

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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SHENZHEN TUOZHU TECHNOLOGY CO., LTD.,  
Petitioner

v.

STRATASYS, INC.  
Patent Owner.

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IPR2025-00438  
U.S. PATENT NO. 10,569,466

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**BRIEF IN SUPPORT OF PATENT OWNER'S REQUEST FOR  
DISCRETIONARY DENIAL**

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**EXHIBIT LIST**

<b>Exhibit No.</b>	<b>Description</b>
2001	Docket Navigator – Judge Rodney Gilstrap Motion Success for Stay Pending IPR and Time to Milestones
2002	United States District Courts — Judicial Caseload Profiles for Eastern District of Texas (Sept. 30, 2024 and Dec. 31, 2024), available at <a href="https://www.uscourts.gov/data-news/reports/statistical-reports/federal-court-management-statistics">https://www.uscourts.gov/data-news/reports/statistical-reports/federal-court-management-statistics</a>
2003	Minute Entry for proceedings held before District Judge Gilstrap on Nov. 7, 2024, <i>Stratasys, Inc. v. Shenzhen Tuozhu Technology Co. Ltd.</i> , No. 2:24-cv-00644-JRG (E.D. Tex. Nov. 14, 2024)
2004	Discovery Order, <i>Stratasys, Inc. v. Shenzhen Tuozhu Technology Co. Ltd.</i> , No. 2:24-cv-00644-JRG, Dkt No. 35 (E.D. Tex. Dec. 2, 2024)
2005	Protective Order, <i>Stratasys, Inc. v. Shenzhen Tuozhu Technology Co. Ltd.</i> , No. 2:24-cv-00644-JRG, Dkt No. 36 (E.D. Tex. Dec. 3, 2024)
2006	e-Discovery Order, <i>Stratasys, Inc. v. Shenzhen Tuozhu Technology Co. Ltd.</i> , No. 2:24-cv-00644-JRG, Dkt No. 41 (E.D. Tex. Dec. 19, 2024)
2007	Invalidity and Ineligibility Contentions, <i>Stratasys, Inc. v. Shenzhen Tuozhu Technology Co. Ltd.</i> , No. 2:24-cv-00644-JRG, (E.D. Tex. Jan. 30, 2025)
2008	Transcript of Hearing on the Nomination of Howard Lutnick, of New York, to be Secretary of Commerce (Jan. 29, 2025)
2009	Order Denying Defendants' Motion to Dismiss for Failure to Join Indispensable Party, <i>Stratasys, Inc. v. Shenzhen Tuozhu Technology Co. Ltd.</i> , No. 2:24-cv-00644-JRG, Dkt. No. 53 (E.D. Tex. May 29, 2025)
2010	Plaintiff's Unopposed Motion to Consolidate Case No. 2:25-cv-00465-JRG with Case Nos. 2:24-cv-00644-JRG and 2:24-cv-00645-JRG, <i>Stratasys, Inc. v. Shenzhen Tuozhu Technology Co. Ltd.</i> , No. 2:24-cv-00644-JRG, Dkt. No. 54 (E.D. Tex. May 30, 2025)
2011	Lex Machina, Patent Litigation Report 2024 (Feb. 2024)
2012	U.S. District Court, Eastern District of Texas [Live] Calendar Events Set for 6/1/2026-8/1/2026

## I. INTRODUCTION

Pursuant to the March 26, 2025 Memorandum by the Director that addresses “Interim Processes for PTAB Workload Management” (Director Memo), Patent Owner respectfully requests the Director exercise discretionary denial of institution. As explained below, several considerations favor discretionary denial of institution in this IPR .

First, the Director should exercise discretion to deny institution under 35 U.S.C. § 314(a) and the *Fintiv* factors. Among other reasons, the parallel district court litigation will reach a final resolution in a jury trial four months before any final written decision in this forum. Not surprisingly, significant progress has already been made in the parallel litigation, including the completion of Infringement Contentions, Invalidity Contentions, and numerous fact discovery requests, and the production of tens of thousands of pages of documents.

Second, the Director should exercise its discretion to deny institution under 35 U.S.C. § 325(d) and the factors set forth in *Advanced Bionics* and *Becton, Dickinson*. Two of the asserted references (*Menchik* and *Dahlin*) were considered by the Office during prosecution of the application leading to U.S. Patent No. 10,569,466 (“’466 Patent”). After careful consideration of *Menchik*, *Dahlin*, and other art, the Office allowed the ’466 Patent. Now, years later, Petitioner seeks to revisit this consideration. It relies on 15 grounds, including Ground 1A (*Loughran*

and *Dubois*), Ground 1B (*Loughran, Dubois, and Jazayeri*), Ground 2 (*Devos*), Ground 3A (*Menchik*), and Ground 3B (*Menchik and Jazayeri*). Despite the multitude of challenges cumulative of the art previously considered by the Office, Petitioner has failed to show that the Office made a material error. Each of these combinations suffer from the same or similar deficiencies of not teaching all elements of independent claims 1 and 19.

In summary, there are two independent reasons for discretionary denial. The exercise of discretionary denial power is appropriate under § 314 and under § 325(d). “To ensure that the PTAB continues to meet its statutory obligations as to *ex parte* appeals, while continuing to maintain its capacity to conduct AIA proceedings,” Patent Owner respectfully requests the Director to exercise her discretion to deny institution of IPR in this proceeding. *See* Director Memo at 1.

## **II. DISCRETIONARY DENIAL UNDER 35 U.S.C. § 314 IS APPROPRIATE**

Institution of *inter partes* review is discretionary. 35 U.S.C. § 314 states that the “Director *may not* authorize an *inter partes* review to be instituted unless the Director determines that the information presented in the petition . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a) (emphasis

added<sup>1</sup>). As the Supreme Court has explained, § 314(a) “invests the Director with discretion on the question *whether* to institute review.” *SAS Inst., Inc. v. Iancu*, 584 U.S. 357, 366 (2018). Pursuant to the Director’s discretion, the Board is “permitted, but never compelled, to institute an IPR proceeding.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016); *see also Cuozzo Speed Techs. v. Lee*, 579 U.S. 261, 273 (2016) (“the agency’s decision to deny a petition is a matter committed to the Patent Office’s discretion”) (citing 35 U.S.C. § 314(a)). Irrespective of whether the minimum standards for institution are met, other reasons, such as “events in other proceedings related to the same patent,” may favor denying a petition. Consolidated Trial Practice Guide (84 Fed. Reg. 64,280 (Nov. 21, 2019)) (“Practice Guide”) at 58 (citing *NetApp, Inc. v. Realtime Data LLC*, IPR2017-01195, Paper 9 at 12–13 (PTAB Oct. 12, 2017) and explaining that the Board in *NetApp* denied institution under § 314(a) where “the Board likely would not have been able to rule on patentability until after the district court trial date”). Further, the Director’s Memo has set forth additional considerations, including:

- Whether the PTAB or another forum has already adjudicated the validity or patentability of the challenged patent claims;
- Whether there have been changes in the law or new judicial precedent issued since issuance of the claims that may affect patentability;
- The strength of the unpatentability challenge;

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<sup>1</sup> Emphasis added throughout unless otherwise stated.

- The extent of the petition's reliance on expert testimony;
- Settled expectations of the parties, such as the length of time the claims have been in force;
- Compelling economic, public health, or national security interests; and
- Any other considerations bearing on the Director's discretion.

Director's Memo at 2–3. Additionally, the Director also considers “the ability of the PTAB to comply with pendency goals for *ex parte* appeals, its statutory deadlines for AIA proceedings, and other workload needs.” *Id.* at 3 (citing 35 U.S.C. § 316(b)).

In determining whether to exercise its discretionary power under § 314(a), the Board balances a set of six factors, as articulated in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11, at 6 (PTAB “Precedential” Mar. 20, 2020) (“*Fintiv* Precedent”). On balance, the six *Fintiv* factors favor discretionary denial in this proceeding. Both Petitioner and Patent Owner are involved in litigations in the Eastern District of Texas (“Related Litigation”). The Court in the Related Litigation consolidated two cases (2:24-cv-00644-JRG and 2:24-cv-00645-JRG) between the same parties for pretrial issues under the lead case (2:24-cv-00644-JRG). *See* EX2010 at 5 (citing Dkt. No. 19). In addition, Patent Owner has submitted a request to consolidate a third case (2:25-cv-00465-JRG) with the first two cases. *See* EX2010. Petitioner does not oppose Patent Owner's request. *See id.* The Related Litigation, which involves substantially the same claims of the same patent, and invalidity challenges to the same patent (including the same prior art

references as this Petition), will outpace this proceeding. Petitioner has failed to provide any credible reason why the “efficiency and integrity of the system” would not be “best served” by discretionary denial. *Fintiv* Precedent at 6.

**A. The exercise of discretionary denial under the *Fintiv* Precedent is proper**

As an initial matter, the exercise of discretionary denial under the *Fintiv* Precedent is proper and should be followed. Petitioner's bare, unsupported assertions that the *Fintiv* Precedent “exceeds the Director's authority, is arbitrary and capricious, and was adopted without notice-and-comment rulemaking” are without merit. Pet. at 83. The Federal Circuit has already considered and rejected similar statutory and arbitrary-and-capriciousness challenges against *Fintiv*. See *Apple Inc. v. Vidal*, 63 F.4th 1, 12–14 (Fed. Cir. 2023) (affirming dismissal of plaintiff's challenges to *Fintiv* as being contrary to statute or arbitrary and capricious under 5 U.S.C. § 701(a)(1)).

Further, a U.S. District Court has already considered and rejected a similar challenge claiming that notice-and-comment rulemaking is required. *Apple Inc. v. Vidal*, Case No. 20-CV-06128-EJD, 2024 WL 1382465, at \*13 (N.D. Cal. Mar. 31, 2024). As the Court explained, “the APA expressly excludes three categories of rulemaking from the notice-and-comment requirement: (1) interpretative rules; (2) general statements of policy; and (3) rules of agency organization, procedure, or

practice.” *Id.* at 5 (citing 5 U.S.C. § 553(b)(4)(A)). Consistent with the APA, “Courts have formulated this distinction to hold that “[t]he notice-and-comment requirements apply ... only to so-called “legislative” or “substantive” rules.”” *Id.* (quoting *Lincoln v. Vigil*, 508 U.S. 182, 195 (1993) (citations omitted)). Under this framework, the Court determined that “the *NHK-Fintiv* standard is a general statement of policy, rather than a substantive or legislative rule.” *Id.* at 13 Accordingly, “the Director was not required to conduct notice-and-comment rule making prior to designating the *NHK* and *Fintiv* decisions as precedential.” *Id.* (concluding that “the lack of such rule making does not render the *NHK-Fintiv* standard unlawful”) (citing 5 U.S.C. § 706(2)(D)).

Thus, the *Fintiv* Precedent is proper—it does not exceed the Director’s authority, is not arbitrary and capricious, and does not need to be adopted with notice-and-comment rule making.

**B. Factor 1: Whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted**

Factor 1 weighs in favor of discretionary denial. In the Related Litigation involving both Petitioner and Patent Owner, there has been no request for a stay pending *inter partes* review and the judge in the case, Judge Rodney Gilstrap, has not granted a stay.

Petitioner contends that this factor is neutral because there is purportedly “no evidence that, if the action is maintained and a stay is requested, the court will deny a stay.” Pet. at 83. However, Petitioner ignores the reality that it is highly unlikely that Judge Gilstrap will grant a stay in the Related Litigation pending IPR. As an initial matter, Judge Gilstrap denies the vast majority of motions to stay pending IPR. Since 2019, over 85% of such motions were denied. EX2001 at 1.

In past decisions denying a stay pending IPR, Judge Gilstrap has made it clear that motions to stay will be denied if filed before the “last of the patents-in-suit to be acted upon by the PTAB.” Order Denying Motion to Stay Pending Inter Partes Review, *Acorn Semi, LLC v. Samsung Elecs. Co.*, No. 2:19-CV-00347-JRG, 2020 WL 10284981 at \*2 (E.D. Tex. Sept. 14, 2020). Similarly, Judge Gilstrap has denied motions to stay pending IPR when the IPR proceedings do not challenge every patent asserted in the case. *See, e.g., Uniloc USA, Inc. v. Motorola Mobility LLC*, 2:16-cv-00992-JRG, Dkt. No. 125 at 3 (E.D. Tex. Apr. 5, 2017) (denying a stay “given that the pending IPR petitions do not challenge every patent asserted in this case”).

Petitioner fails to provide any reason why the Court in the Related Litigation would depart from its practice of denying motions to stay filed before the last of the patents-in-suit are acted upon by the PTAB and before every one of the patents-in-suit are challenged in IPR. Indeed, Petitioner has overlooked the fact

that the Related Litigation involves multiple patents besides the '466 Patent. *See* EX2010 at 5. Petitioner has not challenged asserted U.S. Patent No. 7,555,357. Thus, the reality is that Judge Gilstrap is highly unlikely to grant a stay in the particular Related Litigation due to facts specific to the case and parallel IPR proceedings.

Accordingly, factor 1 of the *Fintiv* analysis weighs in favor of discretionary denial because a stay in the related proceeding has not been requested and the evidence indicates that the Court in the Related Litigation will not grant a stay even if Petitioner were to request one.

**C. Factor 2: Proximity of the court's trial date to the Board's projected statutory deadline for a final written decision**

Given that trial in the Related Litigation is set to begin before any final written decision would be due, factor 2 favors discretionary denial. PTAB precedent makes clear that factor 2 favors discretionary denial “[i]f the court's trial date is earlier than the projected statutory deadline.” *Fintiv* Precedent at 9.

Here, the Court's trial date in the Related Litigation is earlier than the projected statutory deadline. The Court set a trial date for June 1, 2026. EX1020 at 1. The projected statutory deadline for any final written decision is October 7, 2026. *See* Notice of Filing Date Accorded to Petition and Time for Filing Patent Owner Preliminary Response, Paper 5 (setting preliminary response date for July

7, 2025); 35 U.S.C. § 314(b) (setting expected decision whether to institute review for 3 months after a preliminary response); 35 U.S.C. § 316(a)(11) (requiring a final determination by 1 year after the decision whether to institute review, extendable by 6 months).

In general, the Court's trial date is consistent with both the U.S. court case statistics for the United States District Court for the Eastern District of Texas and statistics for patent cases before Judge Gilstrap, specifically. Since 2021, the median time from filing to trial for civil cases has varied between 19.0 and 23.0 months depending on the year and measurement period (e.g., by fiscal year or calendar year). *See* EX2002 at 1-2 ("From Filing to Trial (Civil Only)"). Applying these median timings to the present case, which was filed in August 2024 (*see* EX2010 at 5), trial would be expected between March 2026 and July 2026.

For patent cases before Judge Gilstrap, specifically, the median time from filing to trial is 21.7 months for cases filed since January 2008 (109 cases), 21.7 months for cases filed since January 1, 2019 (43 cases), and 24.1 months for cases filed since January 2022 (small sample size of 15 cases). EX2001 at 3, 5, 7. Applying these median timings to the present case, trial would be expected between May 2026 and August 2026. Thus, the median time to trial statistics are consistent with the actual trial date the Court set for the Related Litigation, which

is set for over four months in advance of an expected final written decision deadline.

Petitioner asserts that this factor is neutral. Pet. at 83–84. First, Petitioner asserts that because there are multiple litigations scheduled to start jury selection on the same day there is no certainty as to which litigations “will be delayed/rescheduled.” *Id.* But Petitioner ignores the facts. There are over four months between the scheduled start of jury selection and any expected final written decision. Petitioner fails to present any evidence that the court cannot move forward with jury selection on the scheduled date, much less before any expected decision. Indeed, it appears that the calendar for Judge Gilstrap has ample opportunities to reschedule jury selection if the need arises. *See* EX2012 at 1-7 (listing events scheduled for June 1, 2026), 8-12 (listing events scheduled for June 22, 2026), 12-17 (listing events scheduled for July 6), 17-21 (listing events scheduled for July 20). Moreover, Petitioner ignores the fact that the vast majority of cases do not reach a jury trial. For instance, out of the 2,886 patent cases before Judge Gilstrap since 2019, only 43 of those cases have reached a jury trial. *See* EX2001 at 4-5; EX2011 at 19 (reporting only about 2% of district court patent cases that resolved from 2021 to 2023 reached trial). Thus, the Related Litigation will reach a jury trial well before any final written decision in this proceeding.

Second, Petitioner asserts that the date for jury selection “is not set in stone because there is a pending motion to dismiss the EDTX litigation in favor of litigation in another district (WDTX[)].” Pet. at 84. However, since the filing of the Petition, the district court has denied Petitioner’s motion to dismiss the EDTX litigation. *See* EX2009. Further, Petitioner neglected to mention that it was Petitioner (and its real parties in interest) who filed the WDTX litigation concerning, among other things, the ’466 Patent. Despite Petitioner’s attempt to increase the number of proceedings addressing same patent, which only raises the risk of duplicative and inconsistent decisions, the court in the WDTX litigation transferred its case to the EDTX. *See* EX2010 at 6. Patent Owner has since moved to consolidate the third EDTX case with the first two for all purposes, including through trial, and Petitioner does not oppose. *See* EX2010 at 6. Thus, the WDTX litigation will not proceed over the dismissal of the EDTX litigation.

Third, Petitioner asserts that it has been diligent in preparing the petition in less than six months in light of its stipulation. Pet. at 84. Petitioner has failed to explain how its stipulation relates to its arguments regarding diligence. As explained below for Factor 4, Petitioner’s stipulation does not eliminate the risk of duplicative and inconsistent decisions. Further, as explained below for Factor 3, there has been and will be substantial investment in the Related Litigation before a decision on whether to institute review and before any final written decision. Any

purported diligence by Petitioner does change this result. Indeed, Petitioner had Patent Owner's infringement contentions for the challenged patent for several months before filing its Petition. *See* EX1020 at 6 (November 14, 2024 Infringement Contentions); Paper 1 (filed on Feb. 6, 2025). And, prior to filing the Petition, Petitioner was able to prepare and file its invalidity contentions. *See* EX1020 at 5 (January 30, 2025 Invalidity Contentions). Thus, the risk of duplicative and inconsistent decisions remains despite Petitioner's stipulation and purported diligence.

Additionally, Petitioner fails to address numerous PTAB decisions that have weighed factor 2 in favor of discretionary denial when trial is expected to begin months in advance of the expected final written decision deadline. For example, the PTAB exercised discretionary denial in the *Apple Inc. v. Fintiv, Inc.* case in part because trial was scheduled to begin "approximately two months" before a final written decision. *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15, at 12–13 (PTAB "Informative" May 13, 2020); *see also Charter Commc'ns, Inc. v. Adaptive Spectrum and Signal Alignment, Inc.*, IPR2024-01379, Paper 16, at 8-11 (PTAB Apr. 17, 2025) (finding factor 2 favors discretionary denial where range of projected trial dates would occur 2 to 7 months before any expected final written decision); *Arm Ltd. et al. v. Daedalus Prime LLC*, IPR2025-00207, Paper 10, at 2

(PTAB May 16, 2025) (granting discretionary denial request where range of trial dates would occur 1 to 6 months before any expected final written decision).

Other PTAB decisions have exercised discretionary denial with even shorter periods between a trial and final written decision. For instance, in *EClinicalWorks, LLC v. Decapolis LLC*, the PTAB denied institution where trial would begin “roughly one to two months before any final decision.” Decision Denying Institution of Inter Partes Review, *EClinicalWorks, LLC v. Decapolis LLC*, IPR2022-00229, Paper 10 at 9 (PTAB Apr. 13, 2022). Consistent with previous PTAB decisions, such as those in *Apple* and *EClinicalWorks*, finding that a trial date set shortly before any final written decision weighs somewhat in favor of denial, factor 2 of the *Fintiv* analysis in this proceeding weighs somewhat in favor of discretionary denial, because it is likely that the jury trial in the Related Litigation will occur over four months before a final written decision would be due. *See also* Decision Denying Institution of Inter Partes Review, *10X Genomics, Inc. v. President and Fellows of Harvard College*, IPR2023-01299, Paper 15 at 17 (PTAB Mar. 7, 2024) (finding factor 2 weighing in favor of discretionary denial where district court trial would occur at least one month before a final written decision would be due).

**D. Factor 3: Investment in the parallel proceeding by the court and the parties**

The proceedings of the Related Litigation are well underway and remain in progress. Petitioner asserts that “there has been little investment by the court and the Markman hearing is scheduled for December 3, 2025, well after institution.” Pet. at 84. However, Petitioner fails to address the efforts undertaken by the Court and parties thus far and efforts that will be undertaken before any decision on institution. Thus far, the Court has held a scheduling conference with the parties (EX2003), entered numerous orders in the case, including a docket control order, discovery order, e-discovery order, and protective order, and decided Petitioner's motion to dismiss, which was denied. EX1020, EX2003, EX2004, EX2005, EX2006, EX2010. In addition, the parties in the Related Litigation have (a) negotiated and proposed numerous orders, including the aforementioned orders, (b) exchanged initial disclosures (EX1020 at 6); (c) exchanged additional disclosures (EX1020 at 6); and (d) exchanged infringement, invalidity, and subject-matter eligibility contentions totaling well over 2,000 pages (*see* EX1020 at 5–6). Fact discovery is well underway with the parties having exchanged over 100 document requests, exchanged requests and responses to over 30 interrogatories, and produced documents exceeding 72,000 pages, and third-party discovery. In addition, the parties have briefed issues related to party joinder in relation to Petitioner's now-denied motion to dismiss. EX2010.

Besides these existing substantial investments in the Related Litigation, the parties will make further substantial investments in the Related Litigation before a decision whether to institute review is expected. Source code review and amended infringement contentions are anticipated based on the Court's local patent rules. *See* EX1020 at 5-6. Moreover, as explained above for factor 2, the parties and Court in the Related Litigation will make additional substantial investments by starting a jury trial prior to the expected final written decision deadline. Similarly, the parties will have completed claim construction, fact discovery, expert discovery, the briefing of dispositive motions, and pretrial disclosures and conference. *See id.* at 2-4. Thus, any final written decision would simply revisit the jury's earlier findings regarding validity, the court's decision regarding claim construction, and other decisions before the trial court. Such duplicative efforts contradict the main purpose of *inter partes* review—to provide “quick and cost effective *alternatives* to litigation.” Practice Guide at 56 (quoting H.R. Rep. No. 112–98, pt. 1, at 40 (2011), 2011 U.S.C.C.A.N. 67, 69). Given the substantial investments made by the Court and parties, factor 3 weighs in favor of exercising discretionary denial.

**E. Factor 4: Overlap between issues raised in the petition and in the parallel proceeding**

The overlap in patent validity issues between the Petition (challenging claims 1-5, 7-13, 16-20) and the Related Litigation is significant. There is significant overlap in claims with the vast majority of claims (claims 1-5, 7-12, 16-17, 19-20) involved in the Related Litigation. There is also significant overlap in invalidity references and grounds. The Petition asserts 15 grounds involving various combinations of *Loughran*, *Dubois*, *Jazayeri*, *Menchik*, and *Devos*, among other references. Each of these references in the Petition is included in the Invalidity Contentions along with many others. *See* EX2007 at 12-13, 20, 30, 35-36, 77-93. Accordingly, there can be no dispute that all of the asserted grounds and references in this IPR are also at issue in the Related Litigation and that additional asserted grounds and references are at issue in the Related Litigation.

Petitioner asserts that this factor “favors institution as Petitioner has made a stipulation not to pursue the IPR grounds in District Court.” Pet. at 84. Since the filing of the Petition, Petitioner has shifted its position and now offers a stipulation not to pursue in district court the IPR grounds or any other ground that was raised or could have been reasonably raised in an IPR. However, as the Director recently clarified, such a stipulation “does not ensure” that an IPR proceeding would be a “true alternative” to the district court proceeding. *See* Order Granting Director Review, Vacating the Decision Granting Institution, and Denying Institution of

*Inter Partes* Review, *Motorola Sols. v. Stellar, LLC*, IPR2024-01205, Paper 19 at 3–4 (PTAB Mar. 28, 2025) (denying institution despite Petitioner's *Sotera* stipulation, in part, because "Petitioner's stipulation does not ensure that the[] IPR proceedings would be a 'true alternative' to the district court proceeding" and because "Petitioner's invalidity arguments in the district court are more expansive and include combinations of the prior art asserted in these proceedings with unpublished system prior art, which Petitioner's stipulation is not likely to moot"). Here, any stipulation by Petitioner is unlikely to address Petitioner's invalidity arguments in district court based on unpublished system prior art. In particular, Petitioner's invalidity contentions identify five system art references: KISSlicer System, Eden 260v, FORTUS 360mc/400mc and FDM 360mc/400mc, Objet260, and HP LaserJet 4100mfp. EX2007 at 30, 35. Petitioner's contentions also identify numerous combinations involving the references in this IPR and system art, including:

- "Loughran in combination with" Eden 260v, KISSlicer, Objet260, or HP LaserJet 4100mfp;
- "Dubois in combination with" Eden260v, Fortus 360mc, or Objet260;
- "KISSlicer in combination with" Devos, Menchik;
- "Devos in combination with" Eden260v, or Fortus 360mc;

- “Menchik in combination with” Eden260v, Fortus 360mc, or Objet260; and
- “Dahlin in combination with” Eden260v, Eden 206v and Menchik, Fortus 360mc, or Fortus 360mc and Menchik.

*Id.* at 83–84. Petitioner also asserts that “it would have been obvious to combine any of the anticipatory references or exemplary combinations with any references in the following illustrative categories:”

- Network References (including Eden 260v, Fortus 360mc, Objet260, or HP LaserJet 4100mfp)
- Tag Data References (including Eden 260v, Fortus 360mc, Objet260, or HP LaserJet 4100mfp);
- Operational Parameters References (including Eden 260v, Fortus 360mc, or Objet260);
- Diagnostic Test References (including Eden 260v, Fortus 360mc, Objet260, or HP LaserJet 4100mfp);
- Determining References (including Eden 260v, Fortus 360mc, Objet, or HP LaserJet 4100mfp);
- Tag Data Content References (including Eden 260v, Fortus 360mc, or Objet260); and

- First and Second Material References (including KISSlicer, Eden260v, Fortus 360mc, or Objet260).

*Id.* at 84-92; *see also id.* at 35-36 (listing 12 anticipatory references). As a result, Petitioner is not restrained from asserting very similar obviousness theories in the Related Litigation that include only minor differences from the Grounds raised in this Petition by including unpublished system art. Given this advantage, it appears that Petitioner has presented an opportunity for it to have two bites at the apple. As such, nothing prevents Petitioner from simply asserting the same reference or references repackaged in different permutations or a nearly identical theory challenging the same claims of the same patent with simple variations that add unpublished system art. Indeed, Petitioner's invalidity contentions reflect Petitioner's ability to game the system with over 50 such variations adding system art. *See* EX2007, 35-36 (12 alleged anticipatory references), 83-84 (18 alleged obviousness combinations involving art asserted in this IPR); *see also id.* at 84-92 (7 categories of additional obviousness combinations, each with three or more alleged system art). Thus, Petitioner's stipulation is not likely to moot Petitioner's numerous invalidity arguments in the District Court with unpublished system art.

Further, recent clarification from the Federal Circuit confirms that stipulations like Petitioner's are not a bar to asserting system prior art in district court, even if the system art is substantively identical to printed publications that

were raised or could have been raised during IPR. Specifically, the Federal Circuit clarified that IPR estoppel, which is similar to Petitioner's stipulation, "does not preclude a petitioner from asserting that a claimed invention was known or used by others, on sale, or in public use in district court." *Ingenico Inc. v. IOENGINE, LLC*, No. 2023-1367, 2025 WL 1318188, at \*7 (Fed. Cir. May 7, 2025). As a result, Petitioner remains free to game the system with variations of its IPR grounds that repackage the same substantive arguments with system art known, used by others, on sale, or in public use. In fact, Petitioner has expressed its intention to do so. In the Related Litigation, Petitioner has specifically sought discovery from Patent Owner regarding the Eden 260v, Fortus 360mc, and Objet260 on the basis that Petitioner has raised system art in its invalidity contentions.

While Petitioner's stipulation can reduce some of the overlapping issues, it does not eliminate the risk of overlap between the Related Litigation and this proceeding. Thus, when factor 4 is considered with the other factors of the *Fintiv* analysis, discretionary denial is still favored.

**F. Factor 5: Whether the petitioner and the defendant in the parallel proceeding are the same party**

Factor 5 favors discretionary denial. In the Related Litigation, Patent Owner is plaintiff and Petitioner is a defendant. As the PTAB explained in *Apple*, factor 5 weighs in favor of discretionary denial where "the petitioner and the defendant in

the parallel proceeding are the same party.” *Apple*, IPR2020-00019, Paper 15 at 15. Petitioner erroneously states that this factor is neutral because “there is no indication that the parallel litigation will reach a jury trial before the conclusion of this IPR.” *See* Pet. at 85. As explained above for factor 2, the Related Litigation will reach a jury trial well before any expected final written decision in this proceeding. On balance, factor 5 favors discretionary denial as the same parties are involved in the Related Litigation.

**G. Factor 6: Other circumstances that impact the Board's exercise of discretion, including the merits**

The sixth factor of the *Fintiv* analysis also favors discretionary denial. Petitioner argues, without explanation or support, that “no potential overlap of issues” exists “between the IPR and parallel District Court action.” Pet. at 85. As explained above for factor 3, there is and will be substantial investment in the Related Litigation, with trial occurring before any final written decision. In addition, as explained for factor 4, there is a substantial overlap of issues between the IPR and Related Litigation. Further, Petitioner is seeking a second bite at the apple to assert system art in the Related Litigation, including in combinations involving the very same art at issue in the IPR. Thus, there is a significant risk of overlap between the IPR and Related Litigation.

To the extent Petitioner's argument of no overlap is premised on its motion to dismiss in the EDTX case (*see* Pet. at 84), the district court has since denied the motion to dismiss. *See* EX2009.

Although the Petition fails to raise an argument regarding the merits of its Petition under factor 6, as explained below, Petitioner's asserted grounds lack merits as they each have identified weaknesses. *See Apple*, IPR2020-00019, Paper 15 at 15–17 (finding that merits “do not tip the balance in favor of Petitioner and instead also weigh in favor discretionary denial in a balanced assessment of all the circumstances”); *infra* Section IV (“The Merits of the Petition Are Weak”).

Further, several additional considerations<sup>2</sup> weigh in favor of discretionary denial. The Petition relies extensively on a 191-page expert declaration with nearly 150 citations to the declaration. *See* Petition and EX1003. Aside from content on the expert's background, materials considered, and discussion of applicable legal standards, the declaration largely mirrors the wording and argument made in the Petition. *Compare, e.g.,* EX1003, ¶53 *with* Pet. at 18, both arguing “[i]n accordance with the scope of this limitation advanced by Patent Owner in the

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<sup>2</sup> Whether considered part of factor 6 under the *Fintiv* framework or separately, the Director may consider such additional factors in discretionary denial. *See* Director Memo at 2–3.

litigation, Loughran's SFF fabrication job corresponds to a request to fabricate an object on the three-dimensional printer" without further explanation; *also compare, e.g.,* EX1003, ¶100 *with* Pet. at 36, both arguing "[w]hile Jazayeri describes a networked printing environment with respect to 2D printers, a POSITA was not an automaton and instead would have possessed ample skill to successfully incorporate Jazayeri's suggested teachings ..." without further explanation. Thus, Petitioner effectively seeks to rely on expert testimony that repeats its attorney argument to supplant the teachings of the references themselves. *See Facebook v. Windy City Innovations, LLC*, 973 F.3d 1321, 1340-41 (Fed. Cir. 2020) (affirming PTAB's decision upholding a claim as "the Board considered Facebook's expert's testimony but determined that it did not add materially to Petitioner's unpersuasive attorney argument"); *see also Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 at 15–17 (PTAB Aug. 24, 2022) (designated precedential) (according "little weight" to testimony that contains a verbatim restatement of a petition's conclusory assertions without additional supporting evidence or reasoning).

Further, Petitioner in some circumstances seeks to improperly shift its burden to articulate its arguments in the Petition to its expert. *Infra* § IV(D) (Ground 2 does not teach claim 19); *see* 35 U.S.C. § 312(a)(3) ("*the petition identifies, in writing and with particularity, each claim challenged, the grounds on which the challenge to each claim is based, and the evidence that supports the*

grounds for the challenge to each claim”) (emphasis added); 37 C.F.R.

§ 42.104(b)(4) (requiring that Petitioner provide “a statement of the precise relief requested for each claim challenged” including “*How the construed claim is unpatentable* under the statutory grounds identified . . . . The petition must specify *where each element of the claim is found* in the prior art patents or printed publications relied upon.”).

Further, the '466 Patent has been in force for over 5 years, which has set the expectations of the parties that it is valid and enforceable.

In addition, there have been no new changes in the law or new judicial precedent issued since the issuance of the '466 Patent that could affect patentability. Nor has Petitioner identified any such changes. The Petition cites to only three Federal Circuit cases for claim construction—an issue that is not contested in this Discretionary Denial request. *See* Pet. at 6. Petitioner has failed to provide any basis to assert that a change in law or judicial precedent warrants revisiting the patentability of the challenged patent.

Additionally, compelling economic or national security interests may warrant discretionary denial. To the extent current or future directives from the Commerce Secretary, or his subordinates at the USPTO, instruct the Director to consider whether to exercise discretionary denial when a foreign company seeks to use the PTAB (a USPTO tribunal) to revisit the validity of a duly issued U.S.

patent invented by an individual in the United States and owned by a U.S. company, Patent Owner seeks to preserve any argument under such directives. Testimony by the Secretary of Commerce indicates that his directive may be that foreign entities, such as the Petitioner, are not permitted to use the PTAB, a tribunal of the United States Patent and Trademark Office, to challenge the duly issued '466 Patent, that was invented by inventors in the United States and assigned to companies in the United States. *See* EX2008 at 57; *see also* Video of Hearing on the Nomination of Howard Lutnick, of New York, to be Secretary of Commerce (Jan. 29, 2025) at 1:56:15, available at [https://www.commerce.senate.gov/2025/1/full-committee-nomination-hearing\\_2\\_3](https://www.commerce.senate.gov/2025/1/full-committee-nomination-hearing_2_3). Accordingly, Patent Owner preserves its argument under any such directive for the Director to consider whether to exercise discretionary denial when a foreign company seeks to use the PTAB (a USPTO tribunal) to revisit the validity of a duly issued U.S. patent invented by an individual in the United States and owned by a U.S. company when the foreign company will receive due process on the validity of the patent in the U.S. federal court system.

While Petitioner will undoubtedly receive due process on validity of the '466 Patent in the U.S. federal court system, Petitioner effectively seeks to benefit from a duplicative proceeding before the PTAB. Doing so would tie up the PTAB's limited resources for Petitioner's benefit at the expense of patent owners

in this and other PTAB proceedings, including *ex parte* appeals and other AIA proceedings. As a consequence, Petitioner's request for review in this proceeding would frustrate the PTAB's ability to comply with pendency goals for *ex parte* appeals and statutory deadlines for other AIA proceedings. See 35 U.S.C. § 316(b). For this additional reason, the Director should exercise her discretion to deny institution.

### **III. THE DIRECTOR SHOULD EXERCISE DISCRETION TO DENY INSTITUTION UNDER SECTION 325(D)**

As explained, institution of *inter partes* review is discretionary. Section 325(d) permits the Director to elect not to institute review if the challenge to the patent is based on matters previously presented to the Office. 35 U.S.C. § 325(d); *see also* 37 C.F.R. § 42.4(a). In particular, section 325(d) states:

In determining whether to institute or order a proceeding under this chapter, chapter 30, or chapter 31, the Director may take into account whether, and reject the petition or request because, the same or substantially the same prior art or arguments previously were presented to the Office.

Under § 325(d), the Board follows a two-part framework:

- (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.

*Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 at 8 (PTAB Feb. 13, 2020) (precedential). Thus, the Director may exercise discretion not to institute *inter partes* review if the petitioner fails to show that the Office erred in a manner material to patentability. *See, e.g., Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 at 24 (PTAB Dec. 15, 2017) (precedential as to § III.C.5, first paragraph) (“*Becton, Dickinson*”).

In determining whether to exercise its discretionary power under § 325(d), the Director considers the following non-exclusive factors, as articulated in *Becton, Dickinson*:

- (a) the similarities and material differences between the asserted art and the prior art involved during examination;
- (b) the cumulative nature of the asserted art and the prior art evaluated during examination;
- (c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection;
- (d) the extent of the overlap between the arguments made during examination and the manner in which petitioner relies on the prior art;
- (e) whether petitioner has pointed out sufficiently how the examiner erred in its evaluation of the asserted prior art; and
- (f) the extent to which additional evidence and facts presented in the petition warrant reconsideration of the prior art or arguments.

*See Becton, Dickinson*, Paper 8 at 17–18; *see also Advanced Bionics*, Paper 6 at 9, n.10. “If, after review of factors (a), (b), and (d), it is determined that the same or substantially the same art or arguments previously were presented to the Office,

then factors (c), (e), and (f) relate to whether the petitioner has demonstrated a material error by the Office.” *Advanced Bionics*, Paper 6 at 10.

**A. Factors (a), (b), and (d): the Patent Office already considered substantially the same art and arguments, and thus these factors weigh in favor of discretionary denial**

The Petition raises 15 grounds in three groups. The first group of grounds (Grounds 1A–1F) are based on *Loughran* and *Dubois*, alone or in combination with other references such as *Menchik* and *Dahlin*, the second group of grounds (Ground 2) is based on *Devos*, and the third group of grounds (Grounds 3A–3H) are based on *Menchik*, alone or in combination with *Jazayeri* and/or other references such as *Dahlin*.

First, the Office already considered *Menchik* (used in Grounds 1E, 1F, and 3A–3H) and *Dahlin* (used in Grounds 1E, 1F, 3E, and 3F) during prosecution. *Menchik* and *Dahlin* are each cited on the face of the '466 Patent. *See* EX1001 at 1 (citing *Dahlin* under References Cited) and 2 (citing *Menchik* under References Cited). Each of those references was submitted by the applicant in an information disclosure statement (IDS) dated March 11, 2019. *See* EX1002 at 109 (listing *Dahlin*), 110 (listing *Menchik*), 112 (providing date). Shortly thereafter, on April 1, 2019, the examiner expressly considered each of these references. *See id.* at 128 (listing *Dahlin*, without a line through, with note that “ALL REFERENCES CONSIDERED” EXCEPT WHERE LINED THROUGH), 129 (listing *Menchik*,

without a line through, with note that “ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH”), 130 (providing date). Thus, the first part of the *Advanced Bionics* framework is satisfied because the asserted *Menchik* and *Dahlin* references were previously presented to the Office in an IDS. *See Ecto World, LLC v. RAI Strategic Holdings, Inc.*, IPR2024-01280, Paper 13, at 4 (May 19, 2025) (designated precedential as to § A on May 19, 2025) (“Challenging the claims using the same prior art that was previously presented on an IDS is sufficient to satisfy the first part of the *Advanced Bionics* framework.”).

Further, *Menchik* and *Dahlin* were expressly used by the examiner in searching for prior art. *See* EX1002 at 132–46 (EAST Search History dated Apr. 1, 2019) (referencing *Menchik* (US2006/0127153) at 133 (S18) and *Dahlin* (USP 6,022,207) at 135 (S47), 138 (S73), 140 (S97); EX1002 at 183–98 (EAST Search History dated Oct. 9, 2019) (referencing *Menchik* (US2006/0127153) at 184 (S18), 194 (S134), 196 (S156, S166, and S167) and *Dahlin* (USP 6,022,207) at 186 (S47), 190 (S73). Thus, the examiner considered and used the *Menchik* and *Dahlin* references during prosecution to search for prior art.

The examiner allowed the claims of the '466 Patent over the art considered, including *Menchik* and *Dahlin*. *See* EX1002 at 176, 201, 215. Thus, *Menchik* and *Dubois* were already considered by the Office during prosecution.

Second, similar to the art considered during prosecution, which did not teach the last two elements (“receiving” and “fabricating” steps) of issued claim 1, the references in Grounds 1A (*Loughran* and *Dubois*), 1B (*Loughran*, *Dubois*, and *Jazayeri*), 2 (*Devos*), and 3A (*Menchik*), 3B (*Menchik* and *Jazayeri*) do not teach all elements of the independent claims.

Like the art considered during prosecution, *Loughran* and *Dubois* (Ground 1A) and *Loughran* and *Dubois* with *Jazayeri* (Ground 1B) do not teach or suggest claim element 1[f] (“receiving one or more operational parameters from the client selected for use in controlling operation of the three-dimensional printer when fabricating the object with the build material having the at least one property stored in the tag”) and 1[g] (“fabricating the object with the build material according to the one or more operational parameters”). As explained in the section below, the printer in *Loughran* does not receive any “operational parameters from the client.” *Infra* § IV.C. As such, *Loughran* does not “fabricat[e] the object with the build material according to the one or more operational parameters” because no such parameters are received. *See id.* *Dubois* does not remedy *Loughran*'s deficiencies because it is strictly concerned with an isolated environment with just a printer. *See id.* Nor does *Jazayeri* (in Ground 1B), which does not separately address claim element 1[f] over Ground 1A. *See id.* Thus, Grounds 1A and 1B of the Petition are cumulative because they suffer from the same issue before the examiner with

respect to the art considered, such as *Jung* and *Wahlstrom*. See EX1002 at 120, 151, 158-160, 176, 202.

Similarly, *Devos* (in Ground 2) does not teach or suggest claim element 19[e] (“determining an operational parameter for configuring the three-dimensional printer for a fabrication process using the build material based upon at least one property of the build material in the data, the operational parameter including at least one of a build platform temperature, a build volume temperature, an infill requirement, a rafting requirement, a support structure requirement, and a cooling requirement”) and 19[f] (“controlling operation of the three-dimensional printer with the controller according to the operational parameter; and fabricating an object with the three-dimensional printer based upon the operational parameter.”). As explained in the section below, *Devos* does not teach “determining an operational parameter for configuring the three-dimensional printer” in which the “operational parameter” includes a “support structure requirement.” *Infra* §IV.D. Indeed, *Devos* is a powder-based additive manufacturing system in which the extra powder that is not bonded with the adhesive binder provides structural support during fabrication of the object and then is “brushed away” at the end of the process. See EX1008 at [0015]. As such, *Devos* does not “control[] operation of the three-dimensional printer with the controller according to the operational parameter” because no “operational

parameter” including a “support structure requirement” is determined. Thus, Ground 2 of the Petition is cumulative because it suffers from the same issue before the examiner with respect to the art considered, such as *Jung* and *Wahlstrom*. See EX1002 at 120, 151, 158-160, 176, 202.

Finally, *Menchik* (in Ground 3A) and *Menchik* and *Jazayeri* (in Ground 3B) do not teach or suggest claim element 1[f] (“receiving one or more operational parameters from the client selected for use in controlling operation of the three-dimensional printer when fabricating the object with the build material having the at least one property stored in the tag”), 1[g] (“fabricating the object with the build material according to the one or more operational parameters”), 19[e] (“determining an operational parameter for configuring the three-dimensional printer for a fabrication process using the build material based upon at least one property of the build material in the data, the operational parameter including at least one of a build platform temperature, a build volume temperature, an infill requirement, a rafting requirement, a support structure requirement, and a cooling requirement”), and 19[f] (“controlling operation of the three-dimensional printer with the controller according to the operational parameter; and fabricating an object with the three-dimensional printer based upon the operational parameter.”). As explained in the section below, *Menchik* does not teach a client and thus cannot teach receiving one or more operational parameters from the client (1[f]) or fabricating the object with the build

material according to the one or more operational parameters that are received from the client (1[g]). *Infra* § IV. Further, *Menchik* does not teach an operational parameter that is a support structure requirement (19[e]) and thus does not teach fabricating an object based on such an operational parameter (19[f]). *See id.* These conclusions for claim 1 do not change under Ground 2A (*Menchik* and *Jazayeri*). *See id.*

As such, factors (a), (b), and (d) favor denying institution.

**B. Factors (c), (e), and (f): Petitioner has failed to show any material error by the Patent Office**

Petitioner asserts that “there was a material error during examination because the Loughran-Dubois combination, Devos, and Menchik all provided Elements 1[f]/19[f], which the examiner mistakenly believed to be missing from the prior art.” Pet. at 83. As explained in the section above, these references and combinations do not provide elements 1[f]/19[f]. *Supra* § III.A. Further, Petitioner fails to address to address *Dahlin*—another reference cited on the face of the ’466 Patent and considered by the Office during prosecution. Thus, the asserted grounds are cumulative over what was considered during prosecution and factors (c) and (e) favor denial of institution.

Petitioner has not provided any additional evidence or facts in the Petition that would warrant reconsideration of *Menchik*, *Dahlin*, or their teachings. Other

grounds (Grounds 1A, 1B, 2) of the Petition are cumulative over combinations with *Menchik* and/or *Dahlin* because they too fail to teach claim elements 1[f]/19[f]. Thus, Petitioner has not provided any additional evidence or facts in the Petition that would warrant reconsideration. Thus, factor (f) favors denial of institution.

On balance, the *Becton, Dickinson* factors weigh in favor of discretionary denial of institution under § 325(d) and thus the Director should decline to institute review of this Petition.

#### **IV. THE MERITS OF THE PETITION ARE WEAK**

Under the *Fintiv* framework, the Board and Director consider a balanced assessment of all relevant circumstances, including the merits of the Petition. As summarized below, and as will explained in further detail in the Patent Owner Preliminary Response, the merits of the Petition are weak. Each of the asserted Grounds for independent claims 1 and 19 (and thus each challenged dependent claim) contain substantive flaws and fail to show that any claims are unpatentable.

**A. Jazayeri is an improper reference**

As one example, the *Jazayeri* reference asserted in Ground 3B (as well as Grounds 1B, 1D<sup>3</sup>, 1F, 3D, 3F, and 3H) is an improper reference for an obviousness challenge. *Jazayeri* is not in the same field of endeavor as the '466 Patent, which is about three-dimensional additive manufacturing. *See, e.g.*, EX1001, 1:23-33.

Petitioner asserts that *Jazayeri* relates to “networked printing environments” (Pet. at 36, 73) but Petitioner never defines the level of skill or describes the '466 Patent as related to this topic (Pet. at 3, 6). Further, *Jazayeri* is not reasonably pertinent to the problem faced by the inventors. The '466 Patent addresses a need for automatic detection and acquisition of three-dimensional build material characteristics to determine how to use the material during fabrication of a three-dimensional object. *See* EX1001, 1:23-33; *see also* Pet. at 3. *Jazayeri* does not explain why an additive manufacturing system would benefit from its solution that addresses the installation of two-dimensional, conventional printer drivers for an operating system. *See* EX1010 at [0002]. And Petitioner fails to address why *Jazayeri*'s

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<sup>3</sup> Petitioner has failed to identify the grounds on which the challenge to each claim is based by identifying “Jazayer” in Grounds 1D and 1F. *See* 35 U.S.C. § 312(a)(3). Patent Owner has interpreted Petitioner's failure as a mistake in properly identifying *Jazayeri* in those grounds.

cloud-based services for two-dimensional printers relates to the problem solved by the inventors of the '466 Patent. *See* Pet. at 35. Thus, Petitioner has failed to show that *Jazayeri* is a proper reference for an obviousness challenge. *See In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004).

**B. No motivation to combine references in Grounds 1A (*Loughran* and *Dubois*) and 1B (*Loughran*, *Dubois*, and *Jazayeri*)**

As another example, there is no motivation to combine *Loughran* and *Dubois* in Ground 1A and *Loughran*, *Dubois*, and *Jazayeri* in Ground 1B. For Ground 1A, Petitioner asserts that there is a motivation (Pet. at 10-13), but wholly fails to address the fact that the proposed combination is contrary to the express teachings of *Loughran*, which enables the printer to adjust its own use automatically and dynamically based on its own information, rather receiving information from, for example, a client. *See, e.g.*, EX1004 at [0024], [0025], [0035], [0037], [0045], [0048], Fig. 3 at 326.

Similarly, Petitioner asserts a motivation for Ground 1B (Pet. at 33-36), but Petitioner shortcuts its analysis and fails to explain in adequate detail how *Jazayeri*'s purported suggestion of providing "print server" functionality and a separate "cloud print service 102" would have worked in *Loughran*'s system of multiple printers (e.g., SFF printer systems 102 and 104). *See, e.g.*, EX1004 at Fig. 1. Moreover, Petitioner's conclusory assertion that *Jazayeri* "does not disturb the

aspects of *Loughran and Dubois*” is plainly deficient. Petitioner ignores the teachings of *Dubois*, which discloses printer-specific implementations (*see* EX1005, [0148] (quoted by Pet. at 11)), by asserting motivations to combine based on printer-agnostic implementations. *See* Pet. at 35 (“[P]rovided a user with a printing experience that is ‘platform-independent.’”), 36 (“user can use software that is not printer specific”).

**C. Grounds 1A-1B (*Loughran and Dubois* without or with *Jazayeri*) does not teach claim 1**

As another example, the Petition fails to show that the *Loughran–Dubois* combination of Ground 1A and *Loughran–Dubois–Jazayeri* combination of Ground 1B teach each element of claim 1. For instance, the Petition tacitly admits that *Loughran*'s fabrication job is not a request, as recited by claim element 1[b] (“receiving a request from a client over a network to fabricate an object on the three-dimensional printer”), by adding *Jazayeri* to the combination in Ground 1B. Thus, the combination in Ground 1A does not teach claim element 1[b]. *See* Pet. at 33.

Further, the Petition fails to explain why a skilled artisan would ignore *Loughran*'s express teaching of a printer that automatically and dynamically adjusts its use based on its own information, and would instead modify that system by sending “printing parameters” from *Dubois*'s CAD client to adjust the

*Loughran* printer. Thus, the combination in Ground 1A does not teach claim element 1[f] (“receiving one or more operational parameters from the client selected for use in controlling operation of the three-dimensional printer when fabricating the object with the build material having the at least one property stored in the tag”). *See* Pet. at 26; *supra* §IV.B. The Petition does not separately address claim element 1[f] in Ground 1B and thus it too does not teach claim element 1[f] for at least the same reasons. *See* Pet. at 33.

**D. Ground 2 does not teach claim 19**

As a further example, Petitioner fails to show that *Devos* in Ground 2 teaches each element of claim 19. For instance, the Petition fails to explain why *Devos*'s disclosure of “powder supports” teaches “determining an operational parameter for configuring the three-dimensional printer” in which the parameter includes a “support structure requirement” (claim element 19[e]). *See* Pet. at 49. It appears that Petitioner has improperly sought to shift its burden to articulate its arguments to its expert, who claims the combined “system would need to generate a parameter indicating ‘how much support’ material to use in fabricating the object.” EX1003, ¶113; *see also* 35 U.S.C. § 312(a)(3); 37 C.F.R. § 42.104(b)(4).

But even if the expert's argument were adopted by Petitioner as its own, there is no evidence to support the argument. Petitioner does not provide any evidence and neither does Petitioner's expert. *Devos* does not provide any support

for the expert's argument either. It never discloses the use of "support materials." Rather, it discloses that only one material is used to build objects. *See, e.g.*, EX1008 at Fig. 2, Fig. 6, [0013], [0014], [0019]. When the entire object is formed, the extra material (in powder form) that is not bonded with a binder/adhesive is "brushed away." *See id.* at [0015]. Accordingly, *Devos*'s reference to "powder supports" and "how much support" has nothing to do with support material or a "support structure requirement" as Petitioner's expert argues.

**E. Grounds 3A-3B (*Menchik* or *Menchik* and *Jazayeri*) does not teach claims 1 and 19**

As another example, the Petition fails to show that *Menchik* in Ground 3A and *Menchik-Jazayeri* in Ground 3B disclose or teach each element of claims 1 and 19. For instance, Petitioner fails to explain why controller 105 in *Menchik* is a client—a term never used by the reference. *See, e.g.*, Pet. at 57-59. As shown by Figure 1 of *Menchik*, controller 105 controls various parts of the printer 140, such as valve matrix 175, dispensing unit 150, positioning unit 155, leveler 157, and curer 159.

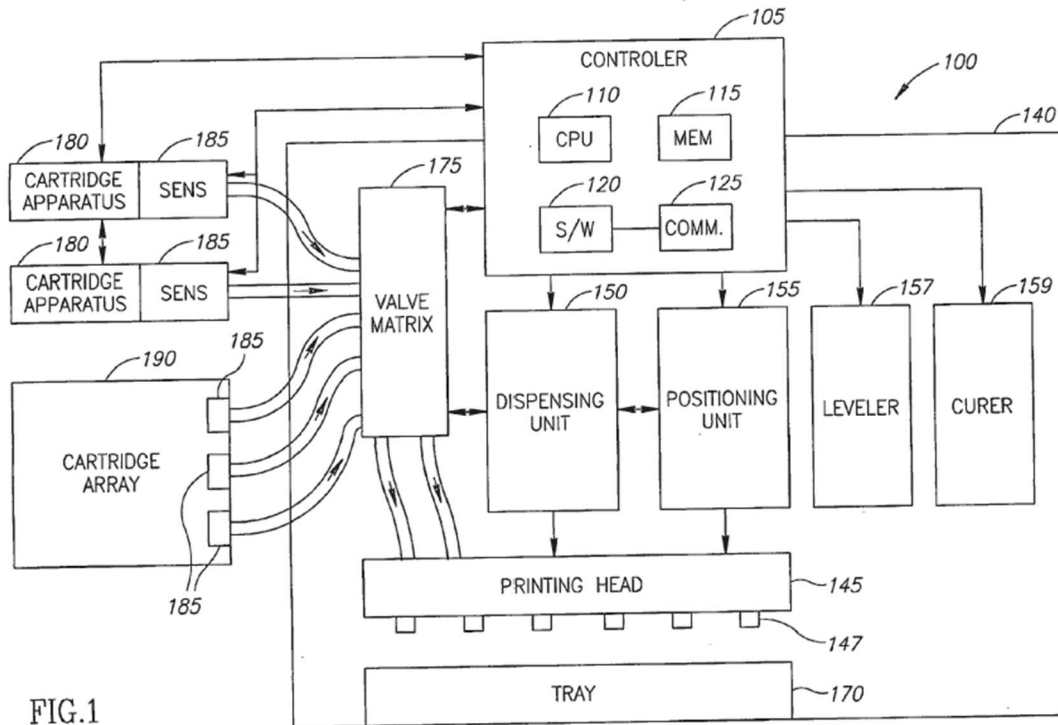


FIG.1

EX1009 at Fig. 1. *Menchik* describes a separate device—“a computing platform connected to 3D printer system 100”—as providing “a printing file” which the system then uses to determine “the order and configuration of deposition of building material” EX1009, [0025]. Petitioner argues in a conclusory manner that this separate device is an example of the controller 105 external to the printer 140. *See* Pet. at 58-59. But Petitioner conflates controller 105 with the separate device. *Menchik* never describes the computing platform connected to 3D printer system 100 for providing a printing file as controller 105. *See* EX1009, [0025]. Petitioner does not provide any explanation beyond citing to its expert, who merely parrots the conclusory assertions in the Petition. *See* Pet. at 58-59 (citing EX1003, ¶¶129-

30). Thus, Petitioner fails to show that *Menchik* discloses or teaches several claim elements of claim 1 that recite a client (1[b], 1[e], 1[f]).

As another example, Petitioner fails to set forth its theories in the Petition for claim element 1[f]. Petitioner concludes that the printer “receives the printing file” and five types of parameters (printing, operation, building, material, supply), that Petitioner collectively calls operational parameters, from controller 105. *See* Pet. at 63. But Petitioner fails to explain why *Menchik* teaches that the five types of parameters are received by the printer from the controller when there is no such disclosure in *Menchik*. *See, e.g.*, EX1009 at [0049] (sending information to be displayed on a computer screen rather than sending information to the printer). Petitioner also fails to explain which printing, operation, building, material, and supply parameters are allegedly received. In fact, Petitioner never discusses “operation parameters” or “building parameters” in its argument for claim element 1[f] (or for 1[b], which is referenced in the argument for 1[f]). *See* Pet. at 61-63; *see also id.* at 57-59. Thus, Petitioner has failed to show that *Menchik* discloses or teaches claim element 1[f] for this additional reason.

Similarly, Petitioner also fails to explain its assertions for claim 19. It merely asserts that controller 105 is within printing apparatus 140 and refers back to its arguments for claim element 1[f] and claim 10. *See* Pet. at 68-71. But, claim element 1[f] and claim 10 do not recite the same elements as claim 19. Petitioner's

suggestion that the Board should piece together Petitioner's argument for claim 19 improperly shifts Petitioner's burden to the Board. *See Gross v. Cicero*, 619 F.3d 697, 702 (7th Cir. 2010) ("Judges are not like pigs, hunting for truffles buried [in the record]."). Moreover, to the extent Petitioner argues that *Menchik* teaches or discloses an "operational parameter [that] includ[es] ... a support structure requirement," as recited in claim element 19[e], the Petition does not cite any evidence in *Menchik* for claim 10. *See* Pet. at 67-68. Nor does Petitioner explain how *Menchik* teaches determining a support structure requirement for configuring the three-dimensional printer "based upon at least one property of the build material in the data."

The Petition does not separately address claim element 1[e] and 1[f] in Ground 3B (*Menchik* and *Jazayeri*) and thus it too does not teach claim elements 1[e] and 1[f] for at least the same reasons. *See* Pet. at 71.

## V. ADDITIONAL COMMENTS

With respect to any arguments in the Petition that are not specifically addressed herein, Patent Owner does not concede the legitimacy of such arguments in the Petition and any underlying contentions in the Petition. Patent Owner's forthcoming Preliminary Response will address why review should not be instituted on the merits in more detail. Further, if *inter partes* review is instituted,

Patent Owner expressly reserves the right to rebut any such arguments and any such contentions at a later point, including in a Patent Owner Response. Patent Owner is not limited to the arguments presented here in this request for discretionary denial and expressly reserves the right to raise further arguments, including claim construction arguments, not presented herein.

## VI. CONCLUSION

For the foregoing reasons, Patent Owner respectfully requests that the Director exercise her discretionary powers and decline to institute *inter partes* review of the '466 Patent.

Respectfully submitted,

Dated: June 9, 2025

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**CERTIFICATE OF COMPLIANCE**

Pursuant to 37 C.F.R. § 42.24(d), I certify that this Request for Discretionary Denial complies with the type-volume limits of 37 C.F.R. § 42.24(b)(1) because it contains 9,511 words, excluding the parts that are exempted by 37 C.F.R. § 42.24(a), according to the word processing system used in preparation of this Request.

Dated: June 9, 2025

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**CERTIFICATE OF SERVICE**

Pursuant to 37 CFR § 42.6(e)(4), the undersigned certifies that on June 9, 2025, a complete copy of the foregoing Patent Owner's Request for Discretionary Denial was served on Lead and Back-up Counsel for Petitioner at the service address provided in Petitioner's Mandatory Notices:

Email: IPR56224-0010IP1@fr.com

Dated: June 9, 2025

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