

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 27

UNITED STATES PATENT AND TRADEMARK OFFICE

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

Ex parte GHOLAM A. PEYMAN

Appeal No. 2003-1012
Application No. 09/340,111

ON BRIEF

Before ADAMS, MILLS, and GREEN, Administrative Patent Judges.

GREEN, 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 13-21, 32 and 34-39. Claim 13 is representative of the subject matter on appeal, and reads as follows:

13. A process for removing calculus and other deposits from the surface of the teeth of an animal in need thereof and suppressing pain and irritation to gum tissue comprising the steps of:

providing an acidic aqueous medium containing an edible acid in an amount to form a solution having a pH of about 6.0 or less and to remove or loosen calculus deposits on the surfaces of teeth and at least one anti-irritant in an amount to suppress irritation of gum tissue caused by contact with said aqueous medium, wherein said anti-irritant is a natural or synthetic sweetener,

applying said aqueous medium directly to the surfaces of the teeth having calculus deposits and to said calculus deposits on the teeth for an effective amount of time to substantially remove or loosen calculus and deposits from the teeth while suppressing pain and irritation of the gum tissue, and

thereafter neutralizing said acidic aqueous medium on the surfaces of the teeth.

The examiner relies upon the following references:

Beierle et al. (Beierle)	4,291,017	Sep. 22, 1981
Ebetino et al. (Ebetino)	5,391,743	Feb. 21, 1995
Colowick et al. (Colowick), <u>Methods in Enzymology</u> , Vol. 1, pp. 138-141 (1955)		

Claims 13, 15-19 and 32 stand rejected under 35 U.S.C. § 103(a) as being obvious over Ebetino. In addition, claims 13-21, 32 and 34-39 stand rejected under 35 U.S.C. § 103(a) as being obvious over the combination of Ebetino and Beierle.¹ After careful review of the record and consideration of the issues before us, we reverse the rejections of record.

DISCUSSION

Claims 13, 15-19 and 32 stand rejected under 35 U.S.C. § 103(a) as being obvious over Ebetino.

According to the rejection, Ebetino teaches a mouthwash or a dental solution that can be used as an anticalculus composition. The composition may

¹ We note that claim 21 does not appear in the appendix of the claims being appealed, nor did the examiner note its absence in the Answer. Both the examiner and appellants agree, however, that this rejection applies to claim 21, and as claim 21 is still pending, this appeal reaches claim 21.

also include a buffer system, such as acetic or citric acids, and sweeteners such as sucrose, glucose or saccharin. See Examiner's Answer, page 3.

The rejection goes on to note that the reference "does not teach specifically that the sweetener acts as the anti-irritant in the composition," but asserts that the reference teaches that "the removal of calculus deposits will treat inflammation." Id. at 3-4. The rejection also asserts that while the Ebetino reference does not teach the specific amount of sweetener present in the anticalculus composition, it would only require minimal experimentation to determine those levels, and "[t]he results must be those that accrue from the specific limitations." Id. at 4.

The rejection concludes:

The reference teaches acetic and citric acids, along with their salts as possible buffering systems. It is well known in the art that a buffering solution comprises a weak acid and the salt of that weak acid, and that buffering solutions have a maximum and minimum pH. Attached is an excerpt from Method in Enzymology, which discloses the pH ranges for both acetic and citric buffer solutions. The acetic buffer allows a range from 3.6 to 5.6, and the citric buffer allows a range from 3.0 to 6.2. Therefore, as the reference teaches that these buffers can be employed in their composition, and these buffers are known to cause acidic pH levels, the limitation to an acidic solution is disclosed.

One of ordinary skill in the art would have been motivated to use the composition disclosed by [Ebetino], containing sweeteners, in order to treat inflammation caused by calculus on teeth. One of ordinary skill in the art would have expected the inflammation to lessen due to the removal or loosening of the calculus. Therefore, the invention as a whole would have [been] [sic] prima facie obvious to one of ordinary skill in the art at the time the invention was made.

Id. at 4.

Appellants argue that:

The fact that a buffer could be made having an acidic pH does not establish that the oral composition of Ebetino has a pH of 6 or less as claimed. Ebetino does not disclose or suggest a pH for its oral composition and the Action does not cite a passage of Ebetino to support the proposition.

Appeal Brief, page 9. 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. Only if that burden is met, does the burden of coming forward with evidence or argument shift to the applicant.” In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). Obviousness is determined in view of the sum of all of the relevant teachings in the art, not isolated teachings in the art. See In re Kuderna, 426 F.2d 385, 389, 165 USPQ 575, 578 (CCPA 1970); see also In re Shuman, 361 F.2d 1008, 1012, 150 USPQ 54, 57 (CCPA 1966). In assessing the teachings of the prior art references, the examiner should also consider those disclosures that may teach away from the invention. See In re Geisler, 116 F.3d 1465, 1469, 43 USPQ2d 1362, 1365 (Fed. Cir. 1997).

As noted by the examiner, Ebetino does teach that particularly preferred buffer systems include citric and acetic acids. See Ebetino, col. 20, lines 53-60. But as pointed out by appellants, in the examples drawn to dental compositions, i.e., Examples 22 and 23, the compositions are adjusted to a pH of 7. See id. at cols. 43-44. Thus, contrary to the position of the examiner, Ebetino does not disclose the limitation of an acidic solution, and in fact, teaches away from the

use of a dental composition having a pH of 6.0 or less. Therefore, the rejection of claims 13, 15-19 and 32 under 35 U.S.C. § 103(a) over Ebetino is reversed.

Claims 13-21, 32 and 34-39 stand rejected under 35 U.S.C. § 103(a) as being obvious over the combination of Ebetino and Beierle.

Ebetino is relied upon as set forth above. Beierle is relied upon for the inclusion of an antibacterial agent in the dental composition. Thus, Beierle does not remedy the deficiencies of Ebetino, and the rejection of claims 13-21, 32 and 34-39 over the combination of Ebetino and Beierle is also reversed.

REVERSED

Donald E. Adams)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
Demetra J. Mills)	
Administrative Patent Judge)	APPEALS AND
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Lora M. Green)	
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