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**Datasheet for the decision
of 3 December 2013**

Case Number: T 1947/11 - 3.3.09

Application Number: 05107975.4

Publication Number: 1759591

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Language of the proceedings: EN

Title of invention:
Low-fat confectionery product

Patent Proprietor:
Nestec S.A.

Opponent:
Cadbury Holdings Limited

Headword:

Relevant legal provisions:
EPC Art. 54, 56, 83

Keyword:
Novelty - (yes)
Inventive step - (yes)
Sufficiency of disclosure - (yes)

Decisions cited:
T 0409/91, T 0608/07

Catchword:



**Beschwerdekammern
Boards of Appeal
Chambres de recours**

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Case Number: T 1947/11 - 3.3.09

D E C I S I O N
of Technical Board of Appeal 3.3.09
of 3 December 2013

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Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
30 June 2011 concerning maintenance of the
European Patent No. 1759591 in amended form.**

Composition of the Board:

Chairman: W. Sieber
Members: J. Jardón Álvarez
R. Menapace

Summary of Facts and Submissions

- I. This decision concerns the appeal filed by the opponent against the interlocutory decision of the opposition division that, as amended European patent No. 1 759 591 granted to Nestec S.A meets the requirements of the EPC.
- II. The opponent, Cadbury Holdings Limited, had requested revocation of the patent in its entirety on the grounds that the claimed subject-matter was neither novel nor inventive (Article 100(a) EPC), that the patent did not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Article 100(b) EPC) and that the patent contained subject-matter which extended beyond the content of the application as filed (Article 100(c) EPC).
- III. The documents cited during the opposition proceedings included:
- D1: EP 0 522 704 A2;
- D5: EP 0 547 658 B1;
- D6: US 5,102,680 A;
- D7: US 5,709,896 A;
- D8: US H1527;
- D9: WO 95/07027 A1;
- D10: WO 02/30212 A2;

D14: A. P. Imeson, "Carrageenan" in "Handbook of hydrocolloids" edited by G.O. Phillips and P.A. Williams, Woodhead Publishing Limited, 2000, pages 87 to 101 and table of contents;

D17: WO 2004/028281 A1;

EX1: Joanne Rowe and Abigail Hope; Experimental Report "Patent Opposition OPPO-B-053; Nestle Results" dated 14 February 2011 (26 pages); and

EX3: Declaration of Axel Syrbe dated 6 May 2011 (9 pages) including *curriculum vitae* (3 pages).

IV. In its decision, announced orally on 11 May 2011 and issued in writing on 30 June 2011, the opposition division acknowledged the allowability of the set of claims 1 to 8 of the main request filed during the oral proceedings.

Independent claims 1, 5, 6 and 8 as maintained by the opposition division read as follows:

"1. Low-fat confectionery product obtainable by process of claim 5 consisting of a water-in-oil emulsion comprising up 20% fat phase, 60-90% aqueous phase, cocoa particles, and at least a structuring agent."

"5. Process for manufacturing a low fat confectionery product according to one of claims 1 to 4 comprising the steps of:

- a) Mixing of the ingredients of the aqueous phase below 40°C
- b) Heating of the aqueous phase at a temperature above 50°C, preferably at a temperature greater than 70°C,

- c) Emulsification of the aqueous phase in the fat phase at a temperature above ambient, preferably at a temperature equal or greater than 50°C
- d) Cooling the water-in-oil emulsion at a temperature above ambient
- e) Adding particles in the fat phase."

"6. Low-fat confectionery product obtainable by the process of claim 9 [sic] comprising 0-20% fat phase, 60-90% aqueous phase, electrically charged cocoa particles and at least a structuring agent, the low-fat confectionery product being a co-suspension, wherein the cocoa particles of the co-suspension are coated with the structuring agent."

[Claim 6 refers to the process of a non-existing claim 9. This mistake originates from the renumbering of the claims during the opposition proceedings. The skilled reader would automatically recognise the mistake and understand that claim 6 should refer to the process of claim 8.]

8. Process for manufacturing a low fat confectionery product according to one of claims 6 or 7 comprising the steps of
- a) preparation of a water dispersion with a structuring agent like a globular protein or gelatin on one hand, and a water dispersion with a structuring agent like a polysaccharide on the other hand;
 - b) dissolution of sugars or other soluble material in water and flavoring agents, when present, in each dispersion;
 - c) mixing of each dispersion independently together with the particles;
 - d) adjustment of the pH of the dispersion to a value where both the polysaccharide and the protein chosen

carried opposite charges using an edible base or an acid;

e) mixing of the two suspensions. If one of the dispersions comprises fat, mixing is achieved at a temperature comprised between 30°C and 80°C preferably between 40°C-60°C, most preferably at 50°C."

Claims 2 to 4 and 7 were dependent claims.

V. The opposition division's position can be summarised as follows.

The amendments made addressed the objection under Article 123(2) EPC. The clarity objection against claim 6 was rejected because the objection concerned a feature already present in granted claim 7.

The opposition division also found that the requirements of sufficiency were fulfilled in view of the working examples in the patent and in the absence of proof from the opponent that the patent did not work over the whole claimed range.

Lastly, the opposition division found that:

- the subject-matter of claims 1 to 3 was novel over the disclosures of D5 and D6;
- the subject-matter of claims 6 and 7 was novel over the disclosures of D1 and D14; and
- the subject-matter of all claims involved an inventive step starting from document D8 as closest prior art.

VI. On 5 September 2011 the opponent (in the following: the appellant) lodged an appeal and on the same day paid the prescribed fee. The statement setting out the grounds of appeal was filed on 10 November 2011

together with the following further experimental evidence:

A4: Declaration of Edwin Eardley dated 7 November 2011 (1 page); and

A5: Joanne Rowe; Experimental Report "Patent Opposition Oppo-B-053" dated 7 November 2011 (21 pages).

The appellant requested that the decision under appeal be set aside and that the patent be revoked in its entirety on the grounds that the patent did not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Article 100(b) EPC) and on the grounds that the subject-matter of the claims lacked novelty and inventive step (Article 100(a) EPC).

VII. With its reply dated 25 May 2012 the patent proprietor (in the following: the respondent) disputed the arguments submitted by the appellant and requested that it be allowed to retain the patent as maintained during the oral proceedings of 11 May 2011 (main request) or, alternatively, that the patent be maintained in amended form with the sets of claims according to newly filed auxiliary requests 1 to 5.

The respondent also filed the following further evidence:

X1: Product information "Sugar Ester ER-190", internet page <http://www.mfc.co.jp/english/er190.htm>; and

X2: Axel Syrbe; "Experimental report for defence of patent EP1759591B1" dated 25 May 2012 (25 pages).

VIII. On 18 June 2013 the board dispatched a summons to oral proceedings. In a communication dated 1 July 2013 the board indicated the points to be discussed during the oral proceedings.

IX. Further submissions in preparation for oral proceedings were filed:

a) By the appellant with letters dated 20 September 2013 and 4 November 2013, including the following further evidence:

D18: WO 95/24831 A1; and

A6: Stewart Radford Experimental Report "Opposition to patent EP1759591" dated 4 November 2013 (9 pages).

b) By the respondent with letters dated 31 October 2013 and 29 November 2013. With the letter dated 31 October 2013, the respondent filed six auxiliary requests based on its previous auxiliary requests. The respondent additionally requested not to admit documents D18 and A6 into the proceedings as being clearly late-filed and not *prima facie* relevant.

X. On 3 December 2013 oral proceedings were held before the board. During the oral proceedings the appellant presented oral submissions concerning sufficiency of disclosure of claim 1 and inventive step of claim 1 starting from D18 as closest prior art document. As regards novelty the appellant referred to its written submissions. Lastly, it withdrew its objection that claim 6 of the main request lacked inventive step.

For its part the respondent withdrew its request that D18 and A6 not be admitted into the proceedings.

XI. The arguments presented by the appellant in its written submissions and at the oral proceedings, insofar as they are relevant for the present decision, may be summarised as follows:

- Claim 1 was not enabled over its full scope since it was not possible to obtain a water-in-oil emulsion at the lower end of the claimed range (e.g. 6% fat phase or less). The new evidence filed, A5 and A6, confirmed that it was impossible to produce water-in-oil emulsions over the whole claimed range, namely at or below a total system fat content of 8% fat. The appellant supported its arguments with the findings of decision T 0409/91, a decision very pertinent in its view for the present case.
- The subject-matter of claim 1 lacked novelty in view of claim 9 of D5, the chocolate frosting of table 2, column 15, of D6, the chocolate frosting of table 1 of D9 and the examples of tables 9-11 of D10. The subject-matter of claim 6 lacked novelty in view of example 3 of D1, the aqueous sugar dispersions of D7, the chocolate milk described on page 95 of D14 and the dispersed emulsion disclosed on page 12 of D17.
- The subject-matter of claim 1 lacked inventive step starting from the water-in-oil emulsions disclosed in D18, in particular starting from the water-in-oil emulsion of example I that included all the features of claim 1 except the cocoa particles. In view of this prior art, the

appellant saw the problem underlying the patent in suit as the provision of a chocolate-like product. The subject-matter of claim 1 lacked inventive step because it would be self-evident to add chocolate flavour to the emulsions of D18 to obtain a chocolate-like product. Moreover, D18 itself referred to cocoa powder as an optional ingredient of the emulsions therein disclosed. It would therefore be obvious to arrive at the claimed invention in view of the disclosure of D18 alone.

- The appellant disputed that the emulsions of claim 1 had improved properties when compared to those of D18, because there was no experimental evidence on file showing an unexpected effect (firmness or snapping) for the claimed emulsions or that any improvement were achieved by the way the cocoa powder was added. In any case, no inventive step could be seen in the way the cocoa powder was added to the emulsions. Although there were theoretically three possibilities of addition of the cocoa powder to the emulsions, the only logical one for the skilled person would be to prepare the emulsion first and then add the cocoa powder, the reason being that cocoa powder does not disperse well in water.

XII. The arguments of the respondent may be summarised as follows:

- Claim 1 of the patent was directed to a water-in-oil emulsion which amongst other things contained up to 20% fat phase. The objections of the respondent were flawed because the claim did not embrace embodiments containing unworkable

amounts of fat. Such embodiments did not fall under the scope of the claim because they did not result in water-in-oil emulsions.

- The claimed subject-matter was novel because none of the documents cited by the appellant disclosed explicitly or implicitly an embodiment falling within the scope of claims 1 or 6.

- Starting from the disclosure of example I of D8 as closest prior art, the respondent saw the problem underlying the subject-matter of claim 1 as the provision of an improved low-fat confectionery product having both a rich cocoa flavour mimicking the flavour of regular chocolates and a mouthfeel mimicking the texture of regular chocolates, in particular leading to similar melting firmness and snapping characteristics. The solution to this problem, namely the water-in-oil emulsions of claim 1 including cocoa particles added in the fat phase, was non-obvious in view of the cited prior art. In particular, D18 gave no hint to it, as the use of cocoa particles was merely optional and the process of D18 would result in cocoa particles being present not in the fat phase but in the aqueous phase.

XIII. The appellant requested that the decision under appeal be set aside and that European patent No. 1 759 591 be revoked.

XIV. The respondent requested that the appeal be dismissed (main request), or, alternatively, that the decision under appeal be set aside and that the patent be maintained in amended form on the basis of any of

auxiliary requests 1-6 filed with letter dated
31 October 2013.

Reasons for the Decision

1. The appeal is admissible.

MAIN REQUEST (claims maintained by the opposition division)

2. *Sufficiency of disclosure*

2.1 The invention relates to confectionery products with low fat content, whereby one embodiment is directed to low-fat water-in-oil emulsions comprising up to 20% fat phase (claim 1) and another embodiment is directed to low-fat co-suspensions comprising 0-20% fat phase (claim 6).

The objection of insufficiency of disclosure raised by the appellant is directed only against the water-in-oil emulsions of claim 1.

2.2 It is not disputed that it is possible to prepare water-in-oil emulsions according to claim 1. Indeed, the patent specification discloses in paragraphs [0034] to [0041] in detail how to prepare the claimed water-in-oil emulsions and further includes four working examples of emulsions according to claim 1, namely examples 4 to 7. Moreover, the examples in the patent were reworked several times by the appellant and by the respondent during the opposition and appeal proceedings (see EX1, A5 and A6 by the appellant and EX3 and X2 by the respondent).

2.3 The appellant argued that it was not possible to perform the invention over the whole range claimed. In particular, claim 1 was not reproducible over its full scope since it was not possible to obtain the claimed water-in-oil emulsions at the lower end of the claimed range of "up to 20% fat phase".

In its view this range was unduly broad, because the absence of a lower limit would imply that the value could be near zero. Consequently, the claim would embrace fat contents (e.g. 8% fat phase or less) which manifestly cannot result in water-in-oil emulsions.

The appellant supported this objection by the experimental reports A5 and A6 which showed that it was not possible to obtain water-in-oil emulsions using the process of the patent and having a fat content of 3.1% or 6.1% (see A5, last point of conclusions) or below 8% fat (see A6, conclusions).

2.4 In the board's judgement the insufficiency of disclosure objection is based on an erroneous interpretation by the appellant of the subject-matter covered by claim 1. It is clear for a skilled reader that a claim such as present claim 1 directed to a "water-in-oil emulsion" comprising "up to 20% fat" is limited in practice with regard to the lower limit of the fat range. In fact, very low amounts of fat would not be regarded as being covered by the claim because the skilled person knows that such low amounts of fat cannot result in water-in-oil emulsions. Furthermore, the board notes that claim 1 is drafted as a product-by-process claim. The skilled reader would realise that claim 1 seeks to embrace fat values which should be as low as can be attained with the process referred to in claim 1.

In other words, the skilled reader of claim 1 knows that there is an implicit lower limit for the amount of fat.

The gist of the appellant's insufficiency objection is that the exact lower limit is not known. Although the board accepts that there is a certain ambiguity associated with the lower limit of the fat content, this ambiguity exists only at the edge of the claim and does not permeate the whole claim. However, such a situation is rather an issue of clarity than sufficiency (see T 608/07, point 2.5 of the reasons).

- 2.5 The appellant further argued that it was not known what an unworkable level of fat is and that, in the hypothetical case that in the future water-in-oil emulsions with lower levels of fat could be prepared, such emulsions would infringe claim 1 although the patent specification does not disclose how to prepare them.

These arguments are not convincing. The skilled person failing to obtain a water-in-oil emulsion due to the use of an unworkable level of fat would automatically know from his general knowledge what measure to apply (increase the fat level) in order to transform this failure into success. The respondent has indicated that the skilled person would know that at levels below 6% it is almost impossible to produce stable water-in-oil emulsions (page 8, third paragraph of the letter dated 25 May 2012) and the board has no reason to doubt the accuracy of this affirmation. In any case, the precise lower limit of the amount of fat which allows the formation of a water-in-oil emulsion would to some extent vary depending on the components of the emulsion

(fat, emulsifier, structuring agent) and the process conditions used. As pointed out above, this is an issue relating to the clarity at the edge of the claim but not to sufficiency of disclosure.

As regards the appellant's question whether water-in-oil emulsions with a very low fat content obtained by an as yet unknown method would infringe the patent or not, the board notes that, as indicated above, the amount of fat is implicitly limited by the (admittedly broad) process referred to in claim 1. Thus, this question again relates to an ambiguity associated with the edge of the claim and cannot call into question the sufficiency of disclosure (see point 2.4 above).

2.6 Lastly, the finding above that claim 1 of the patent is sufficiently disclosed is not in contradiction with decision T 0409/91 (OJ EPO 1994, 653) cited by the appellant.

In that decision the board found that the claims relating to fuel oils containing wax crystals smaller than 1000 nanometers were not sufficiently disclosed because the appellant had admitted that no way of obtaining such claimed fuel oils was disclosed or could be found in the body of relevant common general knowledge. The application therefore lacked information about how to carry out the invention within the whole area claimed (point 2 of the reasons).

In contrast, the present invention can be carried out below the upper limit of 20% fat. There is also an implicit lower limit in the amount of fat in order to obtain a water-in-oil emulsion. Amounts of fat lower than this implicit limit do not result in water-in-oil

emulsions and are therefore not embodiments of the invention. The only issue in the present case is the ambiguity associated with this implicit lower limit. T 409/91 does not deal with this question.

2.7 For these reasons the board is satisfied that the requirements of sufficiency of disclosure are met.

3. *Novelty - claim 1*

3.1 Claim 1 is directed to a low-fat confectionery product and is drafted as a product-by-process claim (cf. "...obtainable by process of claim 5..."). According to EPO practice, such a claim defining a product in terms of a process is to be construed as a claim to the product as such.

Features of claim 1 are therefore, on the one hand, the "composition" features defining the ingredients of the confectionery product:

- (a) up to 20% fat phase,
- (b) 60-90% aqueous phase,
- (c) cocoa particles, and
- (d) at least a structuring agent;

and, on the other hand, the structural features derived from its process of manufacture, namely those of claim 5:

- (e) water-in-oil emulsion (third to last step of the process); and
- (f) the presence of the cocoa particles in the fat phase (last step of the process).

Accordingly, it is an essential requirement of the water-in-oil emulsions that the cocoa particles reside in the fat phase. This is achieved by adding the cocoa particles in the final step of the manufacture, since otherwise the emulsion would be broken (see [0041]).

3.2 Novelty of the subject-matter of claim 1 has been contested by the appellant in view of the disclosures of D5 (claim 9), D6 (chocolate frosting of table 2), D9 (chocolate frosting of table I) and/or D10 (examples of tables 9-11).

3.3 D5 is directed to a low-calorie confectionery filling composition comprising a fat-continuous emulsion with a fat content of 5-50 wt.% and a remainder of 95-50 wt.% wherein the remainder comprises water, at least one thickener other than gelatine, sweetener, and optionally one or more enumerated components. One of the enumerated components is a bulking agent (claim 1). According to claim 9 the bulking agent is selected from powdered or microcrystalline cellulose, insoluble fibres, such as cocoa powder, or plant fibres, such as fibruline[®].

Document D5, however, does not disclose that the - optional - cocoa powder resides in the fat phase. On the contrary, it is apparent from claim 1 as well as from page 2, lines 20 to 25 that the optional bulking agents form part of "the remainder" which includes the water. Thus, if cocoa powder is used as the bulking agent, it appears to be in the aqueous phase and not in the fat phase. Therefore, the emulsions of D5 differ from the claimed emulsions at least in that they do not include cocoa powder in the fat phase (feature (f) of claim 1).

3.4 Document D6 generally relates to a reduced-fat ready-to-spread frosting which nonetheless exhibits a spreadable consistency for an extended shelf life. The chocolate frosting shown in table 2 (column 15) has a maximum fat phase content (emulsified shortening and emulsifiers) of 6.53% of the total emulsion. The emulsion contains 5% cocoa powder. The remaining components constitute the aqueous phase, which therefore forms 88.47% of the emulsion. Included in these is agar, which is a polysaccharide capable of binding water, and which therefore qualifies as a structuring agent as required by the patent in suit.

However, D6 does not specify that the emulsions therein disclosed are water-in-oil emulsions as required by claim 1. The board cannot accept the argument of the appellant that the fact that the compositions of D6 are said to have the same organoleptic and textural attributes comparable to conventional high-fat, high-calorie frostings (column 3, lines 42 to 44) represents an implicit disclosure of water-in-oil emulsions. This paragraph is silent about the nature of the compositions of D6. The fact that it has comparable textural attributes to high-fat high-calorie frosting does not allow the conclusion that the frostings of D6 are water-in-oil emulsions. Moreover, as indicated by the respondent, the reference in column 12, lines 52 to 54 to the influence of water on the frosting's viscosity appears to indicate that the continuous phase is water. The frosting compositions of D6 differ from the subject-matter of claim 1 at least because there is no specific disclosure of water-in-oil emulsions with cocoa particles in the fat phase (features (e) and (f) of claim 1).

3.5 D9 is concerned with low-fat spreadable compositions such as a frosting for use alone or with any type of comestible baked goods (abstract). The compositions comprise effective amounts of sweeteners, shortening, starch, hydrocolloids, and water (claim 1). The chocolate frosting of table 1 (page 13) has a fat phase content (the emulsified shortening) of 7%. The bulk of the remainder, excluding the insoluble starch and cocoa powder, forms the aqueous phase, giving an aqueous phase content of 85.70%. The example includes cocoa powder, as well as hydrophilic starch and pectin (structuring agents in the terminology of the patent).

As admitted by the appellant, the structure of the chocolate frosting is not explicitly disclosed in D9. Moreover there is no disclosure in D9 of the addition of the cocoa powder into the fat phase. Therefore D9 does not disclose features (e) and (f) of claim 1.

3.6 Lastly, D10 discloses low-fat, low-calorie chocolate spreads (abstract). The examples of tables 9 to 11 all have maximum fat phases of less than 20% and contain inulin (a structuring agent).

However, the structure of the spreads of D10 is not disclosed in the document. As pointed out by the respondent, the protocol employed in D10 would surely produce an oil-in-water emulsion. The order of ingredient addition is shown, for example, in figure 1 of D10 (see especially steps 1 to 5 [aqueous phase containing cocoa powder] and step 9 [addition of fat phase]). Consequently, D10 does not disclose an embodiment covered by claim 1.

3.7 In summary, none of D5, D6, D9 or D10 anticipates the subject-matter of claim 1.

4. *Novelty - claim 6*

4.1 Claim 6 is directed to a low-fat confectionery product and is also drafted as a product-by-process claim (cf. "...obtainable by process of claim 9..."). According to EPO practice, such a claim defining a product in terms of a process is to be construed as a claim to the product as such.

Features of claim 6 are therefore, on the one hand, the "composition" features defining the ingredients of the confectionery product:

- (g) 0-20% fat phase,
- (h) 60-90% aqueous phase,
- (i) electrically charged cocoa particles, and
- (j) at least a structuring agent;

and, on the other hand, the structural features derived from its process of manufacture:

- (k) co-suspension,
- (i) wherein the cocoa particles are coated with structuring agents of opposite charge.

4.2 Novelty of the subject-matter of claim 6 has been contested by the appellant in view of the disclosures of example 3 of D1, the aqueous sugar dispersions of D7, the chocolate milk described on page 95 of D14 and the dispersed emulsion disclosed on page 12 of D17.

4.3 Example 3 of D1 discloses a fat-free chocolate icing comprising agar agar, tapioca starch and milk solids.

There is no mention in D1 of electrically charged cocoa particles or of a coating of these particles. In fact, the claimed co-suspensions are obtained by, amongst other things, adjustment of the pH of the water dispersions containing the structuring agent in order to improve the stability of the co-suspension and to avoid the separation of phases. No pH adjustment is carried out in D1, indicating that electrostatic interactions are not present in the icing of D1. Consequently, the disclosure of D1 does not anticipate the subject-matter of claim 6.

- 4.4 D7 is concerned with aqueous sugar dispersions for use in coatings, such as to replace chocolate (column 1, lines 15 to 17). The dispersions contain an aggregate of microcrystalline cellulose and a polysaccharide gum (column 1, lines 39 to 41) and may also contain protein (column 2, lines 45 to 47) and up to 20% fat (column 1, line 66).

There is no indication of pH adjustment in D7 and of pH values at all in the examples of D7. Further, the structuring agents are not charged. The disclosure of D7 is therefore not novelty-destroying for the subject-matter of claim 6.

- 4.5 D14 describes on page 95, second and third paragraphs, chocolate milk in which cocoa particles are held in suspension by the interaction of k-carrageenan with casein proteins. In figure 5.7 the casein micelles and the carrageenan molecules are electrostatically charged.

There is however, as admitted by the appellant, no mention in D14 of the fat and aqueous content of the chocolate milk. There is further no disclosure in D14

that the product contains electrically charged cocoa particles, or that the product is a co-suspension as required by claim 6.

- 4.6 Lastly, the appellant argued that claim 6 lacked novelty over the disclosure of D17 although it admitted that the inventors in D17 refer to the composition as an emulsion and that D17 does not explicitly refer to the cocoa particles being coated.

D17 covers interfacial stabilisation of air or oil with protein-polysaccharide complexes formed at the same time as the interface, but not suspensions like the ones covered by claim 6.

- 4.7 For these reasons, none of documents D1, D7, D14 or D17 anticipates the subject-matter of claim 6.

5. *Inventive step*

- 5.1 The set of claims of the main request includes two independent product claims, namely claims 1 and 6. During the oral proceedings the appellant withdrew its objections concerning inventive step of claim 6. It remains therefore to be decided whether the subject-matter of claim 1, as well as the subject-matter of claims 2 to 5 which are directly or indirectly dependent on claim 1, involves an inventive step.

- 5.2 The invention relates to confectionery products with low-fat contents. The patent aims to provide such products with both a rich cocoa flavour mimicking the flavour of regular chocolates and a mouth feel mimicking the texture of regular chocolates (paragraph [0009]). However, as pointed out by the respondent, the patent does not aim to provide a real chocolate

equivalent, but rather to improve low-fat confectionery products, bringing them closer to the gold standard of "regular chocolates".

- 5.3 Both parties agreed on document D18, and in particular the embodiment of example I, as representing the closest prior art. This example discloses the preparation of a low-calorie filling composition which is a water-in-oil emulsion comprising 20% fat phase and 80% aqueous phase. The emulsion includes Litesse®, a polydextrose which according to the appellant is a structuring agent within the context of claim 1. This finding was not contested by the respondent.

The emulsion of example 1 of D18 differs from the subject-matter of claim 1 in that it does not contain cocoa particles. In this context, D18 merely contains the following statement (passage bridging pages 4 and 5):

"Also solids of particular matter with a particle size between 0.1-200 µm, preferably 1-25 µm can be incorporated in our fillings. Examples being: cocoa powder, TiO₂, colorants and opacifiers."

However it is not apparent from D18 in which phase the solid particles, in particular cocoa particles, would be located when used in the process of D18.

- 5.4 According to the respondent, the problem underlying the patent in the light of D18 was to provide a low-fat confectionery product that is superior to other low-fat confectionery products and thus having both a rich cocoa flavour mimicking the flavour of regular chocolates, and a mouthfeel mimicking the texture of regular chocolates, in particular leading to melting,

- firmness and snapping characteristics similar to those of regular chocolates.
- 5.5 As discussed with the parties during the oral proceedings, the evidence on file is silent about the snapping characteristics of the claimed water-in-oil emulsions and there is no evidence on file showing that the emulsions of claim 1 present any superior snapping characteristics over those of D18.
- 5.6 Consequently, the problem underlying the present invention has to be reformulated in a less ambitious manner that does not include any improvement in the snapping properties, i.e. as being to provide a low-fat confectionery product mimicking the flavour of regular chocolate and a mouthfeel mimicking the texture of regular chocolates and having superior firmness to the products of D18.
- 5.7 This problem is solved by the claimed water-in-oil emulsions which differ from those of D18 essentially by the use of cocoa particles and by the preparation process which requires the addition of the cocoa particles in the fat phase (step e)) at the end of the process, namely once the aqueous phase droplets have been gelled (step d)). By carrying out the process as required by the claim a low-fat confectionery having the required firmness is obtained.
- 5.8 Although a direct comparison between the emulsion of D18 and the claimed emulsions has not been made, the board is satisfied that this less ambitious problem is credibly solved by the water-in-oil emulsions of claim 1. While the emulsions of example I of D18 are confectionery fillings, the emulsions of examples 4 to 7 of the patent as repeated in the additional

evidence filed by the respondent show that following the process steps as required by claim 1, water-in-oil emulsions with chocolate-like character, namely having initial bite, a certain firmness and the typical appearance of a fat-continuous confectionery, are obtained (see, in particular X2, page 2, sixth paragraph and page 12, second paragraph; see also page 7).

The board cannot accept the objections of the appellant that no improvement has been achieved by the claimed emulsions because they can also be used as a chocolate filling or a chocolate cream (cf. paragraph [0012] of the specification). This paragraph refers in a general way to the products of the invention which includes, the water-in-oil emulsions of claim 1 and the co-suspensions of claim 6. In fact in example 1 the co-suspension therein prepared is said to be used to make a filling in a chocolate.

In fact, water-in-oil emulsions according to claim 1 have also been prepared by the appellant, from which the conclusion was drawn that "the samples with more than 8% [fat] had a surprisingly firm structure (albeit at 5°C) and a pleasant melting sensation in the mouth" (A6, page 7, third paragraph from the bottom, emphasis by the board).

- 5.9 It remains to be decided whether or not the claimed solution is obvious over the cited prior art. Taking into account that D18 already suggests in the paragraph bridging pages 4 and 5 the use of cocoa powder as a possible ingredient of the confectionery fillings therein prepared, the relevant question is whether the skilled person would have added the cocoa powder into

the fat phase and would have modified the process of D18 so that a firm structure would be obtained.

- 5.9.1 In the board's judgement this would not be the case. As indicated above, D18 aims to provide low-fat confectionery fillings and low-fat spread compositions having in particular a better stability upon spreading (page 1, line 35 to page 2, line 2). D18 is silent about any desired firmness of the obtained emulsions.

Moreover, there is no motivation in D18 to add the cocoa powder, which is only an optional ingredient, into the fat phase. On the contrary, as indicated by the respondent, D18 aims to improve the process of preparation of confectionery filling compositions disclosed in D5 and in that document the optional cocoa particles are added into the water phase.

- 5.9.2 The board can also not accept the appellant's argument that the only logical way to add the cocoa powder would be into the oil phase after formation of the (final) emulsion. In fact, in the process of D18 all ingredients are added at the very beginning of the process before the formation of the oil-in-water emulsion which is afterwards inverted to give the water-in-oil emulsion. In this context it is noted that in examples II and III the colourant (according to the passage bridging pages 4 and 5 an example of a solid of particular matter) is added to the aqueous phase. In fact, these examples appear to confirm the argument of the respondent that the skilled person would incorporate any solid, like cocoa powder, into the aqueous phase.

- 5.9.3 In summary, D18 gives no hint to add the cocoa particles to the fat phase of the (final) water-in-oil

emulsion in order to obtain a product of superior firmness. It appears that the appellant's arguments in this context have been made *a posteriori*, with the benefit of hindsight.

5.10 In view of the above, the board concludes that the person skilled in the art would not have arrived in an obvious manner at the subject-matter of claim 1. By the same token, the subject-matter of claim 5, which relates to a process for manufacturing the products of claim 1, and the subject-matter of dependent claims 2 to 4 also involves an inventive step.

5.11 Concerning claims 6 to 8, it is noted that the opposition division acknowledged an inventive step for the subject-matter of these claims and that the appellant withdrew its inventive-step objections against these claims (see point X above).

AUXILIARY REQUESTS

6. As the main request of the respondent is allowable, there is no need for the board to deal with the auxiliary requests.

Order

For these reasons it is decided that:

The appeal is dismissed

The Registrar:

The Chairman:



M. Cañueto Carbajo

W. Sieber

Decision electronically authenticated