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Datasheet for the decision of 30 July 2013

Case Number: T 0871/11 - 3.3.09

Application Number: 04761484.7

Publication Number: 1662899

IPC: A23L 1/19, A23D 7/00

Language of the proceedings: EN

Title of invention:
UHT treated 100% non dairy whipping cream

Patent Proprietor:
PURATOS N.V.

Opponent:
G.C. Hahn & Co. Stabilisierungstechnik GmbH

Headword:
-

Relevant legal provisions:
EPC Art. 56
RPBA Art. 12

Keyword:
"Inventive step (no) - obvious alternative"
"Late-filed evidence -admitted (no) - submitted shortly before oral proceedings"

Decisions cited:
-

Catchword:
-

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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0871/11 - 3.3.09

D E C I S I O N
of the Technical Board of Appeal 3.3.09
of 30 July 2013

Appellant: (Opponent)	G.C. Hahn & Co. Stabilisierungstechnik GmbH Aegidienstrasse 22 DE-23552 Lübeck (DE)
Representative:	von Kameke, Allard Uexküll & Stolberg Patentanwälte Beselerstrasse 4 DE-22607 Hamburg (DE)
Respondent: (Patent Proprietor)	PURATOS N.V. Industrialaan 25 BE-1702 Groot-Bijgaarden (BE)
Representative:	Pronovem Office Van Malderen Avenue Josse Goffin 158 BE-1082 Bruxelles (BE)
Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted 20 January 2011 concerning maintenance of European patent No. 1662899 in amended form.**

Composition of the Board:

Chairman: W. Sieber
Members: J. Jardón Álvarez
K. Garnett

Summary of Facts and Submissions

I. The mention of the grant of European patent No. 1 662 899 in respect of European patent application No. 04761484.7 in the name of PURATOS N.V., filed on 27 August 2004 as international application PCT/BE/2004/000123, was published on 10 December 2008 (Bulletin 2008/50). The granted patent contained 11 claims, claim 1 reading as follows:

"1. An UHT treated non-dairy vegetable oil-in-water emulsion for whipping, free from any dairy product or derivative and free from any protein source, wherein the emulsion comprises:

- 20-30% fat of lauric origin, fully hydrogenated, and subsequently refined for human consumption, said fat containing less than 2% of trans fatty acids,
- 10-25%, sweetener
- stabilizers, and
- emulsifier."

Claims 2 to 7 were dependent claims; claim 8 was directed to a method to prepare a whipped product comprising the step of whipping the emulsion of claims 1 to 7; claim 9 was directed to a whipped topping obtainable by the method of claim 8; claim 10 was directed to the use of the emulsion of claims 1 to 7 in a food product and claim 11 to a method of using the emulsion of claims 1 to 7 comprising the steps of whipping the emulsion, and applying the whipped topping in or on a food product.

II. A notice of opposition was filed by G.C. Hahn & Co. Stabilisierungstechnik GmbH on 10 September 2009 requesting revocation of the patent in its entirety based on the grounds of Article 100(a) EPC (lack of novelty and lack of inventive step), and Articles 100(b) and (c) EPC.

The documents cited during the opposition proceedings included:

D1: US 4 770 892 A;

D2: DE 100 64 061 A1;

D3: "MINERALöLE und verwandte Produkte. Ein Handbuch für Laboratorium und Betrieb.", Ed. Carl Zerbe, Springer-Verlag Berlin Heidelberg New York 1969, page 628;

D5: Ullmanns Encyklopädie der technischen Chemie, 4., neubearbeitete und erweiterte Auflage, Band 11, Verlag Chemie, Weinheim/Bergstr., 1976, pages 458, 459 and 502 to 504; and

D7: Abstract of the article: W.C. Willett *et al.*, "Intake of trans fatty acids and risk of coronary heart disease among women", THE LANCET, Volume 341, Issue 8845, pages 581-585, 6 March 1993.

III. By its interlocutory decision announced orally on 9 November 2010 and issued in writing on 20 January 2011 the opposition decided that the claims of the

auxiliary request filed by the patent proprietor during the oral proceedings met the requirements of the EPC.

Claim 1 as maintained by the opposition division resulted from the combination of granted claims 1 to 3 and read as follows:

"1. An UHT treated non-dairy vegetable oil-in-water emulsion for whipping, free from any dairy product or derivative and free from any protein source, wherein the emulsion comprises:

- 20-30% fat of lauric origin, fully hydrogenated, and subsequently refined for human consumption, said fat containing less than 2% of trans fatty acids,
- 10-25%, sweetener
- stabilizers, and
- emulsifier,

wherein the fat has a free fatty acids composition with a C8:0 content of 2-5%, a C10:0 content of 3-5%, a C12:0 content of 44-51%, a C14:0 content of 15-17%, a C16:0 content of 7-10% and a C18:0 content of 23-29%; and

wherein the solid fat content profile of said fat is 90-98% at 10°C, 75-87% at 20°C, 30-45% at 30°C and 5-13% at 35°C."

In the appealed decision, the opposition division came to the conclusion that the subject-matter of the granted claims (main request) did not involve an inventive step in view of the disclosure of D1, the

reason being essentially that the selection of a fat having a lower trans fatty acid content lead to no unexpected advantage and it was an obvious alternative for the skilled person.

On the other hand the opposition division acknowledged an inventive step for the subject-matter of claim 1 of the auxiliary request because neither D1 nor D2 suggested the use of very hard fats, nor attributed any importance to such a level of fat hardness for the provision of stable products having a high overrun. The opposition division formulated the objective technical problem as the provision of whippable products having high functional characteristics and that had a low level of trans fatty acids. The opposition division found no hint in the prior art to the selection of fats having the characteristics of claim 1.

IV. On 29 March 2011 the opponent (in the following: the appellant) filed an appeal and on the same day paid the prescribed fee. The statement setting out the grounds of appeal was filed on 27 May 2011.

V. On 30 March 2011 a second appeal was filed against the decision of the opposition division by the patent proprietor. This appeal of the patent proprietor was withdrawn on 30 July 2013 during the oral proceedings before the board of appeal. Therefore the patent proprietor will be referred as the respondent in this decision.

VI. Further submissions were filed by the respondent on 30 May 2011 and 19 October 2011 and by the appellant on 7 October 2011.

The following documents were also filed:

- By the respondent on 30 May 2011:

D8: F.B. Hu *et al.*, "Dietary fat intake and the risk of coronary heart disease in women" The New England Journal of Medicine, 1997, Vol. 337 (21), pages 1491-1499; and

- By the appellant on 7 October 2011:

D9: Data relating to a conventional commercial fully hardened palm kernel oil (1 page, not dated).

VII. On 12 March 2013 the board dispatched the summons to oral proceedings. In the attached communication the board indicated the points to be discussed during the oral proceedings and *inter alia* expressed its preliminary opinion that it tended to agree with the appellant that the claimed subject-matter was an arbitrary selection within the broader disclosures of D1 and D2 and therefore lacked an inventive step.

VIII. On 27 June 2013 the respondent submitted comparative tests in support of inventive step:

D10: Comparative tests (two pages).

IX. On 30 July 2013 oral proceedings were held before the board. The issues discussed with the parties related to Article 123(2) EPC, sufficiency of disclosure, novelty and inventive step. As regards Article 123(2) EPC it was a matter of dispute (1) whether generally the

compositions now claimed had the properties as presented in the application as filed, and (2) whether there was a clear and unambiguous disclosure in the application as filed for the feature in claim 5 (when read in combination with claim 1) of fully hydrogenated palm kernel oil.

After deliberation the chairman announced the conclusion of the board that:
(1) Generally, the compositions claimed in the request had the properties as presented in the application as filed; and
(2) There was no clear and unambiguous disclosure in the application as filed for the feature in claim 5 (when read in combination with claim 1) of fully hydrogenated palm kernel oil.

The discussion continued on the basis that the proprietor would be willing to delete claim 5.

After the chairman announced the conclusion of the board that the subject-matter of claim 1 was not based on an inventive step and for this reason alone the request was not allowable, the respondent filed the following further requests:

- "the board should comment on the differences between the present case and the case decided under reference T 0318/10, more particularly 7.2.2 and 7.2.4. (alternatives and where to find a technical effect in the description).

- the board should comment on the question as to why the data filed in due time in this case were not

considered although the new argumentation of the opponent based on the data filed before the examination division was admitted into the proceedings."

X. The arguments presented by the appellant insofar as they are relevant for the present decision may be summarised as follows:

(a) The new experimental evidence filed by the respondent one month before the oral proceedings (D10) should not be admitted into the proceedings because it had been filed at such a late stage that there was no chance for the appellant to perform counter-experiments. Moreover, the results lacked sufficient information to enable them to be repeated: they gave no specific compositions of the fat used but only a range of components.

(b) Concerning inventive step, the appellant noted that the respondent had not provided any test results demonstrating an advantage over the prior art products disclosed in D1 and D2. Without any experimental proof, the claimed subject-matter was at most an arbitrary selection from the broader disclosures of D1 and D2 lacking inventive step. Moreover, it was well known from the prior art that trans fatty acids were unhealthy and should be avoided in the fat composition. Concerning the whipping temperature in D1, the appellant stated that there was no requirement in D1 of whipping at this temperature, the temperature of 4°C being the usual refrigeration temperature.

XI. The arguments presented by the respondent insofar as they are relevant for the present decision may be summarised as follows:

(a) The experimental results were filed to support arguments already on file, making the inventive step argument clearer. The experiments were carried out as a reaction to the negative preliminary view of the board, in particular the observation that there was no experimental evidence on file comparing the claimed emulsions with those known *inter alia* from D1. In fact the preliminary opinion of the board was the first indication of a negative view on the claimed subject-matter, the claims having being upheld by the opposition division. Earlier in the oral proceedings, the board had made no objection to the appellant referring, for the first time in the appeal proceedings, to experimental evidence filed by the respondent in the examination proceedings. The board should be even-handed in its treatment of the parties. The evidence should therefore be admitted into the proceedings.

(b) The claimed emulsions differed from those disclosed in D1 by (i) the content of stearic acid, (ii) the solid fat content profile and (iii) the hardness of the fat. The technical effect achieved by these distinguishing features was the whipping at temperatures between 7 and 9°C, i.e. above the temperature of 4°C used in D1. There was no hint in D1, or in any other cited document, that by using the claimed fats having the features of claim 1, in particular a high content of stearic

acid, such a technical effect could be achieved. In fact, D1 would teach against the use of a high content of stearic acid because in example 1 coconut oil having a low content of stearic acid was used. The solid fat content profile of the fats used in D1 was very broad and there was no hint to the specific hard fats now claimed.

(c) For similar reasons the subject-matter of claim 1 would also involve an inventive step if D2 were to be used as closest prior art document.

XII. The final requests of the parties were as follows:

(a) The appellant requested that the decision under appeal be set aside and the patent be revoked.

(b) The respondent requested that the appeal be dismissed.

Reasons for the Decision

1. The appeal is admissible.

2. *Preliminary remark*

The claims under consideration are the claims of the auxiliary request upheld by the opposition division (see point III above). During the appeal proceedings the appellant raised objections against these claims under Articles 123(2), 83, 54 and 56 EPC. However, taking account that the patent is to be revoked for lack of inventive step (see below, point 4.7), there is

no need for the board to deal with the other objections of the appellant.

3. *New evidence*

3.1 The new evidence filed by the respondent (D10) was intended to demonstrate that the claimed emulsions had improved properties compared with those known *inter alia* from D1. The absence of any such evidence hitherto had, however, been clearly raised by the appellant in its grounds of appeal dated 26 May 2011, *i.e.*, over two years before the oral proceedings. The respondent had replied to these grounds of appeal by its letter dated 19 October 2011 but without answering this point or filing, even at this advanced stage of the proceedings, any experimental evidence. In its communication dated 12 March 2013 the board also commented on the absence of such evidence. Contrary to the respondent's argument, however, this remark was not an invitation to file such evidence but, as the introduction to the communication makes clear, merely part of a statement of the issues to be considered, *i.e.*, it pointed out that the discussion on inventive step would take place against the backdrop of there being no evidence of improved properties of the claimed invention over the closest prior art. Even then, the evidence was not filed until 27 June 2013 and only forwarded by the Office to the appellant by registered letter on 4 July 2013. It therefore can only have been received by the appellant relatively shortly before the oral proceedings on 30 July 2013.

3.2 Article 12(1) of the Rules of Procedure of the Boards of Appeal ("RPBA") provides that, from a respondent's

point of view, the appeal proceedings shall be based on *inter alia* the statement of the grounds of appeal and the respondent's reply thereto. This reply is to contain the respondent's complete case, specifying *inter alia* all the evidence relied on. *Prima facie*, therefore, and not least because the issue was flagged up in the appellant's grounds of appeal, if the respondent thought that the grounds of appeal raised a new point which required the filing of experimental evidence to answer, such evidence should have been filed with the respondent's reply. While Article 12(1) RPBA also provides that the appeal proceedings shall in addition be based on any communication from the board and any answer filed "pursuant to the directions of the Board", the board did not direct the parties to file experimental evidence on this issue and for the reasons already given the communication cannot be construed as a general invitation to do so.

3.3 The admittance of experimental evidence filed at such a late stage in appeal proceedings is always at the discretion of the board. Quite apart form whether it is in any event appropriate to file new experimental evidence in appeal proceedings, a basic requirement of fairness is that the other party has sufficient time to react to the evidence and to file evidence of its own if it wishes. It cannot be assumed that any evidence is incontrovertible.

3.4 The argument of the respondent that the board should have admitted the evidence on the principle of goose and gander (see point XI (a), above) is misplaced. Each request to file or reject evidence must be considered on its own. The respondent made no objection to the

appellant referring to the respondent's own evidence filed in examination proceedings. The fact that this was done has no bearing on whether the respondent's late-filed experimental evidence should be admitted.

3.5 Given therefore that the experimental evidence was filed without sufficient cause at a very late stage of the appeal proceedings and without the appellant having had a proper opportunity to react to it, the board decided in the exercise of its discretion not to admit it.

4. *Inventive step*

4.1 The invention as now claimed is directed to a UHT treated non-dairy vegetable oil-in-water emulsion for whipping comprising:

(a) 20-30% fat of lauric origin,

(a1) fully hydrogenated and subsequently refined for human consumption,

(a2) containing less than 2% of trans fatty acids,

(a3) having a fatty acids composition with a C8:0 content of 2-5%, a C10:0 content of 3-5%, a C12:0 content of 44-51%, a C14:0 content of 15-17%, a C16:0 content of 7-10% and a C18:0 content of 23-29%; and

(a4) wherein the solid fat content profile is 90-98% at 10°C, 75-87% at 20°C, 30-45% at 30°C and 5-13% at 35°C,

(b) 10-25% sweetener,

(c) stabilizers, and

(d) emulsifier, the emulsion being

(e) free from any dairy product or derivative, and

(f) free from any protein source.

4.2 This claimed UHT-emulsions are storable at room temperature and otherwise have the properties of a pasteurized product and show, after being whipped, a high overrun, high shape stability for use as filling or topping and a smooth texture (see paragraphs [0006] to [0008] and table 8). An essential characteristic of the claimed invention is the use of a fat of lauric origin presenting features (a1) to (a4).

4.3 Closest prior art

4.3.1 Documents D1 and D2 disclose, like the patent in suit, oil-in-water emulsions which can be maintained at room temperature for long periods of time. Any of these two documents could be regarded as the closest prior art. Document D1 is used in the following discussion.

4.3.2 Claim 1 of D1 is directed to a whippable topping emulsion which comprises:

- 50 to 70% of water;
- 16 to 24% of an edible partially hydrogenated or hydrogenated vegetable fat wherein at least about 60 weight percent of the fat components solidify at about 4°C;
- stabilizers such as microcrystalline cellulose;
- salts;
- emulsifiers such as glyceryl monostearate; and
- 14 to 24% of sugar.

The emulsions of D1 are (UHT)-sterilized for instance by heating at 142°C for 4 seconds (column 4, line 66 to column 5, line 3; see also column 5, lines 31 to 36)

and do not include any dairy product or any protein source.

The exemplified compositions using fats of lauric origin, namely a combination of hydrogenated coconut oil and hydrogenated palm kernel oil (example 1) or hydrogenated palm kernel oil (examples 2 and 3) show a high overrun and storage stability over extended period of time.

4.3.3 In summary, the emulsions disclosed in D1 present features (a), and (b) to (f) of the emulsions of claim 1 (see 4.1 above) and have similar properties. Concerning the fat used, D1 does not specifically disclose the extent of the hydrogenation, the amount of trans fatty acids (features (a1) and (a2) of claim 1 of the patent), the fatty acid composition (feature (a3)) or the solid fat content profile (feature (a4)).

However, D1 embraces the use of fats having these features. Thus, fully hydrogenated fats and consequently fats containing less than 2% of trans fatty acids are within the disclosure of D1, which defines in column 5, lines 35 to 46 the edible fats as "partially hydrogenated or hydrogenated vegetable fats" (emphasis by the board) and as having "an iodine value of about 10 or lower" (emphasis by the board). Moreover, the preferred fat used in the examples, palm kernel oil, has a composition overlapping with the composition as defined by feature (a3) as confirmed by table 1 of document D5 (pages 458/459). Furthermore, it is indicated in D1 that 60% weight fat components of the palm kernel oil used in examples 1 and 3 solidifies

at 4°C, thus embracing the fats having a solid fat content profile specified by feature (a4).

4.4 Problem to be solved and its solution

4.4.1 According to the respondent, the technical problem underlying the patent in suit in view of D1 is the provision of oil-in-water emulsions with improved properties, in particular emulsions which can be whipped at temperatures between 7 and 9°C and which do not have a waxy taste.

4.4.2 As a solution to this problem the patent proposes the oil-in-water emulsions of claim 1, essentially characterized by the use of an oil with a high content of stearic acid (feature (a3), 23 to 29% of C18:0) and being hard at low temperatures (cf. solid fat content profile as defined in feature (a4)).

4.4.3 There is however no evidence on file showing that the claimed oil-in-water emulsions present improved properties over the emulsions of D1. The comparative tests in the patent in suit do not allow any conclusion as to whether the emulsions of claim 1 show any beneficial effect compared with those of D1.

Furthermore, it cannot be established whether the "possible recipe" according to table 6 of the patent in suit still falls within the scope of the claim now under examination because the composition is not given. It can also not be established whether the standard UHT product used for comparison (table 8) is a product according to the disclosure of D1, again because the exact composition of the fat used is not given.

Consequently, no improvement can be seen from the experimental evidence in the patent in suit.

4.4.4 The board can also not see any improvement as regards the whipping temperature. In this context the respondent argued that according to D1 the best whipping results are achieved when the whipping is made at refrigeration temperatures of about 4°C (D1, column 5, lines 14 to 17), while in the patent in suit the products are whipped between 7 and 9°C ([0047], see also [0058]).

Paragraph [0047] describes a method developed by the patent proprietor for measuring shape stability of the whipped product (see [0046]). In fact this test method does not allow any conclusion to be drawn on any improvement on whipping temperature. The whipping temperatures used in D1 and in the patent in suit are within the usual whipping temperatures in the field, namely 2 to 12°C. The patent in suit is silent about any beneficial effect of the use of a slightly higher whipping temperature in the rheological properties of the whipped cream.

Finally, it has not been shown that the whipped emulsions of D1 would have a waxier taste than the claimed emulsions.

4.4.5 The board thus concludes that an improvement of the claimed emulsions due to the distinguishing features of the invention as claimed in claim 1 is not derivable from the available information on file.

4.5 Reformulation of the problem and its solution

4.5.1 As a consequence, the problem has to be reformulated in a less ambitious manner, not involving any improvement of the emulsions over those disclosed in D1. In fact, the objective technical problem has to be reformulated as the provision of alternative whippable oil-in-water emulsions.

4.5.2 This less ambitious problem is solved by the emulsions of claim 1. This conclusion was not disputed by the appellant and the board also is satisfied that this problem is credibly solved by the emulsions now claimed.

4.6 Obviousness

4.6.1 It remains to be decided whether, in view of the available prior art documents, it would have been obvious for the skilled person to solve this technical problem by the means claimed.

4.6.2 This is indeed the case in view of the disclosure of D1 alone. As already explained above when discussing the disclosure of D1, the fats now used are embraced by the disclosure of D1, the claimed emulsions being a selection within the broad disclosure of this document.

Thus, the use of fully hydrogenated vegetable fats is covered by D1, since the wording "hydrogenated" in the expression "an edible partially hydrogenated or hydrogenated vegetable fat" as used in claim 1 of D1 can, in context, only mean "fully" hydrogenated (as opposed to "partially" hydrogenated). Such fully hydrogenated fat necessarily contains less than 2% of

trans fatty acids because, as pointed out by the appellant, trans fatty acids are unsaturated acids.

Further, the use of a fatty acid composition as defined in feature (a3) with a high content of oleic acid overlaps with the teaching of D1 that suggests, as preferred fat, hydrogenated palm kernel oil with an oleic acid content of up to 24% (cf. D5, table 1, sum of the upper ranges of saturated, monounsaturated and disaturated C-18 acids).

Finally, the essential requirement of the fats of D1, namely that at least about 60 weight percent of the components solidifies at 4°C, embraces the harder fats covered by feature (a4).

4.6.3 In summary, in the absence of any unexpected effect, the selection of features (a1) to (a4) cannot establish an inventive step. The claimed emulsions are merely alternative emulsions to those exemplified in D1 and falling within the general scope of the disclosure of D1. The selection of the claimed emulsions within this general teaching would have been obvious for the skilled person and cannot establish an inventive step.

4.6.4 The appellant argued essentially that the claimed selection of features resulted in a technical effect, namely the whipping at higher temperatures and the absence of a waxy taste. This argument fails because such improvement has not been accepted by the board (see 4.4.5 above).

4.7 As a consequence, the requirements of Article 56 EPC are not met.

5. *Further requests*

5.1 As recorded in point IX, above, during the course of the oral proceedings the respondent filed two requests that the board should comment on certain issues. When filing the requests, the respondent made it clear that these requests were directed to what it wished to be contained in the board's written reasons for its decision.

5.2 There is no provision in the EPC or under the general law whereby a party can require a board of appeal to comment on particular issues in its written reasons for a decision. A request framed in such terms therefore has no foundation in law and is inadmissible. As regards the request to comment on T 0138/10, the board notes that the respondent did not even rely on this decision when arguing inventive step.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

3. The respondent's requests referred to point IX of this decision are rejected as inadmissible.

The Registrar The Chairman

M. Cañueto Carbajo W. Sieber