

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN T. GEOGHEGAN AND LONG S. WANG

Appeal No. 1997-4434
Application No. 08/189,053

HEARD: January 9, 2001

Before JERRY SMITH, PAK, and WALTZ, 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 refusal to allow claims 1, 3 through 6, 8, 13 through 15 and 17 which are all of the claims pending in the application.

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Claims 1, 4 and 13 are representative of the subject matter on appeal and read as follows:

1. A surfactant for forming stable dispersions of rosin esters compatible with elastomeric latexes which comprises a compound of the formula $R^1-R^2-R^3$, wherein R^1 and R^3 are selected from the group consisting of a rosin ester and H, provided that R^1 and R^3 are not both H, and R^2 is selected from the group consisting of polyethylene glycol and (polyethylene glycol)- R^4 -(polyethylene glycol) wherein R^4 is rosin, and wherein the polyethylene glycol has a molecular weight of from about 1,500 to about 20,000 such that the surfactant is substantially solid at room temperature.

4. A stable tackifier dispersion compatible with elastomeric latexes comprising a rosin ester, water, and a surfactant having the formula $R^1-R^2-R^3$, wherein R^1 and R^3 are selected from the group consisting of rosin and H, provided that R^1 and R^3 are not both H, and R^2 is selected from the group consisting of polyethylene glycol and polyethylene glycol)- R^4 -(polyethylene glycol) wherein R^4 is rosin, and wherein the PEG has a molecular weight of from about 1,500 to about 20,000.

13. A method for preparing a surfactant for forming stable dispersions of rosin ester, said method comprising esterifying a rosin with polyethylene glycol, wherein the polyethylene glycol has a molecular weight of from about 1,500 to about 20,000.

The sole prior art reference relied upon by the examiner is:

Columbus et al. (Columbus) 4,057,527 Nov. 8,
1977

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Claims 1, 3 through 6, 8, 13 through 15 and 17 stand rejected under 35 U.S.C. § 103 as unpatentable over the disclosure of Columbus.

We reverse.

The claimed subject matter is directed to a surfactant, a method of preparing the surfactant and a stable tackifier dispersion containing the surfactant. The novelty of the claimed subject matter hinges on a compound which is used as the claimed surfactant. According to claim 1, the surfactant is such that it must be useful for "forming stable dispersions of rosin esters compatible with elastomeric latexes". The surfactant comprises a compound having a formula $R^1-R^2-R^3$, wherein at least one of R^1 and R^3 is a rosin ester and wherein R^2 contains at least one polyethylene glycol having a molecular weight of 1500 to 20,000. The surfactant is substantially solid at room temperature.

As evidence of obviousness of the claimed subject matter under 35 U.S.C. § 103, the examiner appears to rely on column 8,

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lines 47 to 60, of Columbus¹, which is reproduced below for convenience:

Another preferred though not essential ingredient in the composition is a tackifying resin. The tackifying resin is present at a level of from .5 to 5 parts. The preferred tackifying resin is a polyhydric alcohol ester of rosin. Polyhydric alcohols which can be used in the esterification include: trimethylene glycol, tetramethylene glycol, etc.; monoethylene glycol, diethylene glycol, triethylene glycol, tetramethylene glycol hexaethylene glycol, etc.; monopropylene glycol, dipropylene glycol, tripropylene glycol, etc.; butylene glycol, dibutylene glycol, tributylene glycol etc. The glycerides and polyethylene glycols are preferred as providing maximum combined softening and adhesive properties.

The examiner recognizes that Columbus does not employ its esterified resin as a surfactant, nor does it disclose the molecular weight of polyethylene glycol used to form an esterified resin. See Answer, page 3. The examiner, however, asserts (Answer, pages 3 and 4) that:

The Examiner maintains however that it would be reasonable to presume that the compound as disclosed in the prior art has a molecular weight of from about 1500 to about 2000 given the fact that the polyethylene glycols are preferred in that the lower limit of "from about 1500" is not unreasonably high so as to render it uncommon. Thus, given the generic disclosure of polyethylene glycols, then it would be reasonable to presume that resins having a

¹ See Answer, page 3.

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molecular weight of about 1500 would be rendered
prima facie obvious.

It is possible that the examiner's assertion may be correct. However, it is incumbent upon the examiner to supply the factual basis for his assertion. *In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967) ("[w]here the legal conclusion [of obviousness] is not supported by facts it cannot stand"). On this record, we find no factual basis to support the examiner's assertion that the use of polyethylene glycols having the claimed molecular weight to form the tackifying resin of Columbus would have been obvious to one of ordinary skill in the art. As correctly argued by appellants, Columbus exemplifies only those polyethylene glycols having molecular weights significantly lower than that claimed. The examiner has not supplied any evidence to establish that one of ordinary skill in the art looking to improve a tackifying resin, such as that described in Columbus, would employ the so-called "common polyethylene glycols having a molecular weight of 1500 to 20,000". The examiner has not shown that common polyethylene glycols having a molecular weight of 1500 to 20,000, for example, are capable of "providing maximum

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combined softening and adhesive properties" as required by Columbus.

For the above reasons, we agree with appellants that the examiner has not carried the burden of establishing a **prima facie** case of obviousness within the meaning of 35 U.S.C. § 103. Having determined that no **prima facie** case is established, we need not address the sufficiency of the declarations of record. **See In re Piasecki**, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); **In re Rinehart**, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

In view of the forgoing, the decision of the examiner rejecting claims 1, 3 through 6, 8, 13 through 15 and 17 under 35 U.S.C. § 103 is reversed.

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REVERSED

JERRY SMITH)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
CHUNG K. PAK)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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THOMAS A. WALTZ)	
Administrative Patent Judge)	

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APJ PAK

APJ WALTZ

APJ SMITH, JERRY

DECISION: REVERSED
Send Reference(s): Yes No
or Translation (s)
Panel Change: Yes No
Index Sheet-2901 Rejection(s):
Prepared: September 26, 2001

Draft Final

3 MEM. CONF. Y N

OB/HD GAU

PALM / ACTS 2 / BOOK
DISK (FOIA) / REPORT