

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. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* CHRISTIAN SCHADE,  
HORST WESTENFELDER,  
KARIN SPERLING-VIETMEIER,  
AXEL SANNER,  
and  
HANS-ULRICH WEKEL

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Appeal No. 2000-1156  
Application No. 08/578,706

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ON BRIEF

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Before PAK, WALTZ, and PAWLIKOWSKI, *Administrative Patent Judges*.  
PAK, *Administrative Patent Judge*.

*DECISION ON APPEAL*

This is a decision on an appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 7 through 11 which are all of the claims pending in the above-identified application.

The subject matter on appeal is directed to a process for stabilizing an oil-in-water emulsion. According to the declaration of record (Paper No. 17), to carry out the process,

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it is critical to employ a cross-linked copolymer obtained by precipitation polymerization of specific monomer mixtures, including specific cross-linkers, in the presence of a saturated nonionic surface-active compound. Further details of the appealed subject matter are provided in representative claim 7 which reads as follows:

7. A process for stabilizing an oil-in-water emulsion which process comprises adding to the emulsion from 0.01 to 5% by weight of the emulsion of a crosslinked copolymer obtained by precipitation polymerization of a monomer mixture comprising:

- (a) monoethylenically unsaturated C<sub>3</sub>-C<sub>8</sub>-carboxylic acids, their anhydrides or mixtures of the carboxylic acids and anhydrides,
- (b) compounds with at least 2 non-conjugated ethylenic double bonds in the molecule as crosslinkers and, optionally,
- (c) other monoethylenically unsaturated monomers which are copolymerizable with monomers (a) and (b), in the presence of free-radical polymerization initiators and from 0.1 to 20% by weight, based on the total weight of the monomers of a saturated, nonionic surface-active compound.

The prior art references relied upon by the examiner are:

|                              |           |               |
|------------------------------|-----------|---------------|
| Sehm                         | 4,419,502 | Dec. 6, 1983  |
| Denzinger et al. (Denzinger) | 4,525,581 | Jun. 25, 1985 |
| Arraudeau et al. (Arraudeau) | 4,871,536 | Oct. 3, 1989  |

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Claims 7 through 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combined teachings of Arraudeau, Denzinger and Sehm.

We have carefully reviewed the specification, claims and applied prior art, including all of the arguments and evidence advanced by both the examiner and the appellants in support of their respective positions. This review leads us to conclude that the examiner's Section 103 rejection is not well founded. Accordingly, we reverse the examiner's Section 103 rejection for the reasons set forth by the appellants in their Brief and below.

Under 35 U.S.C. § 103, "the examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability." *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). In other words, the examiner must provide a sufficient factual basis to support his Section 103 rejection. *In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 177-78 (CCPA 1967), *cert. denied*, 389 U.S. 1057 (1968), *reh'g denied*, 390 U.S. 1000 (1968).

Here, consistent with the appellants' assertion, the examiner has not supplied a sufficient factual basis to establish that one of ordinary skill in the art would have been led to

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employ the claimed cross-linked copolymer for stabilizing an oil-in-water emulsion. Specifically, the examiner has not identified any suggestion or motivation in Arraudeau, which would have led one of ordinary skill in the art to utilize a cross-linked copolymer produced by precipitation polymerization of monoethylenically unsaturated C<sub>3</sub>-C<sub>6</sub> carboxylic acids, their anhydrides or mixtures thereof and ***cross-linking compounds having at least two non-conjugated ethylenic double bonds*** in forming a stabilized oil-in-water emulsion. See, e.g., *In re Baird*, 16 F.3d 380, 382, 29 USPQ2d 1550, 1552 (Fed. Cir. 1994). Nor has the examiner's reliance on Denzinger and Sehm remedied the above deficiencies. Denzinger, for example, teaches using its cross-linked copolymer obtained from precipitation polymerization as a thickener for neutral and alkaline aqueous systems, rather than for oil-in-water emulsion systems. Similarly, Sehm does not indicate that its cross-linked copolymer obtained from precipitation polymerization is useful for an oil-in-water emulsion.

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Under these circumstances, we are constrained to agree with the appellants that the examiner has not carried his burden of establishing a *prima facie* case of obviousness. Accordingly, the decision of the examiner is reversed.

*REVERSED*

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|-----------------------------|---|-----------------|
| CHUNG K. PAK                | ) |                 |
| Administrative Patent Judge | ) |                 |
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|                             | ) | BOARD OF PATENT |
| THOMAS A. WALTZ             | ) | APPEALS AND     |
| Administrative Patent Judge | ) | INTERFERENCES   |
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|                             | ) |                 |
| BEVERLY A. PAWLIKOWSKI      | ) |                 |
| Administrative Patent Judge | ) |                 |

CKP:hh

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