

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VALVE CORPORATION,
Petitioner,

v.

IMMERSION CORPORATION,
Patent Owner.

IPR2024-00582
Patent 11,175,738

**PATENT OWNER'S OBJECTIONS TO PETITIONER'S
ORAL ARGUMENT DEMONSTRATIVES**

Pursuant to the Board’s June 2, 2025 Order Setting Oral Argument (Paper 28), Patent Owner Immersion Corporation and Petitioner Valve Corporation met and conferred regarding objections to oral argument demonstratives on June 16, 2025.

Patent Owner hereby objects to Petitioner’s slides 21, 22, 25, 27, and 28 (as numbered in the as-served version and reproduced below) in their entirety because these slides are directed to Petitioner’s reliance on Tierling (Ex. 1020) in Ground 3 (alleged obviousness in view of Ku). Petitioner did not raise this argument in the Petition, and instead raised it for the first time on reply, improperly incorporating material from its expert declaration in violation of 37 C.F.R. § 42.6(a)(3). *See* Sur-Reply at 21-22.

Ku's Figure 7 and 12 Teachings Render the Claims Obvious

Petition at 54, 66

Petition (at 3)

Ground 3 separately demonstrates that Ku in view of POSAs' knowledge renders obvious all independent claims and all but one challenged dependent claim.

Petition (at 54)

Generating a single "haptic output signal" calling for Ku's vibration 715 based on both the proximity and touch signals (i.e., the "first and second sensor signals" recited in [1F], [15F], and [19F]) and sending it to the haptics driver would have been more efficient and flexible than sending multiple haptic output signals to the haptics driver and requiring the driver to process them into a single output. Welch, ¶226; EX1020, [0062] (disclosing "combiner/sequencer" within processor for combining multiple haptic effects). It would also simplify the driver design by reducing the required processing power. Welch, ¶226.

Petition (at 66)

g. [1F]: "generate a haptic output signal based at least in part on the first and second sensor signals; and"

Ku's controller 180 is configured to "generate a haptic output signal based at least in part on the first and second sensor signals" as claimed. Welch, ¶257. The discussion in §VII.B.3 concerning Ku's Figures 7 and 12 in connection with Pratt-Ku also applies here, the only difference is that Ku's controller 180 rather than Pratt's processor 112 generates the haptic output signal. Welch, ¶258. Using controller 180 to generate a single "haptic output signal"—for example, a command signal causing vibration 715—based on both the proximity and touch signals (i.e., the "first and second sensor signals") and sending it to the haptics driver would have been more efficient than sending multiple haptic output signals to the haptics driver and requiring the driver to process them into a single output. *See supra* §VII.B.3; Welch, ¶259.

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

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Ku's Figure 7 and 12 Teachings Render the Claims Obvious

Petition at 54, 66

226. Generating a single "haptic output signal" calling for Ku's vibration 715 based on both the proximity and touch signals (i.e., the "first and second sensor signals" as required by [1F], [15F], and [19F]) and sending to the haptics driver indeed would have been more efficient and flexible than sending multiple haptic output signals to the haptics driver and requiring the driver to process them into a single output. A POSA would have recognized the benefits of such consolidation based on teachings such as that in Tierling (published in 2005), which discloses a "haptic device controller 130" "within [a] processor," EX1020, FIG. 1, [0045]-[0046], that outputs "a control signal" to "control[]" the tactile output [] of the haptic device 124." *Id.*, FIG. 2, [0048]. Controller 130 includes an "effect combiner/sequencer 308" that can "combine [] multiple effects" using "summation." *Id.*, FIG. 3B, [0062].

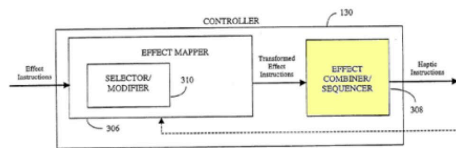


Fig. 3B

Sending a single haptic output signal to generate vibration 715 would also simplify the design requirements for Pratt's haptics driver 120 and haptics actuator 130. For example, Tierling teaches that the "effect combiner/sequencer 308...saves synthesizer and/or processor resources." *Id.*, [0062]. Tierling also discloses "code to: superimpose multiple haptic instructions...to create at least one superimposed haptic instruction" associated with a "haptic signal." *Id.*, claim 6. A POSA would have recognized the utility of Tierling's code in implementing Ku's Figure 12 and in particular outputting from Pratt's processor a single "superimposed haptic instruction" calling for Pratt's haptic output device to generate a combined vibration as illustrated in Ku's FIGS. 7 and 12. *Id.*

259. In particular, I note the discussion in Section VII.B.3 (including paragraph 226) explaining that generating a single "haptic output signal" calling for Ku's vibration 715 based on both the proximity and touch signals (i.e., the sophisticated driver to process them into a single output. That discussion—including my analysis of the related teachings in Tierling (EX1020) applies to Ku

EX1004 (Welch Decl.) at [0226], [0259] (cited by Petition at 54, 66)

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

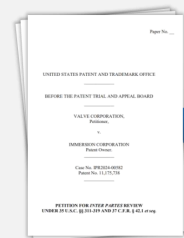
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The Petition's and Dr. Welch's Modification to Ku

Petition at 54, 66



Welch Decl.



Petition

226. Generating a single "haptic output signal" calling for Ku's vibration 715 based on both the proximity and touch signals (i.e., the "first and second sensor signals" as required by [1F], [15F], and [19F]) and sending to the haptics driver indeed would have been more efficient and flexible than sending multiple haptic output signals to the haptics driver and requiring the driver to process them into a single output. A POSA would have recognized the benefits of such consolidation based on teachings such as that in Tierling (published in 2005), which discloses a "haptic device controller 130" "within [a] processor," EX1020, FIG. 1, [0045]-[0046], that outputs "a control signal" to "control[]" the tactile output [] of the haptic device 124." *Id.*, FIG. 2, [0048]. Controller 130 includes an "effect combiner/sequencer 308" that can "combine [] multiple effects" using "summation." *Id.*, FIG. 3B, [0062].

EX1004 (Welch Decl.) at [0226] (cited by Petition at 54)

Pratt's processor 112 generates the haptic output signal. Welch, ¶258. Using controller 180 to generate a single "haptic output signal"—for example, a command signal causing vibration 715—based on both the proximity and touch signals (i.e., the "first and second sensor signals") and sending it to the haptics driver would have been more efficient than sending multiple haptic output signals to the haptics driver and requiring the driver to process them into a single output. See *supra* §VII.B.3; Welch, ¶259.

Petition at 66

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

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Immersion's Tierling Argument Is Misplaced

Sur-Reply (at 21-22)



Sur-Reply

B. Ku + Tierling Is Not an Obviousness Combination Raised in the Petition.

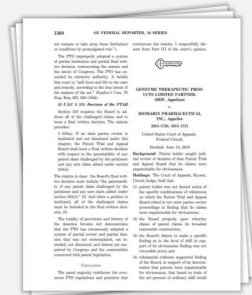
Valve incorrectly asserts that Immersion never rebutted Valve's obviousness theory for Ku on the grounds that the POR did not address Valve's proposed combination of Ku and Tierling. Reply, 10-11. But Tierling is *not* one of the obviousness combinations in the Petition and Valve cannot now raise this new argument.¹ Reply, 11. Per 37 C.F.R. § 42.6(a)(3), "Arguments must not be incorporated by reference from one document into another." Valve cannot elevate Tierling to the level of an obviousness combination when that reference was only discussed in its expert's declaration and not in the Petition itself. *See, e.g., Cisco Sys., Inc. v. C-Cation Techs. LLC*, IPR2014-00454, Paper 12 at 10 (PTAB Aug. 29, 2014); *3M Co. v. Evergreen Adhesives, Inc.*, No. 2020-1738 (Fed. Cir. June 25, 2021) ("Citing § 42.6, the Board refused to consider 3M's central argument [] because the Board determined that this argument was provided only by way of improper incorporation by reference to testimony offered by 3M's expert[.]").

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

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The Petition Properly Cited Tierling As Evidence of a Skilled Artisan's General Knowledge

Reply at 11



GENZYME THERAPEUTIC PRODUCTS LIMITED PARTNER-SHIP, Appellant
v.
BIOMARIN PHARMACEUTICAL INC., Appellee
2015-1720, 2015-1721
United States Court of Appeals,
Federal Circuit.
Decided: June 14, 2016

[7] This court has made clear that the Board may consider a prior art reference to show the state of the art at the time of the invention, regardless of whether that reference was cited in the Board's institution decision. In *Ariosa Diagnostics v. Verinata Health, Inc.*, 805 F.3d 1359 (Fed. Cir. 2015), this court vacated the Board's decision because it appeared that the Board had declined to consider a reference simply because the reference "had not been identified at the petition stage as one of the pieces of prior art defining a combination for obviousness." *Id.* at 1365. The court in *Ariosa* held that such references "can legitimately serve to document the knowledge that skilled artisans would bring to bear in reading the prior art identified as producing obviousness." *Id.* That is exactly how the Board used the Kikuchi and van der Ploeg '91 references—as part of the Board's survey of "the field related to the development of an enzyme replacement therapy for the treatment of Pompe disease" as of the priority date of the patents.

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Cited by Reply at 11

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Respectfully Submitted,

Dated: June 18, 2025

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CERTIFICATE OF SERVICE

As authorized by Petitioner's Mandatory Notice, I hereby certify that on June 18, 2025, a copy of this document has been served in its entirety by electronic mail on Petitioner's Lead and Back-up Counsel at the following email addresses:

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