

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VALVE CORPORATION,
Petitioner,

v.

IMMERSION CORPORATION,
Patent Owner.

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

PATENT OWNER'S SUR-REPLY

I. THE PETITION FAILS TO MEET ITS BURDEN OF DEMONSTRATING THAT ITS ART IS ANALOGOUS

The '042 Patent's "field of endeavor" is explicitly defined by the "Field of Invention" section as relating to "vibrotactile feedback" and virtual detents provided through such vibrotactile feedback. EX1001 at 1:14-17. Express definitions in the "Field of Invention" sections are often determinative. *See In re Wood*, 599 F.2d 1032, 1036 (CCPA 1979) (confining field of endeavor to scope explicitly specified in background of invention section). The claims also require ***vibrotactile effects*** implemented via touchpad. EX1001 at cl. 1. The "appropriate field of endeavor [is determined] by reference to explanations of the invention's subject matter in the patent application, including the embodiments, function, and structure ***of the claimed invention.***" *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir 2004) (emphasis added). Here, the "embodiments, structure, and function" of all claims involve vibrotactile effects (function and embodiments) via touchpad (structure). None of Levin, Wang, or Goldenberg ("Knob Prior Art") uses vibrotactile effects.

Petitioner ("Pet.") confirms that the invention concerns vibrotactile feedback by proposing to construe "virtual detent" in the district court as "***vibrotactile feedback*** that simulates a mechanical detent." EX2003 at 19. Now, to suit its invalidity theory, Pet. walks their understanding of the invention back by improperly broadening the "field of endeavor" to include non-vibrotactile art. Reply at 3

(defining “field of endeavor” as “providing [non-vibrotactile] haptic feedback to input devices via an actuator”). Pet. fails to carry its burden to explain why such broadening is compatible with the '042 Patent's “field of the invention's” express definition and the “embodiments, function, and structure” of the “claimed invention.” *In re Bigio*, 381 F.3d at 1325.

Pet. fails to show that the “field of endeavor” includes physical knobs because the *claimed subject matter* was amended for allowance to expressly require touchpads, thereby excluding physical knobs notwithstanding the '042 Patent's disclosure of a rotary knob based embodiment limited to a rotary knob that is distinguishable from the Knob Prior Art because it outputs vibrotactile effects. EX1002 (Part I) at 138 (distinguishing “touch-pad” requirement from cited art's physical interfaces); *see, e.g., Wang Laboratories v. Toshiba Corp.*, 993 F.2d 858, 864 (“field of endeavor” test focuses on “claimed subject matter”). But even if it could shift the “field of endeavor” to physical knobs, that alone cannot negate the Knob Prior Art's lack of vibrotactile sensations. *In re Bigio*, 381 F.3d at 1325 (requiring the *same*, not merely overlapping, fields of endeavor). Pet.'s focus on physical knobs at best shows partially overlapping, rather than identical fields of endeavor. The Federal Circuit has repeatedly found that such partial overlap fails to meet the field of endeavor test. *See Wang Laboratories, Inc. v. Toshiba Corp.*, 993 F.2d 858, 864 (Fed. Cir. 1993) (mere overlap in fields of endeavor relating to

modular computer memory insufficient when the art involved “memory circuits [with] modules of varying sizes” whereas the claimed subject matter involved “compact modular memories”).

Pet.’s cited cases are distinguishable. Pet. cites the non-precedential *In re Chaganti* case, to argue that a reference need not disclose every limitation to be in the same field of endeavor. Reply at 2. *Chaganti*, however, nowhere suggests that a reference can fail to disclose key limitations such as “vibrotactile effect,” which Pet. itself proposed **requiring** in the district court. EX2003 at 19. Pet. further cites *Unwired Planet* and *In re Asset Guard Prods.* to argue that claim scope should be set aside in favor of the specification’s mention of physical knobs. Reply at 2. Neither suggests ignoring claim scope. In *Unwired Planet, LLC v. Google Inc.*, the Federal Circuit accounted for claim scope in its “field of endeavor” determination. 841 F.3d 995, 1001 (Fed. Cir. 2016) (finding challenged patent’s field of endeavor focused on “interface design” when relevant claims also dealt with mobile device display interfaces). Similarly, in *In re Asset Guard Prods.*, the Federal Circuit did not ignore claim scope. 2022 U.S. App. LEXIS 9909, *8-9 (Fed. Cir. 2022). There, the “background of the invention” defined a “field of endeavor” that **expressly included** “any type of storage, tank, or vessel,” thereby contradicting the claim’s requirement of a specific type of tank. *Id.* at *8 (Fed. Cir. 2022). Accordingly, the Federal Circuit concluded that the Board was correct to not limit the “field of

endeavor” to the “specific type of large volume tank[.]” *Id.* at *9. In contrast, the “field of invention” here does not expressly include **any** input device in contradiction to the claims. A POSA would further understand the express call out of “virtual detent” and “vibrotactile” to support the claimed touchpads. Physical control knobs—due to their 3-dimensional shapes—do not require vibrotactile virtual detents, as physical knobs are not virtual controls. Lastly, “[m]ere listing of a reference [such as Levin here (Reply at 3)] in an information disclosure statement is not taken as an admission that the reference is prior art against the claims.”¹ MPEP § 2129 (R-07.2022)

The Knob Prior Art is also not pertinent to the problem being solved because they relate to the real detents (i.e., force feedback) that the '042 Patent sought to **virtualize** with virtual vibrotactile detents. This alone confirms that the two were directed to different purposes, and thus, not reasonably pertinent. *See In re Clay*, 966 F.2d 656 at 659 (“If [a reference] is directed to a different purpose, the inventor would accordingly have had less motivation or occasion to consider it.”).

Pet.’s broad characterization of the problem as the “need to provide haptic feedback to an input device using an actuator rather than via physical mechanisms

¹ *See Donner Tech., LLC v. Pro Stage Gear, LLC*, 979 F.3d 1353, 1359 (Fed. Cir. 2020) (“The scope of the prior art includes all analogous art.”).

like click-stops[,]” (Reply at 4), ignores the express teachings of the patent. The '042 Patent does not suggest that the problem relates to using actuators generally to create generic haptic feedback. In fact, the patent never mentions actuator produced force feedback at all. Rather, it repeatedly and exclusively discusses vibrotactile virtual detents. EX1001 at 1:14-17. Thus, while the Knob Prior Art solves a haptics-related problem, it is not pertinent to the more specific haptics problem relating to vibrational virtual detents. *Schott Gemtron Corp. v. SSW Holding Co.*, IPR2014-00367, Paper 62 at 17 (May 26, 2015) (analogous art must be “pertinent to *the entire problem* being solved by the challenged patent.”) (citing *In re Klein*, 647 F.3d 1343, 1348 (Fed. Cir. 2011)) (emphasis in original).

In summary, force feedback references, such as the Knob Prior Art, are not reasonably pertinent to the problem of providing vibrational virtual detents on touchpads. In response, Pet. contends that Rosenberg I refutes this argument, as Rosenberg I allegedly discloses a touchpad that uses force feedback. Reply, 4. But Rosenberg I only discloses ***vibrations*** output on a touchpad—not force feedback. EX1009 at 12:5-26, 12:50-66. Pet. further contends that Rosenberg I, a vibrational touch pad reference, and its incorporation of Rosenberg II, a force feedback knob reference, proves that force feedback is reasonably pertinent to touchpads. Reply at 4. First, Rosenberg I never incorporates Rosenberg II for the purpose of applying the latter's force feedback to the former's touchpads. EX1009, 6:49-54 (incorporating

Rosenberg II generically without specifying that Rosenberg II's force feedback should be applied to Rosenberg I's touchpads). Second, Rosenberg I's problem is not transformed merely because it incorporates Rosenberg II. *See Quest USA Corp. v. Popsockets LLC*, IPR2018-00497, Paper No. 59 at 78 (Aug. 12, 2019) (incorporation of reference does not disturb field of endeavor of incorporating document). Finally, Pet. cites no authority for the proposition that the purpose or problem of a reference can be imputed to the challenged patent. *See Reply* at 4.

II. DISCRETIONARY DENIAL IS APPROPRIATE

Patent Owner respectfully requests that the Board exercise its discretion under *Fintiv* to deny institution of the Petition. *See Paper 7* at 62-68. In reply, Patent Owner argues discretionary denial is “not appropriate” due to the district court's stay. *Reply* at 4-5. But Petitioner overstates the significance of the stay to the Board's analysis under *Fintiv* by failing to properly account for Petitioner's decision not to file a *Sotera* stipulation. A *Sotera* stipulation may not be a “prerequisite” for institution, *Zhuhai Cosmox Battery Co. v. Maxell, Ltd.*, IPR2022-00984, Paper 8 at 4 (Sept. 29, 2022), but Petitioner's refusal to file one undercuts the relevance of the stay to the Board's exercise of discretion under *Fintiv*. The Board should give less weight to the stay due to Petitioner's failure to file a *Sotera* stipulation.

The PTAB found in *Sotera* that a stipulation not to pursue invalidity grounds duplicative of those raised in an IPR petition in district court “mitigates any concerns

of duplicative efforts between the district court and the Board.” *Sotera Wireless, Inc. v. Masim Corp.*, IPR2020-01019, Paper 12 at 19 (Dec. 1, 2020). Ignoring this, Petitioner argues “the district court’s stay has already mitigated the risk of duplicative invalidity efforts that a *Sotera* stipulation is intended to address.” Reply at 6. There are at least two problems with Petitioner’s argument. First, the statutory estoppel referenced by Petitioner applies only if the Board institutes proceedings; thus, Petitioner’s argument that the stay “has already mitigated” the risk of duplicative invalidity efforts presumes that the Board will institute proceedings. This presumption is unwarranted on the merits. *See* Paper 7 at 1-62. The fact remains that if the Board denies institution, the district court case will resume and Petitioner will get a second bite, raising the same arguments again. Second, Petitioner’s argument effectively voids *Sotera* by arguing that ***failing*** to file a stipulation not to pursue duplicative grounds and ***presuming that the Board will institute proceedings*** is equivalent to filing a *Sotera* stipulation. This makes no sense. Petitioner preserved its right to pursue the same arguments it advances in the petition in the district court if the Board denies institution. It would fly in the face of *Fintiv* and *Sotera* for the Board to rely on Petitioner’s attempt to have two bites at the invalidity apple as the basis to decline to exercise its discretion not to institute the petition. Petitioner has signaled that it will raise the same arguments in the district court. The Board should conserve resources and let it do so.

Respectfully Submitted,

Dated: June 14, 2024

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CERTIFICATE OF SERVICE

As authorized by Patent Owner's Mandatory Notice, I hereby certify that on June 14, 2024, a copy of this document has been served in its entirety by electronic mail on Petitioner's lead and backup counsel.

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