

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Samsung Electronics Co., Ltd.,
Petitioner,

v.

SiOnyx, LLC,
Patent Owner.

Case No. IPR2025-00064
Patent No. 10,347,682

PETITIONER'S PRELIMINARY REPLY ON DISCRETIONARY DENIAL

List of Exhibits

Exhibit	Description
1001	U.S. Patent No. 10,347,682 (the “’682 patent”)
1002	File History for U.S. Patent No. 10,347,682
1003	Provisional Application No. 61/841,326
1004	Declaration of Dr. Michael Lebby
1005	Curriculum Vitae of Dr. Michael Lebby
1006	U.S. Patent Application Publication No. 2012/0068289 (Alie)
1007	U.S. Patent Application Publication No. 2006/0081900 (Baggenstoss)
1008	Intentionally Left Blank
1009	U.S. Patent Application Publication No. 2012/0313204 (Haddad204)
1010	U.S. Patent Application Publication No. 2010/0006969 (Park)
1011	U.S. Patent No. 7,928,389 (Yap)
1012	U.S. Patent Application Publication No. 2011/0227138 (Haddad138)
1013	Samsung’s Proposed Constructions, Inv. No. 337-TA-1403 (Aug. 27, 2024)
1014	SiOnyx’s Proposed Constructions, Inv. No. 337-TA-1403 (Aug. 27, 2024)
1015	Email from N. Subhedar re: Claim Construction M&C Follow-Up (Sept. 8, 2024)
1016	U.S. Patent No. 8,680,591 (Haddad138 Issued Patent)
1017	U.S. Patent No. 9,496,308 (Haddad204 Issued Patent)
1018	The Authoritative Dictionary of IEEE Standard Terms (7th ed. 2000)
1019	Stephen Y. Chou et al., <i>Nanoimprint Lithography</i> , J. Vac. Sci. Technol. B 14(6), 4129-33 (1996)
1020	Gary S. May & Simon M. Sze, <i>Fundamentals of Semiconductor Fabrication</i> (2003)
1021	Provisional Application No. 61/311,004 (Haddad138-Provisional004)
1022	Provisional Application No. 61/243,434 (Haddad138-Provisional434)
1023	Provisional Application No. 61/311,107 (Haddad138-Provisional107)
1024	U.S. Patent Application Publication No. 2012/0146172 (Carey)
1025	U.S. Patent No. 7,442,629 (Mazur)
1026	U. Gösele & Q.-Y. Tong, <i>Semiconductor Wafer Bonding</i> (1998)
1027	U.S. Patent Application Publication No. 2011/0304003 (Tanida)
1028	S. Wolf, <i>Microchip Manufacturing</i> (2004)
1029	<i>Encyclopedia of Physical Science and Technology</i> (3rd ed. 2002)
1030	Christoph Posch, <i>Detectors, Pixels, and Signal Processing, in SMART CAMERAS</i> (Ahmed Nabil Belbachir ed., 2010)

Exhibit	Description
1031	E. Fred Schubert, LIGHT-EMITTING DIODES (2nd ed. 2006)
1032	U.S. Patent Application Publication No. 2006/0216904 (Tong)
1033	Provisional Application No. 61/317,147 (Alie-Provisional)
1034	U.S. Patent Application Publication No. 2013/0207168 (Edwards)
1035	Maik Wiemer, et al., <i>Plasma-Activated Bonding</i> , in Handbook of Wafer Bonding (Peter Ramm, et al., eds., 2012)
1036	Order No. 36: Construing Certain Claim Terms in parallel matter of In re Certain Sensors with Pixels and Products Containing the Same, Inv. No. 337-TA-1403 (U.S.I.T.C.)
1037	March 30,2025 Email from A. Ahn re: '682 IPR Stipulation

The Board should not exercise discretion under *Fintiv* to deny this patent challenge. The parallel district court case remains in its early stages, and there will be no overlap between the issues raised at the PTAB and in the district court, respectively.

Significantly, Defendants in *SiOnyx, LLC v. Samsung Electronics, Co., Ltd.*, 2:24-cv-00408 (E.D. Tex.), have stipulated not to pursue invalidity defenses based on grounds that were raised or reasonably could have been raised in this IPR if the Board institutes it. Ex-1037. Such *Sotera* stipulations remain “highly relevant” to the *Fintiv* analysis. Boalick, S., *Guidance on USPTO’s Rescission of “Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation”*, available at https://www.uspto.gov/sites/default/files/documents/guidance_memo_on_interim_procedure_recission_20250324.pdf, at 3 (March 24, 2025) (“2025 Guidance Memo”).

A *Sotera* stipulation “mitigates any concerns of duplicative efforts between the district court and the Board, as well as concerns of potentially conflicting decisions.” *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 at 19 (PTAB Dec. 1, 2020) (precedential as to section II.A). A *Sotera* stipulation thus “ensures that an inter partes review is a ‘true alternative’ to the district court proceeding.” *Id.* Accordingly, such a stipulation—as Petitioner has provided here—

“weighs strongly in favor of not exercising discretion to deny institution under 35 U.S.C. § 314(a).” *Id.*

Discretionary denial is therefore not warranted under a holistic analysis of the *Fintiv* factors. **First**, there is no stay in the district court case, so that factor remains neutral. **Second**, the district court trial is scheduled to commence on April 6, 2026, which is more than 1 month earlier than the Eastern District of Texas’ median time-to-trial of 23.5 months from filing.¹ Even if the district court meets that aggressive schedule, trial would commence only two months before the June 2026 expected due date for the Final Written Decision. The Board commonly attributes at most marginal weight to this factor in such situations. *See, e.g., Samsung Elecs. Co., Ltd. v. Power2B, Inc.*, IPR2021-01266, Paper 12 at 11, 15 (PTAB Jan. 26, 2022) (declining to exercise discretion to deny institution where a district court trial was scheduled for about two months before the final written decision date); *Quibi Holdings, LLC v. JBF Interlude 2009 Ltd*, IPR2021-00231, Paper 10 at 8, 11 (PTAB

¹ See https://www.uscourts.gov/sites/default/files/2025-03/stfj_c5_1231.2024.xlsx.

“[I]n applying *Fintiv*, the Board may consider any evidence that the parties make of record that bears on the proximity of the district court’s trial date . . . , including median time-to-trial statistics for civil actions in the district court in which the parallel litigation resides.” 2025 Guidance Memo at 3.

June 7, 2021) (same). **Third**, the district court case is still in early stages. The claim construction hearing is not scheduled until October 2025, fact discovery does not close until November 2025, and expert discovery closes thereafter in December 2025.

Fourth, as discussed above, Defendants’ *Sotera* stipulation “is highly relevant” and strongly favors not exercising discretion to deny institution. Moreover, while this IPR challenges claims 1–44, only 25 claims (1–11, 13–19, and 21–27) are asserted in district court. There is no overlap regarding the other 19 challenged claims (12, 20, and 28–44). This lack of overlap in claims also favors not exercising discretion to deny institution. **Fifth**, Petitioner and Real Parties-in-Interest are Defendants in district court, but that alone is not enough to warrant discretionary denial. **Sixth**, Petitioner has established a strong case on the merits, as demonstrated by the Petition and Patent Owner’s limited discussion of the merits in its POPR.

Under a holistic assessment of these considerations, Petitioner respectfully submits that this IPR presents an appropriate case for institution and resolution by the Board. The Board should not exercise discretion to deny review.

Date: March 31, 2025

Respectfully submitted,

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IPR2025-00064

Patent No. 10,347,682

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6, I hereby certify that the foregoing Petitioner's Preliminary Reply On Discretionary Denial, together with Exhibit 1037, was served by electronic mail on the following counsel of record for patent owner:

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Date: March 31, 2025

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