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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte FRANK JOHANNSEN

Appeal No. 1996-2571
Application No. 08/119,058

ON BRIEF

Before WINTERS, WILLIAM F. SMITH and LORIN, Administrative Patent Judges.

WINTERS, Administrative Patent Judge.

DECISION

This is an appeal from the examiner's decision rejecting claims 1 through 4, 10 through 12, 21, and 23 through 27, all the claims pending in the application.

Claims 1, 2, 23 and 24 are illustrative of the subject matter on appeal and read as follows:

> 1. A fat composition consisting of from 100 to 50 parts by weight of a glyceride system A which is a mixture of mono-, di- and triglycerides having the composition 10-50 weight % of monoglyceride, 25-55 weight % of diglyceride and more than 10 weight % of triglyceride and having a hydroxyl number of 90-190 and an iodine number of 40-90, produced from unhardened or hardened vegetable fats or fractions thereof, and 0 to 50 parts by weight of a glyceride system B which is a mixture of mono-, di- and triglycerides having the composition 5-20 weight % of monoglyceride, 40-60 weight % of diglyceride and 20-50 weight % of triglyceride and having a hydroxyl number of 50-190 and an iodine number below 30, produced from hardened vegetable oils or fractions thereof.
>
> 2. A fat composition according to claim 1 consisting of a mixture of 50-85 weight % of glyceride system A with 15-50 weight % of glyceride system B.
>
> 23. An emulsion product comprising an aqueous emulsion of a fat composition consisting of from 100 to 50 parts by weight of a glyceride system A which is a mixture of mono-, di- and triglycerides having the composition 10-50 weight % of monoglyceride, 25-55 weight % of diglyceride and more than 10 weight % of triglyceride and having a hydroxyl number of 90-190 and an iodine number of 40-90, produced from unhardened or hardened vegetable fats or fractions thereof, and 0 to 50 parts by weight of a glyceride system B which is a mixture of mono-, di- and triglycerides having the composition 5-20 weight % of monoglyceride, 40-60 weight % of diglyceride and 20-50 weight % of triglyceride and having a hydroxyl number of 50-190 and an iodine number below 30,

produced from hardened vegetable oils or fractions thereof.

24. An emulsion product of claim 23 wherein the fat composition consists of a mixture of 50-85 weight % of glyceride system A with 15-50 weight % of glyceride system B.

I. REFERENCES

The references relied on by the examiner are:

Tuma et al. (Tuma)	3,934,003	Jan. 20, 1976
Lin et al. (Lin)	3,996,355	Dec. 7, 1976
Scheuffgen et al. (Scheuffgen)	4,292,088	Sep. 29, 1981
Uemura et al. (Uemura)	4,690,822	Sep. 1, 1987

The references relied on by this merits panel are:

Grant, R., et al. ed. (Grant), Grant & Hackh's Chemical Dictionary, fifth edition, McGraw-Hill Book Company, New York (1987), pp. 307 and 308.

American Chemical Society, File Registry No. RN 85409-09-2.

II. REJECTIONS

The claims stand rejected as follows:[1]

[1]The rejections under 35 U.S.C. § 112, second paragraph, set forth in paragraph 1 of the Final rejection, Paper No. 7, mailed on Jul. 21, 1994, and in the Advisory action, Paper No. 10, mailed on Nov. 15, 1994, have been

Claims 1 through 4, 10 through 12, 21, and 23 through 27 under 35 U.S.C. § 103 as unpatentable over Lin in view of Uemura.

Claims 1 through 4, 10 through 12, 21, and 23 through 27 under 35 U.S.C. § 103 as unpatentable over Tuma in view of Scheuffgen.[2]

We reverse the rejection over Lin in view of Uemura. We vacate the rejection over Tuma in view of Scheuffgen and remand.

III. BACKGROUND

The subject matter on appeal is directed to a fat composition consisting of from 50 to 100 parts by weight of a glyceride system A and from 0 to 50 parts by weight of a glyceride system B. Glyceride system A is a mixture of 10-50 weight % of monoglyceride, 25-55 weight % of diglyceride, and more than 10 weight % of triglyceride. Glyceride system A has a hydroxyl number of 90-190 and an iodine number of 40-90, and

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withdrawn by the examiner. Answer, page 2, (4) *Issues*.

[2]This rejection was entered as a new ground of rejection in the Answer, pages 9 through 11.

is produced from unhardened or hardened vegetable fats or fractions thereof. Glyceride system B is a mixture of 5-20 weight % of monoglyceride, 40-60 weight % of diglyceride, and 20-50 weight % of triglyceride. Glyceride system B has a hydroxyl number of 50-190 and an iodine number of below 30, and is produced from hardened vegetable oils or fractions thereof.

IV. DISCUSSION

A. Rejection over Lin in view of Uemura.

1. Lin is directed to a vegetable oil vehicle, which can be any natural or synthetic pharmaceutically acceptable vegetable oil. Lin discloses that the oils can comprise a mono-, di- or triglyceride, alone or in combination, prepared from saturated fatty acids. Lin discloses that it is preferred that the oil be a glyceryl ester of a C_{14} to C_{22} saturated and/or unsaturated fatty acid. Lin, column 3, lines 9-18. The vegetable oil vehicles exemplified by Lin include sesame oil, corn oil, and glyceryl mono-oleate. See, for example, Lin, Formulations 1-A, 2-B and 3-B.

2. Uemura is directed to a drug carrier comprising an

aqueous polymer and an oil. Uemura discloses that the oil may include medium chain monoglycerides, medium chain diglycerides, medium chain triglycerides, etc. Uemura, column 1, lines 11-17; column 2, lines 36-46. The oil exemplified by Uemura is MIGLYOL 812[3]. See, for example, Uemura, Example 1.

3. Neither Lin nor Uemura discloses or suggests any relative amounts of the mono-, di-, and triglycerides in their respective oil vehicles.

4. The claims on appeal require that glyceride system A has an iodine number of 40-90.[4] Appellant argues that glyceride system A is "characterized by having an iodine number between 40 and 90." Brief, page 9, lines 7-10. The examiner does not point to any reason, suggestion, or motivation stemming from the prior art which would have led a person having ordinary skill to a glyceride composition having an iodine number of 40-90.

5. In setting forth the rejection under 35 U.S.C. § 103,

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[3]American Chemical Society, File Registry No. RN 85409-09-2, which is supplied with this decision, identifies MIGLYOL 812 as "triglycerides, C8-10."

[4]Iodine number is the quantity of iodine, in mg, absorbed by 1 g fat or oil under specified conditions. The number indicates the amount of unsaturated acids present. See Grant, which is supplied with this decision.

the examiner states that "no assertion of criticality for the particular proportions of the instant claims has been established." The examiner concludes that "[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made, having the above references before him to vary the proportions of the various glycerides since such preparations are taught and fat compositions having the essentially same compositions are disclosed." Answer, page 5, lines 7-13.

6. In response to appellant's arguments, the examiner states that in the case where the claims require only glyceride system A, "it has not been shown that the appellant's weight percentages of mono-, di- and triglycerides have any unexpected effect on the result obtained i.e. a skilled artisan would expect

a varied viscosity when forming fatty emulsions or compositions using differing amounts of mono-, di- and tri-glycerides (For example, see SCHEUFFGEN et al. . .)." Answer, paragraph bridging pages 5 and 6. However, as stated in item 3 above, neither Lin nor Uemura discloses or suggests any

relative amounts of mono-, di-, and triglycerides in their respective oil vehicles. The examiner's argument that appellant has not established "criticality" or "unexpectedly superior results" attributable to the recited proportions of mono-, di-, and triglycerides puts the cart before the horse. The examiner provides no reason, suggestion, or motivation stemming from the prior art which would have led a person having ordinary skill in the art to vary the proportions of the various glycerides or to arrive at the proportions of mono-, di-, and triglycerides recited in the claims.

7. The initial burden of establishing reasons for unpatentability rests on the examiner. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where

there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See

In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Here, the examiner has not established a prima facie case of obviousness of appellant's claims reciting glyceride system A which contains (1) specified proportions of mono-, di-, and triglycerides; and (2) an iodine number of 40-90.

Accordingly, because we find that the prior art fails to suggest the claimed invention, we reverse the examiner's rejection of claims 1 through 4, 10 through 12, 21, and 23 through 27 under 35 U.S.C. § 103 as unpatentable over Lin in view of Uemura.

B. Rejection over Tuma in view of Scheuffgen.

Our consideration of the record leads us to conclude that this rejection is not in condition for a decision on appeal. Accordingly, we vacate the rejection and remand the application to the examiner to consider the following issues and take appropriate action not inconsistent with our findings.

(1) The statement of rejection under 35 U.S.C. § 103 on pages 9 through 11 of the Answer is somewhat confusing. Although

the examiner states that the rejection is over Tuma in view of Scheuffgen, it is not clear from the body of the rejection whether the examiner relies on these references individually, or in combination with each other.

(2) Appellant's claims require that glyceride system A has an iodine number of 40-90.

On this record, the examiner does not point to any reason, suggestion, or motivation stemming from the prior art that would have led a person having ordinary skill to a glyceride composition having an iodine number of 40-90. On the contrary,
Tuma teaches glyceride compositions having an iodine number less than one; and Scheuffgen teaches glyceride compositions of
saturated fatty acids. Because the iodine number indicates the amount of unsaturated acids present in an oil or fat, it would appear that the glyceride compositions of Scheuffgen have an iodine number outside the range recited in the claims.

Tuma is directed to a water-soluble and fat-restoring composition comprising partial glyceride mixtures of saturated vegetable fatty acids having about 8 to 14 carbon atoms which

have linked thereto, per hydroxyl group, 2 to 8 moles of ethylene oxide (column 1, lines 49-52). Tuma discloses that the term "partial glyceride" refers to mixtures of mono- and diglycerides (column 3, lines 64-66). Further, Tuma discloses that the partial glyceride mixtures have a monoester content of 42 % by weight, an iodine number less than one, and a hydroxyl number of 370, or a monoester content of 43 % by weight, an iodine number of 0.6, and a hydroxyl number of 360 (column 1, lines 56-64; and column 2, lines 9-23). Tuma discloses that the ethoxylated partial glyceride mixtures have a hydroxyl number from 130 to 260. Tuma, claim 1. Tuma exemplifies compositions comprising the ethoxylated partial glyceride mixture and a triglyceride. See Tuma, Examples II, IV and VI.

Scheuffgen is directed to a substitute beeswax composition comprising (a) from about 3 to 15% by weight of "-branched, aliphatic monocarboxylic acids of Formula I at column 1, lines 50-55, (b) from about 15 to 30% by weight of

esters of

fatty alcohols of chain length C_{12} to C_{22}, (c) from about 5 to 20% by weight of triglycerides of palmitic, stearic, hydroxystearic, or behenic acid, (d) from about 20 to 40% by weight of mono- and/or diglycerides of palmitic, stearic, hydroxystearic, or behenic acid, (e) from about 5 to 20% by weight of fatty acids or

hydroxyl fatty acids of the chain lengths C_{16} to C_{22}, and (f) from 0 to about 30% by weight of microcrystalline paraffins having a melting range of from about 70EC to 72EC (column 1, line 56, through column 2, line 5). Scheuffgen exemplifies such a substitute beeswax composition comprising glyceryl trihydroxystearate and glyceryl monohydroxystearate, and having an iodine number of 4.5 (column 5, example VIIIa, Table 1).

(3) Dependent claims 2, 4, 10 through 12, 24 and 26, require that the fat composition consists of both glyceride system A and glyceride system B. On this record, the examiner does not point

to any disclosure in the prior art which would have led a

person

having ordinary skill to fat compositions consisting of glyceride system A and glyceride system B.

On return of this application, the examiner should reevaluate the patentability of appellant's claims under 35 U.S.C. § 103, considering the claimed subject matter as a whole. "[*E*]*very* limitation in the claim must be given effect rather than considering one in isolation from the others." In re Geerdes, 491 F.2d 1260, 1262-63, 180 USPQ 789, 791 (CCPA 1974) (emphasis in the original). If the examiner remains of the opinion that any claim is unpatentable under this section of the statute, we

recommend that the examiner structure any further § 103 rejection using the model set forth in MPEP § 706.02(j) as follows:

> the examiner should set forth . . . (1) the relevant teachings of the prior art relied upon . . . (2) the difference or differences in the claim over the applied reference(s), (3) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and (4) an explanation why such proposed modification would have been obvious to one of ordinary skill in the art at the

time the invention was made.

Adherence to that model will ensure that the examiner considers the claims individually and applies the relevant evidence of obviousness to the subject matter of each individual claim.

If the examiner adheres to the view that appellant's claims are unpatentable over "Tuma in view of Scheuffgen," at a minimum, we recommend that the examiner (1) clarify whether the claims are obvious over Tuma, or over Scheuffgen, or over the combined teachings of the references, (2) set forth the reason or suggestion stemming from the prior art that would have led a person having ordinary skill to a glyceride composition having an iodine number of 40-90, and (3) set forth the reason or
suggestion stemming from the prior art that would have led a person having ordinary skill to fat compositions consisting of glyceride system A and glyceride system B.

V. CONCLUSION

In conclusion, we reverse the rejection of claims 1 through 4, 10 through 12, 21 and 23 through 27 under 35 U.S.C.

§ 103 as unpatentable over Lin in view of Uemura. We vacate the rejection of claims 1 through 4, 10 through 12, 21 and 23 through 27 under 35 U.S.C. § 103 as unpatentable over Tuma in view of Scheuffgen, and remand this application to the examiner for further proceedings consistent with this opinion.

This application, by virtue of its "special" status, requires an immediate action. MPEP § 708.01(d)(7th Ed., July 1998).

REVERSED and REMANDED

SHERMAN D. WINTERS Administrative Patent Judge	)	
WILLIAM F. SMITH Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
HUBERT C. LORIN Administrative Patent Judge	)	

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