

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. 28

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WIELAND HOVESTADT,
MARTIN MELCHORS and HANS-JOACHIM SCHOLL

Appeal No. 2001-0070
Application 08/841,209

ON BRIEF

Before GARRIS, WARREN and PAWLIKOWSKI, *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 rejection of appealed claims 5 through 14,¹ all of the claims in the application, under 35 U.S.C. § 103(a) as being unpatentable over Scholl.²

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

¹ See the amendment of November 6, 1998 (Paper No. 13).

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 Inc.*, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1629-30 (Fed. Cir. 1996); *B.F. Goodrich Co. v. Aircraft Braking Sys. Corp.*, 72 F.3d 1577, 1582, 37 USPQ2d 1314, 1318 (Fed. Cir. 1996) ("When obviousness is based on a particular prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. [Citation omitted.] This suggestion or motivation need not be expressly stated. [Citation omitted.]"); *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 examiner finds that "Scholl discloses (page 2) the process of reacting polycarbonates with alkanolamines (Y=OH) in order to break the polycarbonate down into urethane/carbonate polyols of lower molecular weight than the original polycarbonate" (answer, page 3). The examiner further finds that the reference "discloses aliphatic polycarbonates (page 3, line 28) having the specified molecular weight of the claims (see examples)" and "reacting the resulting products with polyisocyanate to make polymers (see abstract)" (*id.*). The examiner identifies four (4) differences between the claimed process and that of Scholl, and finds that nonetheless, the claimed process would have been obvious because of the manner in which one of ordinary skill in the art would have interpreted the teachings of Scholl and information known or "common" in the art (*id.*, pages 3-4).³

² Answer, pages 3-4.

³ The examiner compares Scholl with the claimed processes encompassed by appealed claims 5, 12 and 14, but addresses the claimed product encompassed by appealed claims 6, 9 and 13, styled in product-by-process format based on the same process, the claimed compositions containing this claimed product as a binder component as encompassed by appealed claims 7 and 10, and the claimed coating compositions containing this product encompassed by appealed claims 8 and 11, only to the extent of alleging that "[i]t would have been obvious to use" the products of the process of Scholl "for coatings because coating applications are one of the common applications for polyurethanes" (answer, page 4). Thus, it seems that the examiner has not considered the separate patentability of the product claims. *See generally, In re Thorpe*, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985); *In re Wertheim*, 541 F.2d 257, 271, 191 USPQ 90, 103-04 (CCPA 1976) ("These claims are cast in product-by-process form. Although appellants argue, successfully we have found, that the [reference] disclosure does not suggest . . . appellants'

Appellants point out essentially the same differences identified by the examiner from prior Office actions, but limit their argument to the limitations in appealed claim 1 that the product prepared by the specified process is “a hydroxy-functional polyurethane carbonate having a molecular weight of up to about 450” because the reactants “a dihydroxy- or higher hydroxy-functional polymer having . . . optionally ester groups” and “a compound containing at least one primary or secondary amino group and at least one hydroxy group . . . are present in amounts which correspond to a molar ratio of carbonate and ester groups . . . to primary and secondary amino groups . . . of greater than 1:1 to 3:1” (brief, pages 2-4). Appellants present submit arguments with respect to whether Scholl or any knowledge in the art would have led one of ordinary skill in this art to modify the process of the reference in order to arrive at the claimed product, supporting several arguments with evidence in *Polyurethane Handbook*, pages 21 and 513⁴ (*id.*, pages 3-6; see also reply brief).

In response, the examiner does not address any of the points raised by appellants, taking the position that the claimed product, alleged to be “a mixture of products” including “chain extenders and polyols,” would have an average molecular weight that “could be less than 450,” relying on the section of the *Polyurethane Handbook* cited by appellants (answer, page 4). Appellants contend that “the subject claims are only directed to polyols, not mixtures of polyols and chain extenders” (reply brief, page 2).

On this record, even if it may be said that the examiner established a *prima facie* case in the first instance, appellants certainly carried the burden of arguing to the contrary by pointing out that Scholl, taken as a whole and in light of knowledge generally available to one of ordinary skill in the art, does not provide any objective teaching, suggestion or motivation that would have led that person to the claimed invention as a whole. Thus, appellants’ response shifted the burden back to the examiner to again establish a *prima facie* case on the record as a whole, including consideration of appellants’ arguments and evidence in support thereof, in order to

process, the patentability of the products defined by the claims, rather than the processes for making them, is what we must gauge in light of the prior art.”). Appellants have addressed the ground of rejection as set forth by the examiner, stating that the appealed claims are “appealed together” (brief, page 3).

⁴ 2nd ed., Gübter Oertel, ed., New York, Hanser Publishers, 1985.

maintain the ground of rejection. *See generally, In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). This the examiner did not do.

Because the examiner has not established on the record as a whole, including in light of appellants' arguments, why one of ordinary skill in this art would have found in Scholl the objective teaching, suggestion or motivation to modify the process of Scholl with the reasonable expectation of arriving at the claimed process, it is inescapable that, on this record, the only direction to the claimed invention resides in appellants' specification. *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); *In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992) ("The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification."); *Dow Chem., supra* ("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."); *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

BRADLEY R. GARRIS)	
Administrative Patent Judge)	
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CHARLES F. WARREN)	BOARD OF PATENT
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