

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today  
(1) was not written for publication in a law journal and  
(2) is not binding precedent of the Board.

Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* DANIEL F. SCULLY, JR.

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Appeal No. 95-3765  
Application 08/084,388<sup>1</sup>

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ON BRIEF

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Before GARRIS, WARREN, and WALTZ, *Administrative Patent Judges*.

WALTZ, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the  
examiner's final rejection of claims 1 through 28, which are

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<sup>1</sup> Application for patent filed June 29, 1993.

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the only claims remaining in this application.

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According to appellant, the invention is a metal soap pellet which has a metal soap and a binder, with the binder having at least two components that will react under heat and/or pressure to form additional metal soap (brief, pages 1 and 2). Claim 1 is illustrative of the subject matter on appeal and is reproduced below:

1. A metal soap pellet comprising (a) a metal soap and (b) a binder comprising a plurality of components which are capable of reacting together under heat and/or pressure to form a metal soap.

The examiner relies upon the following references as evidence of obviousness:

Rieber et al. (Rieber)	4,235,794	Nov. 25, 1980
Hirsch et al. (Hirsch)	4,927,548	May 22, 1990
Dunski	5,028,486	Jul. 2, 1991

Claims 1 through 28 stand finally rejected under 35 U.S.C. § 103 as unpatentable over Rieber or Dunski or, alternatively, over Dunski and Hirsch (answer, page 3). We reverse all the stated rejections for reasons which follow.

*OPINION*

*A. The Rejections over Rieber or Dunski*

The metal soap pellet of appealed claim 1 requires (a) a metal soap and (b) a binder with a plurality of components

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which are capable of reacting together under heat and/or pressure to form additional metal soap, e.g., a metal carbonate/oxide/ hydroxide and a monocarboxylic acid (see appealed claim 1 and the specification, page 3, lines 1-6, and page 4, lines 18-24).

The examiner states that Rieber teaches the preparation of metal soap granules by mixing metal oxide/hydroxide/carbonate with carboxylic fatty acids where the metal components are used in excess (answer, page 4, citing column 3, lines 18-22, of Rieber). The examiner has determined that the difference between the "invention" of claim 1 and any of the cited references "is essentially nil" (*Id.*). The examiner then concludes that it would have been obvious "to follow the teachings of Dunski or Rieber and use metal oxides, hydroxides, carbonates or monocarboxylic acids as the binder materials for metal soaps to form the granules or pellets." (answer, page 5).

We find that there is no factual basis to support the examiner's conclusion. Appealed claim 1, as noted above, requires a binder with a plurality of components while Rieber only discloses or teaches one component being used in excess

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to that required to form the metal soap (see column 3, lines 18-22). Furthermore, this teaching in Rieber of increasing the speed of the saponification reaction by employing an excess of the metal oxide/hydroxide/carbonate does not teach the use of this metal as a binder. Rieber specifically teaches that his invention is accomplished "without the use of binding agents" (column 2, lines 30-35). The excess metal oxide/hydroxide/carbonate is used to react with previously unreacted fatty acid to drive the reaction to completion and thus does not appear in the final granulate (see Example 18 in column 8). Finally, the examiner fails to establish that the granulate of Rieber is equivalent to the metal soap pellet required by the subject matter on appeal. Therefore the requirements of appealed claim 1 are not shown or suggested by Rieber.

Our reviewing court has stated "[w]here the legal conclusion [of obviousness] is not supported by facts it cannot stand." *In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), *cert. denied*, 389 U.S. 1057 (1968). For the foregoing reasons, the rejection of claims 1 through 28

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under 35 U.S.C. § 103 as unpatentable over Rieber is reversed.

The examiner states that Dunski teaches the preparation of metal soap pellets by blending metal soap powder with a binder material such as fatty acids (answer, page 4, citing column 3, lines 18 and 28-30). The examiner notes that Dunski "clearly identifies fatty acids (monocarboxylic) acids [sic] as an effective binder with the pre-formed metal soaps." (*Id.*). However, the examiner fails to explain how the subject matter of appealed claim 1, including a binder with a plurality of components, would have been obvious in view of the disclosure in Dunski of a one component binder for a metal soap. The examiner argues that "the references teach several alternative choices of the binder, so it would have been obvious to use a plurality of the components as the binder composition." (answer, page 5). Even assuming the correctness of the examiner's statement, this rejection is over Dunski alone and only one binder component is taught in Dunski.

For the foregoing reasons, the rejection of claims 1 through 28 under 35 U.S.C. § 103 as unpatentable over Dunski is reversed.

*B. The Rejection over Dunski and Hirsch*

The requirements of appealed claim 1 and the examiner's analysis of Dunski have been discussed above. The examiner states that Hirsch teaches the preparation of metal soaps by reacting an excess of metal oxide with powdered fatty acids, with the basis for this teaching of an excess of the metal oxide being found in the examples (answer, page 4). Since Dunski teaches that the fatty acid binder in the pellet may be unreacted fatty acid from the saponification reaction (see Example 5), and the examiner states that Hirsch teaches the use of excess metal component in the saponification reaction,<sup>2</sup> the examiner apparently concludes that use of both the fatty acid and the metal oxide as binders would have been obvious to the artisan (answer, page 5).

The examiner must show reasons why one of ordinary skill in the art, confronted with the same problems as appellant and with no knowledge of the claimed invention, would select the

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<sup>2</sup>Although this statement by the examiner is not contested by appellant, Hirsch specifically teaches the use of stoichiometric amounts of each reactant (column 2, lines 2-4). The examiner's calculations for Example 11 (answer, page 4) apparently do not take into consideration the particular range of formulas possible in Formula (I) (column 1, lines 7-10). However, this statement by the examiner does not affect our decision.

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elements from the cited prior art references for combination in the manner claimed. See *In re Rouffet*, 149 F.3d 1350, 1358-59, 47 USPQ2d 1453, 1458 (Fed. Cir. 1998); *Warner*, 379 F.2d at 1016, 154 USPQ at 177 ("[w]here the invention sought to be patented resides in a combination of old elements, the proper inquiry is whether bringing them together was obvious.") There are "three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." See *Rouffet, supra*.

The examiner has failed to explain why one of ordinary skill in the art would have added metal oxide to the fatty acid binder of Dunski. Dunski employs the fatty acid as a binder and does not disclose or teach that any further reaction is desired. There is no disclosure or suggestion in the cited prior art that metal oxides could be used as a binder with metal soap pellets. The nature of the problem to be solved by appellant (specification, page 3, lines 1-6) is not addressed by the cited prior art. The examiner does not refer to any knowledge of persons of ordinary skill in the art

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that would have suggested the combination of references.  
Accordingly, the examiner has failed to show any motivation or  
suggestion to combine the Dunski and Hirsch references.

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For the foregoing reasons, the rejection of claims 1 through 28 under 35 U.S.C. § 103 as unpatentable over Dunski and Hirsch is reversed.

*REVERSED*

BRADLEY R. GARRIS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	BOARD OF PATENT
CHARLES F. WARREN	)	APPEALS AND
Administrative Patent Judge	)	INTERFERENCES
	)	
	)	
	)	
THOMAS A. WALTZ	)	
Administrative Patent Judge	)	

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