

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE, INC.,

Petitioner

v.

APEX BEAM TECHNOLOGIES LLC,

Patent Owner

Case IPR2025-00921

U.S. Patent No. 10,568,113

**PETITIONER'S NOTICE RANKING PETITIONS
FOR *INTER PARTES* REVIEW OF U.S. 10,568,113**

I. INTRODUCTION

The PTAB previously considered two petitions filed by Samsung¹ and resolved to institute both based on priority considerations that drive submission by Petitioner of the instant Petitions. IPR2023-00601, Paper 11, (PTAB Oct. 3, 2023); IPR2023-00602, Paper 11 (PTAB Oct. 3, 2023). The grounds advanced by the Samsung petitions, while instituted, did not reach resolution, as Patent Owner settled to inspire termination prior to FWD. Here, the Petitions include invalidity challenges of claims 1-20 of U.S. Patent No. 10,568,113 (“the ’113 patent”) based on the same grounds (i.e., Xia/Xia-Jover and Liu-Jover).

II. RANKING OF THE PETITIONS

Although Petitioner believes that both Petitions are meritorious and justified, Petitioner requests that the Board consider the Petitions in the following order:

Rank	Petition	Primary Reference
1	IPR2025-00895	Xia
2	IPR2025-00921	Liu

III. FACTORS SUPPORTING INSTITUTION, INCLUDING MATERIAL DIFFERENCES BETWEEN THE PETITIONS

¹ *Samsung Electronics Co., Ltd. et al. v. Apex Beam Technologies LLC*, IPR2023-00601, filed February 28, 2023; *Samsung Electronics Co., Ltd. et al. v. Apex Beam Technologies LLC*, IPR2023-00602, filed February 28, 2023.

The two petitions are materially different. For example, the petitions rely on different prior art references with different priority dates, which may result in a dispute regarding whether the references qualify as prior art. The '113 patent claims priority to a Chinese Application filed August 11, 2017, while Xia claims priority to its provisional filing date of August 10, 2017, and Liu claims priority to its provisional filing date of June 16, 2017. To the extent that Patent Owner challenges the priority of Xia and/or contends that a prior art exception under 35 U.S.C. §102(b) applies in an attempt to remove Xia as prior art, Petitioner presents the Liu Petition.

Further, the obviousness grounds also contain material differences. Although each set of references discloses every claim element, they do not present the same theories of obviousness or use identical language. In particular, where one of the grounds challenging claims 1-20 in the Xia Petition may be a single reference obviousness ground, the Liu Petition asserts a combination of Liu and Jover to render obvious claim limitation [1e]. Additionally, while Petitioner presents a new ground based on 3GPP-LTE in the Xia Petition, that ground offers a unique and novel interpretation of the claims as mapped to a contention-based random access procedure (CBRAP). Accordingly, the petitions have different starting points and different rationales as to why the challenged claims are obvious.

IV. THE BOARD SHOULD EXERCISE ITS DISCRETION TO INSTITUTE BOTH PETITIONS

The Board has recognized “that there may be circumstances in which more

than one petition may be necessary.” TPG, 59. One of the examples provided by the Board for justifying the institution of multiple petitions is a “dispute about priority date.” *Id.* Here, Petitioner contends that Xia qualifies as prior art due to its provisional filing date of August 10, 2017. But if Patent Owner attempts to challenge the priority date of Xia and/or contends that a prior art exception under 35 U.S.C. §102(b) applies to remove Xia as prior art, the Liu Petition provides arguments based on Liu, which has a priority date almost two months earlier than Xia. And because no tribunal has decided the prior art status of Xia, both petitions are necessary to address the possible outcomes. Indeed, as noted above, the PTAB acknowledged the potential priority dispute relative to the ’113 patent when previously endorsing and instituting the second petition (Liu-Jover). IPR2023-00602, Paper 11, 9-10 (PTAB Oct. 3, 2023) (“Patent Owner has not stipulated that Xia qualifies as prior art. ... Thus, there exists the potential for a prior art dispute during trial.”).

While Petitioner includes, in the Xia Petition, an additional ground based on 3GPP-LTE, the Liu Petition is not rendered redundant or duplicative in view of the 3GPP-LTE ground because these invalidity grounds offer distinct applications of prior art combinations against the Challenged Claims—the Liu-based ground previously-endorsed and instituted in the event that Patent Owner challenged Xia’s prior art status and the 3GPP-LTE ground unique and novel as to its application of CBRAP against the Challenged Claims. Thus, while the 3GPP-LTE ground and Liu-

based ground rely on similar priority dates, the 3GPP-LTE ground does not offer a true alternative to the Xia-based ground if Patent Owner challenged Xia's prior art status because it relies on a new invalidity theory (based on CBRAP) that is both untested and distinct from both Xia and Liu and has a priority date one month later than Liu.

In view of the material differences shown above, the Board should exercise its discretion to institute both Petitions. Both Petitions are necessary to show the breadth of prior art that reads on the overly broad claims. The Petitions are not redundant, duplicative, or substantially similar, and this is not a situation in which it would be reasonable to include all challenges in a single petition, as both petitions challenge twenty claims (1-20). Moreover, each Petition provides a strong showing of unpatentability.² Instituting on only one Petition would give Patent Owner an unfair advantage, allowing Patent Owner to strategically *not* address the prior art status of Xia before institution, but then address it once Liu is no longer available to

² See *Samsung Electronics Co., Ltd. v. Apex Beam*, IPR2023-00601, Paper 11, 37 (PTAB Oct. 3, 2023) (instituting IPR when presented with the same or similar grounds as the Xia petition); *Samsung Electronics Co., Ltd. v. Apex Beam*, IPR2023-00602, Paper 11, 10 (PTAB Oct. 3, 2023) (instituting IPR when presented with the same or similar grounds as the Liu petition).

Petitioner (as a result of the Liu petition being denied) despite Liu being an earlier prior art reference. Institution of both IPR petitions would prevent the unjust result of otherwise strong invalidity grounds being dismissed for procedural reasons. Any burden is a product of Patent Owner's decisions (e.g., not stipulating as to Xia's prior art status) and not something that should benefit them, which would amount to discretionary denial. In addition, Petitioner requests consolidation of the two proceedings, as permitted by 35 U.S.C. §§ 315(d) and 325(d) to simplify the complexity of the proceedings.

Finally, this is not a situation where Petitioner has filed many IPR petitions against one patent or is asserting dozens of independent grounds. Rather, Petitioner has filed only two petitions, each based on a single primary reference. For the reasons stated above, the potential dispute about the priority date and prior art status of Xia together with the different disclosure and earlier priority date of Liu is sufficient to justify institution of two petitions against the '113 patent.

V. CONCLUSION

Institution of two petitions was previously endorsed by the Board, and nothing warrants a deviation from the Board's prior analysis. The same priority concerns, unique merits of each ground, and the unjust result if Patent Owner was able to present arguments against one set of art without addressing the other, institution of both petitions is likewise appropriate here.

Dated: May 2, 2025

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR § 42.6(e)(4), the undersigned certifies that on May 2, 2025, a complete and entire copy of this Notice of Ranking of Petitions were provided via Federal Express, to the Patent Owner by serving the correspondence address of record as follows:

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