

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. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WILLIAM C. ALLISON
AND
LORNA ALDERFER

Appeal No. 1998-1674
Application No. 08/437,712

ON BRIEF

Before MCKELVEY, *Senior Administrative Patent Judge*, and WARREN, and TIMM,
Administrative Patent Judges.

TIMM, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from an Examiner's final rejection of claims 2-6 and 10-22, which are all of the claims pending in this application.

BACKGROUND

The invention is directed to a synthetic detergent base material and synthetic detergent bars produced using the synthetic base material (Specification, page 1; Brief, page 2). Claim 13 represents the broadest expression of the invention. According to claim 13, the synthetic detergent base material consists essentially of:

- (a) from 45 to 70 weight percent of mild synthetic surfactant other than (c);
- (b) from 20 to 30 weight percent of C₈-C₂₂ fatty acid;
- (c) from 1.5 to 10 weight percent of C₈-C₂₂ n-acyl sarcosine, salts(s) thereof or a mixture of said sarcosine and said salts(s);
- (d) from 0.5 to 5 weight percent of C₁-C₂₂ alkyl aryl sulfonic acid, salts(s) thereof or a mixture of said sulfonic acid and said salt(s);
- (e) from 1 to 5 weight percent salts(s) of C₈-C₂₂ fatty acid; and
- (f) less than 2 weight percent water; said synthetic detergent base material having a pH from 5 to 8.

Claims 2-6 and 10-22 stand rejected under 35 U.S.C. § 103 as being unpatentable over Kacher, U.S. Patent 5,225,097, issued July 6, 1993. We will not sustain the rejection for the following reasons.

OPINION

As stated in *In re Kotzab*:

A critical step in analyzing the patentability of claims pursuant to section 103(a) is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field.

* * *

Most if not all inventions arise from a combination of old elements. Thus, every element of a claimed invention may often be found in the prior art. However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference.

The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved. In addition, the teaching, motivation or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references. The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art.

In re Kotzab, 217 F.3d 1365, 1369-70, 55 USPQ2d 1313, 1316-17 (Fed. Cir. 2000) (citations omitted).

The Examiner seems to have succeeded in locating within Kacher each of the individual chemical components of claim 13. Three of the components (a), (c) and (d), however, are described in a list of synthetic surfactants that are taught as usable alone or in mixtures to improve bar firmness. The Examiner has failed to demonstrate that there is a suggestion, anywhere in the prior art, which would

have led one of ordinary skill in the art to choose the ingredients required by the instant claims, apart from the many other compounds listed by Kacher, and combine them in the amounts required by the claim.

In the rejection, the Examiner points to column 7, lines 45-56 and column 10, lines 7-20 of Kacher as teaching a mixture of synthetic surfactants such as C₈-C₂₂ acyl sarcosinates, C₈-C₂₂ linear alkyl benzene sulfonates, and C₈-C₂₂ acyl isethionates (Answer, page 4). However, Kacher, in these passages, merely sets forth lists of various surfactants that can be used alone or combined to constitute a bar firmness aid. Kacher indicates that these surfactants, whether used alone or as a mixture, are to make up from about 10 to about 50 weight percent of the cleansing bar. We agree with Appellants that there is no suggestion in Kacher of producing a bar firmness aid containing 45 to 70 percent mild surfactant, 1.5 to 10 percent C₈-C₂₂ n-acyl sarcosine (or salts thereof), and 0.5 to 5 percent C₁-C₂₂ alkylaryl sulfonic acid (or salts thereof) (Brief, page 7). Kacher views the seventeen synthetic surfactants listed in column 7, lines 45-56 as a group. Any one surfactant is replaceable by another or a mixture of others so long as the total quantity is within the range of 10 to 50 percent by weight of the bar. In contrast, Appellants' claims require the presence of three specific species of surfactants, (a), (c), and (d), in specific amounts, namely 45 to 70 percent, 1.5 to 10 percent and 0.5 to 5 percent. These separately claimed quantities are not anywhere suggested in Kacher. The Examiner has not

convinced us that routine experimentation to optimize the use of a synthetic surfactant mixture for bar firmness would have reasonably suggested the separate quantities required by the claim.

In the arguments, the Examiner points to Example BB as most representative of Appellants' composition (Answer, page 5). The composition of example BB contains 23 weight percent water, a level much greater than the level of 2 weight percent or less required by claim 13 and the level of 2 to 10 weight percent water required by claim 19. The Examiner recalculates the percentages of the other components based on a water content of zero. As the recalculated percentages are within the ranges of the claims, the Examiner concludes that a *prima facie* case of obviousness is established (Answer, page 6).

The Examiner does not expressly indicate the reason or suggestion present in the prior art which would have led one of ordinary skill in the art to dehydrate the composition of Example BB to a water level of zero. The Examiner does point out that column 10, lines 46-52 of Kacher suggests that compositions can be made with large amounts of water and the water level reduced to as low as about 1 to 2 percent (Final Rejection, pages 3-4). However, we are not convinced that the disclosure that some compositions of the invention of Kacher can be dehydrated to water levels of about 1 to 2 percent would have led one of ordinary skill in the art to dehydrate the specific composition of Example BB to 1 to 2 percent water for the following reasons.

While the passage at column 10, lines 46-52 does indicate that it is possible to dehydrate some bars to about 1 to 2 percent water, the passage refers only to "some compositions of this invention." No mention is made as to whether the composition of Example BB can be dehydrated to such low levels. Furthermore, the disclosure of Kacher as a whole seems to indicate that higher water levels are desired. Kacher discloses that the invention is directed to a bar containing "from about 15% to about 40% water." (col. 2, lines 20-29; col. 2, lines 47-53; col. 4, lines 38-46; col. 14, line 48; Claim 1). With respect to the process used to make the compositions of the examples, including Example BB, Kacher discloses an optional drying step for reducing the amount of water "to the desired level, preferably 20-30% water." (col. 15, lines 23-25). The Examiner has provided no convincing reason, suggestion or motivation for dehydrating the composition of Example BB to less than 2 percent.

Because the Examiner has failed to provide a convincing reason, suggestion or motivation based in the prior for modifying the teachings of Kacher, we find ourselves in agreement with Appellants that the Examiner has failed to establish a *prima facie* case of obviousness with respect to the subject matter of the appealed claims.

CONCLUSION

To summarize, the decision of the Examiner to reject claims 2-6 and 10-22 under 35 U.S.C. § 103 is reversed.

REVERSED

FRED E. MCKELVEY)	
Senior Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
CATHERINE TIMM)	APPEALS
Administrative Patent Judge)	AND
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Appeal No. 1998-1674
Application No. 08/437,712

Page 8

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APPEAL NO. 1998-1674 - JUDGE TIMM
APPLICATION NO. 08/437,712

APJ TIMM

APJ MCKELVEY

APJ WARREN

DECISION: **REVERSED**

Prepared By: Leticia Pihulic

DRAFT TYPED: 03 Jul 01

FINAL TYPED: