

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

Paper No. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KEVIN D. SIKKEMA,
DAWN M. ORBECK and ROBERT G. NELB II

Appeal No. 1998-3251
Application 08/659,554

ON BRIEF

Before WARREN, DELMENDO and JEFFREY T. SMITH, *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

Decision on Appeal and Opinion

We have carefully considered the record in this appeal under 35 U.S.C. § 134, including the opposing view of the examiner, in the answer, and appellants, in the brief, and based on our review, find that we cannot sustain the ground of rejection of appealed claims 1 through 14, as amended subsequent to the final rejection,¹ under 35 U.S.C. § 103 as being unpatentable over Kent et al. (Kent) taken with Neukrichen et al. and Swartzmiller et al. (Swartzmiller), which ground encompasses all of the claims in

¹ See specification, pages 10-11.

the application.² We determine that the examiner has failed to make out a *prima facie* case in this ground of rejection for the reasons pointed out by appellants in the brief, to which we add the following.

It is well settled that “[t]he consistent criterion for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that [the claimed process] should be carried out and would have a reasonable likelihood of success viewed in light of the prior art. [Citations omitted] Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant’s disclosure.” *In re Dow Chem. Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988). Thus, a *prima facie* case of obviousness is established by showing that some objective teaching, suggestion or motivation in the applied prior art taken as a whole and/or knowledge generally available to one of ordinary skill in the art would have led that person to the claimed invention as a whole, including each and every limitation of the claims, without recourse to the teachings in appellant’s disclosure. *See generally, In re Rouffet*, 149 F.3d 1350, 1358, 47 USPQ2d 1453, 1458 (Fed. Cir. 1998); *Pro-Mold and Tool Co. v. Great Lakes Plastics Inc.*, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1629-30 (Fed. Cir. 1996); *In re Oetiker*, 977 F.2d 1443, 1447-48, 24 USPQ2d 1443, 1446-47 (Fed. Cir. 1992) (Nies, J., concurring); *In re Laskowski*, 871 F.2d 115, 10 USPQ2d 1397 (Fed. Cir. 1989); *In re Fine*, 837 F.2d 1071, 1074-76, 5 USPQ2d 1596, 1598-1600 (Fed. Cir. 1988); *Dow Chem.*, 837 F.2d at 473, 5 USPQ2d at 1531-32.

Appellants amended claim 1 subsequent to the final rejection to require that the high density polyolefin component “C” of the claimed flame resistant composition has “a melt flow rate of 0.9 or less as measured according to ASTM D1238 at 190°C using a 2.16 kg weight” in addition to the requirements that the same is present “from about 0.5 to about 5 parts by weight” and has “a density of greater than 0.940 g/cm³.” As evidence of obviousness, the examiner cites Kent which discloses a flame resistant composition that essentially differs from the claimed composition in containing 0.2 to 4 parts of an olefin homopolymer having a density of “from about 0.8 to about 0.98 and a Melt Index determined in accordance with ASTM-D-1238 of from about 5 to about 50” (pages 5 and 9-10; see brief, page 4). The examiner also relies on Swartzmiller which discloses a composition containing

² The examiner refers to the Office action of November 22, 1996 (Paper No. 3) for a statement of the

several of the same kinds of polymers as in the compositions of Kent, in a thermoformable chemical resistant blend that contains from 15 to 40 parts by weight of an olefin polymer. This reference discloses that the olefin polymer can preferably be a high density polyethylene having a density from .945 to .970, which is “preferred due to the stiffness . . . [imparted] to the final, thermoformable, resin blend,” and has “a melt viscosity, which is matched or nearly matched to that of the monovinylidene aromatic resin, thereby enabling the resulting blend to achieve thorough melt mixing due to high shear stresses between the components and appropriate phase domain size reduction” (col. 6, lines 21-35).

Thus, the issue with respect to whether the composition encompassed by appealed claim 1 would have been *prima facie* obvious over the combined teachings of Kent and Swartzmiller is whether one of ordinary skill in the art would have found in such teachings or in other identified knowledge in the art, the reasonable suggestion to modify the composition of Kent in the reasonable expectation of obtaining the claimed composition and its properties. We, like appellants, find no objective teaching, suggestion or motivation in the combination of these two references which would have led this person to reduce the melt flow index of the high density polyolefins of Kent, which density range overlaps with the claimed density range, from “about 5,” as disclosed to be necessary therein, to “0.9 or less” as claimed in appealed claim 1. *See In re Sebek*, 465 F.2d 904, 907, 175 USPQ 93, 95 (CCPA 1972) (“Where, as here, the prior art disclosure suggests the outer limits of the range of suitable values, and that the optimum resides within that range, and where there are indications elsewhere that in fact the optimum should be sought within that range, the determination of optimum values outside that range may not be obvious.”); *cf. In re Geisler*, 116 F.3d 1465, 1470, 43 USPQ2d 1362, 1366 (Fed. Cir. 1997) (“The statement in Zehender that ‘[i]n general, the thickness of the protective layer should not be less than about [100 Angstroms]’ falls far short of the kind of teaching that would discourage one of ordinary skill in the art from fabricating a protective layer of 100 Angstroms or less.”).

Indeed, the examiner has not established that the melt flow index as disclosed by Kent is measured differently than as specified in appealed claim 1, or that one of ordinary skill in this art would have found in the specific teachings of Swartzmiller, or in reasonable inferences to be drawn from such

ground of rejection (answer, page 3).

teachings, a reasonable suggestion to make the necessary modification to the composition of Kent. We find that, on this record, it would not have been apparent to one of ordinary skill in this art from Swartzmiller alone that an amount of polyolefin required by appealed claim 1 that is significantly *less* than 15 parts by weight, would contribute the “stiffness” property to the composition of Kent as alleged by the examiner, and the examiner has further not established that the melt viscosity of the polyolefins described by Swartzmiller falls below the range taught by Kent, that is, within the melt flow range specified by appealed claim 1. No knowledge in the prior art other than Swartzmiller has been identified by the examiner as the basis for her position. The factual foundation for a case of *prima facie* obviousness is not provided by “plausible” reasoning. *See Rouffet, supra* (“hindsight” is inferred when the specific understanding or principal within the knowledge of one of ordinary skill in the art leading to the modification of the prior art in order to arrive at appellant’s claimed invention has not been explained); *cf. Ex parte Levengood*, 28 USPQ2d 1300, 1301-02 (Bd. Pat. App. & Int. 1993) (“At best, the examiner’s comments regarding obviousness amount to an assertion that one of ordinary skill in the relevant art would have been able to arrive at appellant’s invention because he had the necessary skills to carry out the requisite process steps. This is an inappropriate standard for obviousness. . . . That which is within the capabilities of one skilled in the art is not synonymous with obviousness. *Ex parte Gerlach*, 212 USPQ 471 (Bd. App. 1980).”).

The examiner’s decision is reversed.

Reversed

CHARLES F. WARREN)	
Administrative Patent Judge)	
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ROMULO H. DELMENDO)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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JEFFREY T. SMITH
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