

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte BRUCE A. ROBERTS, TIMOTHY A. SCAVONE
and STEVEN P. RIEDELL

Appeal No. 96-1238
Application 08/082,177¹

ON BRIEF

Before DOWNEY, JOHN D. SMITH and OWENS, Administrative Patent Judges.

DOWNEY, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. section 134 from the final rejection of claims 23-40, all of the claims pending in the application.

The subject matter on appeal is directed to a method

¹ Application for patent filed June 24, 1993.

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of making a low saturated, low trans isomer beta stable shortening composition. The subject matter on appeal comprises making a low saturate, low trans beta stable plastic shortening from a composition which comprises (1) an edible oil, (2) a hardstock blend which consists essentially of (a) a beta phase tending hardstock composition and (b) a beta prime phase tending composition, 3) an emulsifier, and 4) 0 to 500 ppm of an antioxidant.

Appellants have stated that all of claim 23-40 stand and fall together. Claim 23 is illustrative and reads as follows:

23. A process for making a low saturate, low trans beta stable plastic shortening comprising the steps of:

1) fully melting and mixign at a temperature from about 120EF (49EC) to about 180EF (82EC) a mixture comprising:

a) an edible oil having less than 8% by weight of saturated fatty acids, wherein said edible oil comprises from about 75% to about 90% by weight of said plastic shorening;

b) a hardstock blend having a beta stable crystallling phase consisting essentially of i) from about 25% to about 80% by weight, of a beta phase tending hardstock

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component having an iodine value of less than 10, and ii) from about 20% to about 75% by weight of a beta prime phase tending hardstock component, crystallized in beta form, having an iodine value of less than about 10, said hardstock blend comprising from about 10% to about 20% by weight of said plastic shortening;

c) from 0 to about 500 per million by weight of an antioxidant, and

d) an effective amount of an emulsifier;

2) injecting from about 12% to about 23% of an inert gas, under a pressure of from about 50 to about 700 pounds per square inch to form a shortening mixture;

3) rapidly cooling said shortening mixture in a scraped wall heat exchanger in less than about 60 seconds to a temperature of from about 40°F (4.4°C) to about 70°F (21.1°C) while maintaining a pressure of from about 50 to about 700 psig;

4) agitating said shortening mixture and imparting enough work input in a picker box for from about 1 to about 8 minutes to transform said shortening mixture to at least 50% beta crystals upon filling, said shortening mixture having a

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finished shortening consistency of from about 160mm/10 to about 275mm/10 and a maximum inert gas bubble size less than 1 mm;

5) heating said shortening to a temperature from about 70EF (21EC) maximum to 95EF (35EC) and passing said shortening through a slotted valve no more than 0.060 inch in width while lowering the pressure from 300 psig to about 700 psig to atmospheric pressure to form a fine inert gas bubble dispersion; said shortening mixture having a filling temperature of from about 40EF (4EC) to about 95EF (35CE);

6) tempering said shortening at a temperature of from about 80EF (27EC) to about 110EF (43EC) for at least about 24 hours.

THE REFERENCES

Reid et al. (Reid) 3,637,402 Jul. 25, 1972

Gunstone, 1983, Lipids in Foods, Chemistry, Biochemistry and Technology, Pergamon Press, p. 149-150.

THE REJECTION

Claims 23-40 stand rejected under 35 U.S.C. 103 as being unpatentable over Reid et al. in view of Gunstone.

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After careful consideration of the arguments presented by the examiner and the appellants, We reverse.

Opinion

It is well settled that the Patent and Trademark Office (PTO) has the burden under 35 U.S.C. section 103 of establishing a prima facie case of obviousness. In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785,788 (Fed. Cir. 1984). This burden can be satisfied when the PTO, through the examiner, presents evidence by means of some teaching, suggestion, or inference either in the applied prior art or in generally available knowledge, that would have suggested the claimed subject matter to a person of ordinary skill in the art or would have motivated a person of ordinary skill in the art to modify the applied reference(s) in the proposed manner to arrive at the claimed invention. See In re Fine, 837 F.2d 1071,1074 5 USPQ2d, 1598-99 (Fed. Cir. 1988); Carella v. Starlight Archery, 804 F.2d 135,139 231 USPQ 644,647 (Fed. Cir. 1986); Ashland Oil, Inc. v. Delta resins & Refractories, Inc., 776 F.2d 281, 304, 227 USPQ 657,673 (Fed. Cir. 1985); In

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re Rinehart, 531 F.2d 1048,1052, 189 USPQ 134,147 (CCPA 1976).

In our view, the examiner has failed to establish the requisite burden of proof. Reid et al is directed to a process of making an aerated shortening. Reid et al teaches the blending of a partially hydrogenated soybean oil (Aedible oil@) having an I.V. of 65 to 125 (col. 2, line 67) with a nearly fully hydrogenated cottonseed oil (Abeta prime phase tending hardstock@) with an I.V. of 0 to 40 (col. 2, line 68). Reid does not teach the inclusion of a beta phase tending hardstock, the requisite amount of base oil, the requisite proportions of the beta phase tending hardstock and the beta prime phase tending hardstock, and the specific percent of the Beta stable crystalline phase hardstock blend within the shortening composition

The examiner notes that the appellants claims differ from Reid only in the recitation of particular fats which are processed and in the recitation of the use of a scraped wall heat exchanger. The examiner relies on Gunstone on to teach that the various crystal habits of fats and oils as being beta prime or beta type as well as the teaching of a votator unit

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is a scraped surface heat exchanger. However, we do not agree with the examiner that the mere disclosure that beta phase tending hardstock components and beta prime phase tending hardstocks can be used in combination provides sufficient motivation to form a beta stable crystalline phase which comprises 10% to 20% of the composition and consists essentially of about 25% to about 80% of a beta phase tending hardstock having an iodine value of less than 10 with a beta prime phase tending hardstock also having a specific iodine value of less than 10. We note that the two references do not provide any specific proportions such as that required by applicant. Moreover, we do not find any motivation to require that both of the hardstock blend components have a specific iodine value of less than 10. We note that the beta prime phase tending hardstock is disclosed by Reid et al. to have an I.V. from 0-40. However, neither Reid et al. or Gunstone suggest the beta phase tending hardstock having an iodine value of less than 10. We do not find that an artisan would have motivation to select the lower range of the beta prime phase tending hardstock having an iodine value less than about 10 in combination with the beta phase tending hardstock having

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an iodine value of less than about 10.

Although examiner has asserted that the particular fats and the used of a scraped wall heat exchanger were the only differences from the prior art and the claims being appealed, we do not see where Reid et al and Gunstone suggest a slotted valve having more than 0.060 inches in width, a shortening consistency of from about 160 mm/10 to about 275 mm/10, or a shortening having a maximum inert gas bubble size less than 1 mm. However, because we find that the rejection is not prima facie obvious because of the lack of motivation to form the required hardstock blend, we need not address the sufficiency of disclosure as to the remaining elements.

In summation, we reverse the rejection of claims 23-40 over Reid in view of Gunstone.

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

REVERSED

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Administrative Patent Judge)	
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JOHN D. SMITH)	BOARD OF PATENT
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