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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* ALEXANDRA MEGALLY and ROELAND VOSSEN

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Appeal 2015-007148  
Application 13/059,767  
Technology Center 1700

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Before PETER F. KRATZ, KAREN M. HASTINGS, and  
CHRISTOPHER C. KENNEDY, *Administrative Patent Judges*.

HASTINGS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants seek our review under 35 U.S.C. § 134 of the Examiner's final decision rejecting claims 1 and 4–14 under 35 U.S.C. § 103(a) over at least Quasters (WO 95/15257, published June 8, 1995).<sup>1</sup> We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We AFFIRM.

Claim 1 is illustrative of the subject matter on appeal (emphasis to highlight the disputed limitation(s)):

1. A multilayer sheet having two surface layers and optionally one or more interior layers, said multilayer sheet comprising a non-foamed thermoplastic polymer surface layer (A), a foamed thermoplastic polymer layer (B) and an optional non-foamed thermoplastic polymer surface layer (C) and having a total sheet thickness of from about 0.5 to about 20 millimeters (“mm”) and a foam to solid ratio of greater than 1 and wherein:

(a) the non-foamed thermoplastic polymer surface layer (A) has a thickness in the range of from about 0.75 to about 6 millimeters (“mm”);

(b) the foamed thermoplastic polymer layer (B) has a total density reduction of at least about five (5) weight percent and, in the absence of optional surface layer (C), is a surface layer; and

(c) the polymer surface layer (A) and the polymer layer (B) are selected from the group consisting of polyolefins and monovinylidene aromatic polymers.

#### ANALYSIS

We have reviewed each of Appellants' arguments for patentability. However, we are in agreement with the Examiner that the claimed subject

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<sup>1</sup> The Examiner additionally applies Wagner (US 5,364,696, issued Nov. 15, 1994) to dependent claims 10 and 13 (e.g., Ans. 5, 6).

matter would have been obvious to one of ordinary skill in the art within the meaning of § 103 in view of the applied prior art. Accordingly, we will sustain the Examiner's rejections for essentially those reasons expressed in the Answer, including the Response to Argument section, and we add the following primarily for emphasis.

In assessing whether a claim to a combination of prior art elements would have been obvious, the question to be asked is whether the improvement of the claim is more than the predictable use of prior art elements according to their established functions. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007). The analysis need not seek out precise teachings directed to the specific subject matter of the claim, for it is proper to take account of the inferences and creative steps that a person of ordinary skill in the art would employ. *Id.* at 418.

“For obviousness under § 103, all that is required is a reasonable expectation of success.” *In re O'Farrell*, 853 F.2d 894, 903–04 (Fed. Cir. 1988).

There is no dispute that Quasters teaches a multilayer sheet comprising all of the elements recited in claim 1 and discloses using “thermoplastics” polymer for both its layers, except for the explicit list of its thermoplastic polymer being selected from “polyolefins and monovinylidene aromatic polymers” (*generally* Br.). Appellants' main argument is that Quasters does not teach or suggest that the polymer is “selected from the group consisting of polyolefins and monovinylidene aromatic polymers” as recited herein (*id.*). Appellants contend that Quasters discloses a genus of thermoplastics which is too large to suggest the claimed species, only exemplifies polyester, and discourages the use of polyolefins (Br. 3–5).

These arguments are not persuasive for reasons articulated by the Examiner (Ans. 7–9) and because they fail to consider the prior art as a whole.

As pointed out by the Examiner, *Quasters* not only teaches the genus of thermoplastics, but also teaches that a prior art packaging material of polyolefin that was only unsatisfactory because of the use of a filler in its core layer that made it too heavy (Ans. 8). As the Examiner points out, *Quasters* “states that the embodiment found in its Claim 1, remedies these exact drawbacks [ ] mentioned in the prior art. . . . Thus, there is no hint of any disparagement or deficiency in using polyolefins by *Quasters*” (Ans. 9).

Assuming arguendo that Appellants are correct that *Quasters*’ genus encompasses too many species, one of ordinary skill would have readily inferred that polyolefin was indeed a useful species for making its multilayer sheet. *Cf. 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.”); *In re Corkill*, 771 F.2d 1496, 1500 (Fed. Cir. 1985) (affirming obviousness rejection of claims in light of prior art teaching that “hydrated zeolites will work” in detergent formulations, even though “the inventors selected the zeolites of the claims from among ‘thousands’ of compounds”).

Thus, in our view, one of ordinary skill would have considered the use of polyolefins obvious from the explicit teachings set out in *Quasters*. It is also noted that Appellants do not rely upon any evidence of unexpected results (*Br. generally*).

Appellants similarly argue that the monovinylidenes listed in dependent claim 10 are not rendered obvious by the genus of “thermoplastics” in *Quasters* (*Br. 5, 6*). This argument is unavailing as it

fails to consider that Wagner (which was applied in the rejection of this claim) evinces the use of these monovinylidenes in a multilayer sheet product similar to Quasters (e.g., Ans. 6). Furthermore, claim 10 fails to explicitly recite that these materials are used in the sheet of claim 1, and even if such an interpretation is made, only a minor amount need be included in a thermoplastic polymer blend (claim 10). Appellants have not shown error in the Examiner's de facto determination that the use of these materials would have been no more than the predictable use of a known material for its known advantages in multilayer foamed sheet products as exemplified in Wagner. *KSR*, 550 U.S. at 417.

Appellants do not provide any substantive additional argument regarding the rejection of any of the other dependent claims.

Accordingly, a preponderance of the evidence supports both of the Examiner's rejections, and we sustain the § 103 rejections of all the claims on appeal.

#### DECISION

The decision of the Examiner is affirmed.

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).

AFFIRMED