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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte NEAL KEEFER

Appeal 2019-005513
Application 13/711,188
Technology Center 1700

Before MICHAEL P. COLAIANNI, DONNA M. PRAISS, and
MONTÉ T. SQUIRE, *Administrative Patent Judges*.

COLAIANNI, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1, 4–7, and 21–25. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as MFB Patents, Inc. Appeal Br. 3.

Appellant's invention is directed to a molded fuel tank made from synthetic material having one or more metal components in the synthetic material and methods of rotationally molding the fuel tank (Spec. 2:7-13; Claim 1).

Claim 1 is representative of the subject matter on appeal:

1. (amended) A method of manufacturing a fuel tank, the method comprising:

providing a mold having an interior surface that corresponds to an exterior shape of a molded fuel tank and that defines an interior of said mold;

securing on said interior surface of said mold, in an intended final position with respect to the fuel tank, a fuel tank component;

after said securing step, loading a synthetic material into said interior of said mold;

heating said mold until said synthetic material is melted;

rotating said mold until said synthetic material is adhered to said interior surface of said mold;

allowing said melted material to cool so as to form a molded one-piece fuel tank body; and

removing said molded fuel tank body from said mold,

wherein said molded fuel tank one-piece tank body includes said fuel tank component secured by solidified polymer around the component and formed integral within and extending through and outwardly from an exterior surface of said molded fuel tank body in a final position corresponding to the intended final position, wherein said fuel tank component extends inwardly into an interior of said molded fuel tank from and past an interior surface of said molded fuel tank body, such that said tank component is uncoated with the molded synthetic material in a first region extending outwardly from said exterior wall of said molded fuel tank body and is uncoated with the molded synthetic material on a side surface of a second region

extending inwardly from and past said interior surface of said molded fuel tank body such that said component allows open fluid communication between said interior and an exterior of said fuel tank.

Appellant appeals the following rejections:

1. Claims 1, 4–7, and 21–25 are rejected under 35 U.S.C. § 112, ¶ 1 as lacking written description.
2. Claims 1 and 4–7, 23² are rejected under 35 U.S.C. § 112, ¶ 2 as being indefinite.
3. Claims 1, 4–7, and 21–25 are rejected under 35 U.S.C. § 103(a) as unpatentable over Evanovich (US 6,508,271 B2, issued Jan. 21, 2003) in view of Hyde (US 5,103,865, iss. Apr. 14, 1992) or Gatley (US 4,976,910, iss. Dec. 11, 1990).
4. Claims 1, 4–7, and 21–25 are rejected under 35 U.S.C. § 102(b) as anticipated by Ziegler (US 5,211,900, iss. May 18, 1993), or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Ziegler in view of Gatley.
5. Claims 1, 4, 6, 7, and 21–25 are rejected under 35 U.S.C. § 102(b) as anticipated by Gatley.
6. Claim 5 is rejected under 35 U.S.C. § 103(a) as unpatentable over Gatley in view of Evanovich.

² The 35 U.S.C. § 112, ¶ 2 rejection of independent claims 21 and 22 and claims 24 and 25 dependent therefrom were withdrawn by the Examiner (Ans. 3). As we understand the rejection, claim 1 and the claims dependent therefrom remain rejected based on the lack of antecedent basis issue with claim 1.

Appellant also argues the Examiner's objections to the claims (Appeal Br. 16-17). The recourse for objections is by petition to the Director and not appeal to the Board. *See, Manual of Patent Examining Procedure* § 1201. We will not consider arguments made with respect to the Examiner's objections.

FINDINGS OF FACT & ANALYSIS

Rejection (1): Written Description

The Examiner's findings regarding the written description rejection are located on pages 7 to 9 of the Final Office Action. The Examiner finds that there is no written descriptive support for an uncoated component region extending outwardly or inwardly from the tank or tank body (i.e., either the exterior wall or interior surface) (Final Act. 7, 8). The Examiner finds that Appellant's Figures 1 and 2 do not depict the tank, tank wall, or tank body in close enough detail with respect to the tank components to clearly convey that any particular region of an outward extension of the component is uncoated (Final Act. 7, 8).

Appellant argues the figures in the provisional application filed December 12, 2011, show components 20 and 22 extending outwardly from a fuel tank side wall 12 (Appeal Br. 18). Appellant contends the provisional application figures show a cross-hatched side wall of the tank in cross section and components 20, 22, and 28 extending through the tank wall and into the interior of the tank (Appeal Br. 18). Appellant argues the figures in the provisional application show "clean corners defined between the fuel tank wall and the side surface of each component that extends through the fuel tank wall" (Appeal Br. 18). Appellant contends the figures show no

tank wall material extending upwardly along or accumulating at the corners where the components 20, 22, and 28 extend through the fuel tank wall (Appeal Br. 18). Appellant argues provisional application Figure 2 shows an open aperture of component 28 positioned inside the tank, which shows that there is communication between an exterior and an interior of the tank through component 28 (Appeal Br. 19). Appellant contends the Specification discloses the tank material deposited in the mold adheres to the heated mold during rotational molding (Appeal Br. 19). Appellant argues the Specification does not indicate that the component is heated, and thus the tank material would not adhere to the component (Appeal Br. 20). Appellant argues the provisional application Figures 1 and 2 show that the components extend outwardly from side wall 12 and are not in contact with the softened material inside the mold during molding and would not be coated (Appeal Br. 20).

An appellant satisfies the written description requirement by showing the Specification reasonably conveys to those skilled in the art that Appellant had possession of the subject matter recited in the claims. *Ariad Pharmaceuticals, Inc. v. Eli Lilly and Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010). In the present case, we find that Appellant's reliance on provisional application Figures 1 and 2 and the Specification disclosure that the molding material adheres to a heated mold fails to establish they had possession of the components being uncoated by the tank molding material. Regarding the Specification, Appellant contends that Figures 1 and 2 show that the components extend outwardly from the tank wall and that showing coupled with the disclosure that the tank wall material adheres to the heated mold establishes descriptive support (Appeal Br. 19–20). The Examiner

reasonably finds that the figures do not convey via different hatching or expanded views of the components that the portion of the component extending outward from the outer tank wall or inward from the interior of the tank wall would have no coating of tank wall material on them (Ans. 4–5). We find that the provisional application figures, which appear to be identical to the those in the present application, do not provide any sort of expanded view of the components that would have established possession of no coating of tank wall material on the portion of the components extending outward from the tank wall or extending inward from the tank wall.

Appellant’s Specification may disclose that the tank wall material adheres to the heated mold, but that does not necessarily describe that none of the tank wall material adheres to the component as recited in claim 1. Appellant fails to provide any figure or description showing the method used or how the component would have been positioned in the mold to convey reasonably that they had possession of no tank wall material on the portion of the components extending outwardly or inwardly from the tank wall. Notably, Appellant does not provide any argument or evidence that the portion of the components extending inwardly from the tank wall would be free of tank wall material (Appeal Br. 20).

We find that Appellant has not established possession of the claimed subject matter. We affirm the Examiner’s § 112, ¶ 1 written description rejection.

Rejection (2): Indefiniteness

The only remaining rejection under this rejection is the lack of antecedent basis rejection for the phrase “said exterior wall” in claim 1³ (Final Act. 10; Ans. 3).

Appellant concedes that there is a lack of antecedent basis for the phrase (Appeal Br. 28). Appellant argues an amendment submitted on June, 13, 2017 changed “from an exterior wall” to “from an exterior surface” but failed to change “exterior wall” in all instances in claim 1 (Appeal Br. 27–28). Appellant contends the Examiner did not object to the phrase “exterior wall” in the non-final rejection dated September 8, 2017 (Appeal Br. 28). Appellant argues if the Examiner had rejected claim 1 under 35 U.S.C. § 112, ¶ 2 based on lack of antecedent basis in the non-final action, Appellant would have had the opportunity to amend the claim (Appeal Br. 28). Appellant requests the Board to enter an amendment to claim 1, line 26 to replace “exterior wall” with “exterior surface” (Appeal Br. 28).

Contrary to Appellant’s request or argument, the Board does not enter amendments. The authority to enter or deny entry of amendments after final rejection resides with the Examiner. *See Manual of Patent Examining Procedure* § 1206. Our review of the electronic record in the Patent Office does not show that any formal amendment was filed to correct this issue. An Applicant Initiated Interview Summary form (PTO-413) dated March 7,

³ The Examiner does not state which claims are still rejected under 35 U.S.C. § 112, ¶ 2 after withdrawing some of the bases for the rejection. It appears that only claim 1 is affected by the antecedent basis issue that remains (Final Act. 10). Therefore, we understand that claims 1, 4–7, and 23 are rejected under 35 U.S.C. § 112, ¶ 2.

2019 states that the Examiner told Appellant that the matter could be resolved by an amendment after Board decision.

Because it is uncontested that the claims before us contain the antecedent basis problem, we affirm the Examiner's § 112, ¶ 2 rejection of claims 1, 4–7, and 23.

Rejection (3): Obviousness

Appellant's arguments focus primarily on claim 1 (Appeal Br. 30–36). Appellant quotes portions of independent claims 21 and 22 (Appeal Br. 33, 36–37). Appellant's claim quotations do not amount to a separate argument regarding claims 21 and 22. Rather, the same limitations from claims 1, 21 and 22 are argued. Accordingly, we select claim 1 as representative of the claim group. 37 C.F.R. § 41.37(c)(1)(iv).

The Examiner's findings and conclusions regarding Evanovich, Hyde, and Gatley as applied to claim 1 are located on pages 11–13 of the Final Office Action.

Appellant agrees with the Examiner that Evanovich does not teach the claimed inward, uncoated extension of the component (Appeal Br. 34). Appellant contends Hyde's vent 24 is placed in the recess of a blow mold which is a very different process than the claimed rotational molding (Appeal Br. 34–35). Appellant contends a person skilled in the art would not look to Hyde's blow molding method where the vent uses a cutter to pierce a preformed wall to modify Evanovich's rotational molding method where the wall is formed during rotation of the mold (Appeal Br. 35). Appellant argues if Hyde's vent 24 having small apertures 34 is used in Evanovich's rotational molding process, the apertures would likely be

clogged by the small particulate used during rotational molding to form the walls (Appeal Br. 35).

Contrary to Appellant's arguments, the Examiner find that person of ordinary skill in the art would have recognized the benefits of using Hyde's venting valve in Evanovich's tank structure (Final Act. 12). The Examiner finds that it would have been within the skill level of the ordinary artisan to provide whatever measures are required to ensure the valve is properly fixed to Evanovich's one piece molded product (Final Act. 12). Appellant's arguments about the difference in molding techniques does not address this finding of the Examiner. Appellant's argument that the vent apertures in the vent valve 24 would have been filled by the particulate synthetic material used to form the rotational molded tank wall is not persuasive. Appellant provides no evidence that the particle size of the particulate is such that it would have blocked the vent holes. Moreover, as noted above, Appellant does not dispute specifically that a person skilled in the art would have been capable of attaching securely the valve to the rotationally molded structure in Evanovich (Final Act. 12).

Regarding Gatley, Appellant argues that Gatley's boss 18 and fitting 56 each include a polytetrafluoroethylene (PTFE) sleeve to assist with relative sliding movement of the components (Appeal Br. 35–36). Appellant argues that Gatley's components are coated with synthetic material and, thus, are not uncoated with the molded synthetic material extending inwardly from and past the interior surface of the molded fuel tank (Appeal Br. 35). Appellant contends Gatley's PTFE sleeve prevents the components from being secured by solidified polymer around the component (Appeal Br. 36). Appellant argues Gatley's fitting 56 includes a flange 61 positioned on

an exterior surface of the housing (Appeal Br. 36). Appellant contends the exteriorly positioned flange 61 would result in the fitting 56 popping outward if the housing is placed under any pressure (Appeal Br. 36).

Appellant's arguments are not persuasive because no evidence has been provided to substantiate the attorney argument that Gatley's fitting 56 with the flange 61 would pop out and fail if the tank was placed under pressure. In any event, Gatley teaches that tank 6 is filled with eutectic fluid (e.g., brine) through fitting 56 and sealed using cap 58 (Gatley, col. 4, ll. 26–29). If Gatley's fitting 56 was not sealed properly with the tank wall it would leak. In other words, if Appellant's argument is alleging that Gatley's fitting is not enabled for providing a liquid tight fitting assembly in the tank wall, then clear and convincing evidence must be provided to challenge the operability of the patentee's disclosure. *See In re Spence*, 261 F.2d 244, 246 (CCPA 1958) (explaining that inventions disclosed in prior art references enjoy a statutory presumption of validity since the applied prior art references are U.S. Patents).

Appellant's arguments regarding the PTFE sleeve do not appear to be germane to the Examiner's rejection. Gatley's PTFE sleeve 21 concerns boss 18, not the fitting 56 attachment (Gatley, col. 4, ll. 1–5). Appellant has not directed us and we have not found any disclosure in Gatley where a PTFE sleeve is formed around fitting 56. Rather, Gatley shows in Figure 2 that fitting 56 is placed in mold 3 and tank walls 8, 10, 12 are formed by rotational molding the tank wall material around fitting 56, mounting device 14, and threaded bosses 38 (Gatley col. 4, ll. 30–68, col. 5, ll. 1–5). Gatley embeds fitting 56 in tank wall 10 by rotational molding as plainly shown in Figure 2.

We are not persuaded by Appellant's argument that Gatley's components are covered in tank wall material after rotational molding and so are not free of coating material extending inward or outward from the molded tank wall. Gatley discloses that boss 18 and threaded bosses 38 are covered in rotational molded material to provide an extra seal (col. 4, ll. 58–68). Gatley does not state or show in Figure 1 that fitting 56 is covered on either the internally extending portion or externally extended portion by the rotational molded coating material.

On this record, we affirm the Examiner's § 103 rejection of claims 1, 4–7, and 21–25 over Evanovich in view of Hyde or Gatley.

Rejection (4): Anticipation/Obviousness

Appellant's arguments focus on subject matter common to claims 1, 21, and 22 (Appeal Br. 40). Claims 1, 21, and 22 are argued as a group. Accordingly, we select claim 1 as representative of the claim group. 37 C.F.R. § 41.37(c)(1)(iv).

The Examiner's findings and conclusions regarding Ziegler and Gatley under §102 and § 103 are located on pages 17–18 of the Final Office Action. Regarding the § 102 rejection, the Examiner finds that the broadest reasonable interpretation of “open fluid communication between said interior and an exterior of the fuel tank” includes any component as part of the tank thereby permitting said interior to be defined as the interior of the component (Final Act. 17). The Examiner finds that the fluid within Ziegler's tube 18 is reasonably construed as existing within the interior of Ziegler's tank 12 (Ans. 11). The Examiner finds that the integrated tube and

tank structure in Ziegler and Appellant's integrated component/tank structure makes each of them inseparable from one another (Ans. 11).

Appellant argues that Ziegler's tube 18 is closed and, thus, does not show a tube that "allows open fluid communication between said interior and an exterior of said fuel tank" as recited in claims 1, 21, and 22 (Appeal Br. 40). Appellant contends that the Examiner's claim interpretation is based upon a misreading of the plain meaning of Appellant's claims as currently written (Appeal Br. 38). Appellant argues that the plain meaning of the claims was recited in the Response dated December 7, 2017, along with the claim amendment (Appeal Br. 39). Appellant contends that Appellant's Figure 2 shows an aperture above reference number 24 at the end of a fuel draw and return tube 28 (Appeal Br. 39). Appellant argues that components 20 and 22 are a fuel filler neck and a vent port which allow open communication with the interior of the fuel tank to an exterior of the fuel tank (Appeal Br. 39). Appellant argues that an interior of the fuel tank does not encompass the interior of the component itself (Appeal Br. 39).

Claim 1 recites "said component allows open fluid communication between said interior and an exterior of said fuel tank." Claim 1 does not recite what constitutes a "component" other than to recite that the component is a "fuel tank component." In other words, claim 1 is not limited to any particular fuel tank component other than components that permit open fluid communication. The Specification does not define what is meant by "open fluid communication." Appellant contends that the components may include a fuel filler neck 20 and vent port 22, which would constitute open fluid communication (Appeal Br. 39). We have reviewed Appellant's December 7, 2017, dated response to the Examiner's Non-Final

Rejection. In the Response, Appellant amends claim 1 to recite “open fluid communication” and argues that the fuel supply and return lines 28 shows that the tube is open so that fluid may flow into and out of the interior of Applicant’s fuel tank (Response, 14). The recitation of a fuel fill neck would require a tube that opens at each end to permit open fluid communication between the interior and exterior of the fuel tank.

We agree with Appellant the Examiner’s claim interpretation under the § 102 rejection over Ziegler is unreasonable. In light of the Specification, we construe open fluid communication as permitting the fluid to contact freely and openly with the interior of the tank as a fuel filler neck would do, for example. Ziegler’s closed tube 18 does not permit open fluid communication between the interior and exterior of the tank in that the fluid in the tube is not free to enter the interior of the fuel tank.

We reverse the Examiner’s § 102 rejection over Ziegler.

Regarding the alternative § 103 rejection over Ziegler in view of Gatley, Appellant makes similar arguments made previously with respect to the § 103 rejection over Evanovich in view of Gatley (Appeal Br. 40–41). We are unpersuaded by those arguments for the same reasons discussed above. We refer to our discussion above regarding Gatley to respond to these arguments.

Appellant further argues that one skilled in the art would not add Gatley’s fitting 56 to Zeigler’s housing because Ziegler teaches away from a system that allows open fluid communication from the exterior of the tank to the interior of the tank (Appeal Br. 42). Appellant contends that Ziegler’s tube 18 is enclosed so that the fluid contained therein will never mix with fluid contained within its housing 26 (Appeal Br. 42).

Appellant's teaching away argument is unpersuasive because it fails to address the Examiner's stated rejection. In particular, the Examiner is not suggesting to modify Ziegler's tube 18 to permit discharge of the fluid contained therein to the tank. Rather, the Examiner proposes to modify Ziegler's tank to include a fitting 56 as in Gatley to permit the tank to be filled with an eutectic fluid (Final Act. 18). The Examiner finds that Ziegler teaches that an inlet may be included in the tank but such inlet is not shown in the drawings (Ans. 12). We do not find that Ziegler teaches away from the modification proposed by the Examiner.

We affirm the Examiner's § 103 rejection over Ziegler in view of Gatley.

Rejection (5): Anticipation over Gatley

The Examiner's findings regarding Gatley are located on page 20 of the Final Office Action.

Appellant argues that Gatley does not disclose a component that is "uncoated with the molded synthetic material on a side surface of a second region extending inwardly from and past said exterior surface of said molded fuel tank" (Appeal Br. 42). Appellant argues that Gatley's components are not secured by solidified polymer around the component (Appeal Br. 42-43). Appellant contends that Gatley's fitting 56 includes flange 61 that is positioned in an exterior surface of the housing which would cause the fitting to be popped outwardly from Gatley's housing (Appeal Br. 43).

We find that these arguments are the same unpersuasive arguments made regarding Gatley in the § 103 rejection over Evanovich in view of Gatley. We refer to the discussion above in the context of the Evanovich in

view of Gatley rejection. We add that Gatley's Figure 1 shows that fitting 56 includes an inwardly extending, albeit small, section that is not apparently covered by the tank wall material. Gatley discloses in Figure 2 that the fitting 56 is mounted on mold 2 and then rotationally molded so that the fitting is imbedded in the tank wall (col. 4, ll. 30–68). Gatley does not disclose that the fitting 56 is covered by the tank wall material during rotational molding (col. 4, ll. 30–68).

We affirm the Examiner's § 102(b) rejection over Gatley.

Rejection (6): Claim 5 Obviousness⁴ over Gatley in view of Evanovich

The Examiner's findings and conclusions regarding Gatley and Evanovich are located page 21 of the Final Action.

Appellant argues the same unpersuasive arguments made regarding Gatley and Evanovich (Appeal Br. 44–45). We add that Appellant's arguments also fail to address the Examiner's rejection which relies on Evanovich to teach materials used to make the fittings and the determination that it would have been obvious to use Evanovich's fitting material to make Gatley's fitting. Appellant has not shown reversible error with the Examiner's stated rejection.

We affirm the Examiner's § 103 rejection over Gatley in view of Evanovich.

⁴ The Examiner's statement of the rejection on page 21 of the Final Office Action indicates that this rejection is under 35 U.S.C. § 102(b). The body of the rejection, however, includes an obviousness conclusion. It is clear that the Examiner's mistake in the statement of the rejection is harmless error.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 4-7, 21-25	112, ¶ 1	Written Description	1, 4-7, 21-25	
1, 4-7, 23	112, ¶ 2	Indefiniteness	1, 4-7, 23	
1, 4-7, 21-25	103(a)	Evanovich, Hyde, Gatley	1, 4-7, 21-25	
1, 4-7, 21-25	102(b)	Zeigler		1, 4-7, 21-25
1, 4-7, 21-25	103(a)	Zeigler, Gatley	1, 4-7, 21-25	
1, 4, 6, 7, 21-25	102(b)	Gatley	1, 4, 6, 7, 21-25	
5	103(a)	Gatley, Evanovich	5	
Overall Outcome			1, 4-7, 21-25	

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED