

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SHENZHEN TUOZHU TECHNOLOGY CO., LTD.,
Petitioner,

v.

STRATASYS, INC.,
Patent Owner.

Case IPR2025-00311
Patent 8,562,324

PETITIONER’S OPPOSITION TO REQUEST FOR DIRECTOR REVIEW

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The current request for Direct Review is now Stratasys's *third* request for discretionary denial in the present proceeding,¹ and it should be denied.

Stratasys's latest request is premised upon allegations that it knows to be untrue. For instance, Stratasys contends the Director's March 2026 Memo is applicable here, but this Memo "applies to all IPRs and PGRs *in which the due date for a patent owner discretionary brief has not yet elapsed.*" See Memo, 3. Stratasys knows this case falls far outside that window. And at its core, Stratasys's allegation that it is an "American company" (Paper 32, 4) lacks candor because Stratasys's U.S. entity is a subsidiary of Stratasys Ltd.—an Israeli company having a global headquarters and major manufacturing facilities in Israel along with numerous foreign subsidiaries. Stratasys's 2025 Form 20-F², 2, 82, F-7, 78. It is telling that Stratasys omitted this detail of its decades-long effort to offshore its manufacturing outside the U.S. Moreover, Stratasys's 3D printers do not even "compete with

¹ See Paper 7 (Patent Owner Preliminary Response), 2-18; Paper 12 (First Request for Director Review), 5-15.

² available at <https://investors.stratasys.com/sec-filings/all-sec-filings/content/0001628280-26-015079/ssys-20251231.htm>; see also <https://www.3dnatives.com/en/inside-3d-tour-visiting-stratasys-270420234/> (discussing the "Israel...headquarters of the multinational Stratasys").

[Bambu’s] accused products,” as set forth in the March 2026 Memo. Memo, 2.³ As confirmed by the litigation record, Stratasys sells “Industrial-grade 3D Printers”⁴ in excess of \$20,000 per unit for use by fabrication shops and engineering firms. Bambu sells inexpensive home printers that are used in American middle schools, American high schools, and in the homes of everyday Americans.⁵ Bambu’s affordable printers are a net positive to American youth and its “garage inventors,” due to newfound access to user-friendly, affordable 3D printing. Indeed, Bambu lowers barrier of entry for small and medium manufacturing businesses and creates jobs through empowering American home offices, design studios, and 3D printing farms alike.⁶

³ Petitioner’s U.S.-based entity is named Bambulab USA Inc., which is a RPI here. Petitioner and the RPIs are collectively referred to as “Bambu” by both parties, and that term is used here too.

⁴ <https://www.stratasys.com/en/3d-printers/printer-catalog/>

⁵ <https://us.store.bambulab.com/collections/3d-printer>

⁶ Stratasys fails to explain how its assertion that the U.S. military is allegedly barred from purchasing Bambu printers has any bearing on the IPR. And that assertion is untrue. For example, “[t]he prohibition...does not apply to the procurement of additive manufacturing systems or machines for the purposes of intelligence, electronic warfare, or information warfare operations, testing, analysis, or training.” https://rules.house.gov/sites/evo-subsites/rules.house.gov/files/documents/rcp_xml-2.pdf at 647.

Stratasys has not identified any evidence that any governmental or political entity funded, directed, controlled, or had the ability to control this IPR. Nor could it identify any such evidence. Bambu is a private company; neither the Chinese government nor the Chinese Communist Party (“CCP”) manages or controls Bambu, its operations, or this IPR. Accordingly, neither can be considered a real party in interest (“RPI”) here, and Stratasys’s request should be denied on that basis.

There are also no grounds for Director Review on the basis of claim construction. The district court claim construction is part of the record of this IPR and was necessarily considered by the Board in reaching its Final Written Decision (“FWD”). Contrary to Stratasys’s arguments, there was no need for the FWD to explain a “different outcome” as no “different outcome” exists. The Board was aware of the District Court claim construction when rendering its decision and that decision is fully consistent with the District Court’s construction.

Finally, there was no delay or improper use of the IPR proceedings in this case. The Board has already rejected Stratasys’s delay-based arguments in denying its earlier request for discretionary denial. Moreover, the final result here achieved the very result that Stratasys claims to stand for – Bambu successfully used the IPR proceedings as an alternative to litigation, thereby removing invalidity issues from the litigation. And on a larger scale, as has been long recognized, the grant of a patent is a “matter involving public rights.” *Oil States Energy Services v. Greene’s Energy*

Group, 584 U.S. 325 at 8 (2018). This IPR, by determining all asserted claims of the '324 patent unpatentable, has fulfilled its very purpose of undoing the removal of “existent knowledge from the public domain.” *Id.*, at 9. With the Board’s mandate to prevent the abuse of the patent system for the benefit of America’s innovation, Stratasy’s attempt to rewrite laws and reverse the Board’s effort to evaluate and limit its monopoly based on unfounded arguments should be, once again, rejected.

I. Bambu is Not Owned or Controlled by the Chinese Government

Neither the Chinese government, nor any entity that owned or managed by the Chinese government or the CCP, controls or directs any of Bambu’s activities. There is no governmental funding, direction, or control of Bambu’s IPR or any other legal proceeding. The Chinese government and the CCP are not RPIs, period.⁷

Stratasy’s alleges that a small, one-time grant from a *local* district government (similar to receiving an award at the county level in the U.S., not the Chinese national

⁷ Stratasy’s appears to be faulting Bambu for failing to explain how the CCP is *not* an RPI. Request, 5, fn. 8. This is legally improper. Despite making two prior attempts for requesting discretionary denials, Stratasy’s had never previously raised the issue that the Chinese government or the CCP has any relevance to this IPR, let alone submitted any evidence that the Chinese government or the CCP should be an RPI. This legal error is clear even from Patent Owner’s own case. IPR2025-01579, Paper 12 (“[A] patent owner must produce some evidence that tends to show that a particular third party should be named a real party in interest.”) (citation omitted).

government) somehow makes the CCP an RPI to the proceeding. Not only is this wildly contrary to any legal definition of RPI, but Stratasys omitted the critical facts it knew to be true: “Bambu was *one of hundreds of companies* that received a one-time grant from the Nanshan District government in a program for promoting innovation, and the grant was *worth only about USD \$140,000.*” *Stratasys v. Shenzhen Tuozhu Tech. Co. Ltd. et al*, 2:24-cv-00644-JRG, Dkt. 332 at 7 (E.D. Tex. Apr. 13, 2026) (emphasis added). This small grant from a *local* District was an award—not a sale or transfer of any ownership stake to any government entity. Bambu received this local research award years before the start of this proceeding, and the award has nothing to do with this IPR. Stratasys’s omission of this critical fact is telling, especially when Stratasys received “approximately \$9.2 million” in “Israeli governmental grants” which “may require [Stratasys] to satisfy specified conditions.” Stratasys’s 2025 Form 20-F, 31. In contrast, and importantly, the award that Bambu received is a recognition of Bambu’s innovation business and carries no such conditions or restrictions. At any rate, Stratasys cites no provision of Chinese law that requires Bambu to confer ownership rights, litigation authority, or the ability to direct this proceeding, because there is none.

Stratasys is fully aware that Bambu is a private company that is not owned or controlled by the Chinese government or CCP after it deposed Bambu’s corporate officer, Dr. Ye Tao, in the litigation. It is undisputed that three founders and other

private investors own, manage and control Bambu. In *Tianma*, a state-controlled entity had well over a 10% stake in the petitioner. By contrast, Bambu is controlled and managed by its founders, who are private citizens, not government employees. Its remaining equity is held by non-controlling private investment funds, as financial investors, none of which participate in the management of Bambu or has any ability to direct Bambu or this IPR. Additionally, unlike in *Tianma*, no governmental defense related entities or any entities that have been identified by the U.S. Government as being “involved in activities that are contrary to the national security or foreign policy interests of the United States” have an ownership stake in Bambu. IPR2025-01579, Paper 12. Stratasys’s conclusory allegations cannot establish that the Chinese government or the CCP controls Bambu (indeed, that is not the case).

II. The Present IPR Challenge Was Not Delayed

Stratasys insinuates that Bambu had knowledge of the ’324 patent prior to the District Court Complaint. However, the filing cited by Stratasys demonstrates, at best, that Stratasys had “general patent portfolio awareness” that did not “establish the pre-suit knowledge of infringement required for willful or indirect infringement.” *Stratasys*, 2:24-cv-00644-JRG, Dkt. 332 at 9 (E.D. Tex. Apr. 13, 2026). The Petition was filed only four months after the Complaint and “before an answer [was] filed in the parallel District Court action.” Paper 2, 98. Both the PTAB Judges and then-acting Director Stewart weighed the timing of the filing of this IPR

and subsequently rejected Stratasys's plea for discretionary denial. Papers 9, 16. In related parallel cases between the parties, then-acting Director Stewart insightfully recognized that "the Board is better suited to review a large number of patents involving diverse subject matter." IPR2025-00438, Paper 10, 3. This decision proved correct as this IPR reached finality long before any future jury trial involving the '324 patent (the exact date of which remains unknown). This IPR has already achieved the true alternative that Congress envisioned.

III. This IPR Has Fully Realized a True Alternative to Litigation

At this late stage, after the parties' expenditure of hundreds of hours and hundreds of thousands of dollars and the PTAB Judges' lengthy work both during the trial and in reaching the FWD, the fact that the current proceeding is a true alternative to the litigation is no longer hypothetical, but actual and fully realized. The Board's work is done. Bambu's burden is final and fulfilled. Only Stratasys defies this reality, but nothing compels Stratasys to cling to the claims the Office publicly reviewed and deemed unpatentable. Just as Congress intended, there is no need for a subsequent litigation here. *Magnolia Medical Technologies, Inc. v. Kurin, Inc.*, IPR2026-00097, Paper 17, 2 ("The purpose of AIA reviews was, and is, to provide a quick and cost effective alternative.").

Contrary to Stratasys's assertions, there is ***no overlap*** between the Grounds in the completed FWD and the invalidity arguments remaining in the District Court

proceeding. While Bambu’s *initial* District Court invalidity contentions, *submitted months prior to the Decision to Institute*, included references that overlap with those cited here (*see* EX2007), all parties and the District Court surely recognize those grounds are no longer being pursued in accordance with Petitioner’s stipulation that attached only *after institution* (EX1021). Stratasys omitted this fact while insinuating otherwise here. Bambu’s 35 U.S.C. § 282 notice clearly states “Defendants will rely at trial *only on the references and combinations elected pursuant to the Court’s Docket Control Order* as grounds for anticipation or obviousness.” *Stratasys*, 2:24-cv-00644-JRG, Dkt. 377 at 2 (E.D. Tex. May 22, 2026). As Stratasys is well aware, and as confirmed by the Joint Final Pretrial Order, the only remaining invalidity grounds advanced by Bambu for the ’324 Patent are “CharlieX in view of Farnworth; and CharlieX in view of Scott.” *Stratasys*, 2:24-cv-00644-JRG, Dkt. 340 at 9 (E.D. Tex. April 27, 2026). No documentation describing the CharlieX system nor Farnworth/Scott were relied upon in this IPR proceeding. Given Stratasys’s knowledge of this current state of the invalidity grounds in the district court litigation, Stratasys’s insinuations in its Request are at best lacking candor and at worst misleading.

Even if this finalized IPR did not already achieve a true alternative to litigation (which it did), Stratasys’s assertions here also ignore the Petitioner’s restrictive stipulation (EX1021) which follows the restrictive language from the stipulation

endorsed in the Informative *Tesla, Inc. v. Intellectual Ventures II LLC* case. IPR2025-00217, Paper 9 at 2-3 (Jun. 13, 2025). As confirmed by the District Court invalidity grounds discussed above, Bambu has faithfully held true to its stipulation to not pursue any grounds raised, any grounds that could have been reasonably raised, or “any ground based on a combination of system prior art...and the references that form the basis of any ground raised in IPR2025-00311.” EX1021.

IV. The FWD is Fully Consistent with the District Court Claim Construction Order and Bambu Timely Informed the Board of Claim Construction Developments

A. The FWD is Fully Consistent with the District Court Claim Construction Order

Contrary to Stratasys’s assertions, the Board did not reach a “different outcome” to the District Court with respect to construction of the term “two-dimensional projection of the three-dimensional model” or any other issue addressed by the District Court Claim Construction Order (EX1033). The FWD is fully consistent with the claim constructions reached by the District Court and therefore there was no need for the Board to “explain...a different outcome” — there was no different outcome to explain. *See* Paper 31, 10-15 (analyzing the sole claim construction issue necessary to resolve the dispute).

Bambu submitted a District Court claim construction brief with its Petitioner’s Reply that identified Bambu’s proposed District Court claim construction for “two-

dimensional projection of the three-dimensional model” of “two-dimensional image derived from a three-dimensional computerized model.” EX1023, 14. The prior art grounds laid out in the Petition expressly demonstrate how the prior art combinations provide a two-dimensional image derived from a three-dimensional computerized model and therefore there was no need for Bambu to advance a formal construction for this term because “claim terms need only be construed ‘to the extent necessary to resolve the controversy.’” *Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011); *Google Inc. v. Intellectual Ventures II LLC*, 701 Fed. Appx. 946, 956 (Fed. Cir. 2017) (“do not require construction” for purposes of “resolv[ing] the parties’ patentability arguments”). Stratasys was aware of Bambu’s proposed claim construction in the District Court proceeding yet made no arguments based on this construction. This is because there is no discrepancy between Bambu’s District Court construction and the analysis in the Petition. Paper 2, 6 (“given the noticeable overlap between the preferred embodiment of the ’324 Patent and the prior art/predictable combinations articulated in Grounds 1A-2G”).

Stratasys now argues, for the first time, that Bambu’s arguments are somehow inconsistent with the proposed District Court construction. EX1033, 16-19. Yet, the District Court adopted a construction that is **broader** not narrower than that proposed by Bambu, with the Court construing “‘two-dimensional projection of the three-dimensional model’ to mean ‘two-dimensional image of the three-dimensional

model *or of an object to be fabricated therefrom.*” *Id.*, 19 (emphasis added). By definition, the Board’s findings under Bambu’s construction fall within the District Court’s broader construction.

The FWD is fully consistent with this construction because the Petition identified how the prior art combinations provide *both* a two-dimensional image of the three-dimensional model *and* of an object to be fabricated therefrom. Paper 2, 21-24, 71-73. Stratasys now advances a new attorney argument, *after* the FWD, that the prior art grounds in the Petition do not render obvious displaying a projection of “the complete three-dimensional model.” Paper 32, 10-11. This argument, which is unsupported by evidence and appears in the Request for Director Review for the first time, is based on a Figure from Mori showing a partial, rather than complete, two-dimensional projection of the model. *Id.* However, the fact that Mori *additionally* shows projections of a partial model does not negate the fact that the proposed prior art combinations also render obvious displaying a projection of the complete three-dimensional model. Both Grounds 1A and 2A demonstrate that the prior art discloses displaying both a two-dimensional image of the three-dimensional model and video images of the object fabricated throughout the entire fabrication process, and therefore, at the end of such fabrication process, the two-dimensional projection of the complete three-dimensional model would have been predictably displayed. Paper 2, 21-24, 10-13, 71-73.

The reason that Stratasys did not raise this argument earlier is because the prior art combinations advanced in the Petition fully provide this functionality. The FWD's determination that the Mazumder-Mori combination discloses the "two-dimensional projection" recitation (Paper 31, 22-23) is thus fully consistent with the Claim Construction adopted by the District Court. Indeed, Stratasys identifies no part of the Board's analysis to support its second-guess that the Board based its decision on construing the term as projection of a partial model. No formal construction was necessary to resolve the dispute because the analysis in the Petition demonstrated that the prior art combinations render obvious claim 1 under all advanced constructions for the "two-dimensional projection" recitation.

As such, there was no need for the FWD to explain a "different outcome" as no "different outcome" exists. The Board was aware of the District Court claim construction when rendering its decision and the FWD is fully consistent with the District Court's construction.

B. Bambu Timely Informed the Board of the District Court's Claim Construction Order in the Parallel Litigation

As mentioned above, Bambu timely filed a claim construction brief from the District Court proceeding identifying its construction for "two-dimensional projection..." with the Petitioner's Reply. EX1023. A formal construction did not need to be advanced in the present proceeding because the analysis in the Petition

demonstrated how the prior art provided the “two-dimensional projection” under both Stratasys’s interpretation and Bambu’s interpretation.

Once the District Court issued its Claim Construction Order, Bambu immediately sought permission to submit the Order as an exhibit, and filed the Order as exhibit EX1033 as soon as such permission was granted. At that point, all briefing in this IPR had been concluded and the parties were preparing for oral hearing. Stratasys did not request additional briefing to advance arguments based on the Order (which adopted a construction that is ***broader*** than the construction advanced by Bambu, of which Stratasys was previously aware) nor did Stratasys make any arguments based on the Order during the oral hearing. Because the analysis advanced in the Petition demonstrated how the prior art combinations provided the “two-dimensional project” under the District Court construction, no formal construction was required in this preceding “to resolve the controversy.”

V. The Board Applied the Correct Claim Construction Standard

A. The Board Properly Found No Clear Disavowal of Non-Simultaneous Display

Stratasys mischaracterizes the Board’s claim construction analysis; incorrectly attributing the Board’s claim construction finding to the fact that Stratasys’s mention of “side-by-side comparison” during prosecution was merely one of “multiple arguments” rather than “the *sole* argument.” Paper 32, 12-13. This

assertion fundamentally misunderstands the Board's claim construction analysis while ignoring the clear reasoning in the FWD. Contrary to Stratasys's assertion that "[t]he Board did not find any ambiguity in applicant's arguments of side-by-side or simultaneous display" (*Id.*), the Board was clear that "[w]e *cannot say* that the arguments presented during examination were so clear that *they amount to a disavowal* of non-simultaneous display." Paper 31, 14. Indeed, as Bambu identified in the Petitioner's Reply, Stratasys did not even mention "simultaneous" display during prosecution, but rather made an aside that the newly added claim amendments would achieve the alleged benefit of "permit[ting] side-by-side comparison of model and results by a remote user." Paper 21, 3-4 (citing EX1002, 160-161). Indeed, the terms "simultaneous," "side-by-side," or any similar terminology are completely absent from the '324 Patent specification. *Id.*, 1-3. Stratasys's one-off reference to "side-by-side comparison" during prosecution is not rooted in any disclosure of the '324 Patent itself but rather, attorney argument identifying an alleged benefit that would arise from displaying the two-dimensional projection. The Board was correct in determining that this description of an alleged benefit, that was not relied upon by the Examiner, did not "amount to a disavowal." Paper 31, 13-15 ("...the prosecution history does not contain a clear disavowal of claim scope."). Stratasys's discussion of an alleged benefit achieved by the claims during prosecution, without any assertion of "simultaneous" or "at the same time" display of the images is far shy of

the requirement that disavowal “must be ‘so clear as to show reasonable clarity and deliberateness,’ and ‘so unmistakable as to be unambiguous evidence of disclaimer.’” *Genuine Enabling Tech. LLC v. Nintendo Co.*, 29 F.4th 1365, 1374 (Fed. Cir. 2022).

The fact that Stratasys continues to assert at the District Court that non-simultaneous display of the images satisfies claim 1 (*See* Paper 21, 4-5 (citing EX1016, 43, 46, 53)) additionally demonstrates that its assertions of “disavowal” in this proceeding are a farce. Finally, even if the Board’s conclusion were incorrect (it is not), it would not impact the final outcome as the Board has previously, preliminarily determined that the Mazumder-Mori combination provides Element [1.d] even under Stratasys’s improperly narrow construction. Paper 9, 25-26.

VI. Conclusion

The Board has dutifully fulfilled the purpose assigned to it by Congress of serving as a true alternative to the yet to be scheduled litigation. The Board’s determination should remain undisturbed.

Respectfully submitted,

Dated July 17, 2026

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR § 42.6(e)(4), the undersigned certifies that on July 17, 2026, a complete and entire copy of this PETITIONER'S OPPOSITION TO REQUEST FOR DIRECTOR REVIEW was provided by email, to the Patent Owner by serving the email correspondence address of record as follows:

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