

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FLUIDMASTER, INC.

Petitioner

v.

DANCO, INC.
Patent Owner

Case IPR2024-00633
Patent 9,139,993 B1

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

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Petitioner submits this Reply to the Patent Owner's Preliminary Response ("POPR", Paper 12) pursuant to the Board's Order (Paper 15).

I. GUOXIN, HO, AND BROWN ARE DIFFERENT FROM AND MORE MATERIAL THAN DEMARCO

Patent Owner ("PO") argues that, "the two primary references (Guoxin and Brown) and one secondary reference (Ho) are the same or substantially the same as the art previously presented to and considered by the Office (namely, DeMarco)." *See* Paper 12 at 2-3. However, as explained here and in the Petition (Paper 1), these references are different from and more material than DeMarco.

Guoxin (EX1015-EX1016) and Ho (EX1022) were not considered during prosecution of the '993 patent. Petition at 26 and 28. Brown (EX1021) is listed on the face of the '993 patent but was not cited to reject the claims. Petition at fn. 3.

PO argues that there is "no substantive difference between DeMarco and these three references" because the references, like DeMarco, do not disclose an "extended portion" integrally molded with the body of the toilet valve. Paper 12 at 35 (emphasis in original). That is false as the references do in fact disclose an integrally molded "extended portion". *See, e.g.,* Paper 1 at 32-34, 36, 47-48, 64-68. Moreover, another significant difference between DeMarco and the references concerns the connections between the water flow regulators and extended portions. During prosecution, PO argued that the claimed connection differed from that which is disclosed in DeMarco. EX1002 at 38-40. Specifically, PO argued that neither the reseal tube 22

nor valve 36 in DeMarco had such a portion that “‘insert[s] into, and come[s] into contact with, the extended portion of the body,’ as required by the claim”; instead, the reseal tube 22 merely slides over a portion of the water control assembly 18.” *Id.* at 40. However, Guoxin, Ho, and Brown do not use DeMarco’s manner of connection but rather show the claimed connection as explained in the Petition and the Cameron Declaration (EX1004). *See, e.g.,* Paper 1 at 26-31, 37-39, 64-65, 71-72; EX1004, ¶¶ 111-120, 134-140, 220-223, 238-240.

PO’s arguments that the references are the same or substantially the same are untenable and should be rejected.

II. PO FAILS TO CITE TO ANY MEANINGFUL FACTUAL SUPPORT FOR ITS PRIORITY DATE ARGUMENT

PO argues that the claim term at issue (i.e., “water flow regulator”) is a genus supported by the disclosure of a particular species (i.e., “bowl fill valve”). *See* Paper 12 at 5, 15-16, 55-61. It is undisputed that the patent applications to which the ’993 patent claims priority do not include the expressions “bowl fill restriction” or “water flow regulator” prior to January 27, 2014. *See* Petition at 91 (citing EX1004, ¶¶ 324-328). PO concedes that the term “water flow regulator” is broader than the term “bowl fill valve.” *See* Paper 12 at 5. The question here is whether the disclosure of a “bowl fill valve” (an adjustable, variable device) would convey to a person of ordinary skill in the art (“POSITA”) that the inventors had possession of an invention that included fixed flow restrictors as well as the disclosed adjustable flow valves.

As explained in the Petition and the Cameron Declaration, given the facts in this case, PO is not able to meet this burden. *See* Petition at 88-92.

PO's citations to *Hynix* for the general proposition there is "no categorical rule that a species cannot suffice to claim the genus" is inapposite because it ignores the factual nature of the inquiry that must be conducted. *See* Paper 12 at 57 (citing *Hynix Semiconductor Inc. v. Rambus Inc.*, 645 F.3d 1336, 1352 (Fed. Cir. 2011)); *Bilstad v. Wakalopulos*, 386 F.3d 1116, 1121 (Fed. Cir. 2004) ("Whether an application complies with the written description requirement of 35 U.S.C. § 112, ¶ 1 is a question of fact...."). Likewise, PO's characterization of the invention as being mechanical does not perforce mean a POSITA would understand that the inventors possessed an invention that included fluid flow devices other than the disclosed valves. PO fails to point to any disclosure in the applications preceding the '993 patent that support a finding that the inventors possessed an invention that extended beyond valves prior to January 27, 2014. It is not enough that the claims would have been obvious in view of the ancestor application's disclosure. *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1571-1572 (Fed. Cir. 1997) ("Entitlement to a filing date does not extend to subject matter which is not disclosed, but would be obvious over what is expressly disclosed. It extends only to that which is disclosed.").

As explained in the Petition and by Dr. Cameron, a POSITA would not have read the priority applications to have disclosed, and would not have understood that

the inventors had possession of, an invention that included a device other than a valve. *See* Petition at 91 (citing EX1004, ¶¶324-333). Indeed, the entirety of the '904 application as filed (i.e., Title, Abstract, Specification, and Claims), makes crystal clear that the **adjustability** of the bowl fill valve is a desirable and essential feature of the invention—a feature that is not present in a fixed flow restriction. *See* Petition at 91 (citing EX1004, ¶¶327-332; EX1009-EX1012; EX1010-169–EX1010-175; EX1010-158, EX1010-163, EX1010-160–EX1010-162. EX1006-056).

This is not an instance of an inventor being limited to a preferred embodiment despite broader claims being adequately supported as argued by PO. *See* Paper 12 at 59-60 (citing *Lampi Corp. v. Am. Power Prods.*, 228 F.3d 1365 (Fed. Cir. 2000)). Rather, the facts here show that a POSITA would not have understood the inventors to have had possession of a system with a fluid flow restriction mechanism other than the disclosed valves with their essential element of adjustability. *See* Petition at 91 (citing EX1004, ¶333). The broader claims here, which encompass fixed flow restrictors as well as adjustable (variable) flow valves, are not adequately supported.

Here, like in *Tronzo*, PO sought to recast an initial invention (i.e., directed to a variable valve) in broader terms (i.e., that encompass both variable valves and fixed flow restrictors) with a later-filed application and thus the later-filed claims are not entitled to the filing date of the earlier filed application. *See, e.g., Tronzo v. Biomet*, 156 F. 3d 1154, 1158-1160 (Fed. Cir. 1998) (parent application that disclosed “only

conical shaped cups and nothing broader” did not support broad claims covering conical and non-conical shaped cups; therefore, broad claims not entitled to filing date of parent and found invalid as anticipated by intervening prior art) (emphasis in original). *See also Arthrex, Inc. v. Smith & Nephew, Inc.*, 35 F.4th 1328, 1342-44 (Fed. Cir. 2022) (earlier filed patent application disclosing rigid “eyelet” lacks written description support for claim reciting an eyelet generically that encompassed rigid and flexible eyelet embodiments). In view of the foregoing, the ’993 patent is not entitled to a priority date earlier than January 27, 2014.

III. THE PETITION IS NOT DEFICIENT AND THE OMITTED ANNOTATIONS DO NOT RENDER IT AMBIGUOUS

PO argues that the Petition is deficient on its face because annotations on certain figures were inadvertently omitted from the Petition. *See* Paper 12 at 26-31. PO’s argument should be rejected. The Petition as a whole and the discussion of the references within it are complete and unambiguous standing alone. Moreover, the Petition must be read alongside the Cameron Declaration, which Petitioner relies upon and cites throughout the Petition. The Cameron Declaration includes complete versions of the figures at issue, including the omitted annotations, thus clearing up any feigned ambiguity PO falsely asserts to be present in the Petition. Indeed, PO was aware, and acknowledges in its POPR, that the corresponding annotated figures are present in the Cameron Declaration (*see* Paper 12 at 30, fn. 4) and, thus, there is also no surprise or prejudice stemming from the omission of certain limited

annotations from the figures in the body of the Petition.

The Petition includes a number of annotated figures with labels added to highlight the structures in the prior art that are relevant to Petitioner's arguments and aid in the understanding of the reference. However, during the conversion process of turning the Microsoft Word version of the Petition into an Adobe PDF version, the labels for several figures were inadvertently omitted in whole or in part. Specifically, there are seven annotated figures in the Petition where the labels were affected by the conversion process. *See* Petition at 30, 31, 35, 45, 48, 53, 67. However, these annotations were provided for convenience and their omission does not otherwise render the Petition vague or incomplete.

For example, the figure on page 30 of the Petition has partially omitted annotations pointing out the "toilet fill valve," "toilet fill body," "tank water outlet," and "extended portion." *See* Petition at 30. However, the remaining labels provide context for the labeled parts (e.g., "Water flow regulator attached to extended portion of toilet fill valve") and the relevant structures are discussed with respect to each limitation. *See*, e.g., Petition at 32. The same is true for the omitted annotations of the other figures. *See*, e.g., Petition at 31 and 67 (Figs. 2 & 5 from Ho) compared to Petition at 32-34 (discussing the integrally molded extended portion of Ho shown in those figures and providing more detailed figures regarding the same); Petition at 35 and 45 (Fig. 2 of Guoxin showing water inlet and outlet) compared to Petition at 34-

35, 44-46 (discussing the same); Petition at 48 (Fig. 4 of Guoxin) compared to Petition at 36, 47 (discussing the same); and Petition at 53 (Fig. 1 of Guoxin) compared to Petition at 54 (Fig. 6 of Ho) where the two missing labels are clear from the context and the complete labels shown with respect to Ho. As such, it is clear that the Petition standing alone, even with the omitted annotations, do not render Petitioner's arguments vague or incomplete.

Further, the annotated figures cited by PO are also part of the Cameron Declaration (EX1004), which is relied upon by Petitioner and cited throughout the Petition. Indeed, for most of the images at issue, the image in the Petition is preceded or followed by a direct cite to the portion of the Cameron Declaration containing the same image. *See, e.g.,* Petition at 34 (citing EX1004, ¶127); Petition at 44 (citing EX004, ¶156); Petition at 48 (citing EX1004, ¶162); and Petition at 54 (citing EX1004, ¶188). Importantly, the labels for the corresponding annotated figures in the Cameron Declaration were not affected by the conversion process and retained all respective labels. *Cf.* Petition at 30-31 and EX1004, ¶¶120-121; Petition at 35 and EX1004, ¶127; Petition at 45 and EX004, ¶156; Petition at 48, EX1004, ¶162; Petition at 53, EX1004, ¶188; and Petition at 67, EX1004, ¶226. *See also* EX1035 (Figures from Petition side-by-side with Figures from Cameron Declaration with the labels at issue identified by boxes in green).

This is not an instance where a petitioner seeks to import arguments from one

document into another. The arguments in the Petition are complete. Here, as is common practice, Petitioner relies upon an expert declaration as evidence to support the arguments in its Petition. To that end, the Cameron Declaration is structured to generally follow the same organization and order as the Petition in order to aid in its usefulness as a supporting document. For example, Petition §VII.A.1 (“Independent claim 1 is obvious over Guoxin in view of Ho”) corresponds to Cameron Declaration §VIII.B.1 (“Independent claim 1 is obvious over Guoxin in view of Ho”), As another example, Petition §VII.C.1 (“Independent claim 1 are obvious over Brown in view of Ho”) corresponds to Cameron Declaration §VIII.C.1 (“Independent claim 1 is obvious over Brown in view of Ho”). In each case the Cameron Declaration contains the images without the errors at issue. *See* EX1004, ¶¶120-121 and ¶¶224-227, respectively. As such, it is clear that Petitioner is not attempting to incorporate by reference arguments that are not already in the Petition.

PO cannot toss aside the corresponding figures in the Cameron Declaration, and the citations to same in the Petition, to manufacture its “gotcha” argument about clerical errors leading to inadvertent omissions in certain figures in the Petition.

IV. CONCLUSION

Based on the foregoing and the Petition, Petitioner requests institution of an *inter partes* review to cancel all of the challenged claims.

Dated: July 8, 2024

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on July 8, 2024, a true copy of the foregoing **PETITIONER'S REPLY TO PATENT OWNER'S PRELIMINARY RESPONSE** and all exhibits/attachments thereto (EX. 1035) were served in their entirety via electronic mail on the following attorneys of record:

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