

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 GUY LEVI

Appeal 2007-0211
Application 10/305,577
Technology Center 1700

Decided: November 24, 2006

Before KIMLIN, TIMM, and GAUDETTE, *Administrative Patent Judges*.
KIMLIN, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1, 2, 4-6, 8-13, and 16-20. Claim 1 is illustrative:

1. A w/o/w emulsion comprising:
 - (a) a primary phase comprising a water-in-oil emulsion; and
 - (b) an external aqueous phase,

the w/o/w emulsion has an amount of water in the primary phase (W1) and in the external aqueous phase (W2), and an amount of acidulant in the primary phase (A1) and in the external aqueous phase (A2) wherein $W1 > W2$ and $A1 > A2$ and further wherein the primary phase comprises an emulsifier having an HLB of less than about 9 and the w/o/w emulsion has a viscosity from about 10,000 to about 150,000 cps.

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

Schwartz	US 4,447,464	May 8, 1984
Izzo	US 4,882,187	Nov. 21, 1989

Henry G. Schwartzberg, *Physical Chemistry of Foods*, 264-65 (Inst. of Food Technologists ed., 1992).

Appellant's claimed invention is directed to a water-in-oil-in-water emulsion (w/o/w emulsion). The emulsion comprises a primary phase comprising a water-in-oil emulsion and an external aqueous phase. The amounts of water and acidulant are greater in the primary phase than in the external aqueous phase. Also, the primary phase comprises an emulsifier having an HLB of less than about 9 and the w/o/w emulsion has a viscosity within the recited range.

According to Appellant and the prior art, when less fat is used in an emulsion for reduced-fat food, water and water soluble thickening agents replace the fat, but make the emulsion more susceptible to toxic microbiological growth. To combat such growth more acidulant is required which, unfortunately, tends to produce an acidic or sour taste. According to Appellant, the claimed w/o/w emulsion displays excellent stability and is free of a sour taste.

Appealed claims 1, 2, 4-6, 8-13, and 16-28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Izzo in view of Schwartzberg and Schwartz.

Appellant does not provide separate substantive arguments for the various claims on appeal (re-stating the features of the independent claims does not qualify as a substantive argument). Accordingly, all the appealed claims stand or fall together with claim 1.

We have thoroughly reviewed each of Appellant's arguments for patentability. However, we are in complete agreement with the Examiner that the claimed subject matter would have been obvious to one of ordinary skill in the art within the meaning of Section 103 in view of the applied prior art. Accordingly, we will sustain the Examiner's rejection.

Appellant does not dispute that Izzo, like Appellant, discloses a w/o/w emulsion for a low-fat food from which "no sour taste is perceived" (Izzo, col. 9, ll. 48-49). Also, we agree with the Examiner that Izzo fairly teaches a class of w/o/w emulsions that includes those having more acidulant in the primary, dispersed phase than in the aqueous phase. In relevant part, Izzo teaches that the emulsion may comprise 80 % of the primary phase A and 20 % of the aqueous phase B (Izzo, col. 7, ll. 41-44), and discloses that aqueous phase b, which is similar in composition to aqueous phase B, contains an amount of acid that is relatively small despite its low pH (Izzo, col. 6, ll. 10 et seq. and col. 9, ll. 41-43). Accordingly, we are satisfied that one of ordinary skill in the art would have found it obvious to formulate a low-fat food comprising a w/o/w emulsion having more acidulant in the primary phase in view of the Izzo disclosure.

Moreover, although Izzo may not specifically describe the claimed distribution of acidulant, as argued by Appellant at page 11 of the Brief, it is well settled that where patentability is predicated upon a change in a condition of a prior art composition, such as a change in concentration or the like, the burden is on the applicant to establish with objective evidence that the change is critical, i.e., it leads to a new, unexpected result. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990); *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In the present case, Appellant has proffered no objective evidence that w/o/w emulsions within the broad scope of the appealed claims, having only slightly more acidulant in the primary phase than the aqueous phase, produce unexpected results with respect to stability, sour taste, or any other property. Appellant provides no comparison between emulsions within the scope of the appealed claims and emulsions fairly taught by Izzo. Indeed, the present specification characterizes the present invention as “a w/o/w emulsion wherein at least about 50 % by weight of the total acidulant utilized in the w/o/w emulsion is present in the primary phase” (Spec. 2, last sentence). Also, the Specification relates that “[i]n yet another preferred embodiment, the concentration of free hydrogen for the acid employed is *greater* in the external aqueous phase” (Spec. 7, last ¶, emphasis added). In addition, Examples 1 and 2 of the Specification have *more acid* in the external phase (6.4 weight % vinegar) than in the primary phase (2.0 weight % vinegar). Hence, the Specification would seem to allay any suggestion regarding the criticality of having more acidulant in the primary phase, particularly the slight excess of acidulant encompassed by the appealed claims.

As for the claimed emulsifier having an HLB of less than about 9, we fully concur with the Examiner that Schwartzberg evidences the obviousness of utilizing such emulsifiers in food compositions, particularly in w/o emulsions. Appellant has not asserted, let alone established with objective evidence, that the claimed class of emulsifiers produces unexpected results.

Appellant also contends that the product of Izzo is a solid with butter-like properties, whereas the claimed emulsion has a viscosity, at ambient temperature, that is “flowable like a sauce, salad dressing or mayonnaise” (Br. 10, last ¶). However, the Examiner properly cites Schwartz as evidence that at 75°F, ambient temperature, margarine has a viscosity of 16,000 to 18,000 centipoise, which range is directly within the considerably broader claimed range. Since ambient or room temperature is considered in the art to be within 65-85°F (Schwartz, col. 3, ll. 17-18), it is reasonable to conclude that the food product of Izzo has a viscosity within the claimed range at ambient temperature. Manifestly, it is well known that butter left out of the refrigerator at room temperature acquires a consistency, or viscosity, like a sauce or salad dressing.

Appellant states that it may readily be gleaned from Examples 1-5 of the Specification that “the w/o/w emulsion unexpectedly displays excellent stability characteristics and is free of a sour taste” (Br. sentence bridging pp. 5-6). However, Appellant has not established on this record that the Specification data would be considered truly unexpected by one of ordinary skill in the art, especially in light of Izzo’s disclosure that the product is free of a sour taste. *In re Merck & Co.*, 800 F.2d 1091, 1099, 231 USPQ 375, 381 (Fed. Cir. 1986). Significantly, Appellant has offered no analysis of the data but has apparently left it to our perusal. Suffice it to say, it is not within

Appeal 2007-0211
Application 10/305,577

the province of this Board to analyze an applicant's specification data, in the first instance, and interpret it in a light that is most favorable to the applicant. Appellant is reminded that the burden of showing unexpected results rests on the party asserting them. *In re Klosak*, 455 F.2d 1077, 1080, 173 USPQ 14, 16 (CCPA 1972).

In conclusion, based on the foregoing, the Examiner's decision rejecting the appealed claims is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(I)(iv)(2005).

AFFIRMED

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