

Paper No. \_\_\_\_

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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VALVE CORPORATION  
Petitioner,

v.

IMMERSION CORPORATION  
Patent Owner.

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Case No. IPR2024-00478  
Patent No. 9,430,042

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**REPLY TO PATENT OWNER'S PRELIMINARY RESPONSE**

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## **I. The Petition's Art is Analogous to the '042 Patent**

Immersion divides the petition's prior art into two buckets: one includes references, like Ichinose and Rosenberg, "that disclose virtual controls on 2-dimensional touchpads," and the other includes references, like Levin, Goldenberg, and Wang<sup>1</sup>, "that disclose detents with physical 3-dimensional controls (such as knobs and sliders)" in which "force feedback" is used "to mimic the feel of a traditional mechanical detent." POPR at 2. Immersion does not dispute that the first bucket of art is analogous, but contends the second bucket ("Knob Prior Art") is not. Immersion's argument lacks merit.

Immersion concedes that the Knob Prior Art "mimic[s] the feel of a traditional mechanical detent," *i.e.*, each generates a "virtual detent." POPR at 2; *see also id.* at 16 (Levin's "force feedback simulates the detent"). Immersion argues, however, that the use of a "virtual detent" is only analogous to the '042 patent if the "virtual detent" is provided via a touchpad. But this argument is incompatible with the patent's specification, which must be considered to "determine the applicable field of endeavor." *Airbus S.A.S. v. Firepass Corp.*, 941 F.3d 1374, 1380 (Fed. Cir. 2019).

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<sup>1</sup> Immersion puts Wang in the second bucket, but the petition relied on Wang's thumb-actuated embodiment that POSAs would implement as a touchpad. Petition at 32-34. Regardless, Wang is analogous for the reasons discussed herein.

The patent could not be clearer that its field of endeavor includes physical knobs. For example, “to introduce the reader to the general subject matter” of the patent, the example the specification uses is a “**rotary knob input device**” that an actuator vibrates based on the knob’s rotational position. EX1001, 2:39-55. The patent goes on to explain that its “input device” can be any “mechanical input device,” including “a rotary knob.” *Id.*, 3:40-42. Figures 9A-9H, which depict “virtual detents,” all use a knob. *Id.*, 13:37-46. As does Figure 4. *Id.*, 10:55-64.

Although the claims were narrowed during prosecution to a touchpad, the specification makes clear that the “field of endeavor” is broader and encompasses physical knobs like Levin’s and Goldenberg’s. *Unwired Planet, LLC v. Google Inc.*, 841 F.3d 995, 1001 (Fed. Cir. 2016) (“The field of endeavor of a patent is not limited to the specific point of novelty, the narrowest possible conception of the field, or the particular focus within a given field.”); *In re Bigio*, 381 F.3d 1320, 1325-26 (Fed. Cir. 2004) (the field of endeavor is evaluated by “reference to explanations of the invention’s subject matter in the patent application”); *In re Asset Guard Prods.*, 2022 WL 1097363, \*3-4 (Fed. Cir. Apr. 2022) (finding a reference to be in the patent’s field of endeavor given the specification’s broad description of the invention even where claims were narrower); *In re Chaganti*, 554 F. App’x 917, 921 (Fed. Cir. 2014) (“[A reference] need not disclose every limitation of the claimed invention to fall within the same field of endeavor as the claimed invention.”).

Indeed, the patent mentions touchpads (EX1001, 2:59-3:5, 3:45-47, 7:41-44, 13:16-22), but is explicit that its “invention is not limited” to that example (*id.*, 3:16-19, 3:40-47). The patent also never says there is anything unique about generating “virtual detents” via touchpads rather than knobs, which underscores that POSAs would have considered teachings relevant to knobs to be relevant to touchpads as well. *Uber Techs., Inc. v. X One, Inc.*, 957 F.3d 1334, 1339 (Fed. Cir. 2020).

In light of the specification, the “field of endeavor” for the ’042 patent is best characterized as providing haptic feedback to input devices via an actuator, a field to which the Knob Prior Art is plainly directed. EX1016 (Levin), Abstract (“An actuator is coupled to the knob to output a force...thus providing force feedback.”); EX1007 (Goldenberg), Abstract (“The present invention provides haptic sensations for a haptic feedback device and especially for a rotational device such as a knob.”); EX1022 (Wang), 7:23-26 (describing use of “a haptic feedback mechanism” like “actuators” to “generate the force effects”); *see also* EX1003, ¶39.

That Immersion cited Levin in an IDS (EX1002, 406), and the European counterpart to the ’042 patent identifies Goldenberg as relevant prior art (EX1006, [0005]), underscores that the references are in analogous fields. *See, e.g., Elekta Ltd. v. ZAP Surgical Sys., Inc.*, 81 F.4th 1368, 1375 (Fed. Cir. 2023); *Apple Inc. v. Samsung Elecs. Co., Ltd.*, 816 F.3d 788, 803 n.8 (Fed. Cir. 2016).

Even if the Knob Prior Art was not in the same “field of endeavor” as the ’042

Patent, that art is pertinent to the problem the inventors faced. That problem was the need to provide haptic feedback to an input device using an actuator rather than via physical mechanisms like click-stops. EX1001, 1:14-43; 2:57 (“Illustrative Devices for Enhanced Haptic Feedback”). The Knob Prior Art is directed to this same problem. *See, e.g.*, EX1016 (Levin), Abstract, 1:36-54; EX1007 (Goldenberg), Abstract, 1:59-2:3; EX1022 (Wang), Abstract, 6:22-26, 8:6-11, 16:30-17:2.

Finally, Immersion also argues more narrowly that the Knob Prior Art is non-analogous because those references use “force feedback” that is allegedly “not reasonably pertinent to the problem” of providing virtual detents to 2-dimensional touchpads. POPR at 27. Rosenberg-I squarely refutes that argument. Immersion does not dispute that Rosenberg-I discloses a 2-dimensional touchpad that outputs virtual detents, and it does so using “force feedback” that Rosenberg-I also calls “haptic feedback.” EX1009, 1:33-35; 4:65-5:5. Rosenberg-I further incorporates Rosenberg-II’s teachings for how to provide “haptic feedback” (EX1009, 6:49-54), and Rosenberg-II also uses “force feedback,” and it does so on a joystick (EX1010, Abstract). The Rosenberg references together confirm POSAs considered “force feedback” teachings—even those applied to 3-dimensional input devices like a joystick—applicable to touchpads. *See also* EX1003, ¶¶70-74, 127, 234-236.

## **II. Discretionary Denial Is Not Appropriate.**

Given the district court’s stay order, which also vacated the original trial date,

the *Fintiv*<sup>2</sup> factors weigh even more heavily against discretionary denial than they did when Valve filed its petition.

***Factors One and Two.*** The district court has stayed the parties’ litigation pending institution decisions in this and several other IPR proceedings. EX2004 at 1. “[B]ecause a stay ‘allays concerns about inefficiency and duplication of efforts,’ factors 1 and 2 strongly weigh against the exercise of discretion” to deny institution. *Apple Inc. v. Speir Techs., Ltd.*, IPR2023-00151, Paper 9 at 8 (June 9, 2023) (quoting *Fintiv* at 6); *see also Snap, Inc. v. SRK Tech. LLC*, IPR2020-00820, Paper 15 at 8-9 (Oct. 21, 2020) (precedential as to § II.A) (“The granting of a stay...weigh[s] strongly against exercising discretion to deny institution.”); *Beckman Coulter, Inc. v. Sirigen II Ltd.*, IPR2022-01203, Paper 12 at 20 (Jan. 6, 2023) (similar); *Lyft, Inc. v. AGIS Software Dev. LLC*, IPR2022-00513, Paper 11 at 6 (June 2, 2022) (finding stay alone sufficient to “decline to exercise our discretion to deny institution”).

The district court also vacated the June 2025 trial date along with all other deadlines in the case. EX2004 at 8. This development further weighs against discretionary denial. *E.g., Owens Corning Roofing & Asphalt, LLC v. Kirsch Rsch. and Dev., LLC*, IPR2020-01389, Paper 11 at 11 (Feb. 18, 2021) (finding factors one and two “weigh strongly against” discretionary denial where litigation is stayed and no trial date is set); *Facebook, Inc. v. Palo Alto Rsch. Ctr. Inc.*, IPR2021-01434,

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<sup>2</sup> *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (Mar. 20, 2020) (precedential).

Paper 11 at 9-11 (April 4, 2022) (similar); *Analog Devices, Inc. v. Xilinx, Inc.*, IPR2020-01625, Paper 10 at 5-6 (April 23, 2021) (similar).

**Factor 3.** As the district court observed, the litigation “is in its early stages,” Valve’s motion to dismiss is still pending, only “minimal documents” have been exchanged, and no depositions have occurred. EX2004 at 5. Given the stay, the case will remain in its early stages and Factor 3 thus weighs against discretionary denial. *Speir*, IPR2023-00151, Paper 9 at 8 (factor three weighs against denial where case was stayed *before* an order issued on a pending motion to dismiss); *Snap*, IPR2020-00820, Paper 15 at 10-11 (factor three weighs against denial where “the district court has not issued orders related to the patent at issue in the petition”).

**Factor 4.** Immersion argues that because Valve did not include a *Sotera* stipulation with its petition, factor four weighs in favor of discretionary denial. POPR at 67 (arguing Valve “is seeking two bites at the apple”). This argument is a red-herring. Because the district court litigation is stayed, Valve will already be subject to statutory estoppel should the Board institute trial and reach a final written decision. In other words, the district court’s stay has already mitigated the risk of duplicative invalidity efforts that a *Sotera* stipulation is intended to address. *Sotera Wireless, Inc. v. Masim Corp.*, IPR2020-01019, Paper 12 at 19 (Dec. 1, 2020) (precedential as to § II.A) (explaining that a *Sotera* stipulation “mitigates any concerns of duplicative efforts between the district court and the Board, as well as

concerns of potentially conflicting decisions”); *cf. Zhuhai Cosmx Battery Co. v. Maxell, Ltd.*, IPR2022-00984, Paper 8 at 4 (Sept. 29, 2022) (explaining that a *Sotera* stipulation is not “a prerequisite for institution”).

The *Zhuhai* decision that Immersion cites (POPR at 63) is distinguishable for precisely this reason—it did not involve a stay. *Zhuhai Cosmx Battery Co. v. Ningde Amperex Tech.*, IPR2023-00587, Paper 12 at 9 (Sept. 22, 2023). *Zhuhai* also found Factor 4 “weighs against denial,” even though a *Sotera* stipulation was not provided. *Id.* at 15. *Zhuhai* denied institution principally because—unlike here—a trial was “likely to occur months before” the FWD. *Id.* at 12.

As the Board has explained, given the current stay, “the Board will address patentability issues prior to the district court reaching them, which reduces concerns on inefficiency and conflicting results.” *Spier*, IPR2023-00151, Paper 9 at 9 (finding factor four weighs against discretionary denial); *Snap*, IPR2020-00820, Paper 15 at 15-16 (similar). This factor thus weighs against discretionary denial and the lack of a *Sotera* stipulation is irrelevant. *Beckman*, IPR2022-01203, Paper 12 at 23.

**Factor 5.** With the district court litigation stayed, this factor now weighs firmly against discretionary denial because the Board will reach a final written decision before any jury trial. *Beckman*, IPR2022-01203, Paper 12 at 24.

Date: May 31, 2024

By: / Richard Giunta /  
Richard F. Giunta (Reg. No. 36,149)

**CERTIFICATE OF SERVICE UNDER 37 C.F.R. § 42.6 (E)(4)**

I certify that on May 31, 2024, I will cause a copy of the foregoing document, including any exhibits or appendices filed therewith, to be served via electronic mail, as previously consented to by Patent Owner, upon the following:

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