

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. 38

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KAZUAKI ABE.
HIROMICHI SEIKE and MITSUHIRO IWATA

Appeal No. 1998-1152
Application 08/489,829¹

ON BRIEF²

Before WARREN, KRATZ 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 views of the examiner, in the answer, and appellants, in the brief, and based on our review, find that we cannot sustain the rejection of appealed claims 1 through 10,³ all of the claims in the application, under 35 U.S.C. § 103(a) as being unpatentable over Schnur et al. (Schnur) in view of

¹ We have concurrently decided Appeal No. 97-4226 in application 08/501,152.

² As counsel was informed on September 12, 2001, it is ORDERED that the Oral Hearing scheduled for 1:00 PM on September 12, 2001, is VACATED.

³ See, e.g., pages 18-19 of the specification and the amendment September 6, 1995 (Paper No. 16).

Kita.^{4,5} For the reasons pointed out by appellants in the brief and reply brief, the examiner has failed to make out a *prima facie* case of obviousness, to which we add the following for emphasis.

It is well settled that the examiner has the burden of establishing a *prima facie* case of obviousness 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 appellants' disclosure. *See generally, 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, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Vaeck*, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991).

The appealed claims, as represented by appealed claim 1, are drawn to a flame retardant hydraulic oil containing a hydraulic base oil comprising a synthetic ester, wherein the ester has is formed from certain specific di- and polyols and a carboxylic acid, wherein the carboxylic acid comprises at least oleic acid and isostearic acid, both C₁₈ carboxylic acids, each in the amount of at least 15% by mole, or a total of at least 30% by mole, of the total carboxylic acid, that is. the remaining 70% by mole can be other carboxylic acids. The examiner finds that Schnur (col. 4, lines 36-43) teaches that “[i]n addition to . . . simple ester and diester products,” there may be used as an additive in synthetic hydrocarbon base oil containing hydraulic fluid, “polyol esters” prepared from “such as neopentyl glycol or trimethylolpropane” and an “aliphatic monocarboxylic acids having about 5 to 10 carbon atoms” (answer, pages 3-4). The examiner further finds that Kita (see, e.g., pages 2-4 and 4-5) teaches using a mixture of acids that includes oleic acid and stearic acid used to prepare an ester of trimethylolpropane for use as a base stock of a hydraulic fluid (*id.*, page 4). The examiner takes the position that one of ordinary skill in the art would use the base stock of Kita in the composition of

⁴ The examiner has designated this reference in the answer as “JP 18,467.” We refer in our opinion to the translation of Kita prepared for the USPTO by The Ralph McElroy Translation Company (March 2001).

⁵ Answer, pages 3-5. The examiner withdrew the ground of rejection based on the judicially created doctrine of obviousness-type double patenting (answer, page 2).

Schnur because “Schnur teaches the use of polyol esters as hydraulic fluids” and Kita teaches base stock that “provides excellent fluidity with high temperature stability” (*id.*).

In their brief (pages 10-18), appellants submit that Schnur discloses esters prepared from carboxylic acids having 5-10 carbon atoms and Kita discloses *straight-chain* aliphatic esters of 7-18 carbon atoms which are derived from a mixture of straight chain carboxylic acids (brief, pages 12-13). Thus, appellants point out that neither Schnur or Kita disclose or teach an ester containing an isostearic acid moiety, a *branched-chain* aliphatic moiety, in an ester, and that while Kita discloses carboxylic acid mixtures which contain 28.95 to 39.04 wt% of the C₁₈ oleic acid, which is in the claimed range for this ingredient, the reference further teaches that such mixtures contain only 1.0 to 1.35 wt% of the straight-chain stearic acid, which is well below the claimed range for isostearic acid. See the mixtures listed at pages 3-4 and 4-5. Thus, appellants contend that not only does Kita fails to teach either the branched-chain isostearic acid or an amount of stearic acid that falls within the claimed range, but the esters of this reference are not those of Schnur, and therefore even if one of ordinary skill in this art combined the two references, the resulting mixture would not fall within the appealed claims. The examiner does not respond to these arguments in the answer (page 5).⁶

It seems to us that the examiner’s position is essentially that the claimed synthetic esters containing at least 15% by mole of branched-chain isostearic acid moieties are structurally related to the esters of Schnur and the esters of Kita which contain about 1 wt% of stearic acid, because she has not factually support her apparent position that there are no differences in properties between these two sets of esters even in view of appellants’ analysis showing actual differences in structure and properties *based on claim limitations*. However, the mere allegation of structural similarity without supporting evidence that one of ordinary skill in the art would have made the necessary modification to the esters of Schnur and/or Kita in order to arrive at the claimed partial esters is not sufficient to establish a *prima facie* case of obviousness. See *In re Jones*, 958 F.2d 347, 349-51, 21 USPQ2d 1941, 1943-44 (Fed. Cir. 1992) (“Conspicuously missing from this record is any *evidence*, other than the PTO’s

⁶ While the examiner states that appellants’ arguments “are not persuasive for reasons of record,” no Office action is identified as containing a treatment of these arguments and we have not been able to identify such action.

speculation (if it be called evidence) that one of ordinary skill in the herbicidal art would have been motivated to make the modifications of the prior art salts necessary to arrive at the claimed . . . salt.”); *In re Grabiak*, 769 F.2d 729, 731-32, 226 USPQ 870, 872 (Fed. Cir. 1985) (“[W]e have concluded that generalization should be avoided insofar as specific chemical structures are alleged to be *prima facie* obvious one from the other. . . . [I]n the case before us there must be adequate support in the prior art for the ester/thioester change in structure, in order to complete the PTO’s *prima facie* case and shift the burden of going forward to the applicant.”).

To the extent that a *prima facie* case of obviousness had been made out by the examiner over Schnur in view of Kita, the factual arguments presented by appellants in rebuttal shifted the burden back to the examiner to again establish the factual underpinning of a *prima facie* case under § 103(a) in order to maintain each of the grounds of rejection. *See, e.g., Oetiker, supra.* This the examiner has not done.

The examiner’s decision is reversed.

Reversed

CHARLES F. WARREN)	
Administrative Patent Judge)	
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PETER F. KRATZ)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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Appeal No. 1998-1152
Application 08/489,827

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