

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte MANFRED WEUTHEN and KARL HEINZ SCHMID

Appeal No. 2005-1588
Application No. 10/111,863

ON BRIEF

Before ELLIS, MILLS, and GRIMES, Administrative Patent Judges.

MILLS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. §134 from the examiner's final rejection of claims 8-15, which are all of the claims pending in this application.

Claims 8 and 14 are illustrative of the claims on appeal and read as follow:

8. A process for making solid sugar surfactants comprising:
 - (a) providing a glycole component;
 - (b) acetalizing the glycole component with a fatty alcohol to form a technical mixture containing excess fatty alcohol and alkyl and/or alkenyl oligoglycoside; and
 - (c) contacting the technical mixture with an extractant to form a solid phase containing the extractant, a predominant part of alkyl and/or alkenyl oligoglycoside and a small amount of fatty alcohol, and a liquid phase containing a predominant part of the fatty alcohol.

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14. The process of claim 8 wherein the solid phase is size-reduced and ground to a desired particle size.

The prior art references cited by the examiner are:

Hill et al. (Hill)	5,576,425	Nov. 19, 1996
Joshi et al. (Joshi)	5,043,091	Aug. 27, 1991

Grounds of Rejection

Claims 8-15 stand rejected under 35 U.S.C. §103(a), over Hill in view of Joshi.

Claims 8-15 stand rejected under 35 U.S.C. §112, second paragraph, as indefinite.

We reverse these rejections.

DISCUSSION

Obviousness

Claims 8-15 stand rejected under 35 U.S.C. 103(a), over Hill in view of Joshi.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art. In re Bell, 991 F.2d 781, 783, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993). An obviousness analysis requires that the prior art both suggest the claimed subject matter and reveal a reasonable expectation of success to one reasonably skilled in the art. In re Vaeck, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991). With this as background, we analyze

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the prior art applied by the examiner in the rejection of the claims on appeal.

The examiner takes the position (Answer, pages 4-5) that Hill teaches steps (a) and (b) of instant Claim 1. However, the examiner recognizes that “the instant claims differ from the process of the Hill et al patent by setting forth step (c) that involves contacting the product of steps (a) and (b) with an extractant.”

To make up for this deficiency of Hill the examiner relies on Joshi. According to the examiner (Answer, pages 4-5)

The Joshi et al patent teaches a preparation of detergent laundry bars based on alkyl polysaccharide nonionic surfactants with alkyl benzene sulfonate anionic surfactant, detergent builder and filler. The Joshi et al patent teaches processing of the laundry bars by pre-blending the alkyl polysaccharide nonionic surfactant and a fatty alcohol sulfate cosurfactant prior to feeding the mixture to the mixer and plodder (see abstract). This pre-blending procedure of the Joshi et al patent embraces step (b) of the instant claims, which comprises an excess of fatty alcohol. See column 4, lines 20 and 21 wherein the composition thereof contains up to 25% of alkyl polysaccharide nonionic surfactant which embraces the subject matter of the instant claims which indicate 20 to 70% of the solid phase containing alkyl oligoglycoside. See column 7, 4th and 5th paragraphs whereby the Joshi et al patent discloses builder salts such as phosphates, sodium carbonate, sodium silicate, borax, sodium bicarbonate and zeolites which embraces the extractants set forth in the instant claims. Joshi et al also discloses adjuvants that may be employed with the detergent bar such as carrageenan, alginates, and starches (see column 9, lines), which embrace the use of a polysaccharide as the extractant in the instantly claimed invention. At column 10, line 38 to column II, line 24, the Joshi et al patent discloses a detail processing of the laundry bars that suggests size-reducing and grounding of the product, which embraces the size-reducing and grounding steps set forth in the claimed invention.

It would have been obvious to one of ordinary skill in the art at

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the time the invention was made, subsequent to the acetalization of the glycoside component with a fatty alcohol as set forth in the Hill et al patent, to mix the product thereof with other components to prepare solid sugar surfactants such as a detergent laundry bar, in view of the recognition in the art, as evidenced by the Joshi et al patent, that use of such components are able to improve the properties of the surfactants in order to provide a more stable and commercially effective product.

In return, appellants argue the examiner has failed to establish a prima facie case of obviousness. Brief, pages 4-5. We agree. In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art. In re Bell, 991 F.2d 781, 783, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993). An obviousness analysis requires that the prior art both suggest the claimed subject matter and reveal a reasonable expectation of success to one reasonably skilled in the art. In re Vaeck, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991).

In our view, the examiner has failed to indicate a legally significant reason, suggestion or motivation to combine the cited references, and thus failed to establish a prima facie case of obviousness. In particular, while we acknowledge that the Hill process for the production of alkyglycosides by acetalization of higher aliphatic primary alcohols with glycoses teaches steps (a) and (b) of claim 8, the examiner has failed to sufficiently indicate why one of ordinary skill in the art would have been motivated to

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add the detergent builder of Joshi at the particular point in time in the specific process for the direct production of alkyl glucosides taught by Hill, or that such a “detergent builder” would have been recognized by one of ordinary skill in the art to serve the function of being a chemical extractant for the alkylglycoside in the claimed process.

Appellants further argue (Brief, pages 4-5) that

the Joshi reference has **nothing whatsoever** to do with the claimed process of making **solid-form** sugar surfactants. In Joshi, various laundry detergent constituents are mixed together and formed into a ready-to-use laundry detergent bar. The phosphates, silicates, etc. disclosed by Joshi are **not** employed as **extractants** for the purpose of extracting **solid-form** sugar surfactants from a mixture of glucose acetalized with excess fatty alcohol.

Nowhere within the four corners of the Joshi reference is a **process for making solid sugar surfactants** taught, disclosed, motivated, mentioned or even alluded to.

In this case, we do not find that the examiner has drawn a legally sufficient nexus between the steps of the method of preparing an alkyl polysaccharide detergent laundry bar described by Joshi and the process for the production of alkylglycosides by acetalization of higher aliphatic primary alcohols with glycoses of Hill. The examiner has not indicated how the step (c) as claimed, i.e., “contacting the technical mixture with an extractant to form a solid phase containing the extractant, a predominant part of alkyl and/or alkenyl oligoglycoside and a small amount of fatty alcohol, and a liquid phase containing a predominant part of the fatty alcohol” is taught by Joshi. Rather, it appears that the examiner has chosen only so much of the cited references as will support a given position to the exclusion of other parts necessary to the full appreciation of what

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such reference fairly suggests to one skilled in the art. We remind the examiner that “it is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one skilled in the art.” In re Wesslau, 353 F.2d 238, 241, 147 USPQ 391, 393 (CCPA 1965); see also In re Mercer, 515 F.2d 1161, 1165-66, 185 USPQ 774, 778 (CCPA 1975).

In view of the above, we do not find the examiner has established a prima facie case of obviousness on the evidence before us and we reverse the rejection of claims 8-15 over Hill in view of Joshi.

Claim Indefiniteness

Claims 8-15 stand rejected under 35 U.S.C. §112, second paragraph, as indefinite.

Definiteness is determined from the perspective of a person of skill in the relevant art. See Union Pacific Resources Co. v. Chesapeake Energy Corp., 236 F.3d 684, 692, 57 USPQ2d 1293, 1297 (Fed. Cir. 2001) (“The definiteness inquiry focuses on whether those skilled in the art would understand the scope of the claim when the claim is read in light of the rest of the specification.”); Miles Laboratories Inc. v. Shandon Inc., 997 F.2d 870, 875, 27 USPQ2d 1123, 1126 (Fed. Cir. 1993) (“The test for definiteness is whether one skilled in the art would understand the bounds of the claim when read in light of the specification.”). On the other hand, a claim is definite if “one skilled in the

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art would understand the bounds of the claim when read in light of the specification."

Personalized Media Communications, LLC v. ITC, 161 F.3d 696, 705 (Fed. Cir. 1998).

The examiner finds the term "small amount" in the phrase "small amount of fatty alcohol" in Claim 8, line 8 to be a relative term, which renders the claim indefinite. The examiner argues the term "small amount" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Answer, page 3. The term "desired particle size" in claim 14 is also argued by the examiner to be relative term, which renders the claim indefinite. The examiner argues the term "desired particle size" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Id.

In the present case we do not find the phrases "small amount" or "desired particle size" would have been indefinite to one of ordinary skill in the art upon review of

the specification at the time of its filing. In step (c) of claim 8, the phrase "small amount of fatty alcohol" (in the solid phase), in our view, should be read in conjunction with the claim limitation, the "predominant part" of the fatty alcohol (in the liquid phase)

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in that step. Thus, it would reasonably appear that a greater quantity¹ of the “excess fatty alcohol” of step (b) remains in the liquid phase and a “small amount” of fatty alcohol is found in the solid phase after the technical mixture is contacted with an extractant (step (c)). For example, Example 1 of the specification describes a solid product filter cake with 15.3% of fatty alcohol (compare, “small amount” in step (c)). Specification, pages 8-9. In our view the percentage discussed in the example, coupled with the claim relationship of the “predominant part” of fatty alcohol in the liquid phase to the “small amount” of fatty alcohol in the solid phase provide one of ordinary skill in the art with an understanding as to what a “small amount” of fatty alcohol in the solid phase means for purposes understanding the metes and bounds of the claim. Thus, in our view one skilled in the art would have reasonably understood the metes and bounds of the claim when read in light of the specification.

¹ Predominate is defined as, “To be of greater power, importance or quantity.” Webster’s II New Riverside Dictionary, Anne H. Soukhanov, pub., The Riverside Publishing Co., Boston, Massachusetts, p. 927 (1994).

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We also find that one of ordinary skill in the art would likely attribute the ordinary meaning to the phrase in claim 14, “ground to a ‘desired particle size’”, in view of the Example 1 language “the filter cake was ground”. The term “ground” is a general term meaning “to crush, pulverize or powder by friction ...”² and connotes no particular particle size. Thus, claim 14 requires a grinding step with the resulting particle size when the grinding is stopped being, by definition, the “desired” particle size. In addition, desired uses of the product would also have provided one of ordinary skill in the art with a reasonable understanding of an appropriate “desired” size to grind the filter cake.

In view of the above, we do not find the examiner has presented sufficient evidence or argument to establish a prima facie case of claim indefiniteness. The rejection of the claims for indefiniteness is reversed.

CONCLUSION

Therefore, we reverse the rejections of the claims for obviousness and claim indefiniteness.

² Webster's II New Riverside Dictionary, Anne H. Soukhanov, pub., The Riverside Publishing Co., Boston, Massachussettes, pp. 549, 551 (1994).

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

REVERSED

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JOAN ELLIS)
Administrative Patent Judge)
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) BOARD OF PATENT
DEMETRA J. MILLS)
Administrative Patent Judge) APPEALS AND
)
) INTERFERENCES
)
ERIC GRIMES)
Administrative Patent Judge)

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Cognis Corporation
Patent Department
300 Brookside Avenue
Ambler, PA 19002