

PUBLIC VERSION

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SEMICONDUCTOR COMPONENTS INDUSTRIES, LLC,
Petitioner

v.

GREENTHREAD LLC,
Patent Owner

IPR2024-00265
U.S. Patent No. 9,190,502

**PETITIONER'S OPPOSITION TO PATENT OWNER'S
REQUEST TO FILE A MOTION FOR ADDITIONAL DISCOVERY**

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TABLE OF EXHIBITS

Exhibit No.	Description
1001	U.S. Patent No. 9,190,502 to Rao (the “’502 Patent”)
1002	Prosecution History of the ’502 Patent (“the Prosecution History”)
1003	Declaration of Travis Blalock, PhD
1004	Curriculum Vitae of Travis Blalock, PhD
1005	U.S. Patent No. 4,684,971 (“Payne”)
1006	U.S. Patent No. 4,907,058 to Sakai (“Sakai”)
1007	U.S. Patent No. 6,043,114 to Kawagoe, et al., (“Kawagoe”)
1008A	Stanley Wolf and Richard N. Tauber, <i>Silicon Processing For The VLSI Era</i> , Vol 1, Lattice Press (2000) (“Wolf.1”)
1008B	Stanley Wolf and Richard N. Tauber, <i>Silicon Processing For The VLSI Era</i> , Vol. 2, Lattice Press (2000) (“Wolf.2”)
1008C	Stanley Wolf and Richard N. Tauber, <i>Silicon Processing For The VLSI Era</i> , Vol. 3, Lattice Press (2000) (“Wolf.3”)
1008D	Stanley Wolf and Richard N. Tauber, <i>Silicon Processing For The VLSI Era</i> , Vol. 4, Lattice Press (2000) (“Wolf.4”)
1009	U.S. Patent No. 4,160,985 (“Kamins”)
1010	U.S. Patent No. 4,481,522 (“Jastrzebski”)
1011	U.S. Patent Application Publication No. 2003/0042511 (“Rhodes”)
1012	U.S. Patent Application Publication No. 2002/0102783 (“Fujimoto”)
1013	Wang and Agrawal, <i>Single Event Upset: An Embedded Tutorial</i> , 21st Intl Conf on VLSI Design, IEEE 2008 (“Wang”)
1014	Publication Declaration of Alyssa G. Resnick for Wolf.1 and Wolf.2 (“Resnick Decl.”)
1015	Publication Declaration of Rachel J. Watters for Wolf.3 and Wolf.4 (“Watters Decl.”)
1016	IPR2020-00290, Patent Owner Preliminary Response
1017	U.S. Pat. No. 11,121,222 (the “’222 Patent”)
1018	U.S. Pat. No. 11,316,014 (the “’014 Patent”)
1019	<i>Greenthread, LLC, v. [REDACTED] Elecs. Co., Ltd. et al.</i> , Civil Action No. 2:19-cv-00147-JRG, Dkt. 67 (E.D. Tex. Apr. 20, 2019)
1020	Prosecution History of U.S. Pat. No. 11,121,222
1021	Prosecution History of U.S. Pat. No. 11,316,014
1022	U.S. Patent Application Publication No. 2004/0063288 (“Kenney”)

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1023	Jaeger, <i>Introduction to Microelectronic Fabrication</i> , Vol. V, Addison-Wesley Modular Series on Solid State Devices (1988) (“Jaeger”)
1024	U.S. District Courts – Case Statistics, obtained at https://www.uscourts.gov/statistics-reports/analysis-reports/federal-court-management-statistics , dated March 31, 2023
1025	U.S. Patent No. 4,435,896 (“Parrillo”)
1026	L.C. Parrillo, R.S. Payne et al., <i>Twin-Tub CMOS - A Technology for VLSI Circuits</i> , IEEE 1980 (“Parrillo2”)
1027	U.S. Patent Application Publication No. 2007/0045682 to Hong <i>et al.</i> (“Hong”)
1028	The Oxford American Dictionary and Language Guide, Oxford University Press (1996)
1029	Defendants’ Opening Claim Construction Brief, <i>Greenthread, LLC v. Intel Corp., et al.</i> , Civil Action No. 6:22-cv-00105-ADA, Dkt. 82 (W.D. Tex. Oct. 10, 2022)
1030	Greenthread’s Response Claim Construction Brief, <i>Greenthread, LLC v. Intel Corp., et al.</i> , Civil Action No. 6:22-cv-00105-ADA, Dkt. 96 (W.D. Tex. Oct. 31, 2022)
1031	Defendants’ Reply Claim Construction Brief, <i>Greenthread, LLC v. Intel Corp., et al.</i> , Civil Action No. 6:22-cv-00105-ADA, Dkt. 100 (W.D. Tex. Nov. 14, 2022)
1032	Greenthread’s Sur-Reply Claim Construction Brief, <i>Greenthread, LLC v. Intel Corp., et al.</i> , Civil Action No. 6:22-cv-00105-ADA, Dkt. 102 (W.D. Tex. Nov. 28, 2022)
1033	Proposed Claim Constructions in the District Court Case, <i>Greenthread, LLC v. Intel Corp., et al.</i> , Civil Action No. 6:22-cv-00105-ADA, Dkt. 102 (W.D. Tex. Nov. 28, 2022)
1034	Redacted District Court Case Transfer Order, <i>Greenthread, LLC v. Intel Corp., et al.</i> , Civil Action No. 6:22-cv-00105-ADA, Dkt. 113 (W.D. Tex. Dec. 27, 2022)
1035	<i>Greenthread, LLC, v. Samsung Elecs. Co., Ltd. et al.</i> , Civil Action No. 2:19-cv-00147-JRG, Dkt. 105 (E.D. Tex. Jul. 9, 2020)
1036	IPR2020-00290, Termination Order

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1037	District Court’s Tentative Claim Construction Ruling, <i>Greenthread, LLC v. Intel Corp. et al.</i> , Civil Action No. 6:22-cv-00105-ADA (W.D. Tex.)
1038	U.S. Patent Application Publication No. 2003/0183856 to Wieczorek (“Wieczorek”)
1039	Parillo IEEE Citation List
1040	Prosecution History of U.S. Patent No. 8,421,195
1041	Rabaey <i>et al.</i> , <i>Digital Integrated Circuits, A Design Perspective</i> , Prentice Hall Electronics and VLSI Series (2003) (“Rabaey”)
1042	Sze, <i>Semiconductor Devices Physics and Technology</i> , 2d Ed., John Wiley & Sons (2002)
1043	Publication Declaration of Martin L. Knott for Rabaey (“Knott Decl.”)
1044	Maziasz and Hayes, <i>Layout Minimization of CMOS Cells</i> , Kluwer Academic Publishers (1992) (“Maziasz”)
1045	Public Declaration of Sean O’Bryan for Maziasz (“O’Bryan Decl.”)
1046	US. Patent No. 5,986,924 (“Yamada”)
1047	U.S. Patent No. 8,421,195 to Rao (the “’195 Patent”)
1048	U.S. Patent No. 6,614,560 (“Silverbrook”)
1049	Wong, H. P., et al. “CMOS active pixel image sensors fabricated using a 1.8-V 0.25-μm CMOS technology.” <i>IEEE Transactions on Electron Devices</i> 45.4 (1998): 889-894.
1050	Publication Declaration of Silvia Hall-Ellis for Wolf
1051	Law360 Article “Stays Pending IPR in Del. District Courts Are Here To Stay,” Kraning and Del Dotto, March 11, 2022.
1052	McGraw-Hill Dictionary of Scientific and Technical Terms (2003)
1053	01242 Paper 32 - Decision granting Inter Partes Review - PO material
1054	01242 Paper 35 - Decision granting Inter Partes Review – public
1055	01243 Paper 31 - Decision granting Inter Partes Review - PO material
1056	01243 Paper 34 - Decision granting Inter Partes Review – public
1057	01244 Paper 32 - Decision granting Inter Partes Review - PO material
1058	01244 Paper 35 - Decision granting Inter Partes Review – public
1059	01242 Paper 22 - Petitioner's Authorized Reply to Patent Owner's Preliminary Response – confidential

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Exhibit No.	Description
1060	01243 Paper 21 - Petitioner's Authorized Reply to Patent Owner's Preliminary Response – confidential
1061	01244 Paper 22 - Petitioner's Authorized Reply to Patent Owner's Preliminary Response - confidential

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Because the Board has already rejected an identical motion for additional discovery in prior proceedings (IPR2023-01242, -01243, and -01244, the “Prior IPRs”), Patent Owner (“PO”) should not be authorized to pursue additional discovery here. PO does not hide that it is seeking to relitigate “the same discovery issue” that PO lost in the Prior IPRs. Paper 7 at 1. Nor does PO make any argument distinguishing this IPR from the Prior IPRs. As a matter of consistency and fairness—and because the Board’s prior decision was legally correct—the prior decision denying PO’s motion should control and PO’s request should be denied.

I. PO’S FLAWED PRIVACY ARGUMENTS DO NOT WARRANT DISCOVERY

The premise of PO’s request is that a bare customer-manufacturer relationship, along with an agreement between PO and RPX Corporation—to which Petitioner is not a party—establishes a privacy relationship that bars Petitioner from seeking *inter partes* review. Paper 7 at 1–2. PO is wrong. PO raised identical arguments in the Prior IPRs, and the Board correctly found that PO’s privacy theories had no merit, regardless of what information PO sought to discover. *See* EX2912 at 9; *see also* EX1053 IPR2023-01242, Paper 32 (confidential) and EX1054 IPR2023-01242, Paper 35 (granting institution, rejecting PO’s privacy arguments). As such, just like in the Prior IPRs, *Garmin* factors 1 and 2 require denying PO’s motion for discovery. *See* EX2912 at 6–13.

A. *The Board correctly found no privacy with Intel, [REDACTED] or [REDACTED]*

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PO's privity arguments have no merit. As the Board correctly stated in the Prior IPRs, "Patent Owner loses sight of the rationale behind the privity provision of § 315(b), which is 'to prevent successive challenges to a patent by those who previously have had the opportunity to make such challenges in prior litigation.'" EX2912 at 6–7 (quoting *WesternGeco LLC v. ION Geophysical Corp.*, 889 F.3d 1308, 1319 (Fed. Cir. 2018)). Because Petitioner was not involved in PO's prior litigations or IPRs involving Intel, [REDACTED] and [REDACTED] and none of those parties are participating in this IPR—there is no relevant privity. *Id.* at 6-13.

Because PO has not alleged that Petitioner has anything other than a standard manufacturer-customer relationship with Intel, [REDACTED] or [REDACTED] PO's arguments about Petitioner supplying products to these entities are red herrings.¹ As the Board correctly recognized, under "controlling Federal Circuit precedent," a "fairly standard customer-manufacturer relationship" does **not** mean "that both [parties] should be bound by the trial outcome and related estoppels." EX2912 at 9 (quoting with alteration *WesternGeco*, 889 F.3d at 1321; citing *Wi-Fi One, LLC v. Broadcom Corp.*, 887 F.3d 1329, 1341 (Fed. Cir. 2018)). Similarly, PO's arguments about the

¹ PO misidentifies statements as "undisputed" when a dispute exists. *See* Paper 7 at 1-2. It is unnecessary to address these improper statements further because they do not undermine the Board's prior sound reasoning for denying additional discovery.

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potential assertion of a license defense have no merit. To the contrary—again as the Board correctly recognized—a third-party beneficiary to a contract (as PO alleges Petitioner is in this context) is *not* a privity in contract law. *See* EX2912 at 11 n.6 (citing *Pac. Gas & Elec. Co. v. United States*, 838 F.3d 1341, 1350–51 (Fed. Cir. 2016), *Prime Finish, LLC v. Cameo, LLC*, 487 F. App’x 956, 959 (6th Cir. 2012)).

B. No discovery is necessary

Discovery into Petitioner’s sales relationships with Intel, [REDACTED] and/or [REDACTED] is unnecessary because there is no plausible discovery that would cause a time bar to apply in these IPRs. As the Board correctly stated in the prior IPRs:

Patent Owner’s discovery requests seek documents, such as sales agreements, design agreements, and communications about product design, that are characteristic of a standard customer-manufacturer relationship. The requests are not aimed at discovering evidence that would be useful in determining whether Petitioner has a close relationship with Intel, [REDACTED] or [REDACTED] *as it relates to the prior infringement litigation and IPRs.*

EX2912 at 9 (emphasis original, citing *WesternGeco*, 889 F.3d at 1319).

II. NO FURTHER BRIEFING IS NECESSARY

PO has not identified any additional issues that need briefing to resolve this dispute. In the Prior IPRs, the Board fully considered and rejected all of PO’s arguments, and PO has not explained why a different result would be appropriate in this IPR. Because the Board’s prior decision was correct and there are no changed circumstances, there is no reason to waste resources rehashing resolved issues here.

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Dated: March 5, 2024

Respectfully submitted,

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CERTIFICATE OF SERVICE

In accordance with 37 C.F.R. § 42.6(e), the undersigned certifies that on the 5th day of March, 2024, a complete and entire copy of this **PETITIONER'S OPPOSITION TO PATENT OWNER'S REQUEST TO FILE A MOTION FOR ADDITIONAL DISCOVERY** was served on Patent Owner electronically via email to counsel for the Patent Owner:

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