

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE OFFICE OF THE UNDER SECRETARY OF COMMERCE
FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE
UNITED STATES PATENT AND TRADEMARK OFFICE

MAHLE BEHR CHARLESTON INC.,
Petitioner,

v.

FRANK AMIDIO CATALANO,
Patent Owner.

IPR2023-00861
Patent RE47,494 E

Before KATHERINE K. VIDAL, *Under Secretary of Commerce for
Intellectual Property and Director of the United States Patent and
Trademark Office.*

DECISION

Granting Director Review, Vacating the Decision on Institution, and
Remanding to the Patent Trial and Appeal Board Panel
for Further Proceedings

I. INTRODUCTION

MAHLE Behr Charleston Inc. (“Petitioner”) filed a Petition (Paper 1, “Petition” or “Pet.”) requesting *inter partes* review of claims 12, 15–17, 19–29, 31–40, and 42–47 of U.S. Patent No. RE47,494 E (Ex. 1001, “the ’494 patent”). On November 15, 2023, the Board issued a decision denying institution of *inter partes* review (Paper 13, “Dec.”). The Board determined that the Petition did not establish a reasonable likelihood that Petitioner would prevail with respect to at least one of the challenged claims. Dec. 2.

On November 29, 2023, Petitioner filed a request for Director Review. Paper 14 (“Request” or “Reh’g Req.”); Ex. 3100. In the Request, Petitioner argues that the Board’s decision presents “an erroneous application” of Federal Circuit case law, which led the Board to improperly “disallow[] Petitioner’s reliance on the figures [in the prior art] to teach the claimed dimensional range.” Reh’g Req. 11. I have reviewed Petitioner’s Request, the Board’s decision denying institution, the relevant papers, and the relevant exhibits of record in this proceeding. I determine that Director review of the Board’s decision denying institution is appropriate. *See* Revised Interim Director Review Process¹ §§ 4.B, 5.A. For the reasons set forth below, I vacate the Board’s denial of institution and remand to the Board for further proceedings consistent with this decision.

II. BACKGROUND

The ’494 patent discloses “a device to prevent corrosion [in motor vehicle radiators] caused by electrolysis,” wherein the device is “comprised of metal, preferably disposed in or near the inlet hose connection of a

¹ Available at www.uspto.gov/patents/ptab/decisions/revised-interim-director-review-process.

radiator.” Ex. 1001, 1:35–41, 2:40–44.

Figure 4A, reproduced below, is an exemplary embodiment of the claimed invention.

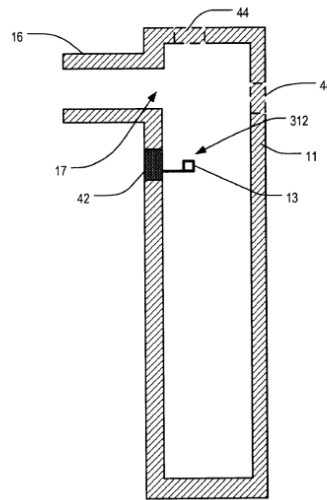


FIG. 4A

Figure 4A depicts “a left side cross-sectional view of a radiator having an electrolysis prevention device 312,” which includes anode 13. *Id.* at 7:50–51, 62. The ’494 patent explains that anode 13 may be attached “by any way imaginable within 10 inches in any direction of the center axis of the inlet connection 16.” *Id.* at 7:61–64.

Independent claim 12, reproduced below, is illustrative of the challenged claims.

12. A method of preventing corrosion of a radiator, the method comprising:

installing a sacrificial anode assembly including a sacrificial anode within the radiator,

wherein *the sacrificial anode is placed within 10 inches of a hot liquid inlet to the radiator.*

Dec. 4 (quoting Ex. 1001, 11:57–63 (emphasis and formatting added)).

Petitioner alleges, *inter alia*, that Godefroy² anticipates and renders obvious certain challenged claims, including claim 12. *See* Pet. 66–77. Petitioner relies on Godefroy’s Figure 1, reproduced below, to disclose a “sacrificial anode [that] is placed within 10 inches of a hot liquid inlet to the radiator.” Pet. 69–70.

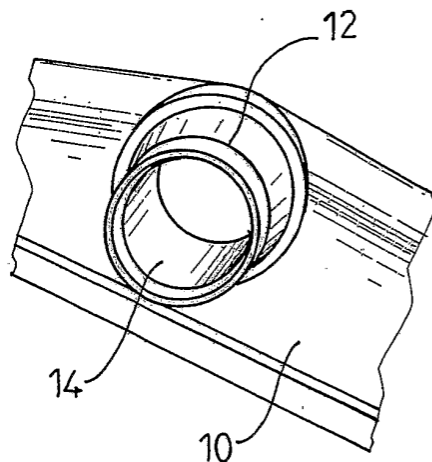


FIG.1

Figure 1 of Godefroy “shows a manifold 10 of a heat exchanger” with sacrificial resist 14 in the form of a tubular insert inside pipe 12, which operates as a liquid inlet. Ex. 1008, 7.

Petitioner asserts that sacrificial resist 14 corresponds to the claimed “sacrificial anode” and that a person of ordinary skill in the art “would have understood that the sacrificial anode 14 is . . . necessarily placed within 10 inches of a center axis of a hot liquid inlet to the radiator.” Pet. 69–70 (quoting Ex. 1004 (Declaration of Dr. Dana J. Medlin) ¶¶ 144, 360–61 and citing Ex. 1008, 8). Petitioner relies upon its expert’s testimony that:

A [person of ordinary skill in the art] would understand from Figure 1 that the sacrificial anode 14 is within 10 inches of a center axis of a hot liquid inlet because *the sacrificial anode 14 is disposed on the inside of the connector 12*, which Godefroy

² Godefroy et al., WO 03/100337 A2, published Dec. 4, 2003 (Ex. 1008).

teaches is “intended for the inlet . . . of a heat transfer liquid.” . . . While Godefroy does not provide exact dimensions with Figure 1, a [person of ordinary skill in the art] would have understood Figure 1 as showing that an entirety of the sacrificial anode 14, or at least a significant portion of the sacrificial anode 14, is within 10 inches of a center axis of the inlet. At least an upstream edge of the sacrificial anode 14 is explicitly shown at the inlet, for example.

Ex. 1004 ¶ 144 (emphasis added).

In its decision denying institution, the Board relied on the Federal Circuit’s holding in *Hockerson-Halberstadt, Inc. v. Avia Group International, Inc.*, 222 F.3d 951 (Fed. Cir. 2000) to conclude that “Figure 1 of Godefroy cannot be relied on to teach or suggest the 10-inch limitation of the challenged claims” because “[p]atent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue.” Dec. 18 (quoting *Hockerson*, 222 F.3d at 956). Because Petitioner’s expert “admits that ‘Godefroy does not provide exact dimensions with Figure 1,’” the Board concluded that the expert testimony does “not show sufficiently that Godefroy would have suggested to a person of ordinary skill in the art that anodes should be placed within 10 inches of Godefroy’s hot liquid inlet.” Dec. 18–19.

In its Request, Petitioner argues that the Board misapplied *Hockerson* and “disregarded the prior art’s facial teaching of the dimensional range.” Reh’g Req. 1, 11. Petitioner contends that Godefroy’s sacrificial anode is necessarily “within 10 inches of a center axis of” the inlet, as claimed, because “sacrificial anode [14 is] located at, and lining, the liquid inlet.” *Id.* at 9–10. Petitioner argues that “it cannot be that a patent drawing depicting

an element at and lining a location (*i.e.*, ‘within 0 inches’) does not teach the element being ‘within 10 inches’ of that location.” *Id.* at 2.

III. ANALYSIS

A. *Legal Standard*

“[A] claimed invention may be anticipated or rendered obvious by a drawing in a reference.” *In re Meng*, 492 F.2d 843, 847 (CCPA 1974). However, “patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue.” *Hockerson*, 222 F.3d at 956 (declining to draw an inference as to the relationship between the respective widths of a groove and fins on the outsole of a shoe as depicted in a prior art patent in a manner that would contradict arguments made by the patent applicant during examination to distinguish over this prior art); *see also In re Wright*, 569 F.2d 1124, 1127 (CCPA 1977) (“Absent any written description in the specification of quantitative values, arguments based on measurement of a drawing are of little value.”).

Thus, for a drawing alone to disclose a claim limitation, the limitation must be shown clearly. *See In re Wagner*, 63 F.2d 987, 987–88 (CCPA 1933) (“[T]he Board did not err in holding that the drawings are sufficient to afford a proper basis for the rejection” where “the shading in the drawing clearly indicates” the claimed feature.); *PlaSmart, Inc. v. Kappos*, 482 F. App’x 568, 572 (Fed. Cir. 2012) (“[D]rawings can be used as prior art,

without referring to the surrounding description, only if the prior art features are clearly disclosed by the drawing.”³

Moreover, where “a person of skill in the art could derive the claimed dimensions from the patent’s disclosure, there is no additional requirement that the specification must explicitly disclose the precise proportions or particular sizes.” *Cummins-Allison Corp. v. SBM Co.*, 484 F. App’x 499, 507 (Fed. Cir. 2012); *see also In re Mraz*, 455 F.2d 1069, 1072 (CCPA 1972) (“[A]s we said . . ., ‘Patent drawings are not working drawings.’ However, we did not mean that things patent drawings show clearly are to be disregarded.” (citation omitted) (emphasis omitted)); *Krippelz v. Ford Motor Co.*, 667 F.3d 1261, 1269 (Fed. Cir. 2012) (“There is no question that a person of ordinary skill, reviewing these figures, would understand them to show mounting the lamp adjacent to the side window.”).

B. Discussion

In this case, the Board did not adequately address Petitioner’s arguments regarding what Figure 1 of Godefroy clearly shows or would have reasonably suggested to a person of ordinary skill in the art. The Board relied upon *Hockerson*’s holding that “patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes.” Dec. 18 (quoting *Hockerson*, 222 F.3d at 956). However, Petitioner’s expert testified that “[a]t least an upstream edge of the sacrificial anode 14 *is explicitly shown* at the inlet.” Ex. 1004 ¶ 144 (emphasis added). As discussed above, a drawing may be relied upon for what it clearly shows.

³ *See also* MPEP § 2125 (9th ed. rev. 07.2022 Feb. 2023) (“Drawings and pictures can anticipate claims if they clearly show the structure which is claimed. However, the picture must show all the claimed structural features and how they are put together.” (citations omitted)).

Here, the Board discounted Figure 1 of Godefroy because it does not disclose precise proportions, Dec. 18–19, but did not address Petitioner’s assertion that Figure 1 “is clear on its face,” in showing that sacrificial anode 14 is “at, and lining, the inlet” and so is “necessarily” within 10 inches of that inlet. Reh’g Req. 1–2; *see also id.* at 10, 13; Ex. 1004 ¶ 144; Pet. 69–70.⁴

Though the Board correctly noted that it is improper “to back-fill with opinion testimony a prior art disclosure that does not suggest a required feature of the claimed invention,” Dec. 18; *see Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 12 at 5 (Vidal Feb. 10, 2023), *aff’g* Paper 9 at 15–17 (PTAB Aug. 24, 2022) (precedential), here, because the relevant expert testimony relies on features of the drawing itself, it was not insufficient for lacking “additional supporting evidence or . . . technical reasoning to support [the expert’s] statement,” Paper 9 at 15. *Compare id.*, with Dec. 18–19. Specifically, Petitioner’s expert testified that a person of ordinary skill in the art “would have understood that the sacrificial anode 14 is [] necessarily placed within 10 inches of a center axis of a hot liquid inlet to the radiator” because “the sacrificial anode 14 . . . is applied to the pipe 12,” which Godefroy discloses is intended for the inlet. Ex. 1004 ¶ 361; *see*

⁴ It is unclear from the Board’s analysis how it interpreted the limitation “within 10 inches of a hot liquid inlet to the radiator.” At times, the Board discussed testimony regarding “within 10 inches *of a center axis* of the inlet,” Dec. 18 (emphasis added), and other times, referred to “within 10 inches of Godefroy’s hot liquid inlet,” *id.* at 19. Thus, it is unclear whether the Board required the anode be placed “within 10 inches” from the center axis or from the inlet itself. On remand, the Board shall set forth its interpretation reconciling these apparent inconsistencies. However, my analysis of the Board’s treatment of *Hockerson* applies regardless of the construction adopted.

also Pet. 69–70 (citing Ex. 1004 ¶¶ 144, 360–61; Ex. 1008, 8). The Board should have thoroughly evaluated this argument and evidence.

On remand, the Board shall determine whether Petitioner has demonstrated that Figure 1 of Godefroy “is clear on its face” or would have reasonably suggested the placement of Godefroy’s sacrificial anode “within 10 inches” of the hot liquid inlet. In making this determination, the Board shall consider whether the expert testimony provides sufficient “technical detail, explanation, or statements supporting why the expert determines that the feature in question was required or would have been obvious based on the prior art disclosure.” *Xerox*, Paper 12 at 5.

IV. CONCLUSION

Based on the record before me, I determine that the Board misapplied *Hockerson* in this case. Accordingly, I vacate the Board’s decision denying institution and remand to the Board for further proceedings consistent with this decision.

My decision here is limited to the Board’s application of *Hockerson* to the grounds in the Petition involving Godefroy. But on remand, the Board should consider what effect, if any, this decision has on the other asserted grounds.

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that the Board’s decision denying institution of *inter partes* review (Paper 13) is vacated; and

FURTHER ORDERED that the case is remanded to the Board for further proceedings consistent with this decision.

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