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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JAMES T. TANNER[1]

Appeal 2018-006788
Application 13/067,571
Technology Center 1700

Before ADRIENE LEPIANE HANLON, CHRISTOPHER C. KENNEDY, and MERRELL C. CASHION, JR., *Administrative Patent Judges*.

KENNEDY, *Administrative Patent Judge*.

DECISION ON APPEAL

This case is an appeal under 35 U.S.C. § 134(a) from the Examiner's decision rejecting claims 22–24, 31, and 41. An oral hearing was held on December 17, 2019. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

BACKGROUND

The subject matter on appeal relates to polyester articles and containers that comprise gas barrier enhancing additives. *E.g.*, Spec. 2:9–17;

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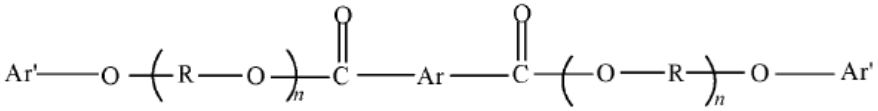
[1] We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. The Appellant identifies Ethox Chemicals, LLC, as the real party in interest. *See* Appeal Br. 2.

Claims 22, 31. Claim 22 is reproduced below from page 38 (Claims Appendix) of the Appeal Brief[2,3]:

22. In a container comprising a polyester composition, the improvement comprising inclusion of a gas barrier enhancing diester additive having the chemical formula:



wherein Ar is aryl, Ar' is phenyl, R is an alkylene radical having 2–20 carbon atoms; and n=1-20, and wherein the gas barrier diester additive comprises 3-5 weight % of the total composition.

REJECTIONS ON APPEAL[4]

The claims stand rejected as follows:

1. Claims 22–24, 31, and 41 under 35 U.S.C. § 102(e) as anticipated by Kriegel '546 (US 2010/0143546 A1, published June 10, 2010);

2. Claims 22–24, 31, and 41 under 35 U.S.C. § 102(e) as anticipated by Kriegel '511 (US 8,685,511 B2, issued Apr. 1, 2014);

3. Claims 22–24, 31, and 41 under 35 U.S.C. § 102(e) as anticipated by Kriegel '116 (US 9,051,116 B2, issued June 9, 2015);

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[2] The Examiner's refusal to enter claim amendments after the Final Action is a petitionable matter, not an appealable one. *See In re Berger*, 279 F.3d 975, 984 (Fed. Cir. 2002); *see also* 37 C.F.R. § 1.127. We therefore consider the claims without the proposed amendments. *See* Appeal Br. 4–6.

[3] We refer to the revised Appeal Brief filed January 12, 2018.

[4] In the Final Action, Rejections 1–3 were based on § 102(e) or, alternatively, § 103(a). In the Answer, the Examiner withdraws the alternative § 103(a) basis for the rejections and maintains the rejections based on § 102(e) alone. Ans. 2–3.

4. Claims 31 and 41 under 35 U.S.C. § 103(a) as unpatentable over Espenschied (US 4,705,844, issued Nov. 10, 1987);

5. Claims 22–24, 31, and 41 under 35 U.S.C. § 103(a) as unpatentable over Espenschied and Shi (US 8,545,952 B2, issued Oct. 1, 2013).

ANALYSIS

After review of the cited evidence in the appeal record and the opposing positions of the Appellant and the Examiner, we determine that the Appellant has not identified reversible error in Rejections 4 and 5. Accordingly, we affirm those rejections for reasons set forth below, in the Final Action dated September 14, 2016, and in the Examiner's Answer. However, for reasons set forth below, we reverse as to Rejections 1–3.

Rejections 1–3

The Examiner finds that each of Kriegel '546, Kriegel '511, and Kriegel '116 (collectively, "the Kriegel references") individually anticipates the claimed subject matter under 35 U.S.C. § 102(e). *See* Ans. 3. The Examiner does not find that any Kriegel reference constitutes prior art under § 102(b).

The Appellant does not dispute the Examiner's determination that each Kriegel reference discloses the claimed subject matter; the Appellant contends, however, that the Kriegel references are not available as prior art because the Appellant invented the subject matter in the Kriegel references upon which the Examiner relies. *See, e.g.*, Appeal Br. 11 (arguing that the Kriegel references "cannot be applied as prior art references because the

content from those publications relied upon by the Examiner reflects Appellant's own work").

The Appellant provides persuasive evidence in support of that contention, including evidence that a federal district court previously attributed the relevant subject matter from the Kriegel references to the Appellant as a result of litigation arising from joint work that the Appellant conducted with the assignee of the Kriegel references. *See, e.g.*, Appeal Br. 2–3 (citing various exhibits from related district court litigation), 12–13, 17–32 (comparing disclosures that the district court found attributable to the Appellant to the disclosures of the prior art relied upon by the Examiner); Reply Br. 3–16 (similar). For example, the Examiner relies on the Kriegel references as disclosing a compound known as PEM. *See* Ans. 3. PEM falls within the scope of the gas barrier enhancing diester additive of the claims. In the related litigation, the district court unequivocally determined that "Dr. Tanner [the Appellant] conceived of PEM as a gas barrier additive for use in PET containers, as well as ways to make PEM . . . . Dr. Tanner's conception is corroborated." Ex. B at 30. The district court's judgment was affirmed by the Federal Circuit. *See* Ex. D. The Examiner does not meaningfully dispute the Appellant's assertions in that regard, and, on this record, we discern no apparent reason to reject them.

The Examiner nevertheless maintains the rejections under § 102(e) because "the inventive entity (i.e. various co-inventors) of [the Kriegel references] and the instant application is different from each other and thus [the Kriegel references] would be still qualified as 35 U.S.C. 102(e) [prior art] contrary to the appellant's assertion." *E.g.*, Ans. 6–7.

We disagree. "[T]he fact that an application has named a different inventive entity than a patent does not necessarily make that patent prior art." *Applied Materials, Inc. v. Gemini Research Corp.*, 835 F.2d 279, 281 (Fed. Cir. 1987). An "applicant's own work, even though publicly disclosed prior to his application, may not be used against him as a reference, absent the existence of a time bar to his application." *In re DeBaun*, 687 F.2d 459, 462 (CCPA 1982). "The proper subject of inquiry [is] what the evidence show[s] as to who invented the subject matter disclosed by the reference which [is] relied on to support the rejection." *Id.* (internal parentheses omitted) (quoting *In re Land*, 368 F.2d 866, 879–80 (CCPA 1966)).

Here, there is no meaningful dispute that the relied-upon material in the Kriegel references is the Appellant's own work. Accordingly, that work "may not be used against [the Appellant] as a reference, absent the existence of a time bar to his application." *See DeBaun*, 687 F.2d at 462. As noted above, the Examiner does not assert that a time bar applies.

On this record, the Examiner has not adequately established that the Kriegel references are available as prior art against the Appellant under § 102(e). Consequently, we reverse Rejections 1–3.

Rejection 4

The Examiner finds, *inter alia*, that Espenschied discloses shaped/molded articles of polyester "having an additive such as di-(2-phenoxyethyl) terephthalate," which the Examiner finds is the "gas barrier enhancing diester additive" recited by claims 31 and 41. Ans. 4. The Examiner finds that claims 31 and 41 recite only a "shaped" article without specifying any particular shape, and that those claims encompass any shaped article, including, e.g., "clutch discs taught in line 34 of col. 9 of

Espenschied." *Id.* The Examiner determines that the subject matter of claims 31 and 41 would have been obvious in view of Espenschied's disclosure because "choosing the di-(2-phenoxyethyl) terephthalate [as Espenschied's additive] from the disclosed lists would be considered obvious absent showing otherwise." *Id.*

In the Appeal Brief, the Appellant argues that Espenschied is nonanalogous art. Appeal Br. 34–35.

We disagree. Espenschied is analogous art for at least the reason that it is from the same field of endeavor (molded polyester products) as the claimed invention. *See In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004); *see also* Espenschied at 3:1–2 ("The invention furthermore relates to a molding material based on a polyester."); Spec. 2:10–12 ("The invention is also directed to a polymer composition and method for reducing the permeability of gases through molded polymeric containers.").

The Appellant argues for the first time in the Reply Brief that the Appellant's field of endeavor is "reducing permeability of gases." Reply Br. 18. Even were that argument timely, which it is not,[5] it would be unpersuasive because, although the Specification indicates that reducing permeability of gases is a problem with which the inventors were concerned, the Specification indicates that the field of endeavor is broader than that specific problem and encompasses polymer compositions, e.g., molded

[5] *See In re Borden*, Appeal No. 2008-004312, at 4 (BPAI Jan. 7, 2010) (informative) ("The reply brief is not an opportunity to make arguments that could have been made during prosecution, but were not. Nor is the reply brief an opportunity to make arguments that could have been made in the principal brief on appeal to rebut the Examiner's rejections, but were not.")

polyester products. *See* Spec. 2:10–11. Particularly in view of our reviewing court's interpretation of Supreme Court precedent as "direct[ing] us to construe the scope of analogous art broadly," *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1238 (Fed. Cir. 2010) (internal citation omitted), we are not persuaded that the field of endeavor should be defined in the narrow way proposed by the Appellant.

The Appellant also argues in the Appeal Brief that "[t]here is no evidence of record as to why one of ordinary skill in the art . . . would have selected Espenschied, let alone modified it as required to arrive at Appellant's claims." Appeal Br. 35.

That argument is unpersuasive. The Examiner finds that the only modification necessary to Espenschied is the selection of the specific additive used in Espenschied's molded polyester product. Ans. 4. One additive expressly disclosed by Espenschied is di-(2-phenoxyethyl) terephthalate. Espenschied at 8:56–58. The Appellant does not dispute that di-(2-phenoxyethyl) terephthalate falls within the scope of the additive of claims 31 and 41. A person of ordinary skill in the art would have selected that additive for use in Espenschied's polyester product because Espenschied expressly discloses it as a desirable additive. That Espenschied discloses other additives does not negate its disclosure of di-(2-phenoxyethyl) terephthalate. *See Merck & Co. v. Biocraft Labs., Inc.*, 874 F.2d 804, 807 (Fed. Cir. 1989) ("That the [prior art] patent discloses a multitude of effective combinations does not render any particular formulation less obvious.").

Additionally, that Espenschied discloses that the purpose of the additive is crystallization acceleration, rather than reduction of gas

permeability, is not, of itself, indicative of reversible error in the rejection. *Cf. In re Kemps*, 97 F.3d 1427, 1430 (Fed. Cir. 1996) ("[T]he motivation in the prior art to combine the references does not have to be identical to that of the applicant to establish obviousness."); *see also* Appeal Br. 36 (arguing that Espenschied does not "disclose or suggest PEM as a gas barrier additive"). The Appellant does not challenge the Examiner's rejection on the basis of the amount of additive (i.e., 3–5 weight %) recited by claims 31 and 41. *See* Appeal Br. 33–36; *see also* Ans. 5 (finding that the recited range is prima facie obvious in view of the prior art).

The Appellant also argues: "[H]ad it been so obvious to arrive at Appellant's invention from Espenschied, which published in 1987, one would have done so in well under 23 years." Appeal Br. 35. That argument is not persuasive because "[t]he mere age of the references is not persuasive of the unobviousness of the combination of their teachings, absent evidence that, notwithstanding knowledge of the references, the art tried and failed to solve the problem." *See In re Wright*, 569 F.2d 1124, 1127 (CCPA 1977).

The Appellant also argues that "Espenschied fails to say anything about a container or gas barrier additives . . . and is instead directed to gear wheels, bevel wheels, racks, clutch disks, guide elements, and components for electronic equipment and the like." Appeal Br. 35–36 (internal citation omitted) (quoting various fact findings from the district court proceeding).

That argument is unpersuasive because claims 31 and 41, subject to Rejection 4, are not limited to containers, and the Appellant has not persuasively argued that, e.g., the clutch disk of Espenschied does not constitute a "shaped thermoplastic . . . article" as recited by claims 31 and 41. Nor has the Appellant persuasively asserted error in the Examiner's

determination that "the PET composition having PEM taught by Espenschied et al would have the gas barrier property inherently." Final Act. 5. Thus, the fact that Espenschied does not specifically mention containers or the gas barrier properties of PEM is not persuasive of reversible error in the rejection. *Cf. In re Best*, 562 F.2d 1252, 1255–56 (CCPA 1977) ("Where, as here, the claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes, the PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his claimed product."); *Ex parte Obiaya*, 227 USPQ 58, 60 (BPAI 1985) ("The fact that appellant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious.").

In the Reply Brief, the Appellant raises a number of additional arguments for the first time. The Appellant argues that "the Examiner's inherency argument is not supported," that unexpected results support a conclusion of nonobviousness, and that others previously "tried and failed to solve the same problem notwithstanding [their] presumed knowledge of [Espenschied]." Reply Br. 19–22. Those arguments are untimely because they were not presented in the Appeal Brief, and the Appellant has not attempted to show good cause for presenting them for the first time in the Reply Brief. *See* 37 C.F.R. § 41.41(b)(2). The Examiner did not have an opportunity to respond to those arguments in the Examiner's Answer. We decline to consider them for the first time on appeal.

We are not persuaded of reversible error in the Examiner's rejection of claims 31 and 41 as set forth in Rejection 4. *See In re Jung*, 637 F.3d 1356, 1365 (Fed. Cir. 2011) ("[I]t has long been the Board's practice to require an applicant to identify the alleged error in the examiner's rejections.").

Rejection 5

Of particular relevance to the issues raised by the Appellant in this appeal concerning Rejection 5, some of the claims subject to Rejection 5 recite a "container." *E.g.*, claims 22–24. The Examiner relies on Espenschied as set forth above and finds that Shi teaches "a container obtained from PET compositions." Ans. 5. The Examiner determines:

> Thus, it would have been obvious to one skilled in the art at time of invention to obtain a container from the PET composition of Espenschied et al with the teaching of Shi et al or to utilize the PET composition of Espenschied et al in Shi et al in obtaining a container since Espenschied et al teach that PET compositions are well known for moldings, films and fibers and since a container obtained from PET compositions is well known as taught by Shi et al and since the PET compositions of Espenschied et al having an enhanced crystallinity would have a gas barrier property inherently absent showing otherwise.

Ans. 5–6. The Examiner also finds that the proposed combination is simply the use of a known element (Espenschied's PET composition) according to an established function (Shi's molded container) with predictable results. *Id.* at 6.

The Appellant argues that "[t]here is no evidence of record as to why one of ordinary skill . . . would have taken Espenschied, which has nothing to do with containers or gas barrier additives, and combine it with Shi, which

is titled 'Polyester Container With Enhanced Gas Barrier and Method.'" Appeal Br. 38.

That argument is not persuasive. Shi discloses polyester containers. *E.g.*, Shi at Abstract. Espenschied discloses polyester materials generally and discloses a variety of articles that can be molded from Espenschied's polyester materials. *E.g.*, Espenschied at 9:30–35. Although Espenschied does not specifically disclose containers, the Appellant identifies no portion of Espenschied that excludes containers or teaches away from using the disclosed materials for other molded articles, such as the molded containers disclosed in Shi.

In view of Shi's disclosure that containers are an article known to be made from polyester, it would have been obvious to make containers using Espenschied's polyester compositions because it is the use of a known material (Espenschied's) to make an article known to be made from that or a similar material (polyester containers). The use of known elements according to established functions typically does not result in nonobvious subject matter. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 416–21 (2007) ("The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results."); *see also id.* at 416 ("[W]hen a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result."). To the extent express motivation is necessary, Espenschied discloses that its materials "permit the production of heat distortion resistant moldings having high dimensional stability," which would appear to be a desirable characteristic for Shi's containers at least during shipping where

temperature and humidity changes may be expected as the containers change environments. *See* Espenschied at 9:30–32.

As above, we decline to consider the Appellant's unexpected results argument because it was not presented in the Appeal Brief, and the Appellant fails to show good cause for presenting it for the first time in the Reply Brief. *See* 37 C.F.R. § 41.41(b)(2).

On this record, the Appellant's arguments do not persuade us of reversible error in Rejection 5. *See Jung*, 637 F.3d at 1365.

CONCLUSION

In summary:

Claims Rejected	**35 U.S.C. §**	**Basis**	**Affirmed**	**Reversed**
22–24, 31, 41	102(e)	Kriegel '546		22–24, 31, 41
22–24, 31, 41	102(e)	Kriegel '511		22–24, 31, 41
22–24, 31, 41	102(e)	Kriegel '116		22–24, 31, 41
31, 41	103(a)	Espenschied	31, 41	
22–24, 31, 41	103(a)	Espenschied, Shi	22–24, 31, 41	
Overall Outcome			22–24, 31, 41	

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

AFFIRMED