of contributions to the American economy. Indeed, WeCrevention does not purport to manufacture any products—in the U.S. or otherwise. No surprise when considering original assignment of the ’017 Patent to Etron Technology, Inc., a Taiwanese corporation. *See* EX1001, Cover. And, Etron Technology, Inc. “owns more than 10% of Plaintiff WeCrevention’s stock.” EX1057, 1; *see also* EX1073, 105 (showing that Etron owns 100% of WeCrevention).

The Director’s Memorandum seeks to address decades of offshoring in electronics and information and communications technology supply chains, and the resulting vulnerabilities to U.S. economic and national security. EX1055, 1-3. As explained above, the public record confirms that Apple is actively addressing concerns over offshoring, leading the way in bringing innovative manufacturing back to the United States.

Respectfully, denying Apple access to PTAB review on the ground that its accused products are insufficiently “domestic” would for, at least these reasons,

undermine the very policy objectives that the Director’s Memorandum was designed to advance. Bearing in mind both those objectives and the fact of Apple’s leading role in innovative American manufacturing, the Director’s Memorandum weighs decisively in favor of referral and institution of Apple’s petition.

III. HOLISTIC CONSIDERATION OF THE FINTIV FACTORS FAVORS REFERRAL

Consistent with Congressional intent and the Office’s goals of identifying and correcting material errors, referral and institution of Apple’s petition would promote efficient resolution of the challenged patent’s invalidity, without duplication of district court efforts.

A. Factor 1: Neither Party Has Requested Stay (Neutral)

Neither party has filed a motion to stay the district court proceedings and, were such a motion to be filed, the outcome cannot be reasonably inferred; for at least that reason, Factor 1 is neutral. *Sand Revolution II, LLC v. Continental Intermodal Group – Trucking LLC*, IPR2019-01393, Pap. 24, at 7 (June 16, 2020) (informative).

B. Factor 2: the Board’s FWD is Statistically Likely to Issue Months Ahead of District Court Trial (Favors Referral)

If instituted, the Board’s final written decisions would issue no later than August 13, 2027. WeCrevention’s DD Brief erroneously states that the “parties’ trial is scheduled for June 14, 2027” despite Judge Albright having issued, in

advance of that brief's filing, an amended scheduling order that pushed the trial date back to July 6, 2027. DD Brief, 3 (citing EX2004); EX1065, 5.

Judge Albright thereafter announced his intent to retire from the bench this August, an event that would necessarily involve reassignment of the instant case and the many other cases over which Judge Albright presently presides to his colleagues in the Western District of Texas. The impact of reassignment of the instant case on potential trial schedule is presently both unknown and unknowable.

And, even before factoring the impact of Albright's retirement on case management within district, current *median time-to-trial statistics* for the Western District of Texas *indicate that trial is statistically not likely to occur until May 2028, roughly 9 months AFTER the Board's projected final written decision deadline*. EX1051, 37 (indicating a median time-to-trial of 29.5 months).

As then Acting Director Stewart recently noted, the likelihood "that a final written decision ... will issue before a district court trial occurs" reduces "the concern of inconsistent outcomes or significant duplication of efforts." *Apple Inc. v. Apex Beam Technologies LLC*, IPR2025-00896, Pap. 10, 2-4 (Sep. 3, 2025).

And even if one were to assume that the already amended case schedule will not be further amended in view of reassignment to a different judge, *Fintiv* would not favor discretion; the Office has instead recently and repeatedly indicated that when a scheduled trial date precedes the date indicated by statistics, *Fintiv* "neither

favor[s] nor counsel[s] against discretionary denial.” *See, e.g., Clearcorrect Operating LLC v. Align Technology, Inc.*, IPR2025-00814 Pap. 14 (PTAB Aug. 29, 2025); *Volkswagen Group of America, Inc. v. Longhorn Automotive Group LLC*, IPR2025-00925 (PTAB Sept. 12, 2025).

But the need for reassignment instead gives rise to a reasonable expectation, further supported by official statistics, that the five week gap between the currently scheduled trial date and the projected FWD deadline will ultimately reverse, with FWDs being projected to issue nine months in advance of the statistically indicated trial date. EX1065, 5; EX1051, 37.

Apple respectfully submits that factor 2 favors referral. *See Apex Beam*, 2-4.

C. Factor 3: Apple Diligently Filed Five Petitions Within Four Months of WeCrevention’s Complaint (Favors Referral)

Apple diligently filed five petitions challenging each of WeCrevention’s five asserted patents on February 13, 2026, just four months after WeCrevention’s October 7, 2025 complaint.

The Board has weighed factor 3 against denial based on diligence related to significantly slower efforts. *E.g., Sotera Wireless Inc. v. Masimo Corp.*, IPR2020-01019 Pap. 12, 16-17 (PTAB Dec. 1 2020)(precedential).

More, even against the currently amended schedule, which as explained above is likely to be further shifted back in view of the need for case reassignment, little substantive work will have been completed by the district court before the

August 20, 2026 date by which the Board is projected to issue its institution decisions. *See* EX1065, 7. The current schedule confirms that the parties will, by that point, not even have served final infringement and invalidity contentions. *Id.* And expert discovery is not currently scheduled to close until March 31, 2027.

Factor 3 therefore favors referral. *See also Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Pap. 11, 9 (PTAB Mar. 20, 2020) (precedential).

D. Factor 4: Apple’s *Sotera*+ Stipulation Ensures that IPR would serve as a True Alternative to District Court Litigation (Strongly Favors Referral)

WeCrevention’s DD Brief conspicuously fails to address the full scope of Apple’s broad *Sotera*+ stipulation (EX1052), which ensures that the instant IPR if instituted and maintained will serve as a “true alternative” to the district court litigation with respect to invalidity under 35 U.S.C. §§ 102 and 103. *See Motorola Sols., Inc. v. Stellar, LLC*, IPR2024-01205, Pap. 19, 3–4 (Acting Director Mar. 28, 2025); DD Brief, 15 (mistakenly indicating that Apple’s *Sotera*+ stipulation is coextensive with the *Sotera* stipulation addressed in the Office’s March 24, 2025 memorandum, which the memorandum describes as “highly relevant” despite being far narrower in scope than Apple’s stipulation); EX1068, 1-3.

Apple’s *Sotera*+ stipulation guarantees that not only will Apple not advance in the parallel litigation the specific grounds asserted in the instituted IPR and “any other ground that could have been reasonably raised in the IPR,” but also precludes

Apple from raising “combinations of the prior art references asserted as part of a ground ... with unpublished system prior art or any other type of prior art.”

EX1052.

WeCrevention’s contention that the *Sotera+* stipulation would still allow Apple to raise duplicative issues in district court is completely unfounded. The Office has referred many cases where petitioners submitted stipulations of similar (and even narrower) scope to the stipulation that Apple has submitted here. *See e.g., Samsung Elecs. Co. v. Wilus Inst. of Standards & Tech. Inc.*, IPR2025-00933, Pap. 11, 3 (Oct. 10, 2025); *Tesla, Inc. v. Intellectual Ventures II LLC*, IPR2025-00217, Pap. 9, 2 (June 13, 2025); *Shenzhen Tuozhu Tech Co. v. Stratasy, Inc.*, IPR2025-00438, Pap. 10, 3 (July 17, 2025).

And, with final invalidity contentions not due in district court until after the Board is projected to issue its institution decision, WeCrevention’s argument that “the Petition challenges the same claims asserted in the District Court Litigation under the same grounds” is simply irrelevant, at least insofar as Apple’s stipulation ensures that that the instant IPR if instituted and maintained will be a true alternative to the district court litigation not only with respect to those grounds, but with respect to any other ground leveraging the same prior art references.

Factor 4 thus strongly favors referral.

E. Factor 5: the WDTX and PTAB Parties are the Same, and Institution would Allow for Efficient Resolution of Invalidity (Favors Referral)

Apple is the defendant in a parallel district court case. However, this factor has been historically viewed as neutral, especially where, as here, the Petition demonstrates strong merits. *See Innolux Corp., v. Phenix Longhorn LLC*, IPR2025-00043, Pap. 10, 13 (May 15, 2025).

Moreover, a holistic view of Factor 5 should account for “whether efficiency and integrity of the system are best served by denying or instituting review.” *See Fintiv*, 6. Here, WeCrevention has commonly asserted five of the same patents against each of Apple, Dell, and Lenovo, and in so doing has by its own actions given rise to duplicative efforts across the Western and Eastern Districts of Texas. *See generally* EX1056, EX1069, EX1070.

Petitioner respectfully submits that Congressional intent to offer an efficient alternative to litigation is never more clearly implicated than when the Board is confronted by a litigation strategy like the one employed by this Patent Owner—i.e., filing separate litigations against multiple defendants across different forums. *See* 157 Cong. Rec. S1178, (Mar, 3, 2011) (statement of Sen. Patrick Leahy).

Thus, institution of the instant IPR would promote judicial efficiency and integrity by enabling the Board to efficiently address the invalidity of patents asserted by WeCrevention in three separate actions now pending before the

Western and Eastern Districts of Texas. More, the Board's FWD would address invalidity far in advance of statistically likely trial dates, and would thereby eliminate any need for trial on the same issues. EX1051, 35-37 (indicating that the Board's projected August 2027 FWD will resolve invalidity on the Petition's grounds months ahead of statistically likely May 2028 WDTX and October 2027 EDTX trial dates).

F. Factor 6: the Petition Compellingly Demonstrates that the Patent Issued only a Consequence of Material Error (Strongly Favors Referral)

As the Petition compellingly demonstrates, the '652 Patent's claims are plainly unpatentable over prior art disclosures that were available to, and overlooked by, the Examiner. Indeed, the claims recite nothing other than features that were disclosed in the prior art long before the alleged invention, and as described in detail below, the '652 Patent would not have issued but for material examination errors. *Infra*, §IV. Factor 6 thus strongly favors referral.

Accordingly, each *Fintiv* factor either favors referral, or is at worst neutral. Thus, a holistic consideration of the *Fintiv* factors strongly favors referral.

IV. REFERRAL IS WARRANTED TO REMEDY MATERIAL ERRORS

A. The Examiner Overlooked Disclosure, by a Reference of Record (Takahashi), of the Feature that was the Basis for Allowance

The '652 Patent was allowed without art rejections. EX1002, 15-21, 46-52. A non-statutory double-patenting rejection was issued over the claims of the '098

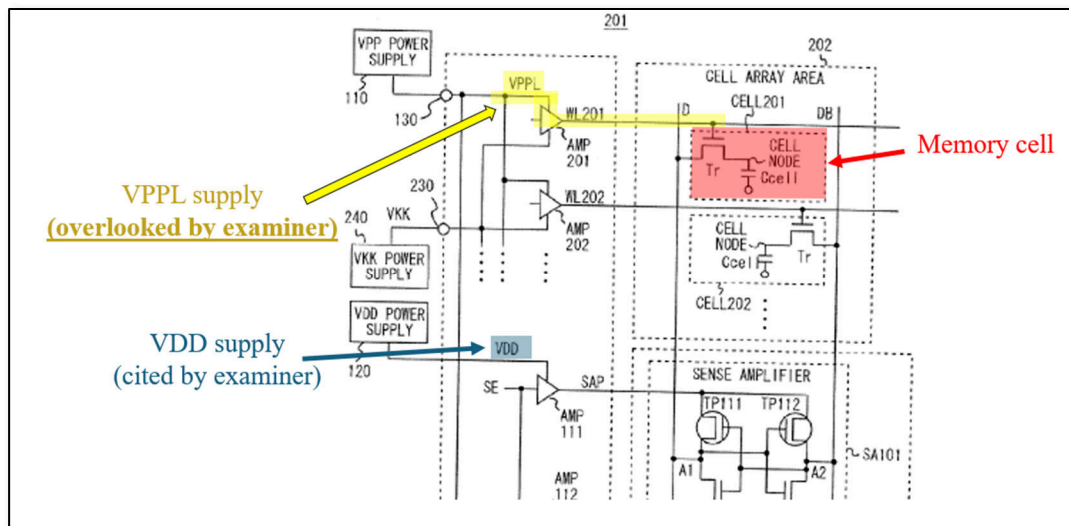
Patent, and the '652 Patent's claims recite voltage-related features similar to those of the '098 Patent's claims. EX1002, 48-52. Thus, the '652 Patent's allowance reflects the same material error as the '098 Patent's.

The '098 Patent's prosecution focused on whether Takahashi discloses two different voltages lower than 1.1 V. The Examiner materially erred by considering only *one* of Takahashi's voltages (VDD) for the "first voltage" and "second voltage," overlooking *another* of Takahashi's voltages (VPPL) that, as demonstrated within the Petition, unmistakably satisfies the claims. By considering VDD but not VPPL, the Examiner erroneously concluded that Takahashi did not teach the multiple different voltages recited in the claims.

For example, the '098 Patent's claim 1 recites a "first voltage [] lower than 1.1V" and a "second voltage [] lower than 1.1V," where "the first voltage is different from the second voltage." The '652 Patent's claims include similar features, including a third voltage that is also met by Takahashi. During prosecution, the Examiner cited Takahashi's VDD for *both* the "first voltage" and the "second voltage," but relented after two rounds of responses in which the Applicant contested the Examiner's reliance on VDD alone. EX1072, 39-40, 79-80, 133-135, 169-171. Within the Notice of Allowance, the Examiner erroneously concluded that the recitation of "the second voltage ... is different from the first voltage overcome[s] the prior art of record." EX1072, 15.

The Examiner's failure to recognize and apply Takahashi's disclosures related to VDD and VPPL constitutes material error, at least insofar as VDD and VPPL together satisfy all features related to the recited first, second, and third voltages, including that the second and third voltages are different from the first voltage. *See* Petition, 18-28, 34-36.

And VPPL is not hidden or obscure: as shown below, Takahashi plainly illustrates VPPL being supplied to Takahashi's memory cell, matching the configuration of claim 1:



Takahashi FIG. 7 (cropped)

Not only did the Examiner fail to apply VPPL as the “first voltage,” he did not raise VPPL at all during prosecution. EX1072; EX1002. There is no evidence that he considered it, and the '652 Patent's claims therefore issued without facing a challenge based on Takahashi's disclosures related to VPPL.

The '652 Patent's issuance resulted directly from the Examiner's failure to

apply Takahashi's disclosure of the feature that was the basis for allowance, and for at least that reason referral and institution are warranted. *See, e.g., Taiwan Semiconductor Manufacturing Company Ltd. and Apple Inc. v. Marlin Semiconductor Ltd.*, IPR2025-00847 Pap. 11, 3-4 (Acting Director Sep. 3 2025); *Eunsung Global Corp. v. Hydrafacial LLC*, IPR2025-00445 Pap. 14, 3 (Acting Director Jul. 10 2025).

B. The Examiner Erroneously Relied on Applicant Arguments that Distinguished the Art Based on Non-Existent Requirements of the eDP Standard

With respect to the parent '017 and '098 Patents and the '652 Patent's claim 3, which recites similar language, the same Examiner materially erred in an additional way by allowing claims based on the Applicant's unsupportable representation that the Embedded DisplayPort (eDP) 1.3 standard includes certain voltage and power requirements that were alleged to be relevant. EX1002, 51; EX1072, 41-44; EX1071, 12, 28; EX1071, 12.

But as revealed by the eDP 1.3 standard itself (EX1014) and Dr. David Liu's related declaration testimony (EX1003), neither of which were available to the Examiner during prosecution, no such "requirements" exist. *See generally* EX1014; EX1003, 38-43. For at least this additional reason, referral and institution are warranted to address claims that issued as a result of material errors.

C. The Examiner's Flawed Search Failed to Identify an Additional Prior Art Reference (Endo) that Further Disclosed eDP Features

As demonstrated in the Petition and Dr. Liu's declaration testimony, the '652 Patent's claims 3-6 are further obvious over Takahashi in view of Endo's teachings, which additionally demonstrate that it would have been obvious for Takahashi's DRAM to be "capable to be applied to an embedded display port (eDP)," as recited in claim 3. EX1003, 199; EX1007, [0034]-[0035]; EX1003, 201.

During prosecution of the '652 Patent and its family, the Examiner repeatedly searched for references that discuss eDP in conjunction with DRAM but, due to flawed queries, these searches did not lead the Examiner to Endo.

The Examiner failed to identify Endo because his searches were overly restricted to specific, often incorrect word arrangements. In an initial search on this topic for the parent '017 Patent, the Examiner erroneously required the search term "embedded adj display adj port," thereby requiring "display" and "port" to be in separate words and excluding the more common term "Embedded DisplayPort." EX1071, 97. For this reason, the Examiner's search results excluded Endo; correcting the same search term to "embedded adj displayport" (as the Examiner failed to do) *does* identify Endo. The Examiner repeated the error in subsequent searches, including in searches performed with respect to the '098 Patent. EX1071, 55-56; EX1072, 181.

In other searches for both the '017 and '098 Patents, the Examiner required

that “eDP” and related terms be unnecessarily close to “DRAM,” e.g., in the same paragraph or within several words of one another. EX1071, 23, 49, 54; EX1072, 181. This strategy *also* excluded Endo, which locates those terms in separate paragraphs and spaced apart by about twenty-five words. EX1007, [0034]-[0035]. Moreover, in some searches, the examiner erroneously searched for “disolay” instead of “display,” further harming his chances of identifying Endo. EX1071, 49-50.

The Examiner was clearly searching for a reference that discussed the application of DRAM to eDP. Unfortunately, due to an overly-restrictive search methodology, he failed to identify Endo, which directly discloses the subject matter he was looking for. The Petition seeks to remedy this error by applying Endo in combination with Takahashi.

V. REFERRAL IS WARRANTED BECAUSE APPLE’S SETTLED EXPECTATIONS OUTWEIGH WECREVENTION’S BASELESS ASSERTION OF EXPECTATIONS IN THE ’652 PATENT

A. The ’652 Patent is Young, Having Issued Less Than 2 Years Prior to Apple’s Petition Filing

WeCrevention fails to show that it enjoys settled expectations in the ’652 Patent. It does not. The ’652 Patent recently issued in November 2024, only 16 months prior to Apple’s instant petition. *See Samsung Electronics Co., Ltd., v. Wilus Institute of Standards*, IPR2025-00935, Pap. 12, a2-3 (Sep. 26, 2025) (finding that patent issued four years prior to the petition “has not been in force for a significant period of time” and thus “Patent Owner has not developed strong

settled expectations that favor discretionary denial”).

Also notable is WeCrevention’s additional assertion in the parallel litigation of two patents related to the ’652 Patent, neither of which have been in force for a significant period of time. *See* EX1056 (asserting the ’017 Patent, which issued in May 2021, and the ’098 Patent, which issued in February 2024).

Apple brought early challenges to each related patent, filing petitions on all three within just a few years of issuance, and in doing so has exposed the hollowness of WeCrevention’s claims to settled expectations. *See* IPR2026-00241, -00242, -00243; *Zhuhai Cosmx Battery Co. LTD. v. NingDe Amperex Technology Ltd.*, IPR2025-00385, Pap. 9, 2-3 (Jul. 2, 2025) (“the early challenges to the patents tip the balance against discretionary denial”).

B. WeCrevention Presents No Evidence of Licensing or Commercialization

Although baselessly asserting settled expectations, WeCrevention’s brief is notably silent regarding any licensing or commercial activity involving the ’652 Patent. Presumably, no such activity exists, which further weighs against WeCrevention’s claims of settled expectations. *See Shenzhen Tuozhu Tech. Co., Ltd. v. Stratasys, Inc.*, IPR2025-00531, Pap. 10, 3 (Jul. 17, 2025); *Intel Corp. v. Proxense LLC*, IPR2025-00327, Pap. 12, 2-3 (June 26, 2025).

C. Apple’s Settled Expectations Have Accrued for Years

Referral and institution are also warranted because the Apple products

accused in the district court litigation—i.e., “at least all versions and variants of Apple products that include LPDDR5 DRAM ... including without limitation, the iPhone ... the MacBook ...and the iPad”—are in a continuum of profoundly innovative product lines that Apple introduced to the market years before WeCrevention filed the ’652 Patent. EX1056, 4-5. Apple thus has its own settled expectations that outweigh the claims to settled expectations baselessly asserted by WeCrevention.

And, even if WeCrevention were credited with settled expectations, those expectations are nullified by other circumstances described herein that weigh strongly in favor of referral—including Apple’s leading role in promoting innovative American manufacturing, and the petition’s demonstration that the challenged patent is not only invalid, but in fact issued as a consequence of several material errors.

VI. CONCLUSION

Apple respectfully requests referral and institution of the instant petition.

Respectfully submitted,

Dated: May 20, 2026

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR § 42.6(e)(4), the undersigned certifies that on May 20, 2026, a complete and entire copy of this Petitioner's Opposition to Patent Owner's Request for Discretionary Denial and Accompanying Exhibits were provided by email to the Patent Owner by serving the correspondence email addresses of record as follows:

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