

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

SHENZHEN TUOZHU TECHNOLOGY CO., LTD.,  
Petitioner

v.

STRATASYS, INC.  
Patent Owner.

---

IPR2025-00531  
U.S. PATENT NO. 9,168,698

---

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

**TABLE OF CONTENTS**

I. Introduction .....1

II. Discretionary Denial Under 35 U.S.C. § 314 is Appropriate .....1

A. The exercise of discretionary denial under the *Fintiv* Precedent is proper..4

B. Factor 1: Whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted.....5

C. Factor 2: Proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision .....7

D. Factor 3: Investment in the parallel proceeding by the court and the parties.....13

E. Factor 4: Overlap between issues raised in the petition and in the parallel proceeding.....15

F. Factor 5: Whether the petitioner and the defendant in the parallel proceeding are the same party .....19

G. Factor 6: Other circumstances that impact the Board’s exercise of discretion, including the merits .....20

III. The Merits of the Petition Are Weak .....25

A. The Petition Fails to Satisfy the Requirements of IPR .....25

B. No motivation to combine different embodiments of *Warren* .....26

C. Ground 1A (*Warren*) does not teach claim 1 .....27

D. *RepRap20208* is not a printed publication .....28

E. No motivation to combine *Calderon* and *RepRap20208* (Ground 2A).....30

F. Ground 2A (*Calderon* and *RepRap20208*) does not teach claim 1 .....31

G. Lack of supporting evidence for Ground 2A .....32

IV. Additional Comments.....33

V. Conclusion .....34

**TABLE OF AUTHORITIES**

|   | <b>Page(s)</b> |
|---|----------------|
| <b>Federal Cases</b>  |                |
| <i>10X Genomics, Inc. v. President and Fellows of Harvard College</i> ,<br>IPR2023-01299, Paper 15 (PTAB Mar. 7, 2024).....           | 12             |
| <i>Acorn Semi, LLC v. Samsung Elecs. Co.</i> ,<br>No. 2:19-CV-00347-JRG, 2020 WL 10284981 (E.D. Tex. Sept. 14,<br>2020) .....         | 6              |
| <i>Apple Inc. v. Fintiv, Inc.</i> ,<br>IPR2020-00019, Paper 11 (PTAB “Precedential” Mar. 20, 2020).....                               | <i>passim</i>  |
| <i>Apple Inc. v. Fintiv, Inc.</i> ,<br>IPR2020-00019, Paper 15 (PTAB “Informative” May 13, 2020).....                                 | 11, 19, 20     |
| <i>Apple Inc. v. Vidal</i> ,<br>63 F.4th 1 (Fed. Cir. 2023) .....   | 4              |
| <i>Apple Inc. v. Vidal</i> ,<br>Case No. 20-CV-06128-EJD, 2024 WL 1382465 (N.D. Cal. Mar.<br>31, 2024) .....                          | 4, 5           |
| <i>Arendi S.A.R.L. v. Apple Inc.</i> ,<br>832 F.3d 1355 (Fed. Cir. 2016) .....  | 33             |
| <i>Arm Ltd. et al. v. Daedalus Prime LLC</i> ,<br>IPR2025-00207, Paper 10 (PTAB May 16, 2025) .....                                   | 11             |
| <i>Belden Inc. v. Berk-Tek LLC</i> ,<br>805 F.3d 1064 (Fed. Cir. 2015) .....  | 28             |
| <i>Blue Calypso, LLC v. Groupon, Inc.</i> ,<br>815 F.3d 1331 (Fed. Cir. 2016) .....   | 29             |
| <i>Charter Commc’ns, Inc. v. Adaptive Spectrum and Signal Alignment, Inc.</i> ,<br>IPR2024-01379, Paper 16 (PTAB Apr. 17, 2025) ..... | 11             |
| <i>Conmed Corp. v. Bonutti Skeletal Innov. LLC</i> ,<br>IPR2013-00624, Paper 18 (PTAB Feb. 21, 2014).....                             | 26             |

*Cuozzo Speed Techs. v. Lee*,  
579 U.S. 261 (2016).....2

*EClinicalWorks, LLC v. Decapolis LLC*,  
IPR2022-00229, Paper 10 (PTAB Apr. 13, 2022) ..... 12

*Facebook v. Windy City Innovations, LLC*,  
973 F.3d 1321 (Fed. Cir. 2020) .....21

*Harmonic Inc. v. Avid Tech., Inc.*,  
815 F.3d 1356 (Fed. Cir. 2016) .....2

*Ingenico Inc. v. IOENGINE, LLC*,  
No. 2023-1367, 2025 WL 1318188 (Fed. Cir. May 7, 2025)..... 18

*Medivis, Inc. v. Novarad Corp.*,  
IPR2023-00042, Paper 37 (PTAB Apr. 23, 2024) .....29

*MHL Custom, Inc. v. Waydoo USA, Inc.*,  
No. CV 21-0091-RGA, 2023 WL 5748755 (D. Del. Sept. 6, 2023).....30

*Motorola Sols. v. Stellar, LLC*,  
IPR2024-01205, Paper 19 (PTAB Mar. 28, 2025) .....16, 17, 18

*Nuna Baby Essentials, Inc. v. Britax Child Safety, Inc.*,  
IPR2018-01683, Paper 11 (PTAB Dec. 18, 2018) .....26

*SAS Inst., Inc. v. Iancu*,  
584 U.S. 357 (2018).....2

*TCL Commc’n Tech. Holdings Ltd. v. DataQuill Ltd.*,  
IPR2020-00746, Paper 21 (Sept. 18, 2020).....29

*Uniloc USA, Inc. v. Motorola Mobility LLC*,  
2:16-cv-00992-JRG, Dkt. No. 125 (E.D. Tex. Apr. 5, 2017).....6

*Xerox Corp. v. Bytemark, Inc.*,  
IPR2022-00624, Paper 9 (PTAB Aug. 24, 2022).....22

**Federal Statutes**

5 U.S.C. § 701(a)(1).....4

35 U.S.C. § 312(a)(3).....22

35 U.S.C. § 312(a)(3)(A) .....25

35 U.S.C. § 314..... 1

35 U.S.C. § 314(a) .....1, 2, 3

35 U.S.C. § 314(b) .....8

35 U.S.C. § 316(a)(11).....8

35 U.S.C. § 316(b) .....24

**Regulations**

37 C.F.R. § 42.6(a)(3).....29

37 C.F.R. § 42.104 .....25

37 C.F.R. § 42.104(b)(4).....22

37 C.F.R. § 42.104(b)(5).....25

Consolidated Trial Practice Guide (84 Fed. Reg. 64,280 (Nov. 21, 2019)).....2, 14

**Other Authorities**

Video of Hearing on the Nomination of Howard Lutnick, of New York, to be Secretary of Commerce (Jan. 29, 2025), 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).....23

**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, 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.

The exercise of discretionary denial power is appropriate under § 314. “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;

---

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

- 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;
- 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 75. 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 76. 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 '698 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. EX1024 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 76. 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 “if the motion to dismiss is successful, the EDTX trial will not happen” and a trial in the WDTX is not expected until mid-2027. Pet. at 76. 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 ’698 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 76. 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* EX1024 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* EX1024 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 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 76. 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. EX1024, 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 (EX1024 at 6); (c) exchanged additional disclosures (EX1024 at 6); and (d) exchanged infringement, invalidity, and subject-matter eligibility contentions totaling well over 2,000 pages (*see* EX1024 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 and invalidity contentions are anticipated based on the Court's local patent rules. *See* EX1024 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 1-15) and the Related Litigation is significant. There is significant overlap in claims with the vast majority of claims (claims 1-5, 7-10, 12, 15) involved in the Related Litigation. There is also significant overlap in invalidity references and grounds. The Petition asserts four grounds involving various combinations of *Warren*, *Eshed*, *Calderon*, and *RepRap20208*, among other references. Each of these references in the Petition is included in the Invalidity Contentions along with many others. *See* EX2007 at 11-12, 19, 29, 34-35, 46-62. 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 76. 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 four system art references: MakerBot Replicator, SeTAC, RepRap 20208, and Bukkapatnam. EX2007 at 29. Petitioner's contentions also identify numerous combinations involving the references in this IPR and system art, including:

- "Warren in combination with" MakerBot Replicator or SeTAC;
- "Calderon in combination with" RepRap 20208, RepRap 20208 and MakerBot, or RepRap 20208 and SeTAC; and
- "MakerBot in combination with" SeTAC and Eshed, SeTAC and Warren, SeTAC and Calderon, RepRap, RepRap and Mayer, RepRap and Igasaki, RepRap and Calderon, Eshed, Eshed and Mayer, Eshed and Igasaki, Eshed and Calderon, or Eshed and Dunn.

*Id.* at 52-53. 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:”

- Mechanically Coupled Fabrication-Sensor References (including SeTAC, Bukkapatnam, Warren, RepRap 20208, Eshed);
- Detecting Current Contact Force References (including SeTAC, Bukkapatnam, Warren, RepRap 20208, Calderon, Eshed);
- Force-Sensor Responsive Control Signal References (including SeTAC, Bukkapatnam, Warren, RepRap 20208, Eshed);
- Controlling Feed-Rate References (including MakerBot Replicator, Warren, Bukkapatnam);
- Controlling Z-Height References (including MakerBot, Bukkapatnam, Warren, Calderon);
- Detecting Forces Due to External Structures References (including SeTAC, Bukkapatnam, Warren, RepRap 20208);
- Current and Expected Contact Forces References (including Warren, ReRap 20208); and
- Detecting Planarity References (Warren, Calderon).

*Id.* at 54-62; *see also id.* at 34-35 (listing 6 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 well over 30 such variations adding system art. *See* EX2007, 34-35 (6 alleged anticipatory references), 52-53 (17 alleged obviousness combinations involving art asserted in this IPR); *see also id.* at 54-62 (8 categories of additional obviousness combinations, each with one 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 third-party discovery regarding the MakerBot Replicator 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 favors institution due to Petitioner's motion to dismiss. *See* Pet. at 76. As explained above, Petitioner's motion to dismiss was denied by the court in the Related Litigation. *See* EX2009. 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 that if the motion to dismiss is granted, there will be “no potential overlap of issues between the IPR and parallel [district court] action.” Pet. at 76.

However, the district court has denied Petitioner's motion to dismiss in the Related Litigation. *See* EX2009. Further, 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.

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 III ("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 106-page expert declaration with over 120 citations to the declaration. *See* Petition and EX1003; *see also* Pet. at 1 (providing one citation to 244 paragraphs of the expert declaration). 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, ¶170 *with* Pet. at 53, both arguing "[t]he resistance to movement of the substrate 128 and platform 134 can be influenced by other factors like damage, wear or friction (e.g., due to dirt or need of maintenance) in the servo drive motors and drive system, as well as other factors" without further explanation or support. 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

---

<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.

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* § III.E-G (Ground 2A); *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 ’698 Patent has been in force for over 9 years, which has set the expectations of the parties that it is valid and enforceable. Nearly half of the Petition (Grounds 2A and 2B) seeks to revisit the USPTO’s consideration of the ’698 Patent by asserting a ground based primarily on *Calderon*, a reference that

was before the examiner. *See* EX1001 at 1 (listing *Calderon* as one of seven references cited); EX1002 at 47 (listing *Calderon* as a reference considered by the examiner).

In addition, there have been no new changes in the law or new judicial precedent issued since the issuance of the '698 Patent that could affect patentability. Nor has Petitioner identified any such changes. 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 '698 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 '698 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 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 claim 1 (and thus each challenged dependent claim) contain substantive flaws and fail to show that any claims are unpatentable.

#### A. The Petition Fails to Satisfy the Requirements of IPR

As one example, Petitioner has failed to satisfy the threshold requirements of *inter partes* review by failing to identify specific portions of Exhibit 1004 (*Warren*), U.S. Patent No. 6,986,739. Each of the citations to *Warren* in the Petition include paragraph numbers despite the provided exhibit, a U.S. patent, lacking paragraph numbers. *See, e.g.*, Pet. at 6 (citing EX1004, [0010-0011]); *see generally* EX1004. Thus, Petitioner has failed to satisfy the requirements of a petition for *inter partes* review. *See* 35 U.S.C. § 312(a)(3)(A) (The petition must identify “the evidence that supports the grounds for the challenge to each claim” and include “copies of patents and printed publications that the petitioner relies upon in support of the petition.”); 37 C.F.R. § 42.104 (specifying content of the petition); 37 C.F.R. § 42.104(b)(5) (The Petition must provide a statement of the precise relief requested including by “identifying specific portions of the evidence

that support the challenge.” The Board “may exclude or give no weight to the evidence where a party has failed . . . to identify specific portions of the evidence that support the challenge.”); *see also Conmed Corp. v. Bonutti Skeletal Innov. LLC*, IPR2013-00624, Paper 18 at 8 (PTAB Feb. 21, 2014) (“At the very least, the responsibilities of Petitioner’s counsel include reviewing documents uploaded during this proceeding and, if necessary, notifying the Board of a mistake, inconsistency, or error in a timely manner.”); *Nuna Baby Essentials, Inc. v. Britax Child Safety, Inc.*, IPR2018-01683, Paper 11 at 6 (PTAB Dec. 18, 2018) (“There is no evidence concerning whether counsel for Petitioner checked” its filings.).

As a result of Petitioner’s failure, Patent Owner has been forced to search for text quoted in its Petition from *Warren* to formulate its arguments on the merits. Petitioner’s failure is both prejudicial to Patent Owner and an independent basis for finding that the merits of the Petition are weak and that there are other considerations bearing on the Director’s discretion to deny institution. *See* Director’s Memo at 2–3.

**B. No motivation to combine different embodiments of *Warren***

As another example, there is no motivation to combine the different embodiments of *Warren*, as Petitioner asserts. *See* Pet. at 13-16. None of Petitioner’s reasons or rationales are sufficient to achieve the combination. There is no express motivation or invitation in *Warren*, as Petitioner purports. *See* EX1004,

47:14-19<sup>3</sup>. Also, Petitioner repeatedly ignores *Warren's* teachings to support its impermissible hindsight. The vibrating force sensor embodiments of *Warren* already teach a high-precision solution that uses capillary dispensers in which the flow is controlled by capillary surface tension, requiring that the tip almost touch the substrate surface. *See id.* at 44:33-41, 44:55-57. But there is no analogous teaching for *Warren's* through-nozzle dispenser embodiments, which rely on a piston to control material flow and a linear location controller for positioning, rather than almost touching the substrate. *See id.* at 38:37-39, 36:66-67, 35:51-55. Thus, there is no motivation to combine these disparate embodiments of *Warren* with different requirements, solutions, and uses.

**C. Ground 1A (*Warren*) does not teach claim 1**

As another example, the *Warren* combination in Ground 1A does not teach each element of claim 1. For instance, the Petition fails to show that the combination teaches claim elements 1[b] (“initiating a build using a three-dimensional printer comprising a fabrication tool and one or more sensors mechanically coupled to the fabrication tool, the one or more sensors configured to detect a current contact force between the fabrication tool and a separate

---

<sup>3</sup> Patent Owner has provided citations to the columns and line numbers in the exhibit for *Warren* (EX1004).

structure;”) and 1[c] (“detecting the current contact force based on a sensor signal from the one or more sensors; and”).

Petitioner concedes that *Warren* detects a change in amplitude of vibration and not a current contact force, but asserts that “a POSITA would have understood or found it obvious that the contact force can be readily calculated from the detected ‘change in the amplitude.’” *See* Pet. at 20. *Warren* does not explain how to calculate the contact force from a change in amplitude as Petitioner argues. It only says that the force is proportional to the change in amplitude, which according to Figure 21 of *Warren* has arbitrary units and varies widely over a frequency range that also has arbitrary units. *See* EX1004 at Fig. 21. Further, even if the contact force could have been calculated, as Petitioner asserts, there is no explanation how a skilled artisan would have done so. *See Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015) (“[O]bviousness concerns whether a skilled artisan not only *could have made* but *would have been motivated to make* the combinations or modifications of prior art to arrive at the claimed invention.”).

**D. *RepRap20208* is not a printed publication**

As another example, Petitioner has failed to show that one of the references in Ground 2A, *RepRap20208*, is a printed publication. Petitioner asserts that the reference “is an online discussion thread” that was purportedly published around January 2009 on a website repprap.org, where forum discussion threads were

purportedly accessible from the front page, ordered by subject matter and keyword searchable. *See* Pet. at 2. However, Petitioner fails to address why *RepRap2028*, specifically, was accessible to the public before the challenged patent, much less by January 2009.

To the extent Petitioner relies on arguments in the declaration that it has cited, the PTAB's "rules prohibit parties' incorporation of arguments by reference." *See* Decision Denying Petitioner's Request on Rehearing of Final Written Decision, *Medivis, Inc. v. Novarad Corp.*, IPR2023-00042, Paper 37 at 10 (PTAB Apr. 23, 2024); *see also* 37 C.F.R. § 42.6(a)(3).

Further, it is improper to ask the Board to "piece together" potential arguments that might have been made. *See TCL Commc'n Tech. Holdings Ltd. v. DataQuill Ltd.*, IPR2020-00746, Paper 21 at 22 (Sept. 18, 2020) (denying institution and explaining that it is "Petitioner's responsibility to cite specific evidence to support its arguments, not the Board's responsibility to piece together evidence or speculate as to Petitioner's position").

Even if the Board were to consider the arguments in the declaration and "piece together" Petitioner's position, there is no evidence of which subject matter or keywords would have been used to find *RepRap20208* with reasonable diligence. *See Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1350–51 (Fed. Cir. 2016) (agreeing with Board that petitioner "failed to carry its burden of

proving public accessibility” of an asserted reference as it must provide “a sufficiently definite roadmap” leading to the reference); *see also MHL Custom, Inc. v. Waydoo USA, Inc.*, No. CV 21-0091-RGA, 2023 WL 5748755, at \*4 (D. Del. Sept. 6, 2023) (explaining that indexing / technical accessibility, by itself, is “not sufficient to prove public accessibility”) (citing *Acceleration Bay, LLC v. Activision Blizzard Inc.*, 908 F.3d 765, 774 (Fed. Cir. 2018)). In fact, *RepRap20208* suggests that it is located in the “General” forum, which plainly indicates no particular subject matter could have been used to find the reference. *See* EX1010 at 1 (“Home > General > Topic”). Also, the title of *RepRap20208* (i.e., “Genetic Algorithms”) fails to indicate how the reference has anything to do with “how to improve control of the RepRap 3D printer” as Petitioner asserts. *See* EX1010 at 1; Pet. at 46.

**E. No motivation to combine *Calderon* and *RepRap20208* (Ground 2A)**

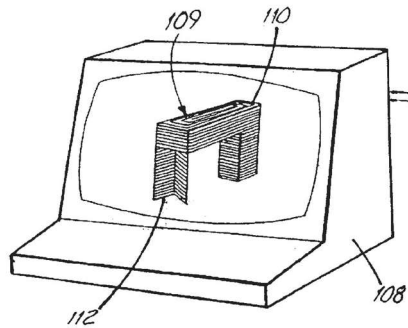
As another example, Petitioner has failed to show a motivation to combine *Calderon* and *RepRap20208* in Ground 2A. *See* Pet. at 49-56. *Calderon* already has its own technique for auto-initialization and collision detection to determine contact between a nozzle and the substrate by “monitoring a change in the servo drive current” and discourages solutions that need “special purpose sensing means.” EX1009 at 10:5-8; *see also id.* at 9:63-10:5, 10:26-47. Petitioner fails to

adequately address these teachings in *Calderon* and instead presents multiple, deficient rationales for ignoring *Calderon's* teachings. In doing so, however, Petitioner misinterprets and ignores the teachings of *Calderon* and *RepRap20208* and relies on impermissible hindsight based on unsupported statements by its expert. *See, e.g.*, Pet. at 53-54 (citing to EX1003 at ¶170 six times for the same argument without any other support).

In fact, Petitioner's repeated reliance on its expert to explain its combination suggests that any factual questions are better resolved by in an Article III court as a matter of efficiency. *See* Pet. at 48-56 (citing to its expert's declaration over 35 times); *see also* Director's Memo at 2-3; FAQs for Interim Processes for PTAB Workload Management, Briefing requirements, Question 21, available at <https://www.uspto.gov/patents/ptab/faqs/interim-processes-workload-management>.

**F. Ground 2A (*Calderon* and *RepRap20208*) does not teach claim 1**

As another example, the *Calderon* and *RepRap20208* combination in Ground 2A does not teach each element of claim 1. For instance, the Petition fails to show that the combination teaches claim element 1[a] ("identifying build instructions for fabricating an object"), as Petitioner does not explain why the file in *Calderon* has build instructions for fabricating the object. *See* Pet. at 57-58.



As shown in Figure 1 of *Calderon* above, the file and elements in the figure represents the model of the object and not build instructions for fabricating the object. *See* EX1009 at Fig. 1.

As another example, the Petition fails to explain how the combination detects a current contact force. *See* claim elements 1[b] and 1[c]. As explained above, *Calderon* already has its own solution for determining contact between a nozzle and the substrate. *Supra* § III.E. Further, Petitioner again relies on its expert's declaration without evidentiary support for claim element 1[d] to assert that it would have been obvious to create a control signal, but Petitioner fails to explain why a control signal would have been created based on the teachings of the references. *See* Pet. at 62-63.

### **G. Lack of supporting evidence for Ground 2A**

As another example, Petitioner fails to explain its arguments with supporting evidence for its obviousness arguments regarding many dependent claims in Ground 2A. Instead, it appears that Petitioner has improperly resorted to common

sense or a POSITA's knowledge to supply a limitation. *See, e.g.*, Pet. at 63 (claim 3), Pet. at 64 (claim 4), Pet. at 65 (claim 5), Pet. at 66 (claim 7), Pet. at 66 (claim 8), Pet. at 68-69 (claim 9), Pet. at 69 (claim element 12[a]), Pet. at 70 (claim element 12[b]); *see also Arendi S.A.R.L. v. Apple Inc.*, 832 F.3d 1355, 1361 (Fed. Cir. 2016) (“common sense is typically invoked to provide a known motivation to combine, not to supply a missing claim limitation”). As the Federal Circuit explained in *Arendi*, the Court's cases “repeatedly warn that references to ‘common sense’—whether to supply a motivation to combine or a missing limitation—cannot be used as a wholesale substitute for reasoned analysis and evidentiary support, especially when dealing with a limitation missing from the prior art references specified.” *Id.* at 1362. In the rare case where common sense “is used to supply a missing limitation” the search for “a reasoned basis for resort[ing] to common sense must be searching” and “this is particularly true where the missing limitation goes to the heart of an invention.” *Id.*

#### **IV. 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.

## V. 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 '698 Patent.

Respectfully submitted,

Dated: June 9, 2025

/s/ Brian W. Oaks

Brian W. Oaks (Reg. No. 44,981)  
MCDERMOTT WILL & EMERY LLP  
300 Colorado Street, Suite 2200  
Austin, TX 78701  
TEL: 512-726-2574  
EMAIL: boaks@mwe.com

*Attorney for Patent Owner*

**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 7,596 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

/s/ Brian W. Oaks

Brian W. Oaks (Reg. No. 44,981)  
MCDERMOTT WILL & EMERY LLP  
300 Colorado Street, Suite 2200  
Austin, TX 78701  
TEL: 512-726-2574  
EMAIL: boaks@mwe.com

*Attorney for Patent Owner*

**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: IPR56224-0008IP1@fr.com

Dated: June 9, 2025

/s/ Brian W. Oaks \_\_\_\_\_

Brian W. Oaks (Reg. No. 44,981)  
MCDERMOTT WILL & EMERY LLP  
300 Colorado Street, Suite 2200  
Austin, TX 78701  
TEL: 512-726-2574  
EMAIL: boaks@mwe.com

*Attorney for Patent Owner*