

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,

Petitioner,

v.

APEX BEAM TECHNOLOGIES LLC,

Patent Owner.

Patent No. 11,546,110

Filing Date: January 7, 2021

Issue Date: January 3, 2023

Inventor: Xiaobo Zhang

Title: METHOD AND DEVICE FOR MULTI-ANTENNA TRANSMISSION
IN USER EQUIPMENT (UE) AND BASE STATION

**PATENT OWNER'S REQUEST FOR
DISCRETIONARY DENIAL OF INSTITUTION**

Case No. IPR2025-00903

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LIST OF EXHIBITS

Exhibit No.	Description of Document
2001	Scheduling Order, Dkt. 40, <i>Apex Beam Techs. LLC v. Apple Inc.</i> , Case No. 6:24-cv-00223-ADA (W.D. Tex. June 18, 2025)
2002	Apex Beam Technologies LLC's Infringement Contentions and P.R. 3-1 and 3-2 Disclosures in <i>Apex Beam Techs. LLC v. Apple Inc.</i> , Case No. 6:24-cv-00223-ADA (W.D. Tex.), dated May 27, 2025
2003	Complaint, Dkt. 1, <i>Apex Beam Techs. LLC v. Apple Inc.</i> , Case No. 6:24-cv-00223-ADA (W.D. Tex. April 29, 2024)

I. INTRODUCTION

Pursuant to the Director’s March 26, 2025, Memorandum Regarding Interim Processes for PTAB Workload Management, Apex Beam Technologies LLC (“Patent Owner”) files this Request for Discretionary Denial of Institution.

On May 5, 2025, Apple Inc. (“Petitioner”) submitted a Petition (Paper No. 2, “Petition” or “Pet.”) requesting *inter partes* review (“IPR”) of U.S. Patent No. 11,546,110 (APPLE-1001, the “’110 Patent”), challenging Claims 1-20 (the “Challenged Claims”). Petitioner and Patent Owner have a long history of FRAND negotiations, starting on May 15, 2023 when Patent Owner offered a license on FRAND terms to its patents. Ex. 2003, ¶¶ 17-21. On June 5, 2023, Petitioner responded that it “had been aware of ABT’s SEPs for at least six months before receiving ABT’s correspondence,” which would be at least December 2022. *Id.*, ¶ 18. “Apple was directed to ABT[’]s detailed complaints for patent infringement showing how Apple’s products are covered by the ABT SEPs in response to Apple’s requests for ‘detailed claim charts’ referenced therein.” *Id.* Negotiations have continued since Petitioner’s June 5, 2023 letter and are still ongoing. *Id.*, ¶¶ 17-21.

The Petition identifies co-pending district court litigation *Apex Beam Techs. LLC v. Apple Inc.*, Case No. 6:24-cv-00223-ADA (W.D. Tex.) (the “District Court Litigation”), with a trial date set for December 7, 2026. Pet. at 89; Ex. 2001. With

Patent Owner's Preliminary Response due September 11, 2025, institution of any grounds will result in the issuance of a Final Written Decision ("FWD") by December 11, 2026. Despite the open line of communication between Petitioner and Patent Owner for FRAND negotiations described above, Petitioner never alerted Patent Owner that it would be filing IPR Petitions related to Patent Owner's asserted patents in the District Court Litigation.

The Director should exercise discretion to deny the Petition under 35 U.S.C. § 314(a) for at least the following reasons: (i) the parallel District Court Litigation exists between the same parties or real-parties-in-interest; (ii) the District Court Litigation involves the same subject patent, the '110 Patent, (in addition to nearly all the other asserted patents that Petitioner has filed 19 IPR Petitions for) with the same claims; (iii) the District Court's trial will be before the projected statutory deadline for FWD and before the deadline for Director Review; (iv) the parties will have heavily invested in the District Court Litigation and completed the claim construction hearing on November 21, 2025, almost a month before the December 11, 2025 deadline for an institution decision; and (v) settled expectations have been created because Petitioner has been on notice of Patent Owner's patents since at least December 2022, when Petitioner "revealed that Apple had been aware of ABT's SEPs for at least six months before receiving ABT's correspondence" on May 15,

2023 but waited nearly 2.5 years before filing an IPR Petition. *See* Ex. 2003, ¶ 18.

For the reasons set forth herein, the Director should exercise discretion to deny the Petition.

II. THE PETITION SHOULD BE DENIED IN THE DISCRETION OF THE DIRECTOR UNDER 35 U.S.C. § 314(a)

The circumstances of the parallel District Court Litigation, *Apex Beam Techs. LLC v. Apple Inc.*, Case No. 6:24-cv-00223-ADA (W.D. Tex.), necessitate denial of the Petition under the Board's precedent, as every factor considered in relation to efficiency, fairness, and the merits supports denial. *See Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11, at 6 (P.T.A.B. Mar. 20, 2020) (precedential) (considering (a) "whether the petitioner and the defendant in the parallel proceeding are the same party"; (b) "overlap between issues raised in the petition and in the parallel proceeding"; (c) "proximity of the court's trial date to the Board's projected statutory deadline for a final written decision"; (d) "investment in the parallel proceeding by the court and the parties"; (e) "whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted"; and (f) "other circumstances that impact the Board's exercise of discretion, including the merits.").

As set forth below, these factors collectively demonstrate that efficiency and integrity of the AIA are best served by denying review. First, the Petitioner is the

Defendant in the parallel proceeding. *See infra* Section II.A. Second, the District Court Litigation involves the same claims at issue in the Petition. *See infra* Section II.B. Third, trial in the District Court Litigation is set for December 7, 2026, before the projected statutory deadline for a Final Written Decision of this Petition on December 11, 2026. *See infra* Section II.C. Fourth, the parties (and Patent Owner in particular) have invested significant resources in developing legal and factual issues of validity and infringement in the District Court Litigation and will have invested substantially more resources before any decision on this Petition. *See infra* Section II.D. Finally, there are settled expectations regarding the '110 Patent, as it is a continuation of the '527 Patent that was granted over 4 years ago and Petitioner had at least 2.5 years of notice of the '527 Patent without filing an IPR Petition. *See infra* Section II.E.

Accordingly, the Director should exercise discretion under § 314(a) and deny the Petition because institution of this proceeding would not be consistent with the objective of the AIA to “provide an effective and efficient alternative to district court litigation.” *NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8, at 20 (P.T.A.B. Sept. 12, 2018) (quoting *Gen. Plastic Indus. Co. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19, at 16–17 (P.T.A.B. Sept. 6, 2017) (precedential)).

A. The Parallel District Court Litigation and the Petition Involve the Same Parties

As Petitioner notes, there exists a parallel District Court Litigation between the same parties regarding the same subject patent (the '110 Patent). Pet. at 89. Petitioner is a party to the District Court Litigation captioned as *Apex Beam Techs. LLC v. Apple Inc.*, Case No. 6:24-cv-00223-ADA (W.D. Tex.), The District Court Litigation involves causes of action asserting the '110 Patent against Petitioner's products, which include Apple products that are capable of implementing 4G/LTE and/or 5G/NR, including at least the iPhone 15, iPhone 15 Plus, iPhone 15 Pro, iPhone 15 Pro Max, iPhone 14, iPhone 14 Plus, iPhone 14 Pro, iPhone 14 Pro Max, iPhone SE (2022), iPhone 13, iPhone 13 Mini, iPhone 13 Pro, iPhone 13 Pro Max, iPhone 12, iPhone 12 Mini, iPhone 12 Pro, iPhone 12 Pro Max, iPad Pro 12.9-inch (5th generation or later), iPad Pro 11-inch (3rd generation or later), iPad Air (5th generation), iPad mini (6th generation), and iPad (10th generation). Ex. 2002 at 3.

Accordingly, this factor weighs strongly in favor of discretionary denial.

B. The District Court Litigation Involves Substantially the Same Claims

There is complete overlap between the claims and grounds at issue in this Petition and the District Court Litigation because the Petition challenges all claims asserted in the District Court Litigation under the same grounds. *See* Ex. 2002 at 2;

Pet. at 1. “In at least these ways, the parallel proceedings would duplicate effort. This is an inefficient use of Board, party, and judicial resources and raises the possibility of conflicting decisions.” *Cisco Sys., Inc. v. Ramot at Tel Aviv Univ. Ltd.*, IPR2020-00122, Paper 15 at 10 (P.T.A.B. May 15, 2020).

Accordingly, this factor weighs strongly in favor of discretionary denial.

C. Proximity of the District Court’s Trial Date

The proximity of the District Court Litigation’s trial date to the Board’s projected statutory deadline for a Final Written Decision weighs strongly in favor of discretionary denial.

The parties’ trial is scheduled for December 7, 2026. Ex. 2001. Pursuant to 35 U.S.C. §§ 314(b)(1) and 316(a)(11), the projected statutory deadline for a Final Written Decision of this Petition is December 11, 2026.¹ As the District Court’s trial

¹ Patent Owner will file a timely preliminary response on September 11, 2025. The statutory deadline for institution is December 11, 2025, “three months after receiving a preliminary response to the petition under section 313.” *See* 35 U.S.C. § 314(b)(1). If instituted, the statutory deadline for a Final Written Decision is December 11, 2026, “not later than 1 year after the date on which the Director notices the institution of a review.”

will be before the projected FWD statutory deadline, this factor weighs in favor of denying institution. *See Supercell Oy v. Gree, Inc.*, IPR2020-00513, Paper 11 at 10-12 (P.T.A.B. June 24, 2020) (denying institution where the jury trial was scheduled to conclude approximately ten months before the statutory deadline); *Edward LifeSciences Corp. v. Evalve, Inc.*, IPR2019-01479, Paper 7, at 6-13 (P.T.A.B. Feb. 26, 2020) (denying institution where jury trial would conclude more than nine months before a final decision would be due); *Samsung Elecs. Am., Inc. v. Uniloc 2017 LLC*, IPR2019-01218, Paper 7, at 7-10 (P.T.A.B. Jan. 7, 2020) (denying institution where jury selection was scheduled for approximately six months before trial in the Board proceeding would conclude); *Next Caller Inc. v. TRUSTID, Inc.*, IPR2019-00961, -00962, Paper 10, at 8-16 (P.T.A.B. Oct. 16, 2019) (denying institution where trial was scheduled to conclude “several months,” before a final decision would be due); *Cisco Sys., Inc.*, IPR2020-00122, Paper 15 at 8 (“Because the trial date is substantially earlier than the projected statutory deadline for the Board’s final decision, this factor weighs in favor of discretionary denial.”); *Cisco Sys., Inc. v. Estech Sys., Inc.*, IPR2021-00329, Paper 13 at 7-15 (P.T.A.B. Jul. 6, 2021) (denied when two related trials predate FWD by eleven months and seven months, respectively); *F5 Networks, Inc. v. WSOU Invs., LLC*, IPR2022-00239, Paper 12 at 7-8 (P.T.A.B. May 19, 2022) (denied when trial predates FWD by six

months); *Google LLC v. EcoFactor, Inc.*, IPR2021-00488, Paper 12 at 11-12 (P.T.A.B. Aug. 11, 2021) (denied when trial predates FWD by six months); *Cisco Sys., Inc. v. Oyster Optics, LLC*, IPR2021-00238, Paper 10 at 11-13 (P.T.A.B. Jun. 1, 2021) (denied when trial predates FWD by seven months); *Samsung Elecs. Co. v. Truesight Commc'ns LLC*, IPR2025-00123, Paper 12 at 6-7 (P.T.A.B. Apr. 22, 2025) (denied when trial predates FWD by six months). That the December 11, 2026 FWD date is after the December 7, 2026 trial date justifies discretionary denial on its own.

This justification is compounded when considering the deadline for a request for Director Review, which is within 30 days of the entry of the FWD (i.e., January 11, 2027), let alone the ultimate decision of any Director Review. Notably, it was only on Oct. 1, 2024 that the U.S. Patent and Trademark Office (USPTO) issued a final rule governing Director Review of PTAB decisions in contested proceedings brought under the AIA, Rules Governing Director Review of Patent Trial and Appeal Board Decisions, effective Oct. 31, 2024, as 37 C.F.R. § 42.75. 89 Fed. Reg. 79744 (Oct. 1, 2024). As such, the Board's *Apple Inc. v. Fintiv, Inc.* decision was unable to consider the extended period of time for the PTAB Director to opine on a

FWD. In this proceeding, such a determination from Director Review would likely be at least two months past the December 7, 2026 trial date.

Accordingly, that the trial date is well before any determination from a Director Review of a FWD weighs strongly in favor of discretionary denial.

D. Significant Investment and Petitioner's Delay in Filing the Petition

The parties' and the Court's investment in the parallel proceeding weighs strongly in favor of discretionary denial. In the District Court Litigation, Patent Owner has already served infringement contentions and the parties have their claim construction hearing on November 21, 2025. Ex. 2001. Therefore, on the December 11, 2025 statutory deadline for an institution decision, the parties will have completed claim construction briefing in the District Court Litigation. *See id.*

The District Court's investment cannot be understated in view of the holistic circumstances of Petitioner's prolific IPR campaign. Specifically, to date, Petitioner has filed 19 IPR petitions corresponding to the asserted patents in the District Court Litigation. Utilizing the Board's resources on 19 individual IPR proceedings is inefficient in view of the District Court's singular and significant investment in Petitioner's invalidity arguments for the asserted patents in one proceeding.

Further, as described below in § II.E, Petitioner intentionally delayed in filing

its Petition because it had ample notice of Patent Owner's patent portfolio 2.5 years before filing its first IPR Petition.

Accordingly, the parties' and Court's substantial investment in this proceeding weighs in favor of denial of institution.

E. Settled Expectations of the Parties

The '110 Patent was granted January 3, 2023 as a continuation of the '527 Patent granted March 9, 2021, over 4 years before Petitioner filed its Petition, and claims priority to a foreign application from 2016, which is over 8 years before Petitioner filed its Petition. *See* '110 Patent. As such, Patent Owner has settled expectations at this point. The Board has previously discretionarily denied institution because "the challenged patent has been in force almost eight years, creating settled expectations." *Dabico Airport Sols. Inc. v. AXA Powers Aps*, IPR2025-00408, Paper 21 at 2 (P.T.A.B. June 18, 2025). The Board also noted that "the longer the patent has been in force, the more settled expectations should be" and equated this approach to the six year damages period related to filing infringement lawsuits. *Id.* at 3. The situation is no different here.

While "actual notice of a patent or of possible infringement is not necessary to create settled expectations," here, Petitioner did have substantial and non-disputed notice of Patent Owner's portfolio. *Id.* Specifically, Petitioner has been on notice of

Patent Owner's patents since at least December 2022, when Petitioner "revealed that Apple had been aware of ABT's SEPs for at least six months before receiving ABT's correspondence" on May 15, 2023 but *waited nearly 2.5 years* before filing this IPR Petition. *See* Ex. 2003, ¶ 18. The parties had been undergoing intensive FRAND negotiations (*Id.* ¶¶ 17-21), which accounts for Patent Owner's first complaint dated April 29, 2024, but Petitioner never gave Patent Owner an inkling that it was intending to file this Petition.

As noted above, the '110 Patent is a continuation of the '527 Patent and Petitioner had been at least aware of the '527 Patent (which was granted March 2021) since December 2022. Therefore, at the time of the parties' FRAND negotiations, Petitioner should have been aware that the '110 Patent was granted during the period of those negotiations. Nevertheless, despite being afforded an opportunity to do so, Petitioner failed to file a petition to institute a post-grant review of the '110 Patent within "9 months after the date of the grant of the patent." 35 U.S.C. § 321(c).

At the time of the parties' FRAND negotiations, Petitioner was also aware of Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc.'s (collectively, "Samsung") concurrent IPR Petition of the '527 Patent. *See Samsung Elecs. Co. v. Apex Beam Techs LLC*, IPR2023-00603, Paper 1 (P.T.A.B. Feb. 28,

2023). Nonetheless, Petitioner failed to join Samsung's Petition and now principally relies on the same prior art reference that Samsung relied on in its Petition. *Compare* Ex. 1004 (U.S. Patent Publication No. 2013/0182594 to Kim et al. ("Kim")) with *id.* at 8 (referring to Kim).

When viewing the factors together, and particularly in view of Petitioner's inexcusable delay in the filing of its Petition in view of its particularized settled expectations, the Petition should be denied in the Director's discretion under 35 U.S.C. § 314(a).

III. CONCLUSION

For the foregoing reasons, Patent Owner respectfully requests that the Director exercise discretion to deny institution of the Petition in its entirety.

Respectfully submitted,

Dated: July 25, 2025

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CERTIFICATE OF WORD COUNT

The undersigned hereby certifies that the portions of the above-captioned PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL OF INSTITUTION has 2,494 words in compliance with the 14,000 word limit set forth in 37 C.F.R. § 42.24. This word count was prepared using Microsoft Word for Office 365.

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July 25, 2025

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CERTIFICATE OF SERVICE

A copy of the foregoing PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL OF INSTITUTION and Exhibits 2001 through 2003 have been served on Petitioner's counsel of record as follows:

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