

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. 30

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte BRIAN W.S. KOLTHAMMER,
ROBERT S. CARDWELL, DEEPAK R. PARIKH,
MORRIS S. EDMONDSON and STANELY W. SMITH

Appeal No. 2000-1822
Application 08/679,538

ON BRIEF

Before WARREN, LIEBERMAN and KRATZ, *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 views of the examiner, in the answer, and appellants, in the brief and reply brief, and based on our review, find that we cannot sustain the grounds of rejections of appealed claims 1, 5, 7, 9 through 12, 14 through 16, 23 and 24¹ under 35 U.S.C. § 103(a) as being unpatentable over Stehling et al. (Stehling)² taken with Canich, Hopkins, further taken with Stevens et al.

¹ See the amendment of June 26, 1998 (Paper No. 15). Appellants cancelled claims 19 through 22 and 17 in the amendments of February 24, 1999 (Paper No. 20) and of August 25, 1999 (Paper No. 23), respectively. Thus, claims 1, 5, 7, 9 through 12, 14 through 16, 23 and 24 are all of the claims in the application.

² Stehling is referred to in the answer as “WO ‘414.”

(Stevens '815),³ and under 35 U.S.C. § 103(a) as being unpatentable over Kawasaki et al. (Kawasaki),⁴ optionally in view of Tsutsui et al. (Tsutsui) and further in view of Stevens '815.⁵

We find that, when considered in light of the written description in the specification as interpreted by one of ordinary skill in this art, *see, e.g., In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000); *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997), *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989), the plain language of appealed claim 1, representative of the appealed claims, requires that the claimed process for preparing “an ethylene/ α -olefin/diene monomer elastomer having a density of from about 0.850 g/cm³ to about 0.895 g/cm³” comprises at least the steps of contacting in a first reactor, the three required monomers, an activated “metallocene complex” as defined wherein the metal is “bound in an η^5 bonding mode to,” *inter alia*, a cyclopentadienyl group, and a solvent in such manner as to obtain a first elastomeric product at a concentration of from about 1 to about 15 weight percent; contacting in a second reactor, a product stream from the first reactor, the three required monomers, an activated “metallocene catalyst” as defined, which can be the same or different than that in the first reactor, and solvent in such manner as to obtain a second elastomeric product at a concentration of from about 2 to about 30 weight percent; and subjecting the elastomeric product from the second reactor to a first stage and then a second stage anhydrous solvent recovery operation wherein the concentration of the elastomeric product is increased as specified.

In order to establish a *prima facie* case of obviousness, the examiner must show 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 this 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 appellants' 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*,

³ Stevens '815 is referred to in the answer as “EP '815.”

⁴ Kawasaki is referred to in the answer as “EP '945.”

⁵ Answer, pages 4-10. The examiner withdrew Pfeiffer from the first ground of rejection (answer, pages 2-3). The examiner has also withdrawn all of the “Examiner Notices” in both grounds of rejection (*id.*, pages 4 and 8).

Inc., 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1629-30 (Fed. Cir. 1996); *In re Fine*, 837 F.2d 1071, 1074-76, 5 USPQ2d 1596, 1598-1600 (Fed. Cir. 1988); *In re Dow Chem. Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1531-32 (Fed. Cir. 1988). The requirement for objective factual underpinnings for a rejection under § 103(a) extends to the determination of whether the references can be combined. *See In re Lee*, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002), and cases cited therein.

On this record, we must agree with appellants that the examiner has not made out a *prima facie* case of obviousness in the first ground of rejection. We find that Stehling discloses “polymer blends of *crystalline* interpolymers, such as LLDPE” (page 1, lines 2-3; emphasis supplied), wherein “[c]ontemplated blend *components* generally include elastomer blend *components* in the density range of about 0.85-0.900 g/cm³” and three other classes of blend *components* of higher densities (page 6, lines 21-23; emphasis supplied), all of which can be prepared with a variety of monomers, including ethylene, alpha-olefins and dienes (page 6, line 31, to page 7, line 10) in the presence of a metallocene catalyst (pages 12-17), and wherein “the *blends* [of *crystalline* interpolymers] may be made by direct polymerization, without isolation of the blend components, using, for example, two or more catalysts in one reactor, or by using a single catalyst and two or more reactors in series or parallel” (page 18, lines 29-33; emphasis supplied). Based on this meager evidence, which is essentially all that the examiner has relied on from Stehling (answer, pages 4-5), we agree with appellants that “[w]hile the breadth of the teachings of [Stehling] allows for the preparation of an EPDM elastomer using a metallocene catalyst in two reactors connected in series (it does *not* provide for anhydrous solvent stripping), it does not provide any direction to do so” (brief, page 7; emphasis in the original). Indeed, we find no teaching or inference in the other three references relied on in this ground of rejection which would have supplied the direction, that is, the objective teaching, suggestion or motivation, leading one of ordinary skill in this art to each and every limitation of the claims, with or without Stehling.

We also agree with appellants that the examiner has not made out a *prima facie* case of obviousness in the second ground of rejection. Indeed, we determine that the disconnected teachings of Kawasaki relied on by the examiner are even less relevant to the claim limitations

arranged as required in appealed claim 1 than are the teachings of Stehling, and find that the examiner has provided negligible evidence in support of his reasoning, thus failing to establish that the combination of references would have placed one of ordinary skill in this art in possession of the claimed invention at the time it was made.

In explaining the grounds of rejection, the examiner has repeatedly stated that one consideration or another “would immediately come to mind” without identifying the person to whom the consideration would occur, when the consideration would have occurred and the evidence that such consideration would have in fact occurred. The standards for the “person” and the “time” in formulating grounds of rejection under 35 U.S.C. § 103(a) is “the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains,” which standard and supporting evidence thereof are applied according to the direction set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966).

Therefore, on this record, we must conclude that applied references as combined by the examiner would not have suggested to one of ordinary skill in this art at the time the claimed invention was made that the claimed process should have been carried out, which is the initial step required to establish a *prima facie* case of obviousness under § 103(a). *Dow Chem.*, 837 F.2d at 473, 5 USPQ2d at 1531 (“The 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.”).

The examiner’s decision is reversed.

Reversed

