

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VALVE CORPORATION,
Petitioner,

v.

IMMERSION CORPORATION,
Patent Owner.

IPR2024-00477
Patent 7,336,260 B2

Before WILLIAM V. SAINDON, PATRICK R. SCANLON, and
CHRISTOPHER L. OGDEN, *Administrative Patent Judges*.

SCANLON, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

Valve Corporation (“Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting an *inter partes* review (“IPR”) of claims 1–7 of U.S. Patent No. 7,336,260 B2 (Ex. 1001, “the ’260 patent”). Immersion Corporation (“Patent Owner”) filed a Preliminary Response (Paper 7, “Prelim. Resp.”). With our authorization, Petitioner filed a Reply (Paper 9, “Prelim. Reply”) to the Preliminary Response, and Patent Owner filed a Sur-reply (Paper 11, “Prelim. Sur-reply”).

We have authority to determine whether to institute an *inter partes* review. *See* 35 U.S.C. § 314 (2018); 37 C.F.R. § 42.4(a) (2022). To institute an *inter partes* review, we must determine that the information presented in the Petition shows “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). For the reasons set forth below, we determine that Petitioner has demonstrated a reasonable likelihood that it would prevail with respect to at least one challenged claim. Accordingly, we institute an *inter partes* review of the challenged claims on the grounds set forth in the Petition.

Our factual findings and conclusions at this stage of the proceeding are based on the evidentiary record developed thus far. This is not a final decision as to patentability of the challenged claims. Any final decision will be based on the full trial record, including any response to the Petition timely filed by Patent Owner.

II. BACKGROUND

A. *Real Parties in Interest*

Petitioner identifies itself as the real party in interest. Pet. x. Patent Owner identifies itself as the real party in interest. Paper 4, 1.

B. Related Matters

The parties indicate that the '260 patent is at issue in *Immersion Corporation v. Valve Corporation*, No. 2:23-cv-00712 (W.D. Wash.) (filed May 18, 2023). Pet. xi; Paper 4, 1.

The parties also indicate that the '260 patent was previously at issue in the following matters:

Immersion Corp. v. Apple Inc., No. 1:16-cv-00325 (D. Del.);
In the Matter of Certain Mobile and Portable Electronic Devices Incorporating Haptics (Including Smartphones and Laptops) and Components Thereof, ITC Investigation No. 337-TA-1004 (U.S. International Trade Commission);

Apple Inc. v. Immersion Corp., IPR2016-01884 (terminated prior to final written decision); and

Apple Inc. v. Immersion Corp., IPR2017-01369 (institution denied). Pet. x–xi; Paper 4, 1.

C. The '260 Patent

The '260 patent, titled “Method and Apparatus for Providing Tactile Sensations,” issued on February 26, 2008, with claims 1–9. Ex. 1001, codes (45), (54), 20:33–22:16. The '260 patent describes a system and method for providing tactile sensations to input devices, including non-mechanical input devices, such as soft-keys displayed on a screen. *Id.* at Abstract, 2:66–3:4. In particular, the '260 patent describes different tactile sensations to users manipulating an input device such as a touchscreen, based in part on varying levels of pressure applied to the input device by the users. *Id.* at 5:38–57.

Figure 2 of the '260 patent is reproduced below.

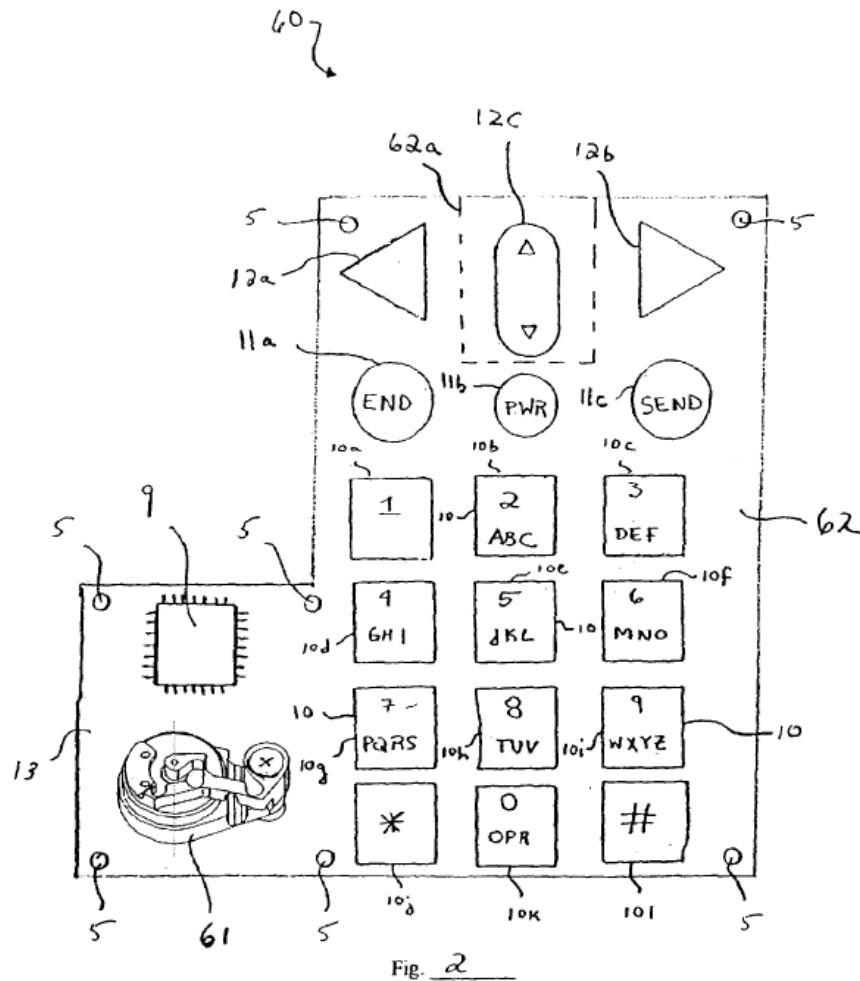


Figure 2 depicts apparatus 60 with multiple input devices arranged as keys in a key pad for a telephone or mobile telephone, including twelve fixed or pre-assigned alphanumeric input buttons 10a-l, three pre-assigned function buttons 11a-c, and three assignable function buttons 12a-c. Ex. 1001, 5:38–47. Each of alphanumeric buttons 10 is capable of receiving multiple levels of pressure, such as button 10i capable of resolving five levels of increasingly greater pressure. *Id.* at 5:62–6:9. Pre-assigned function buttons 11 are capable of resolving three levels of increasingly greater pressure. *Id.* at 6:51–55. Actuator 61 is in communication with input devices and with controller 9 and is configured to provide vibrations of varying frequencies to

the input devices in response to signals transmitted from the controller. *Id.* at 7:65–8:25.

Figure 4 of the '260 patent is reproduced below.

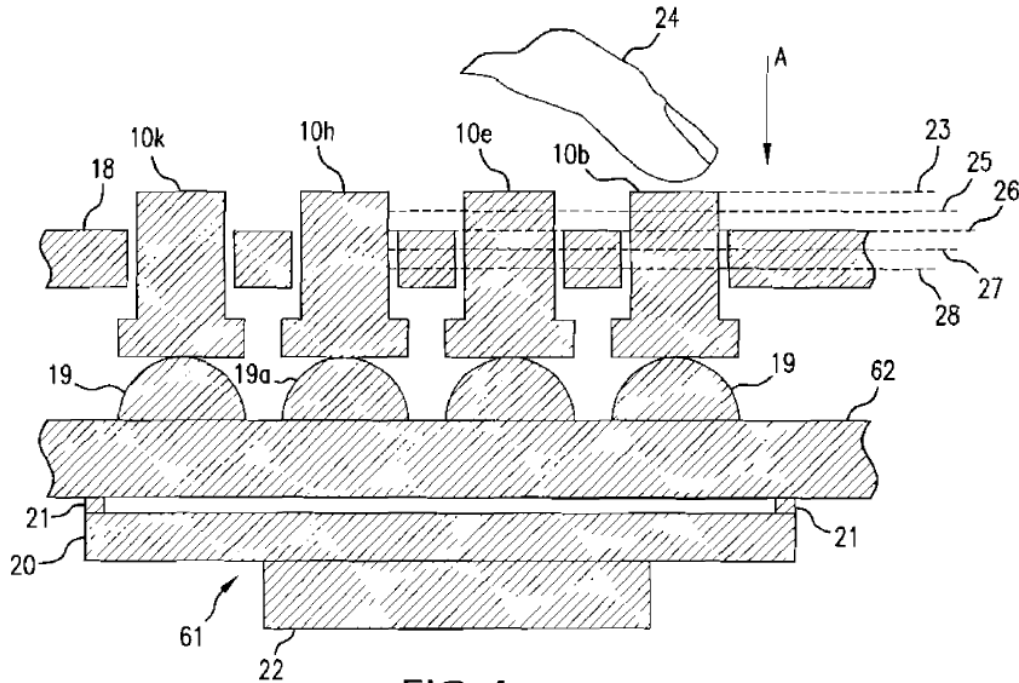


Figure 4 depicts alphanumeric input buttons or keys 10 in a mobile telephone, passing through case 18 of the telephone and contacting a plurality of switches 19 that are in communication with controller 9 and disposed on printed circuit board (PCB) 62. Ex. 1001, 8:38–43. PCB 62 in turn is in communication with actuator 61, which is a piezo-electric actuator having metal diaphragm 20 in contact with piezo-ceramic element 22. *Id.* at 8:54–59.

Object 24, for example a user's finger, selects one or more of keys 10 by applying pressure in direction of arrow A, causing the selected key to progress through a plurality of positions such as rest position 23, second position 25, third position 26, fourth position 27, and fifth position 28, as greater pressure is applied to button 10. *Id.* at 8:65–9:5.

Figure 3 of the '260 patent is reproduced below.

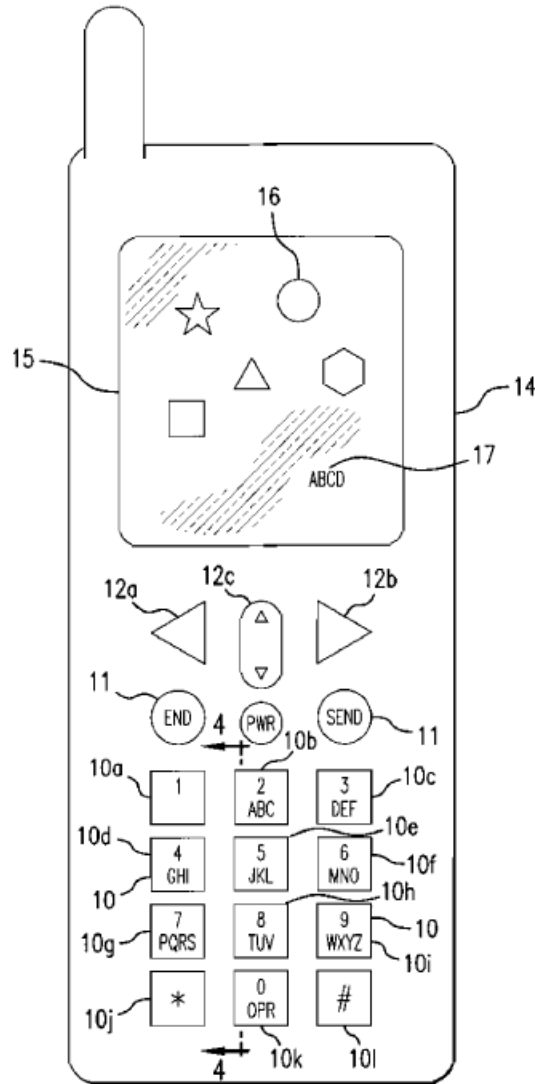


FIG.3

Figure 3 depicts mobile telephone 14, with controller 9, actuator 61, and PCB 62 of apparatus 60 from Figure 2 encased in case 18. Ex. 1001, 8:26–30. Display screen 15 displays graphical objects 16 and alphanumeric information 17. *Id.* at 8:30–32. When a user presses the “9” key/button 10i, button 10i applies pressure to switch 19a, which transmits signals to controller 9. *Id.* at 9:19–30. Controller 9 then transmits a signal to actuator 61 which provides a vibration of a first pre-selected frequency to metal

diaphragm 20, in turn causing PCB, switches 19, and button 10 to vibrate at that frequency. *Id.* at 9:30–44.

If a user applies further pressure sufficient to cause button 10*i* to move from second level 25 to third level 26, switch 19*a* then transmits a second signal to controller 9, which transmits a second signal to actuator 61. *Id.* at 9:45–56. Actuator 61 provides a vibration of a second pre-selected frequency that is communicated through PCB 62 and switches 19 to button 10*i*. *Id.* at 9:56–64. Different signals are transmitted by switch 19*a* for each level of pressure 25, 26, 27, and 28. *Id.* at 10:1–3.

D. Challenged Claims

Of the challenged claims in the '260 patent, claim 1 is the sole independent claim and is reproduced below.

1. A computer-readable medium having instructions, the instructions including instructions that cause a processor to:
 - detect a first pressure on a first input device;
 - provide a first tactile sensation to the first input device, the first tactile sensation based at least in part on the first pressure;
 - detect a second pressure on the first input device, the second pressure greater than the first pressure; and
 - provide a second tactile sensation to the first input device, the second tactile sensation based at least in part on the second pressure;
 - detect a third pressure on the first input device, the third pressure greater than the second pressure; and
 - provide a third tactile sensation to the first input device.
- Ex. 1001, 20:33–46.

E. Asserted Grounds of Unpatentability

Petitioner contends that the challenged claims are unpatentable based on the following grounds:

Claims Challenged	35 U.S.C. § ¹	Reference(s)/Basis
1–7	102/103	Komata ²
1–7	102/103	Tsuji ³
1–7	102/103	Rosenberg ⁴

Pet. 2. Petitioner relies on the Declaration of Jean Renard Ward (Ex. 1003) to support its challenges. Patent Owner relies on the Declaration of Craig Rosenberg, Ph.D. (Ex. 2002) to support its Preliminary Response.

III. ANALYSIS

A. Level of Ordinary Skill in the Art

In determining whether an invention would have been obvious at the time it was made, 35 U.S.C. § 103 requires us to resolve the level of ordinary skill in the pertinent art at the time of the invention. *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966). The person of ordinary skill in the art is a hypothetical person who is presumed to have known the relevant art at the time of the invention. *In re GPAC, Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995). Factors that may be considered in determining the level of ordinary skill in the art include, but are not limited to, the types of problems encountered in the art, the sophistication of the technology, and educational level of active workers in the field. *Id.* In a given case, one or more factors may predominate. *Id.*

¹ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112–29, 125 Stat. 284, 287–88 (2011), amended 35 U.S.C. § 102, effective March 16, 2013. Because the challenged claims of the ’260 patent have an effective filing date before March 16, 2013, the pre-AIA versions of 35 U.S.C. §§ 102, 103 apply.

² US 2001/0008849 A1, published July 19, 2001 (Ex. 1005).

³ Japanese Unexamined Patent Application Publication No. 11-212725, published Aug. 6, 1999 (certified English translation) (Ex. 1007).

⁴ WO 99/66997 A1, published December 29, 1999 (Ex. 1008).

Petitioner contends that a person having ordinary skill in the art “would have a bachelor’s degree in electrical engineering, computer science, or a related field, plus at least two years of industry or graduate level experience with software engineering, haptics programming, and/or human-computer interaction, including experience with user-interfaces and applications involving touchscreens, touchpads, and related technologies.” Pet. 7 (citing Ex. 1003 ¶¶ 38–44).

Patent Owner contends that a person having ordinary skill in the art “would have had a bachelor’s degree in electrical engineering or computer science (or an equivalent degree), and two years of practical or industry experience in the field of human computer interaction (HCI), including implementation of computer-based systems and software for providing haptic feedback effects to a user,” and adds that a person having ordinary skill in the art “could have qualified . . . with more formal education and less practical or industry experience, or vice versa.” Prelim. Resp. 19–20 (citing Ex. 2002 ¶ 33).

Although not identical, the parties’ definitions are substantially similar. Accordingly, for purposes of this Decision, we determine that no express finding is necessary, and that the level of ordinary skill in the art is reflected by the prior art of record. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001). We note, however, that our obviousness analysis in this Decision would not differ if we adopted either Petitioner’s or Patent Owner’s definition.

B. Claim Construction

In *inter partes* reviews, the Board interprets claim language using the district-court-type standard, as described in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). *See* 37 C.F.R. § 42.100(b). Under that

standard, we generally give claim terms their ordinary and customary meaning, as would be understood by a person of ordinary skill in the art at the time of the invention, in light of the language of the claims, the specification, and the prosecution history. *See Phillips*, 415 F.3d at 1313–14. Although extrinsic evidence, when available, may also be useful when construing claim terms under this standard, extrinsic evidence should be considered in the context of the intrinsic evidence. *See id.* at 1317–19.

Petitioner argues that “[b]ecause the petition’s art plainly discloses each element of the challenged claims under any plausible construction, no outer boundary constructions are necessary.” Pet. 8–9 (citing *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Ltd.*, 868 F.3d 1013 (Fed. Cir. 2017)). Petitioner also discusses certain claim constructions made by the Board in IPR2016-01884 and by the ITC in ITC Investigation No. 337-TA-1004. *Id.* at 9–13.

Patent Owner asserts that “all terms may be given their ordinary and customary meaning, as understood by a [person having ordinary skill in the art], in the context of the patent specification, and that no argument herein requires a special construction for any particular term.” Prelim. Resp. 20. Patent Owner also argues that “a plain and ordinary reading of Claim 1 requires that the steps of detecting a *first* pressure, *second* pressure, and *third* pressure and providing a corresponding *first* tactile sensation, *second* tactile sensation, and *third* tactile sensation are performed in the order recited in the claim.” *Id.* at 21; *see also id.* at 26–31 (presenting more detailed arguments regarding the order in which the steps are performed). We disagree with these arguments for the reasons discussed below. *See infra* Section III.D.2.

In another section of the Preliminary Response, Patent Owner appears to argue in favor of a particular construction of “tactile sensation.” Prelim.

Resp. 52–56. We disagree with these arguments for the reasons discussed below. *See infra* Section III.F.2.

We do not discern a need to construe explicitly any other claim language at this juncture because doing so would have no effect on our analyses below of Petitioner’s asserted grounds and will not assist in resolving the present controversy between the parties. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’”) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

C. Discretion Under 35 U.S.C. § 314(a)

Patent Owner argues that we exercise our discretion under 35 U.S.C. § 314(a) to deny institution in view of the parallel district court proceeding. Prelim. Resp. 56–63; Prelim. Sur-reply 1–4. Petitioner argues that we should not exercise discretion to deny institution under 35 U.S.C. § 314(a). Pet. 73–75; Prelim. Reply 1–4. For the reasons stated below, we do not exercise our discretion to deny institution in view of the parallel proceeding.

Institution of an *inter partes* review is discretionary. *See* 35 U.S.C. § 314(a) (authorizing institution of an *inter partes* review under particular circumstances, but not requiring institution under any circumstances); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2140 (2016) (“[T]he agency’s decision to deny a petition is a matter committed to the Patent Office’s discretion.”); *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1356 (2018) (“[Section] 314(a) invests the Director with discretion on the question whether to institute review” (emphasis omitted)); *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.”).

Under Board precedent, one of the considerations that may weigh in favor of denying a petition under § 314(a) is the advanced state of a parallel district court action. *See NHK Spring Co. v. Intrix-Plex Techs., Inc.*, IPR2018-00752, Paper 8 at 20 (PTAB Sept. 12, 2018) (precedential); Patent Trial and Appeal Board, Consolidated Trial Practice Guide (“CTPG”) 58, n.2 (Nov. 2019).⁵ In *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”), the Board set forth the following non-exclusive factors for determining whether to deny institution under § 314(a) based on the parallel district court proceeding:

1. whether the court granted a stay or evidence exists that one may be granted if this proceeding is instituted;
2. proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision;
3. investment in the parallel proceeding by the court and the parties;
4. overlap between issues raised in the petition and in the parallel proceeding;
5. whether the petitioner and the defendant in the parallel proceeding are the same party; and
6. other circumstances that impact the Board’s exercise of discretion, including the merits.

Fintiv at 5–6.

These factors “relate to whether efficiency, fairness, and the merits support the exercise of authority to deny institution in view of an earlier trial date in the parallel proceeding.” *Id.* at 6. Further, the Board should take “a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review.” *Id.* The Director has also issued

⁵ Available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

interim guidance to the Board on applying these factors. *See* Katherine K. Vidal, Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation (June 21, 2022) 9, *available at* https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf (“Director Memo”).

We address each factor below.

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

Since the filing of the Petition, the parallel district court proceeding has been stayed. *Ex. 2005*. According to *Fintiv*, “[a] district court stay of the litigation pending resolution of the PTAB trial allays concerns about inefficiency and duplication of efforts” and “has strongly weighed against exercise of the authority to deny institution.” *Fintiv* at 6; *see also Snap, Inc. v. SRK Tech. LLC*, IPR2020-00820, Paper 15 at 9 (PTAB Oct. 21, 2020) (precedential as to § II.A) (“*Snap*”) (holding that the granting of a stay pending *inter partes* review weighs strongly against exercising discretion to deny institution).

Patent Owner’s arguments concerning the stay center on the fact that Petitioner has not offered a *Sotera* stipulation.⁶ *See* Prelim. Resp. 58–60; Prelim. Sur-reply 1–4. In particular, Patent Owner argues that “Petitioner’s decision not to offer a *Sotera* stipulation neutralizes the effects of the pre-institution stay recently entered by the District Court,” and “a stay of

⁶ *See Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 at 18–19 (PTAB Dec. 1, 2020) (precedential) (finding that “a stipulation that, if IPR is instituted, they will not pursue in the District Court Litigation any ground raised or that could have been reasonably raised in an IPR,” weighed strongly in favor of not exercising discretion to deny institution).

District Court proceedings, when coupled with a *Sotera* stipulation, can make discretionary denial under *Fintiv* inappropriate.” Prelim. Resp. 58–59. Patent Owner also argues that “Petitioner’s refusal to file [a *Sotera* stipulation] undercuts the relevance of the stay to the Board’s exercise of discretion under *Fintiv*,” and concludes that “[t]he Board should give less weight to the stay due to Petitioner’s failure to file a *Sotera* stipulation.” Prelim. Sur-reply 1.

We do not find Patent Owner’s arguments persuasive. Patent Owner does not provide any authority supporting its position that failure to provide a *Sotera* stipulation “neutralizes” or “undercuts” the impact of a stay. We also disagree with Patent Owner’s suggestion that a district court stay can make discretionary denial inappropriate only when coupled with a *Sotera* stipulation. *See* Prelim. Resp. 59. Again, Patent Owner does not provide any authority supporting this position. *Id.* Contrary to Patent Owner’s positions, *Fintiv* indicates a district court stay “has strongly weighed against exercise of the authority to deny institution” independent of whether a *Sotera* stipulation—or any other type of stipulation—has been submitted. *Fintiv* at 6.

In addition, Petitioner identifies several Board decisions in which a district court stay strongly weighed against discretionary denial despite the absence of a *Sotera* stipulation. Prelim. Reply 1 (citing *Apple Inc. v. Speir Techs., Ltd.*, IPR2023-00151, Paper 9 at 8 (June 9, 2023) (“*Speir Techs.*”); *Snap* at 8–9; *Beckman Coulter, Inc. v. Sirigen II Ltd.*, IPR2022-01203, Paper 12 at 20 (Jan. 6, 2023) (“*Beckman*”); *Lyft, Inc. v. AGIS Software Dev. LLC*,

IPR2022-00513, Paper 11 at 6 (June 2, 2022)).⁷ Patent Owner’s arguments attempting to distinguish these cases are not persuasive. *See* Prelim. Sur-reply 2–4. For instance, Patent Owner argues that the petitioner in *Speir Techs.* stipulated that it would not pursue in the litigation invalidity challenges that were the same as the grounds asserted in its petition, but Petitioner here has not made such a stipulation. *Id.* at 2. Although the Board in *Speir Techs.* did determine that the stipulation mitigated the risk of duplicative efforts in assessing *Fintiv* factor four, it also stated that “in view of the stay, the Board will address patentability issues prior to the district court reaching them, which reduces concerns on inefficiency and conflicting results, and also provides the possibility of simplifying issues for any trial.” *Speir Techs.* at 9. In addition, in determining that *Fintiv* factors one and two strongly weighed against exercising discretion to deny, the Board stated that the stay, independent of the stipulation, “allays concerns about inefficiency and duplication of efforts.” *Id.* at 8 (citing *Fintiv* at 6; *Snap* at 9–11). As such, we are not persuaded that the petitioner’s stipulation in *Speir Techs.* had a significant impact on the outcome of that decision.

Patent Owner also argues that the parties stipulated to a stay in *Snap*, and contends that “[a] stipulated stay can appropriately be treated differently than an opposed stay.” Prelim. Sur-reply 3–4. This argument is not persuasive because Patent Owner does not explain adequately why a stipulated stay should be treated differently or, more importantly, how a stipulated stay would alter an analysis under *Fintiv*.

⁷ The *Speir Techs.* case involved a stipulation that was narrower than a *Sotera* stipulation.

Last, we disagree with Patent Owner’s argument that “if the Board denies institution, the district court case will resume and Petitioner will get a second bite, raising the same arguments again.” *See* Prelim. Sur-reply 2. On the contrary, if we were to deny institution discretionarily, then Petitioner’s unpatentability arguments would not be addressed by the Board. Thus, Petitioner advancing these arguments before the district court would not amount to a “second bite.”

In view of the above, we determine that this factor strongly weighs against the exercise of discretionary denial.

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

Patent Owner argues that, before the parallel district court proceeding was stayed, trial was set for June 2025, approximately 1.5 months before the projected statutory deadline for issuance of a final written decision in this proceeding. Prelim. Resp. 60 (citing Ex. 2006, 1). Patent Owner adds that:

If the Board denies institution and the matter proceeds with an approximate delay of 3.5 to 4 months from the previous schedule, the District Court action will head to trial on or about December 2025. Moreover, the District Court can hear not only Petitioner’s invalidity defense but can resolve infringement and damages as well. As such, especially in light of Petitioner’s failure to offer a *Sotera* stipulation, it is more efficient to allow this matter to proceed in front of the District Court.

Id. at 60–61.

In reply, Petitioner notes that “[t]he district court . . . vacated the June 2025 trial along with all other deadlines in the case.” Prelim. Reply 1 (citing Ex. 2005, 8).⁸ Indeed, the district court has vacated all remaining deadlines,

⁸ Petitioner actually cites Exhibit 2004, but this appears to be a typographically error.

which would include the previously-set trial date. Ex. 2005, 8. As such, there is no trial date currently set in the parallel district court proceeding. Should this proceeding be instituted, any trial date would be after the issuance of a final written decision. Furthermore, the district court ordered the stay pending the outcome of seven IPR proceedings, not just this proceeding. *Id.* at 1–2, 8. Thus, Patent Owner’s suggestion that the trial would occur in December 2025 (which would be approximately three months after the projected statutory deadline for issuance of a final written decision in this proceeding) is purely speculative.

Accordingly, we determine that this factor strongly weighs against the exercise of discretionary denial.

3. Factor 3: investment in the parallel proceeding by the court and the parties

If, at the time of the institution decision, the district court has issued substantive orders related to the challenged patent, such as a claim construction order, this fact weighs in favor of denial. *See Fintiv* at 9–10. On the other hand, if the district court has not issued such orders, this fact weighs against discretionary denial. *Id.* at 10.

Petitioner asserts that “[o]ther than initial motion practice and preliminary contentions, the parties have invested little in the litigation.” Pet. 74. Petitioner also argues that “[a]s the district court observed, the litigation ‘is in its early stages,’ [Petitioner’s] motion to dismiss is still pending, only ‘minimal documents’ have been exchanged, and no depositions have occurred.” Prelim. Reply 2 (citing Ex. 2005, 5).

Patent Owner contends that “[t]he parties served invalidity and infringement contentions over six months and two months ago respectively,” “were in the midst of claim construction briefing when the Court stayed the

case,” and “[f]act discovery in the parallel litigation was underway and could efficiently be resumed if the stay is lifted.” Prelim. Resp. 61 (citing Ex. 2006, 1–2; Ex. 2007).

We agree with the district court’s assessment that the parallel proceeding was “in its early stages” at the time of the stay. Ex. 2005, 5. The record before us indicates that the district court has not issued any substantive orders. The district court specifies that “at the time Defendant filed its motion to stay, the close of fact discovery was more than five months away, the close of expert discovery was almost nine months away, the *Markman* hearing was four months away, and trial was nearly 16 months away.” *Id.*

Based on the record before us, this factor weighs against exercising our discretion to deny institution.

4. Factor 4: overlap between issues raised in the petition and in the parallel proceeding

Petitioner argues that a trial in this proceeding would address claims that the district court will not address because Patent Owner is not asserting challenged claims 3 and 4 in the parallel proceeding. Pet. 74 (citing Ex. 1015). According to Petitioner, this fact weighs against us exercising discretion to deny institution. *Id.* at 74–75 (citing *Markforged Inc. v. Continuous Composites*, IPR2022-00679, Paper 7 at 32–33 (Oct. 25, 2022)).

Patent Owner argues that “Petitioner has attacked the validity of the challenged claims in view of the same prior art addressed in the Petition.” Prelim. Resp. 62 (citing Ex. 2007, 9–10). In addition, Patent Owner contends that the Board should exercise its discretion to deny institution because Petitioner has not offered a *Sotera* stipulation. *Id.* at. 57–58 (citing

Zhuhai Cosmox Battery Co., Ltd. v. Ningde Amperex Technology Limited, IPR2023-00587, Paper 12 at 15, 27 (PTAB Sept. 22, 2023) (“*Zhuhai*”).

In reply, Petitioner argues that the *Zhuhai* decision cited by Patent Owner is distinguishable from the current case because it does not involve a stay. Prelim. Reply 3 (citing *Zhuhai* at 9). Petitioner also argues that “a *Sotera* stipulation is not ‘a prerequisite for institution.’” *Id.* (citing *Zhuhai Cosmox Battery Co. v. Maxell, Ltd.*, IPR2022-00984, Paper 8 at 4 (Sept. 29, 2022)).

In its Sur-reply, Patent Owner concedes that “[a] *Sotera* stipulation may not be a ‘prerequisite’ for institution,” but maintains that “Petitioner’s refusal to file one undercuts the relevance of the stay to the Board’s exercise of discretion under *Fintiv*,” and concludes that “[t]he Board should give less weight to the stay due to Petitioner’s failure to file a *Sotera* stipulation.” Prelim. Sur-reply 1.

We do not find Patent Owner’s arguments persuasive. Patent Owner has mischaracterized the *Zhuhai* decision. The petitioner in that case provided a stipulation that was narrower than a *Sotera* stipulation. *Zhuhai* at 15. Nevertheless, the Board determined that the fourth *Fintiv* factor weighed against denial of institution. *Id.* The Board did indicate that the petitioner did not submit “a *Sotera*-type stipulation that would make discretionary denial inappropriate under the [Director] Memo” in its discussion of balancing the *Fintiv* factors (*see id.* at 27), but this statement does not support Patent Owner’s assertion that the Board should exercise its discretion to deny institution because Petitioner has not offered a *Sotera* stipulation. Indeed, as Patent Owner concedes in its Sur-reply, a *Sotera* stipulation is not a “prerequisite” for institution. Furthermore, for the

reasons discussed above in connection with factor one, we are not persuaded that failure to file a *Sotera* stipulation undercuts the relevance of the stay.

Here, despite the absence of a stipulation, the projected statutory deadline for a final written decision will predate any trial date in the parallel district court litigation in light of the stay. As such, any overlap in issues will serve to streamline the issues in the litigation, as opposed to creating duplication or redundancy.

In view of this determination and because additional claims are challenged here that are not at issue in the parallel district court proceeding, we determine that this factor weighs against the exercise of discretionary denial.

5. Factor 5: whether the petitioner and the defendant in the parallel proceeding are the same party

Petitioner admits that it is the defendant in the parallel proceeding. Pet. 75. Because of this admission, Patent Owner argues that this factor weighs in favor of denial. Prelim. Resp. 62–63 (citing *Cisco Sys., Inc. v. Oyster Optics, LLC*, IPR2021-00238, Paper 10 at 16–17). In view of the stay, however, Petitioner asserts that “this factor now weighs firmly against discretionary denial because the Board will reach a final written decision before any jury trial.” Prelim. Reply 4 (citing *Beckman* at 24).

In *Beckman*, the Board stated that factor five “favors denial if trial precedes the Board’s Final Written Decision and favors institution if the opposite is true.” *Beckman* at 24 (quoting *Huawei Tech. Co. v. WSOU Inv., LLC*, IPR2021-00225, Paper 11 at 14 (PTAB June 14, 2021)). The Board then determined that factor five weighs against exercising our discretion to deny institution under § 314(a) because the final written decision in that case

was likely to precede trial in the parallel district court proceeding in view of the order staying the parallel proceeding. *Id.*

Similarly, in this proceeding, the final written decision is likely to precede trial in the parallel district court proceeding because of the stay issued in the parallel proceeding. Accordingly, this factor does not weigh in favor of exercising our discretion to deny institution.

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

Patent Owner argues that the asserted grounds are not strong and should be denied on the merits. Prelim. Resp. 63. Petitioner does not address this factor in the Petition or the Preliminary Reply.

As discussed below, we determine that the merits of the Petition meet the standard for institution. *See infra* §§ III.D, IIIE, III.F. Accordingly, we determine that this factor is neutral.

7. Conclusion

We have considered the circumstances and facts before us in view of the *Fintiv* factors, none of which favor discretionary denial. We take “a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review” when evaluating these factors. *Fintiv* at 6. Evaluating all of the factors on this record, we determine that the circumstances presented here do not support exercising our discretion under 35 U.S.C. § 314(a) to deny *inter partes* review.

D. Ground 1: Asserted Anticipation or Obviousness Based on Komata

Petitioner asserts that claims 1–7 are anticipated by or obvious over Komata. Pet. 14–35. Patent Owner provides arguments addressing this asserted ground of unpatentability. Prelim. Resp. 21–35.

1. Komata (Ex. 1005)

Komata relates to controllers used in video game machines. Ex. 1005, Abstract. In one embodiment, controller 200 “has buttons connected to pressure-sensitive devices and a vibration generator.” *Id.* ¶ 31. Figure 6 of Komata is reproduced below.

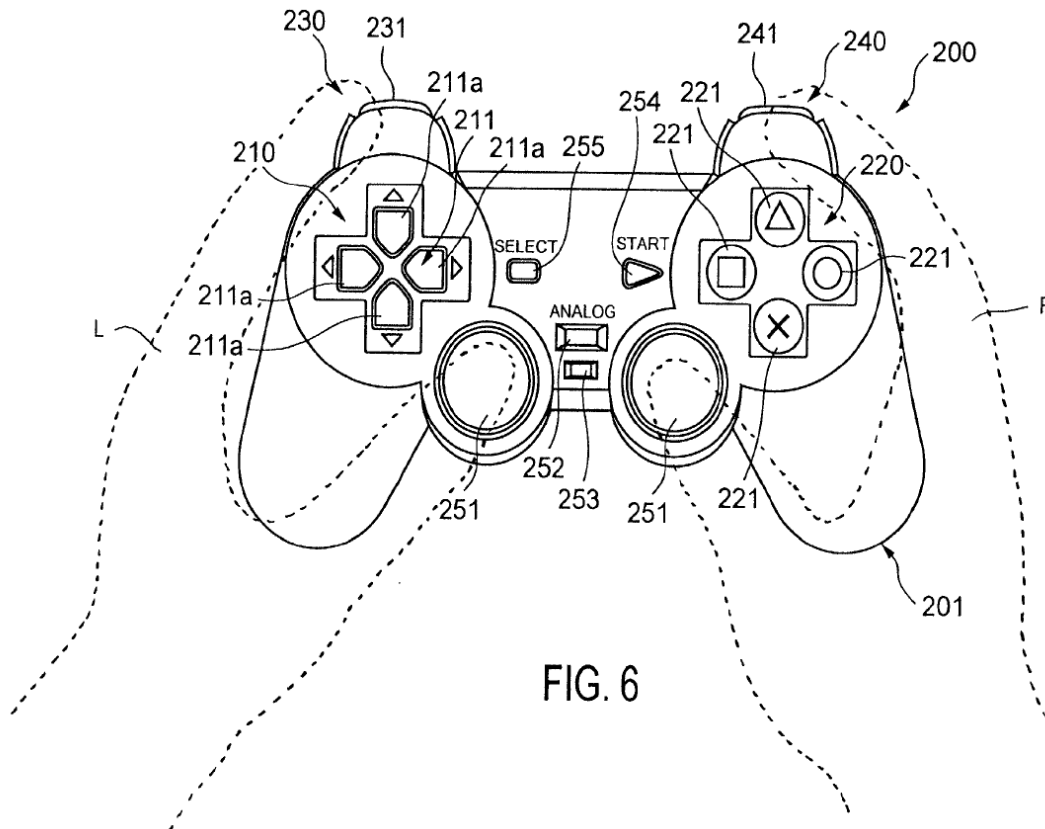


FIG. 6

Figure 6 is a top view of controller 200. *Id.* ¶ 67. Controller 200 includes body 201 having first, second, third, and fourth control parts 210, 220, 230, 240. *Id.* Second control part 220 has four cylindrical control buttons 221, and the functions of the second control part are set by a game program recorded on an optical disc. *Id.* ¶ 69.

Figures 7 and 8A–8C of Komata are reproduced below.

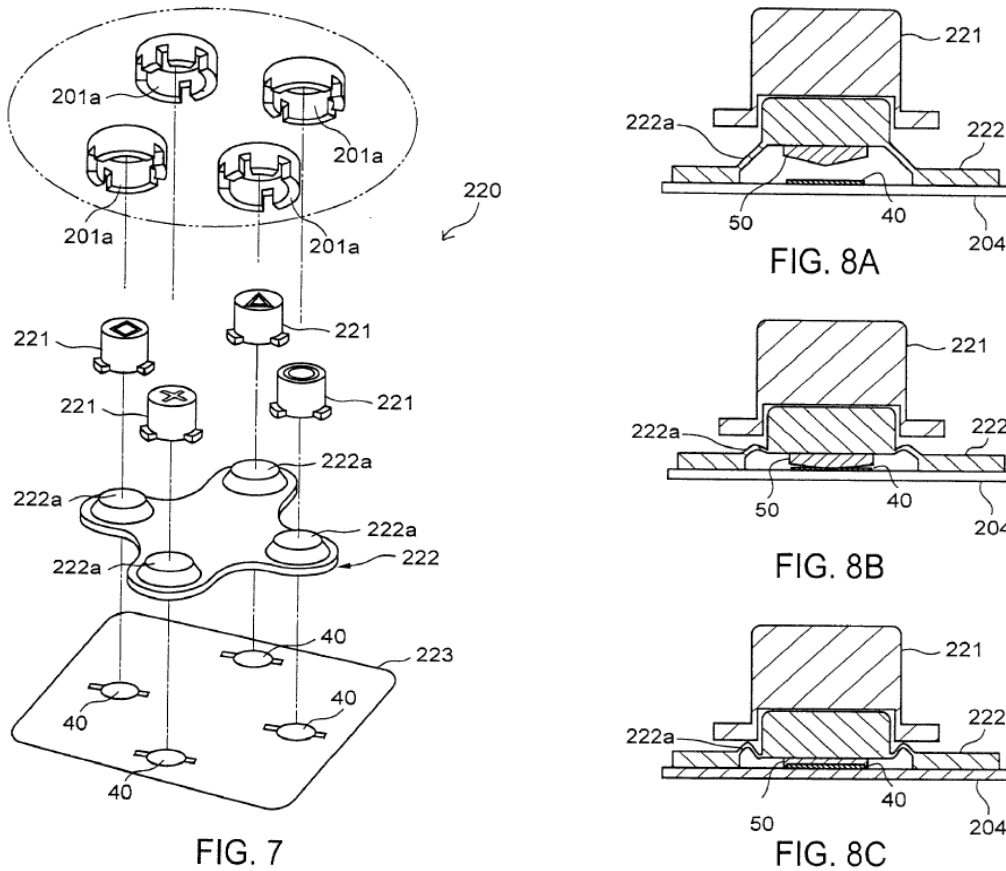


Figure 7 is an exploded perspective view of the second control part of controller 200, and Figures 8A–8C depict cross-sectional views of the second control part. *Id.* ¶ 75. The second control part includes control buttons 221, elastic body 222, and sheet member 223, which is provided with resistors 40. *Id.* ¶ 76. Elastic body 222 includes protruding elastic areas 222a that support control buttons 221 and flex when the control buttons are pressed. *Id.* ¶ 77.

Conducting members 50 are attached to the rear surface of elastic body 222 such that resistors 40 and conducting members 50 form pressure-sensitive devices having resistance values that vary depending on how much pressure is applied to the corresponding control button. *Id.* ¶¶ 78–79. More specifically, each conducting member 50 is made of a conductive elastic

material that contacts a corresponding resistor 40 when the control button is pressed downward sufficiently. *Id.* ¶¶ 80–81. The tip of conducting member 50 deforms as it is pressed against resistor 40 such that the surface area contacting resistor 40 depends on the amount of pressure applied. *Id.* ¶ 82. As shown in Figures 8B and 8C, a stronger pressing force on the control button causes the surface area contacting resistor 40 to expand. *Id.* The “resistance value of the pressure-sensitive device varies depending on the surface area of contact.” *Id.* ¶ 83. Namely, the resistance value decreases as the surface area of contact increases. *Id.* ¶ 84.

Figure 10 of Komata is reproduced below.

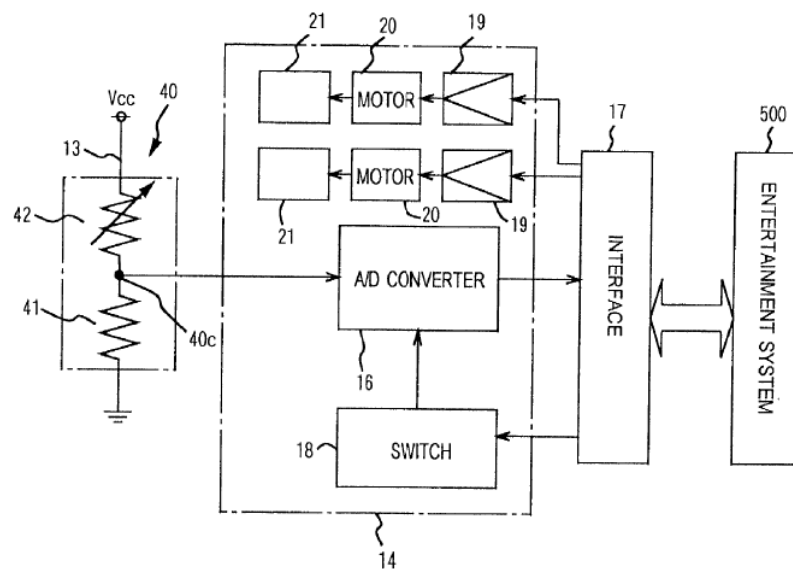


FIG. 10

Figure 10 depicts a block diagram of controller 200. Controller 200 includes MPU⁹ 14, which is provided with A/D converter 16, switch 18, and two vibration generation systems. *Id.* ¶ 89. The signal from the output terminal of resistor 40 is input to A/D converter 16. *Id.* The digital signal output

⁹ Although not specified in Komata, “MPU” presumably refers to a microprocessor unit.

from A/D converter 16 corresponds to the pushing pressure on control button 221 and is sent to entertainment system 500 via interface 17. *Id.* ¶¶ 90–91. Each vibration generation system comprises a driver 19, motor 20, and eccentric member 21 attached to the shaft of the motor. *Id.* ¶ 93. Each motor 20 is driven by drive signals supplied by entertainment system 500. *Id.* ¶ 117.

The drive signals are selected from “a pressure-sensed value-drive signal conversion table” that correlates drive signals to several pressure-sensed values. *Id.* ¶ 36, Fig. 2. “The drive signals . . . corresponding to each of the pressure-sense values are supplied from the entertainment system 500 to the controller 200, and after conversion to analog signals by the A/D converter of the controller 200, they are given as drive-signals for the motor of the vibration generator.” *Id.* ¶ 36.

2. Independent Claim 1

Petitioner contends that Komata discloses the limitations of claim 1. Pet. 18–28. To support its arguments, Petitioner identifies certain passages in Komata and explains the significance of each passage with respect to the corresponding claim limitation. *Id.* Patent Owner argues that the steps of claim 1 must be performed in the order recited and Komata does not disclose performing the steps of claim 1 in that order. Prelim. Resp. 25–35.

We have reviewed Petitioner’s contentions with respect to the limitations of claim 1, and for the reasons discussed below, we determine that the Petition shows a reasonable likelihood that Petitioner would prevail in with respect to the contention that claim 1 would have been unpatentable based on Komata. *See* Pet. 14–28. We address Patent Owner’s arguments below.

Patent Owner argues that Petitioner does not show “that Komata discloses the ordered steps of detecting a first, second, and third pressure in progressively increasing sequence as claimed.”¹⁰ Prelim. Resp. 25–26. Patent Owner contends that the steps of claim 1 must be performed in the order recited because a “claim requires an ordering of steps when the claim language as a matter of logic or grammar requires that the steps be performed in the order written.” *Id.* at 26 (quoting *Mformation Techs., Inc. v. Research in Motion Ltd.*, 764 F.3d 1392, 1398–99 (Fed. Cir. 2014); citing *Rambus Inc. v. Rea*, 527 F. App’x 902, 907 (Fed. Cir. 2013)). The claim at issue in *Rambus* recited the steps “specifies that a write operation be initiated in the memory device” and “indicates when the memory device is to begin sampling write data.” *Rambus*, 527 F. App’x at 907. The Federal Circuit held that a plain reading of the claim evinces a specific order of the steps because “[i]t would make no sense for the second step to be performed first—telling the memory device to begin sampling write data—before the memory device was even instructed to perform a ‘write’ operation.” *Id.*

According to Patent Owner, the same logic applies to the steps of claim 1 of the ’260 patent. Prelim. Resp. 27. Specifically, Patent Owner argues that

it would make no sense to provide a first tactile sensation—that is based on the first pressure—before detecting the first pressure; nor would it make any sense to detect a second pressure—that is greater than the first pressure—before detecting the first pressure. Similarly, it would make no sense to detect a third pressure—that is greater than the second pressure—before

¹⁰ In arguing that Komata does not disclose performing the steps of claim 1 in the order recited, Patent Owner does not dispute that Komata discloses the steps of claim 1. *See* Prelim. Resp. 21–34.

detecting the second pressure or before detecting the first pressure.

Id. (citing Ex. 2002 ¶¶ 68–69). We agree that, as a matter of logic, the first step of detecting a first pressure must occur before the second step of providing a first tactile sensation based at least in part on the first pressure because the first tactile sensation could not be based on the first pressure if the first pressure has not been detected.¹¹ However, we disagree that the second pressure must be detected after the first pressure is detected (or that the third pressure must be detected after the first pressure is detected) simply because the second pressure is greater than the first pressure (and the third pressure is greater than the second pressure). The claimed relative magnitudes of the first, second, and third pressures do not define any temporal relationships regarding the detection of the pressures.

Patent Owner also argues that claim 1 “was drafted in this way to require that the processor perform this specific order of steps (for detecting pressure levels and providing corresponding tactile sensations) in accordance with the embodiments illustrated in, for example, Figures 4 and 5.” Prelim. Resp. 27. According to Patent Owner, “[t]he order in which these steps are to be performed by the claimed processor is rooted in the problems with the prior art that the inventors of the patent were trying to solve.” *Id.* at 28 (citing Ex. 2002 ¶¶ 70–74; Ex. 1001, 1:60–2:12). Patent Owner argues that the ’260 patent overcame the prior art problems of detecting different pressure levels with the softkeys depicted in Figures 4

¹¹ Similarly, the third step of detecting a second pressure must occur before the fourth step of providing a second tactile sensation based at least in part on the second pressure, and the fifth step of detecting a third pressure must occur before the sixth step of providing a third tactile sensation based at least in part on the third pressure.

and 5. *Id.* at 28–31 (citing Ex. 1001, 1:60–2:12, 6:11–25, 8:62–9:5, 12:33–55, Figs. 4–5). In particular, Patent Owner argues that the ’260 patent discloses that “as the user presses on the button with increasing pressure, ‘the keys pass *sequentially*’ through a second position 25, third position 26, fourth position 27, and fifth position 28 such that each pressure level is detected in that order.” *Id.* at 30–31 (quoting Ex. 1001, 8:62–9:5; citing *id.* at 6:11–25). Thus, Patent Owner asserts that, in light of the embodiment of Figures 4 and 5, one of ordinary skill in the art “would understand that the claimed steps of detecting pressure and providing corresponding tactile sensations must be performed by the processor in the order recited.” *Id.* at 31 (citing Ex. 2002 ¶¶ 73–74).

We disagree. Claim 1 recites a computer-readable medium having instructions that cause a processor to perform the recited steps; claim 1 does not require the structure of the embodiment of Figures 4 and 5. Ex. 1001, 20:33–46. Therefore, we are not persuaded that the language of claim 1 requires, as a matter of logic, that the steps be performed in the order recited. Furthermore, we are not persuaded that the ’260 patent’s disclosure of a user pressing a key sequentially through second position 25, third position 26, fourth position 27, and fifth position 28 would necessarily suggest to one of ordinary skill in the art that the steps of claim 1 are performed in the order recited. It is generally improper to read limitations from specific embodiments into the claims. *See Cadence Pharms. Inc. v. Exela PharmSci Inc.*, 780 F.3d 1364, 1369 (Fed. Cir. 2015) (“[E]ven if all of the embodiments discussed in the patent included a specific limitation, it would not be proper to import from the patent’s written description limitations that are not found in the claims themselves.” (internal quotations omitted)); *see also SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed.

Cir. 2004) (“Though understanding the claim language may be aided by the explanations contained in the written description, it is important not to import into a claim limitations that are not a part of the claim.”).

Moreover, as Petitioner argues, the ’260 patent appears to disclose a scenario in which different pressures on an input device are detected separately or independently of one another. *See* Pet. 10–12 (citing Ex. 1001, 14:43–15:15, Fig. 9). The ’260 patent discloses that a controller monitoring an input device detects a pressure, Pressure 1, during a monitoring pass, and then, during another monitoring pass, the controller detects another pressure, Pressure 3, on the same input device. Ex. 1001, 14:43–63. Thus, by disclosing detecting distinct Pressures 1 and 3 during different monitoring passes, the ’260 patent encompasses the possibility of detecting Pressures 1 and 3 independently of one another and not in any particular order.

In view of the above, we are not persuaded on the current record that the steps of claim 1 must be performed in the order recited. Accordingly, Patent Owner’s argument that Komata does not disclose the steps of claim 1 performed in the order recited is also not persuasive.

Thus, based on our review and consideration of the current record, we determine that the information presented sufficiently supports, for purposes of institution, Petitioner’s assertions that Komata satisfies each limitation of claim 1. *See* Pet. 18–28. We therefore determine Petitioner has met its burden to show a reasonable likelihood it would prevail in demonstrating that claim 1 is anticipated by, or obvious over, Komata.

3. Dependent Claims 2–7

Claims 2–7 depend from claim 1. Ex. 1001, 20:47–21:12. Because Petitioner has demonstrated a reasonable likelihood of success in proving that at least one claim of the ’260 patent is unpatentable, we institute on all

grounds and all claims raised in the Petition. *See SAS Inst., Inc. v. Iancu*, 138 S.Ct. 1348, 1359–60 (2018); *see also PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018) (interpreting 35 U.S.C. § 314 to require “a simple yes-or-no institution choice respecting a petition, embracing all challenges included in the petition”); 37 C.F.R. § 42.108(a) (“When instituting inter partes review, the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim.”). Therefore, it is not necessary for us to assess every claim challenged by Petitioner.

Nevertheless, we note that Petitioner provides reasonable and detailed explanations indicating where Komata teaches or suggests the limitations of claims 2–7. Pet. 28–35. Patent Owner offers no particular arguments regarding claims 2–7 for us to consider at this stage of the proceeding. *See* Prelim. Resp. 35. We have reviewed Petitioner’s contentions with respect to these claims and determine that the information presented in the Petition establishes that there is a reasonable likelihood that Petitioner would prevail in its assertion that claims 2–7 are anticipated by, or obvious over, Komata.

E. Ground 2: Asserted Anticipation or Obviousness Based on Tsuji

Petitioner asserts that claims 1–7 are anticipated by or obvious over Tsuji. Pet. 36–57. Patent Owner provides arguments addressing this asserted ground of unpatentability. Prelim. Resp. 35–48.

1. Tsuji (Ex. 1007)

Tsuji “relates to an information display device and an operation input device used in, for example, factory automation (FA) devices, automatic vending machines, automatic ticket vending machines, automatic teller machines, home appliances, medical operating equipment, information equipment, handheld terminals, game devices, and the like.” Ex. 1007 ¶ 1.

In one embodiment, information display device 100 includes housing 101 having display operating unit DP and control circuit unit CT. *Id.* ¶ 42, Fig. 2. Operating surface 11 is disposed on a main surface of housing 101, and the contents displayed on information display surface 21 can be viewed through the operating surface. *Id.* ¶ 43, Fig. 2.

Figures 3 and 4 of Tsuji are reproduced below.

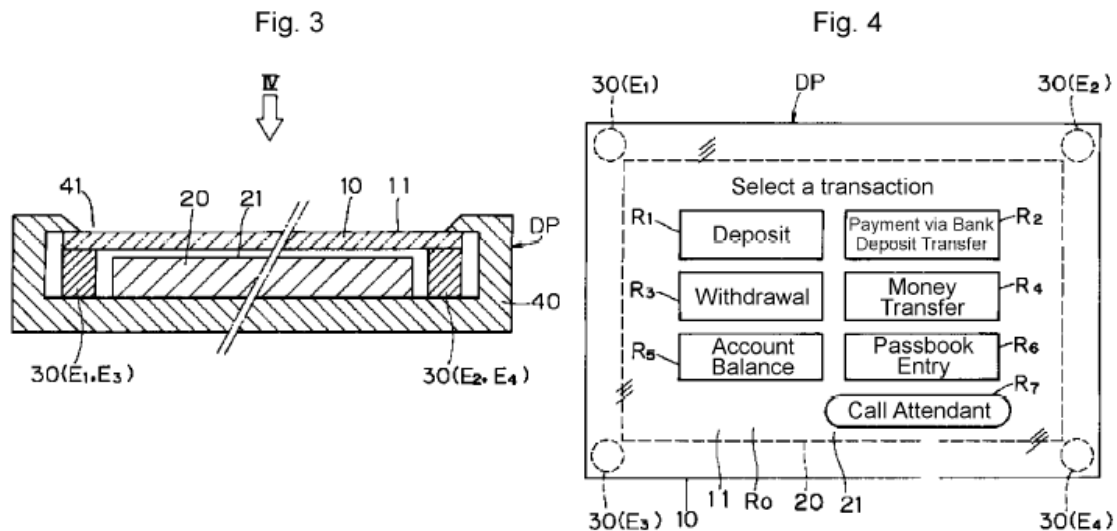


Figure 3 is a partial cross-sectional view of display operating unit DP, and Figure 4 is a plan view of display operating unit DP. *Id.* ¶ 44. Liquid crystal display panel 20, housed in case 40, provides information display surface 21. *Id.* Four piezoelectric elements E1–E4 are disposed in case 40, each one located adjacent to a respective corner of liquid crystal display panel 20. *Id.* ¶ 45. Figure 4 shows seven operating regions R1–R7, representing menus of a “bank automated cashier,” displayed liquid crystal display panel 20. *Id.* ¶¶ 46. A user can press one of the regions to activate the corresponding function. *Id.* Piezoelectric elements E1–E4 function as sensing means for sensing when a user presses one of the operating regions and as driving means for vibrating operating panel 10 in response to a region being pressed. *Id.* ¶ 47.

Figure 7 is reproduced below.

Fig. 7

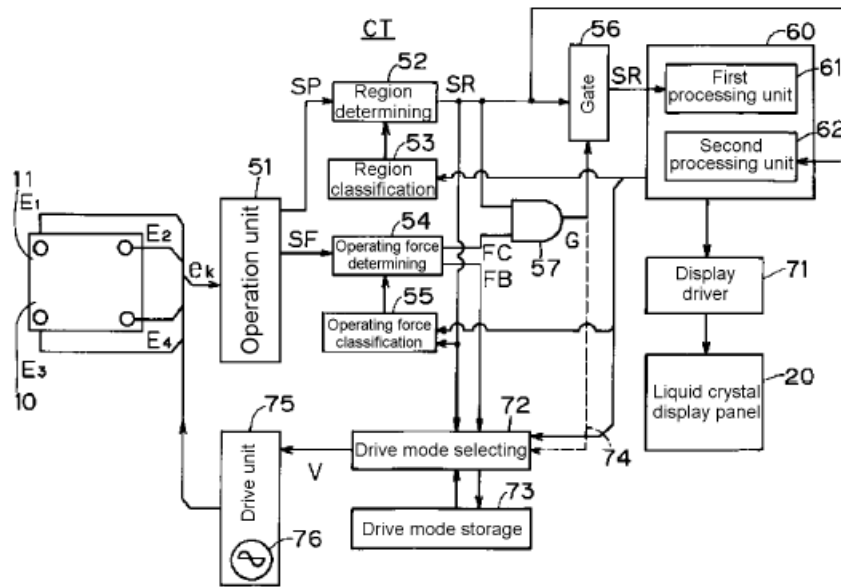


Figure 7 is a block diagram of control circuit CT. *Id.* at 13. Element voltages e_k ($k = 1$ to 4) from each piezoelectric element E1–E4 are applied in parallel to operation unit 51. *Id.* ¶ 81. Based on the forces derived from element voltages e_k , operation unit 51 determines and outputs operating signal position SP and operating force signal SF. *Id.* ¶¶ 82–85.

Operating force signal SF, indicating the operating force F, is applied to operating force determining unit 54. *Id.* ¶ 91. Thresholds Fh1–Fh4 are provided for defining operating force classifications F0–F4. *Id.* More specifically,

[w]ith the four operating force classifications F1 through F4, in ranges at or above the minimum threshold Fh1, referred to as “effective operating force classifications,” the operating force determining unit 54 uses the comparing and determining unit 54a housed therein (FIG. 12) to compare the operating force F, denoted at a given time by the operating force signal SF, to the operating force thresholds Fh1 through Fh4 to determine which

of the effective operating force classifications F1 through F4 the operating force F is in at a given time.

Id. ¶ 94.

Operating force determining signal FB, indicating the effective operating force classifications F1–F4, is sent to drive mode selecting unit 72, where it is used for selecting a drive mode for operating surface 11 using piezoelectric elements E1–E4, and based on the classification of operating force F. *Id.* ¶ 101. Drive mode selecting unit 72 “selects a drive mode based on the classifications of the in-operation region and the operating force.” *Id.* ¶ 107. This selection is accomplished using the matrix depicted in Figure 13, where signals S11, S12, etc. “are codes for selecting and defining any of a variety of drive modes.” *Id.* ¶ 108.

2. Independent Claim 1

Petitioner contends that Tsuji teaches or suggests the limitations of claim 1. Pet. 41–49. To support its arguments, Petitioner identifies certain passages in Tsuji and explains the significance of each passage with respect to the corresponding claim limitation. *Id.* Patent Owner argues that the steps of claim 1 must be performed in the order recited and Tsuji does not disclose performing the steps of claim 1 in that order. Prelim. Resp. 43–47.

We have reviewed Petitioner’s contentions with respect to the limitations of claim 1, and for the reasons discussed below, we determine that the Petition shows a reasonable likelihood that Petitioner would prevail in with respect to the contention that claim 1 would have been unpatentable based on Tsuji. *See* Pet. 36–49. We address Patent Owner’s arguments below.

For Ground 2, Patent Owner argues that the steps of claim 1 must be performed in the order recited for the same reasons asserted in Ground 1.

Prelim. Resp. 43–44 (referencing Section VI.A.2 of the Petition). We find these arguments unpersuasive for the same reasons discussed above in connection with Ground 1. *See supra* Section III.D.2. Because we are not persuaded on the current record that the steps of claim 1 must be performed in the order recited, we find Patent Owner’s arguments that Tsuji does not disclose the steps of claim 1 performed in the order recited unpersuasive. *See* Prelim. Resp. 44–47.

Thus, based on our review and consideration of the current record, we determine that the information presented sufficiently supports, for purposes of institution, Petitioner’s assertions that Tsuji satisfies each limitation of claim 1. *See* Pet. 41–49. We therefore determine Petitioner has met its burden to show a reasonable likelihood it would prevail in demonstrating that claim 1 is anticipated by, or obvious over, Tsuji.

3. *Dependent Claims 2–7*

Claims 2–7 depend from claim 1. Ex. 1001, 20:47–21:12. Because Petitioner has demonstrated a reasonable likelihood of success in proving that at least one claim of the ’260 patent is unpatentable, we institute on all grounds and all claims raised in the Petition. *See SAS*, 138 S. Ct. at 1354, 1359–60; *PGS Geophysical*, 891 F.3d at 1360; 37 C.F.R. § 42.108(a). Therefore, it is not necessary for us to assess every claim challenged by Petitioner.

Nevertheless, we note that Petitioner provides reasonable and detailed explanations indicating where Tsuji teaches or suggests the limitations of claims 2–7. Pet. 49–57. Patent Owner offers no particular arguments regarding claims 2–7 for us to consider at this stage of the proceeding. *See* Prelim. Resp. 47–48. We have reviewed Petitioner’s contentions with respect to these claims and determine that the information presented in the

Petition establishes that there is a reasonable likelihood that Petitioner would prevail in its assertion that claims 2–7 are anticipated by, or obvious over, Tsuji.

F. Ground 3: Asserted Anticipation or Obviousness Based on Rosenberg

Petitioner asserts that claims 1–7 are anticipated by or obvious over Rosenberg. Pet. 57–73. Patent Owner provides arguments addressing this asserted ground of unpatentability. Prelim. Resp. 48–56.

1. Rosenberg (Ex. 1008)

Rosenberg relates to force feedback devices “for enhancing interactions in a computer generated environment.” Ex. 1008, Abstract. In one embodiment, a mouse movable in a planar workspace includes an actuator that is coupled to a button of the mouse to apply an output force to the button.” *Id.* Figures 8 and 9 of Rosenberg are reproduced below.

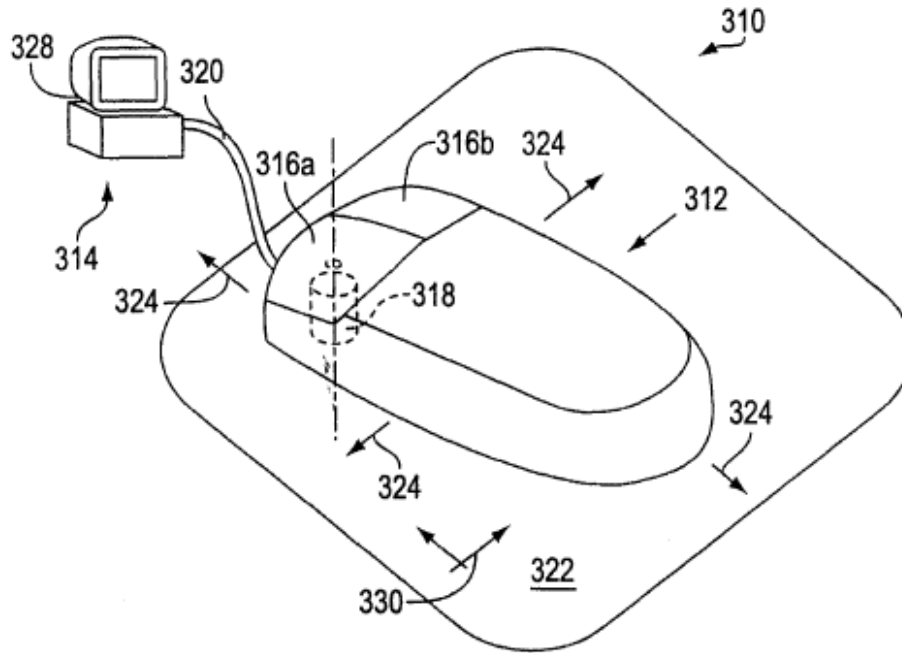


FIG. 8

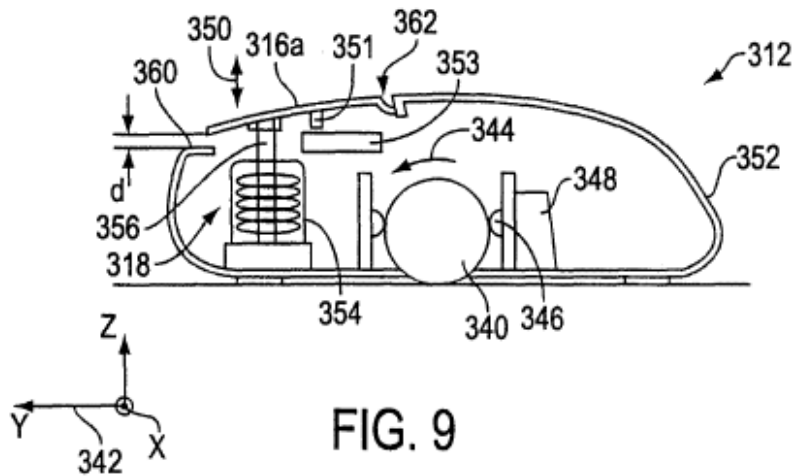


FIG. 9

Figure 8 is a perspective view of an embodiment of the invention that includes a mouse connected to a host computer, and Figure 9 is a side cross-sectional view of the mouse of Figure 8. *Id.* at 6:17–19. Force feedback mouse interface system 310 includes mouse 312 and host computer 314 and “is capable of providing input to a host computer based on the user’s manipulation of the mouse and capable of providing force feedback to the

user of the mouse system based on events occurring in a program implemented by the host computer.” *Id.* at 23:17–21. Mouse 312 includes buttons 316a, 316b that allow a user to input commands into the computer system. *Id.* at 23:33–34. Mouse 312 also includes actuator 318, “which is operative to produce forces on one or more buttons of the mouse 312.” *Id.* at 24:1–2.

As shown in Figure 9, a user can push “button 316a down (in the degree of freedom of the button approximately along axis z) toward the actuator 318 to provide a command to the computer.” *Id.* at 25:24–26. Electrical leads 351, 353 function as a mechanical switch to determine a simple on or off state of button 316a. *Id.* at 25:31–32. Alternatively, “a sensor can be used to detect the precise position of the button 316a in its range of motion (degree of freedom)” for a “continuous-range button embodiment.” *Id.* at 25:33–35. In this case, “each position of the button can be sensed as a different analog value and used as an analog value or a digital value in processing the button position,” so that host computer 314 can determine the position of the button and control a force output based on that position. *Id.* at 25:35–26:3.

2. *Independent Claim 1*

Petitioner contends that Rosenberg discloses the limitations of claim 1. Pet. 59–66. To support its arguments, Petitioner identifies certain passages in Rosenberg and explains the significance of each passage with respect to the corresponding claim limitation. *Id.* Patent Owner argues that Rosenberg does not disclose the “tactile sensation” limitations of claim 1. Prelim. Resp. 52–56.

We have reviewed Petitioner’s contentions with respect to the limitations of claim 1, and for the reasons discussed below, we determine

that the Petition shows a reasonable likelihood that Petitioner would prevail in with respect to the contention that claim 1 would have been unpatentable based on Rosenberg. *See* Pet. 57–66. We address Patent Owner’s arguments below.

Patent Owner argues that Petitioner relies on an embodiment of Rosenberg that mimics a spring effect when the mouse button is pressed. Prelim. Resp. 52–53 (citing Pet. 61–62). Patent Owner contends that this spring effect creates a “blunt push-back or resistive effect that the user experiences when pushing down on the mouse button,” but one of ordinary skill in the art “would understand that this type of blunt force feedback effect that is provided to mimic a mechanical spring . . . is not a tactile sensation that is required by the ’260 Patent.” *Id.* at 52, 54 (citing Ex. 2002 ¶¶ 102, 106–107).

According to Patent Owner, “the ’260 Patent explains that a tactile sensation is an effect with vibrations, and which can be created by varying the frequency, amplitude, and waveform output by the actuator.” *Id.* at 54. In support of this assertion, Patent Owner points to the ’260 patent’s disclosure that

[t]he apparatus 1 shown in FIG. 1 also includes a vibrotactile actuator 6 in communication with the input device 2. Preferably, the actuator 6 is configured to output a plurality of distinct tactile feedback sensations to the input device 2. **Suitable tactile sensations include vibrations, for example, jolts and textures, and a plurality of distinct tactile sensations can be created by varying the frequency, amplitude and waveform output by the actuator 6.** The actuator 6 is selected to deliver the desired tactile sensations to the input device 2.

Id. at 54–55 (quoting Ex. 1001, 3:44–52). Patent Owner also points to the ’260 patent’s disclosures “the actuator [6] can include a flexure, for example

an arrangement of flexible material, couple to the rotating shaft of a DC motor or step motor to transform the rotation of the motor shaft into vibrations or other haptic sensations,” “the actuator [6] is an existing eccentric mass motor as is used, for example, as a vibrating ringer in a pager or mobile telephone,” and “[t]he vibrotactile actuator 6 can also be mounted to a portion of the case or housing of the electronic device in which the apparatus 1 is disposed, communicating the tactile sensations to the entire electronic device.” *Id.* at 55 (quoting Ex. 1001, 3:56–60, 4:35–38, 4:39–42) (alterations in original).

Patent Owner’s argument that the tactile sensations recited in claim 1 must be vibrotactile sensations contradicts its assertion that “all [claim] terms may be given their ordinary and customary meaning, as understood by a [person having ordinary skill in the art], in the context of the patent specification, and that no argument herein requires a special construction for any particular term.” *See* Prelim. Resp. 20. We disagree that the ordinary and customary meaning of “tactile sensation” is limited to only tactile sensations that are vibratory in nature. Furthermore, Patent Owner’s proposed interpretation of “tactile sensation” is an attempt to improperly read limitations from the Specification into the claims. *See Cadence Pharms.*, 780 F.3d at 1369 (“[E]ven if all of the embodiments discussed in the patent included a specific limitation, it would not be proper to import from the patent’s written description limitations that are not found in the claims themselves.” (internal quotations omitted)); *see also SuperGuide Corp.*, 358 F.3d at 875 (“Though understanding the claim language may be aided by the explanations contained in the written description, it is important not to import into a claim limitations that are not a part of the claim.”).

For these reasons, we disagree that the tactile sensations recited in claim 1 must be vibrotactile sensations. Accordingly, Patent Owner's argument that Rosenberg fails to disclose tactile sensation as claimed is unpersuasive.

Thus, based on our review and consideration of the current record, we determine that the information presented sufficiently supports, for purposes of institution, Petitioner's assertions that Rosenberg satisfies each limitation of claim 1. *See* Pet. 59–66. We therefore determine Petitioner has met its burden to show a reasonable likelihood it would prevail in demonstrating that claim 1 is anticipated by, or obvious over, Rosenberg.

3. Dependent Claims 2–7

Claims 2–7 depend from claim 1. Ex. 1001, 20:47–21:12. Because Petitioner has demonstrated a reasonable likelihood of success in proving that at least one claim of the '260 patent is unpatentable, we institute on all grounds and all claims raised in the Petition. *See SAS*, 138 S. Ct. at 1354, 1359–60; *PGS Geophysical*, 891 F.3d at 1360; 37 C.F.R. § 42.108(a). Therefore, it is not necessary for us to assess every claim challenged by Petitioner.

Nevertheless, we note that Petitioner provides reasonable and detailed explanations indicating where Rosenberg teaches or suggests the limitations of claims 2–7. Pet. 66–73. Patent Owner offers no particular arguments regarding claims 2–7 for us to consider at this stage of the proceeding. *See* Prelim. Resp. 56. We have reviewed Petitioner's contentions with respect to these claims and determine that the information presented in the Petition establishes that there is a reasonable likelihood that Petitioner would prevail in its assertion that claims 2–7 are anticipated by, or obvious over, Rosenberg.

IV. CONCLUSION

After considering the evidence and arguments presented by the Parties, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing with respect to at least one of the challenged claims. Thus, we institute an *inter partes* review of all challenged claims on all presented challenges. *SAS*, 138 S.Ct. at 1359–60; *PGS Geophysical*, 891 F.3d at 1360; 37 C.F.R. § 42.108(a).

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review is instituted for claims 1–7 of the '260 patent on the unpatentability grounds asserted in the Petition; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial, which commences on the entry date of this decision.

IPR2024-00477
Patent 7,336,260 B2

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