

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

QUALCOMM INCORPORATED,
Petitioner,

v.

COLLABO INNOVATIONS, INC.,
Patent Owner.

Case No. IPR2025-01015
U.S. Patent No. 7,930,575

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

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List of Exhibits

Exhibit	Description
1001	U.S. Patent No. 7,930,575 (the “575 Patent”)
1002	File History of U.S. Patent No. 7,930,575 (“File History”)
1003	Declaration of Murali Annavaram, Ph.D.
1004	<i>Curriculum Vitae</i> of Murali Annavaram
1005	U.S. Patent No. 7,293,183 (“Lee”)
1006	U.S. Patent No. 7,664,970 (“Jahagirdar”)
1007	U.S. Patent No. 7,219,248 (“Shikata”)
1008	U.S. Patent No. 5,530,879 (“Crump”)
1009	U.S. Patent No. 7,167,991 (“Higashida”)
1010	U.S. Patent No. 5,502,689 (“Peterson”)
1011	U.S. Patent No. 7,369,815 (“Kang”)
1012	U.S. Patent No. 5,390,350 (“Chung”)
1013	Petition for <i>Inter Partes</i> Review, <i>Advanced Micro Devices, Inc. v. Collabo Innovations Inc.</i> , IPR2019-01523, Paper 2 (P.T.A.B. Sep. 16, 2019) (“Jahagirdar IPR Petition”)
1014	Patent Owner’s Preliminary Response, <i>Advanced Micro Devices, Inc. v. Collabo Innovations Inc.</i> , IPR2019-01523, Paper 9 (P.T.A.B. Jan. 3, 2020) (“Jahagirdar POPR”)
1015	Decision Denying Institution of <i>Inter Partes</i> Review, <i>Advanced Micro Devices, Inc. v. Collabo Innovations Inc.</i> , IPR2019-01523, Paper 18 (P.T.A.B. Mar. 27, 2020) (“Jahagirdar Institution Decision”)
1016	Petition for <i>Inter Partes</i> Review, <i>Advanced Micro Devices, Inc. v. Collabo Innovations Inc.</i> , IPR2019-0152, Paper 2 (P.T.A.B. Sept. 16, 2019) (“Chung IPR Petition”)
1017	Patent Owner’s Preliminary Response, <i>Advanced Micro Devices, Inc. v. Collabo Innovations Inc.</i> , IPR2019-01524, Paper 9 (P.T.A.B. Jan. 3, 2020) (“Chung POPR”)
1018	Decision Denying Institution of <i>Inter Partes</i> Review, <i>Advanced Micro Devices, Inc. v. Collabo Innovations Inc.</i> , IPR2019-01524, Paper 13 (P.T.A.B. Mar. 30, 2020) (“Chung Institution Decision”)
1019	Complaint, <i>Collabo Innovations, Inc. v. Advanced Micro Devices, Inc.</i> , No. 1:18-cv-552, ECF 1 (W.D. Tex. July 2, 2018) (“AMD Complaint”)

Exhibit	Description
1020	Claim Construction Order, <i>Collabo Innovations, Inc.</i> , No. 1:18-cv-552, ECF 93 (W.D. Tex. July 5, 2023) (“AMD Claim Construction”)
1021	Michael J. Flynn, <i>Computer Architecture: Pipelined and Parallel Processor Design</i> (1995) (“Flynn Textbook”)
1022	Excerpts from <i>The Modern Dictionary of Electronics</i> (7th Ed. 1999)
1023	M.V. Wilkes, <i>Microprogramming</i> , AIEE-ACM-IRE: Papers and Discussions Presented at the Dec. 3-5, 1958 Easter Joint Computer Conference (1958) (“Wilkes Paper”)
1024	M.V. Wilkes, <i>The Growth of Interest in Microprogramming: A Literature Survey</i> , 1 Computing Surveys 139 (1969) (“Wilkes Survey”)
1025	David A. Patterson, <i>Microprogramming</i> , 248 Sci. Am. 50 (1983)
1026	Mutunori Igarashi et al., <i>A Low-power Design Method Using Multiple Supply Voltages</i> , in <i>Proceedings of 1997 International Symposium on Low Power Electronics and Design</i> , Monterey, CA 36 (1997) (“Igarashi”)
1027	Jui-Ming Chang & Massoud Pedram, <i>Energy Minimization Using Multiple Supply Voltages</i> , 5 IEEE Transactions on Very Large Scale Integration (VLSI) Systems 436 (1997) (“Chang”)
1028	U.S. Patent No. 7,174,472 (“Hill”)
1029	Zhigang Hu et al., <i>Microarchitectural Techniques for Power Gating of Execution Units</i> , in <i>Proceedings of 2004 International Symposium on Low Power Electronics and Design</i> 32 (2004) (“Hu”)
1030	Shekhar Borkar, <i>Design Challenges of Technology Scaling</i> , 19 IEEE Micro 23 (July-Aug. 1999) (“Borkar”)
1031	Lawrence T. Clark et al., <i>Standby Power Management for a 0.18μm Microprocessor</i> , in <i>Proceedings of 2002 International Symposium on Low Power Electronics and Design</i> 7 (2002) (“Clark”)
1032	Luca Benini et al., <i>A Survey of Design Technologies for System-Level Dynamic Power Management</i> , 8 IEEE Transactions on Very Large Scale Integration (VLSI) Systems 299 (2000) (“Benini”)

Exhibit	Description
1033	Resve Saleh et al., <i>System-on-Chip: Reuse and Integration</i> , 94 Proceedings of the IEEE 1050 (2006) (“Saleh”)
1034	Raj Nair & Bao Tang, <i>Low Cost On-Die CMOS Distributed Voltage Regulation for Microcontrollers</i> , in <i>Proceedings of the 24th European Solid-State Circuits Conference</i> 188 (1998) (“Nair”)
1035	L. Richard Carley & Akshay Aggarwal, <i>A Completely On-Chip Voltage Regulation Technique for Low Power Digital Circuits</i> , in <i>Proceedings of 1999 International Symposium on Low Power Electronics and Design</i> 109 (1999) (“Carley”)
1036	Sape J. Mullender, <i>Interprocess Communication: Computer Networks</i> , Ch. 1, 47 (1992) (“Mullender”)
1037	Howard Lee Morgan, <i>An Interrupt Based Organization for Management Information Systems</i> , 13 Communications of the ACM 734 (1970) (“Morgan”)
1038	A.C. Fischer-Cripps, <i>Newnes Interfacing Companion</i> (2002) (“Fischer-Cripps”)
1039	B Holdsworth & R.C. Woods, <i>Digital Logic Design</i> (2003) (“Holdsworth”)
1040	Jurij Silc et al., <i>Processor Architecture: From Dataflow to Superscalar and Beyond</i> (Springer 1999) (“Processor Architecture”)
1041	Preliminary Infringement Contentions, <i>Collabo Innovations, Inc. v. Qualcomm Inc.</i> , No. 6:24-cv-00472 (W.D. Tex. Dec. 6, 2024) (“Collabo’s Preliminary Infringement Contentions”)
1042	U.S. Patent No. 6,141,762 to Nicol et al. (“Nicol”)
1043	U.S. Patent No. 5,784,628 to Reneris (“Reneris”)
1044	U.S. Patent No. 6,804,632 B2 to Orenstien et al. (“Orenstien”)
1045	Excerpts from <i>The Authoritative Dictionary of IEEE Standard Terms</i> (7th Ed. 2000)
1046	Excerpts from <i>Microsoft Computer Dictionary</i> (4th Ed. 1999)
1047	Joint Claim Construction Statement, <i>Collabo Innovations, Inc. v. Qualcomm Inc.</i> , No. 6:24-cv-00472-ADA (W.D. Tex.)
1048	Opening Claim Construction Brief, <i>Collabo Innovations, Inc. v. Qualcomm Inc.</i> , No. 6:24-cv-00472-ADA, Dkt. 32 (W.D. Tex.)
1049	Responsive Claim Construction Brief, <i>Collabo Innovations, Inc. v. Qualcomm Inc.</i> , No. 6:24-cv-00472-ADA, Dkt. 33 (W.D. Tex.)

Exhibit	Description
1050	James Leiterman, <i>32/63-BIT 80x86 Assembly Language Architecture</i> , 2005 (“Leiterman”)
1051	U.S. Patent Application Publication No. 2004/0257898 (“Ozawa”)
1052	U.S. Patent No. 6,715,090 (“Totsuka”)
1053	Complaint, <i>Collabo Innovations, Inc. v. Qualcomm Incorporated</i> , No. 6:24-cv-00472, ECF 1 (W.D. Tex. Sept. 13, 2024)
1054	Scheduling Order, <i>Collabo Innovations, Inc. v. Qualcomm Incorporated</i> , No. 6:24-cv-00472, ECF 29 (W.D. Tex. Dec. 20, 2024)
1055	July 15, 2025 Email from A. Sharma re: IPR2025-01015 (US 7,930,575)
1056	Assignment abstract of title for Application 11898145

I. Introduction

The Director should not exercise his discretion to deny this IPR and instead should refer the Petition to the Board.

II. Settled Expectations Favor Petitioner And Do Not Warrant Denial

The alleged settled expectations of Patent Owner Collabo Innovations, Inc. (“Collabo” or “Patent Owner”) in its 14-year old patent do not warrant denial.

U.S. Patent No. 7,930,575 (the “’575 patent”) was issued in 2011 to Panasonic Corporation. Ex-1001. There is no evidence that Panasonic asserted the ’575 patent against anyone. The ’575 patent was assigned to Patent Owner in 2013. Ex-1056. Patent Owner is a non-practicing entity with no known investments in research and development.¹ Patent Owner filed a single patent infringement

¹ Petitioner is unable to provide evidence to show the *absence* of either (1) assertion of the ’575 patent or (2) R&D investment by Patent Owner. Petitioner respectfully submits that the burden of establishing what patent owners have or have not done should fall on patent owners, not petitioners, despite the Office’s suggestions to the contrary. *See, e.g., JinkoSolar Co. Ltd. v. Longi Green Energy Technology Co. Ltd.*, IPR2025-00859, Paper 10 at 2 (P.T.A.B. Sept. 3, 2025). Placing such a burden on patent owners “makes sense” because they are both (1)

complaint against AMD in July 2018, but did not accuse the products of Qualcomm Incorporated (“Qualcomm” or “Petitioner”) of infringement at that time. Ex-1019. Patent Owner instead waited more than six years to file a complaint against Petitioner in September 2024, relying on documents copyrighted as early as 2013. Ex-1053, ¶27 (citing Qualcomm Snapdragon 600 Processors, Product Brief²). Petitioner had been selling the accused products for more than a decade before Patent Owner filed the complaint.

Although Patent Owner has owned the ’575 patent since 2013, it chose not to assert it against Petitioner Qualcomm until 2024. If anything, it is Petitioner that has had settled expectations—reinforced by Patent Owner’s decade of inaction—of avoiding litigation from Patent Owner. After Patent Owner finally filed suit last year, Petitioner promptly filed this IPR, in keeping with the text, spirit, and policy of the AIA.

the parties seeking relief and (2) in a better position to access relevant evidence.

Worlds Inc. v. Bungie, Inc., 903 F.3d 1237, 1242-43 (Fed. Cir. 2018).

² Available at <https://www.qualcomm.com/content/dam/qcomm-martech/dm-assets/documents/snapdragon-600-processor-product-brief.pdf>.

III. Collabo’s Reliance On *Fintiv* Is Misplaced

Collabo argues that the Director should deny institution under *Fintiv*. That decision does not govern the Director’s analysis here, but Qualcomm responds to pertinent considerations to show that Collabo’s reliance on *Fintiv* is misplaced.

A. A stay has not yet been sought or ruled upon

Petitioner has not yet requested a stay of the litigation. The Board should “decline to infer, based on actions taken in different cases with different facts, how the District Court would rule should a stay be requested by the parties in the parallel case here.” *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15 at 12 (P.T.A.B. May 13, 2020) (informative).

Further, Judge Albright has granted opposed motions to stay—even after conducting a *Markman* hearing—where, as here, (1) a petitioner agreed to be bound by the full scope of Section 315 estoppel and more, with a stipulation that goes beyond that in *Sotera*, and (2) a final written decision invalidating all asserted claims would nullify Patent Owner’s infringement claims in the district court. *See Sonrai Memory Ltd. v. Western Digital Techs., Inc.*, No. 6:21-cv-01168-ADA (W.D. Tex. Aug. 14, 2022) (granting motion to stay filed post-*Markman*, even though case was “no longer in its early stages,” because breadth of estoppel would simplify issues and institution decision indicated a reasonable likelihood of invalidating multiple claims); *Kirsch Research & Dev., LLC v. IKO Indus., Inc.*,

No. 6:20-cv-00317-ADA (W.D. Tex. Oct. 4, 2021) (granting stay where petitioner “agree[d] to be estopped under the full scope of § 315(e)”). Patent Owner’s arguments regarding the probability of a stay therefore do not support discretionary denial.

B. A Final Written Decision will likely precede trial

Petitioner filed the Petition promptly on May 20, 2025 (Paper 1), only about eight months after Patent Owner asserted the ’575 patent against Petitioner on September 13, 2024. The Director has indicated that such diligence can weigh against discretionary denial. *See, e.g., Berkshire Hathaway Energy Co. v. Birchtech Corp.*, IPR2025-00274, -00278, -00280, -00281, Paper 23 at 3 (P.T.A.B. July 2, 2025). The filing date was accorded one month later, on June 20, 2025 (Paper 5), meaning that the decision on institution and the Final Written Decision are due in mid-December 2025 and 2026, respectively.

While trial in the litigation is currently scheduled for May 18, 2026, Ex-1054 at 4, Judge Albright seldom holds trials on the date initially set. IPR2025-00485, Ex-1047. Thus, the scheduled trial date just 20 months after filing is likely to be extended, and multiple datapoints suggest that any trial would occur after the Final Written Decision. First, the median 27.2 month time to trial over the past six years for the Western District of Texas is instructive. IPR2025-00485, Paper 7, 6 (citing IPR2025-00485, EX-2005). This alone would put the likely trial date for the

litigation in late December 2026, which would be shortly after the Final Written Decision in this proceeding.

Reflecting his very large patent docket, Judge Albright's median and average times to patent trial are even longer than the Western District median time to trial. *See* IPR2025-00485, EX-1047. Specifically, over the past four years, the median time to trial for patent cases in Judge Albright's court has trended upward from 27.1 months over the past four years, to 28.6 months over the past three years, to 30.2 months over the past two years, and to 32.9 months over the past one year. *See id.* Similarly, the average time to trial for patent cases reaching jury selection has trended upward from 28.9 months over the past four years, to 30.3 months over the past three years, to 32.3 months over the past two years, and to 33.9 months over the past one year. *See id.* Of these, even the number most favorable to Patent Owner—27.1 months median time-to-trial over the past four years—would also indicate a trial in the litigation in late December of 2026, shortly after the Final Written Decision is expected here. Thus, contrary to Collabo's assertion, the district court trial is not likely to precede the Final Written Decision.

C. The parties have not invested sufficient resources in litigation to weigh against institution

The parties' and the Court's investment in the litigation has been minimal. In the parallel litigation, the parties have only held a *Markman* hearing. Discovery is

ongoing, and so far, has been largely limited to technical documents. No 30(b)(6) notices have been served, and there have been no 30(b)(6) depositions. Petitioner served one subpoena, but has not taken any third-party depositions. Discovery will continue until December 19, 2025. There has been no expert discovery, which will close on February 20, 2026. Indeed, Collabo's confusion about what grounds the district court trial may include (Br. at 12-18) shows how little the parties have invested in focusing the invalidity case for trial.

D. Qualcomm's beyond-*Sotera* stipulation mitigates risk of overlap or conflicting issues

Petitioner has offered a stipulation going beyond even the *Sotera* stipulation. Ex-1055. Namely, if the Petition is instituted, Petitioner "will not pursue an invalidity defense in *Collabo Innovations, Inc. v. Qualcomm, Inc.*, 6:24-cv-00472 (W.D. Tex.) that the claims of the '575 Patent subject to the instituted IPR are invalid based on grounds that were raised or reasonably could have been raised in the instituted IPR petition and any grounds that include any prior art references relied upon in any of the grounds in the IPR petition." Ex-1055. Yet Patent Owner asserts that "there is substantial overlap in the invalidity theories presented in the Petition and in the Litigation." Br. at 13. Patent Owner is wrong. Not only has Petitioner offered a stipulation consistent with *Sotera*, Petitioner has further offered not to assert "any prior art references relied upon in any of the grounds in the IPR

petition.” Ex-1055. There is simply no overlap between the IPR and the district court litigation.

Patent Owner’s argument that “Petitioner’s stipulation does not cover Petitioner’s substantial product and system-based invalidity contentions” highlights the fact that there is no overlap between the two proceedings. If the Petition were instituted, only product prior art-based grounds will remain in the district court—grounds that cannot be asserted in an IPR proceeding. Patent Owner’s reliance on *Motorola Solutions, Inc. v. Stellar, LLC*, IPR2024-01205, Paper 19 at 3-4 (P.T.A.B. Mar. 28, 2025) is inapposite. There, the Director found that the petitioner’s stipulation did not ensure that the IPR proceedings would be a “true alternative” because Petitioner could assert in district court combination of system prior art with the prior art references asserted in the IPR proceedings. *Id.* Here, Petitioner stipulated not to rely on any such combinations, if the Petition were to be instituted. Ex-1055.

“Accordingly, Petitioner’s broad stipulation ensures that an inter partes review is a ‘true alternative’ to the district court proceeding.” *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 at 19 (P.T.A.B. Dec. 1, 2020) (designated Precedential Dec. 17, 2020). As in *Sotera*, this factor therefore “weighs strongly in favor of not exercising discretion to deny institution under 35 U.S.C. § 314(a).” *Id.*

As shown above, Collabo's reliance on *Fintiv* is misplaced.

IV. Section 325(d) Does Not Warrant Denial

Section 325(d) does not warrant denial under the *Advanced Bionics* test.

Advanced Bionics, IPR2019-01469, Paper 6 at 8 (“(1) whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office; and (2) if either condition of first part of the framework is satisfied, whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims”).

Patent Owner's § 325(d) argument fails under the first prong of *Advanced Bionics* because none of the grounds presented in the Petition have been previously considered by the Office. The Petition relies on two primary references: U.S. 7,293,183 (Lee) and U.S. 7,219,248 (Shikata). Neither reference was discussed by the Examiner during prosecution. Ex-1002. Neither reference was discussed in the AMD IPRs. Ex-1013; Ex-1016. Therefore, the combinations discussed in the Petition, such as the combination of Lee and Jahagirdar and the combination of Shikata and Crump have not been considered by the Office.

V. Conclusion

The Director should not exercise the discretion under 35 U.S.C. §§ 314(a) and 325(d) to deny the Petition in this *inter partes* review. Instead, the Director should refer the Petition to the Board for it to consider the merits of the Petition.

Date: September 22, 2025

Respectfully submitted,

By: /Scott C. Weidenfeller/

Scott C. Weidenfeller

Registration No.: 54,531

Counsel for Petitioner

CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), I certify that the foregoing Petitioner's Opposition to Patent Owner's Request for Discretionary Denial of Institution contains 1,783 words based on the word count indicated by the word-processing program used to generate the paper and excluding those portions exempted by 37 C.F.R. § 42.24(a).

Date: September 22, 2025

/Scott C. Weidenfeller/
Scott C. Weidenfeller
Registration No.: 54,531

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6, I hereby certify that the foregoing Petitioner's Opposition to Patent Owner's Request for Discretionary Denial of Institution was served by electronic mail today on the following counsel of record for Patent Owner:

Collabo@nelbum.com

Date: September 22, 2025

/Scott C. Weidenfeller/
Scott C. Weidenfeller
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