

**Internal distribution code:**

- (A)  Publication in OJ  
(B)  To Chairmen and Members  
(C)  To Chairmen  
(D)  No distribution

**Datasheet for the decision  
of 18 December 2008**

**Case Number:** T 1481/06 - 3.3.09

**Application Number:** 99913866.2

**Publication Number:** 1069831

**IPC:** A23G 1/00

**Language of the proceedings:** EN

**Title of invention:**

Reduced-fat confectioneries comprising emulsifying agent combinations, and preparation thereof

**Patent Proprietor:**

Mars, Inc.

**Opponent:**

NESTEC S.A.

**Headword:**

-

**Relevant legal provisions:**

EPC Art. 56

**Relevant legal provisions (EPC 1973):**

-

**Keyword:**

"Inventive step (no)"

**Decisions cited:**

-

**Catchword:**

-



Case Number: T 1481/06 - 3.3.09

**D E C I S I O N**  
of the Technical Board of Appeal 3.3.09  
of 18 December 2008

**Appellant:**  
(Opponent)

NESTEC S.A.  
Avenue Nestlé 55  
CH-1800 Vevey (CH)

**Representative:**

Marchant, James Ian  
Elkington and Fife LLP  
Prospect House  
8 Pembroke Road  
Sevenoaks  
Kent TN13 1XR (GB)

**Respondent:**  
(Patent Proprietor)

Mars, Inc.  
6885 Elm Street  
McLean  
VA 22101-3883 (US)

**Representative:**

Cornish, Kristina Victoria Joy  
Kilburn & Strode  
20 Red Lion Street  
London WC1R 4PJ (GB)

**Decision under appeal:**

Interlocutory decision of the Opposition  
Division of the European Patent Office posted  
19 July 2006 concerning maintenance of European  
patent No. 1069831 in amended form.

**Composition of the Board:**

**Chairman:** P. Kitzmantel  
**Members:** N. Perakis  
K. Garnett

## Summary of Facts and Submissions

I. Mention of the grant of European patent No 1 069 831 in respect of European patent application No 99913866.2 in the name of Mars Inc., which had been filed as International application No PCT/US 99/05457 on 12 March 1999 claiming a US priority of 12 March 1998 (US 41325), was announced on 14 May 2003 (Bulletin 2003/20). The patent entitled "Reduced-fat confectioneries comprising emulsifying agent combinations, and preparation thereof" was granted with seventeen claims. Independent method Claim 12 read as follows:

"12. A method of preparing a reduced-fat confectionery comprising a total fat content of less than 25% by weight and an emulsifying agent combination comprised of a base emulsifying agent and at least one other emulsifying agent, said method comprising:

- (a) mixing fat and solid-containing confectionery ingredients;
- (b) conching the ingredient mixture;
- (c) adding the base emulsifying agent to the mixture;
- (d) adding the at least one other emulsifying agent to the mixture containing the base emulsifying agent to form a confectionery mix;
- (e) mixing the confectionery mix; and
- (f) forming the reduced-fat confectionery;

wherein the base emulsifying agent is selected from the group consisting of lecithin,

fractionated lecithin, sucrose polyerucate, sucrose polystearate, mono-phosphate derivatives of mono- and di-glycerides/diacetyl tartaric acid esters of mono- and di-glycerides, ammonium phosphatides and combinations thereof, and the at least one other emulsifying agent is selected from the group consisting of sucrose polyerucate, polyglycerol polyricinoleate, and combinations thereof, provided that when the base emulsifying agent is solely ammonium phosphatides, the at least one other emulsifying agent is not solely polyglycerol polyricinoleate; and wherein said emulsifying agent combination is effective to provide the reduced-fat confectionery having a yield value of less than 250 dynes/cm<sup>2</sup> and a plastic viscosity of less than 100 poise."

- II. A Notice of Opposition was filed against the patent by NESTEC S.A. on 13 February 2004. The Opponent requested the revocation of the patent in its entirety, relying on Articles 100(a), 100(b) and 100(c) EPC.

The opposition was *inter alia* supported by the following documents:

- D3 : US 5 709 903
- D4 : WO 96/17523
- D5 : WO 96/19923
- D6 : J.W. Du Ross, "Functionality of selected surfactants in Chocolate and Compound Coatings", The Manufacturing Confectioner, 1987(6), pp 105-110

- D7 : Brochure "Palsgaard® 4125", dated Nov. 1996  
(incomplete copy replaced during the appeal  
procedure by D27)
- D9 : Brochure "Palsgaard® 4445", dated January 1997
- D10: WO 95/10946
- D11: G.L. Hasenhuettl and R.W. Hartel, "Food  
Emulsifiers and Their Applications", Chapman and  
Hall, 1997, pp 236-244
- D17: Statutory Declaration of Peter William Cooke dated  
29 March 2006
- D21: M. Weyland, "Functional Effects of Emulsifiers in  
Chocolate", The Manufacturing Confectioner,  
1994(5), pp 111-117

III. By an interlocutory decision orally announced on 31 May 2006 and issued in writing on 19 July 2006 the Opposition Division maintained the patent on the basis of Claims 1-12 of the second auxiliary request filed during the oral proceedings held on 31 May 2006. Claim 1 of that request was identical to Claim 12 of the granted patent.

With regard to the issue of inventive step, the Opposition Division considered D4 to represent the closest state of the art, because it disclosed a method for preparing low-fat chocolates suitable for enrobing. The distinguishing feature of the claimed method boiled down to the sequential addition after conching of a base emulsifier and other emulsifiers. According to the Opposition Division the skilled person starting from D4 and seeking a preparation method for reduced-fat confectionery products suitable for enrobing which could be carried out on conventional equipment by conventional techniques would not find any indication

in the available state of the art that this could be achieved by the claimed sequential addition of selected emulsifiers. It thus concluded that the claimed method involved an inventive step.

IV. On 19 September 2006 the Opponent (Appellant) lodged an appeal against the decision of the Opposition Division and paid the appeal fee on the same day.

V. In the Statement setting out the Grounds of Appeal filed on 20 November 2006, the Appellant refuted the conclusions of the Opposition Division, *inter alia* those relating to the issue of inventive step, and requested the revocation of the patent in its entirety. It also filed document D27, which was said to be a complete version of D7.

Throughout the written appeal proceedings the Appellant considered D27 to represent the closest state of the art. It argued that this document disclosed the sequential addition of the specific emulsifier polyglycerol polyricinoleate (PGPR) and lecithin during the preparation of low-fat chocolate which exhibited the correct yield and viscosity properties without requiring any modification of conventional equipment and procedures. According to the Appellant the claimed method was distinguished over that of D27 in that it aimed at preparing low-fat chocolates with even lower fat content, namely of less than 25% by weight. The Appellant argued that the skilled person starting from D27 would arrive at the claimed invention in an obvious way.

VI. With a letter in reply dated 23 March 2007 the Respondent on the one hand filed a new main request, comprising Claim 1 as maintained by the interlocutory decision of the Opposition Division (and identical to Claim 12 of the granted patent) and a reduced number of claims appended thereto, namely Claims 2 to 6, and on the other hand contested the arguments of the Appellant.

In particular with regard to the issue of inventive step it took the view that each of D3, D4 or D10 could be considered to represent the closest state of the art because these documents dealt with low-fat chocolate and belonged therefore to the technical field of the claimed invention. The technical problem solved by the claimed method in view of these prior art documents was considered to be the provision of low-fat chocolate having useful rheological properties that could be commercially prepared by using conventional equipment and procedures, ie without the necessity of any extra step(s) in these procedures and without any modification of the standard equipment. According to the Respondent, the skilled person starting from D3, D4 or D10 would, however, realize that, in order to arrive at a chocolate having the required rheological properties, additional processing steps had to be performed. Since there was no reason for him to conclude that this additional effort could be avoided by the sequential addition of the specific emulsifiers, the claimed method was not obvious and thus involved an inventive step.

VII. On 18 December 2008 oral proceedings were held before the Board. At these oral proceedings the Patent Proprietor (Respondent) requested the deletion of

dependent Claim 6 from its sole request in order to overcome the objection under Article 123(3) EPC raised during these proceedings against the subject-matter of Claim 6. Furthermore, the Opponent (Appellant) filed the following documents:

D7' : Brochure "Palsgaard® 4125" dated Nov. 1996,  
corresponding to the copy previously filed as D27  
and to the incomplete copy previously filed as D7  
D7'' : Brochure "Palsgaard® 4125" dated Sep. 1995

in order to establish that D7 and D27 were both copies of the same document, namely D7', which was publicly available before the priority date of the patent in suit and that D27 was the complete copy of D7'.

Document D7'' was filed in order to show that the technical information concerning Palsgaard® 4125 had been issued for commercial reasons many times before the priority date of the patent in suit. The Patent Proprietor did not contest these facts.

VIII. The arguments put forward by the Appellant (Opponent) in its written submissions and at the oral proceedings can be summarized as follows:

- D27 belonged to the state of the art because it represented a piece of commercial literature to be widely distributed to potential customers; as such it was made available to the public at its issue date of November 1996, ie prior to the priority date of the patent in suit. D27 was a full copy of D7', as demonstrated by the submission of the latter at the oral proceedings held before the Board, whereas D7 was an incomplete copy of it. The fact that an



incomplete copy had been originally submitted by the former representative could not be explained but it seemed that either its genuine relevance had not been correctly appreciated or that it was due to a simple copying mistake.

- Furthermore, the Patent Proprietor was aware of the technical content of D7' because it was identical to that of D7'', the latter having been cited in the International Search Report drafted by the USPTO for the originally filed PCT patent application from which stemmed the patent in suit.
- The method of Claim 1 lacked an inventive step over the disclosure of D27 considered as the closest state of the art.
- D27 should indeed be considered as the closest state of the art and not D3, D4 or D10 as argued by the Patent Proprietor. D27 dealt with a method for preparing a reduced-fat chocolate using conventional equipment and procedures.
- Although D3 aimed at a fat content of 20 to 24.5% by weight, that content was achieved by non-standard chocolate-making method steps, which meant that the true objective of D3 was not to find a method that used only conventional equipment and procedures.
- With regard to the methods disclosed in D4 and D10, they actually involved quite complicated chocolate making techniques aimed at an adequate flavour development rather than the reduction of fat content *per se*.
- Contrary to the arguments of the Patent Proprietor, D27 (diagram at page 4) disclosed the sequential addition of the emulsifiers. A sequential addition was clearly suggested in D27 because different boxes of different colour for each emulsifier were used

(green and yellow) and different arrows from each box pointed towards the white box of the conching step in a specific order and at different times.

- There could be no doubt that the person skilled in the art interpreting that diagram using his general technical knowledge, namely that lecithin, known as a viscosity-reducing chocolate-making ingredient since the 1930's, would conclude that lecithin was applied first in order to allow the processing of the mixture and that PGPR, known to reduce the yield point, was applied later when the chocolate mass was required to flow.
- Since both emulsifiers were thick viscous liquids, it was unrealistic to assume that they had been applied as a blended mixture: it would have been difficult to blend them and for that reason it was unrealistic to consider the use of such blend in a commercial manufacturing process.
- The comparison of the subject-matter of Claim 1 with the disclosure of D27 showed that the only distinguishing feature related to the level or reduction of fat content. According to the claimed method it was reduced to less than 25% by weight, whereas D27 disclosed a reduced fat content of 27% by weight.
- Contrary to the allegations of the Respondent, as regards the manufacturing and compositional properties of the chocolate, a content of 25% by weight of fat did not have any particular technical significance. A chocolate with a fat content of less than 25% by weight was not different in principle from a chocolate with a fat content of just more than 25% by weight. This value had only a legal significance as some countries did not allow the

sale of confectionery with less than 25% by weight fat under the name of chocolate (D4, page 4, lines 21-23).

- Furthermore, the argument of the Respondent, that the relation between the rheological properties of the confectionery product and its fat content was no longer linear at values of less than 25% by weight but rather logarithmic, was not based on any technical evidence.
- The objective of the patent in suit was to produce chocolate with a fat content of less than 25% by weight having rheological properties that allowed its use for enrobing, that chocolate being commercially prepared using conventional equipment and procedures.
- The solution to that problem was to adopt a method exactly in accordance with D27 and apply it to starting materials which were such as to give a confectionery product with a fat content of less than 25% by weight.
- That solution was however obvious in view of D27.
- The diagram in D27 (page 5) comprised values of chocolate fat content down to 27% by weight. At the same time D27 (page 3, last line) already provided the skilled person with the reasonable expectation that going below 27% by weight would still afford acceptable rheological properties.
- It was admitted that the skilled person knew that by decreasing the fat content below 27% by weight, the product would become thicker and eventually a point would be reached where the product would become so thick that it could not flow at all or could only be processed with difficulty. However, the values for yield point and plastic viscosity quoted in D27 were

so far below the limits specified in Claim 1 of the opposed patent that the skilled person would confidently expect that the fat content could be reduced from 27% by weight to 25% by weight and lower before the limit values for yield point and plastic viscosity specified in the claim were exceeded.

- An indication for a reasonable expectation of success was also provided by D11 (page 244, end of section; page 243, end of first paragraph) which disclosed that if a blend of 0.2% by weight PGPR and 0.5% by weight lecithin was used, the cocoa butter content of the chocolate could be reduced by 8% by weight. On this basis the skilled person would have expected the successful reduction of the fat content to below 25% by weight.
- Furthermore, the skilled person would find in other prior art documents the motivation to further reduce the fat content in chocolate. Thus, D3 disclosed that non standardized chocolate ranged between 25.4-26.0% by weight fat (column 5, lines 29-36) and that chocolate manufacturers aimed at reducing chocolate's fat content both for economic reasons and because some consumers might perceive them as being more healthy.
- Furthermore, even if it were admitted that D27 did not disclose the claimed sequential addition of emulsifiers, this difference would not justify the acknowledgment of an inventive step because the Patent Proprietor had not demonstrated by technical evidence that this procedural step was associated with any technical effect.
- The technical evidence in the opposed patent (Example 1, paragraph [0033]) did not disclose the

sequential addition of emulsifiers. On the contrary, this Example (see in particular lines 15-16) referred to "test emulsifier combinations" which could be interpreted to mean that the emulsifiers were first blended and then added at the conching stage.

- Moreover the patent itself (see paragraph [0022]) indicated that the order of addition of the emulsifiers was of no importance, since it disclosed that the addition of the emulsifiers could take place in any order.
- Finally the argument of the Patent Proprietor that Example 1 should be interpreted in the light of the general disclosure of the patent specification could not be accepted, since an example should be self-contained.

IX. The arguments put forward by the Respondent (Patent Proprietor) in its written submissions and at the oral proceedings can be summarized as follows:

- The method of Claim 1 involved an inventive step.
- The skilled person would consider one of D3, D4 and D10 to represent the closest state of the art because they belonged to the technical field of low fat chocolate with a fat content of less than 25% by weight.
- D27, which did not concern a low fat chocolate with a fat content of less than 25% by weight, should not be considered as the closest state of the art.
- The fat content of less than 25% by weight was neither arbitrary nor unknown to the skilled person. Such a fat content was already disclosed in the state of the art, namely D3 (column 5, lines 58-59),

D4 (page 4, last paragraph) and D10 (page 6, lines 5-6).

- There was a significant technical difference between chocolates with a fat-content of 25% by weight and those with 27% by weight. The reduction of the fat content by 2% by weight had a huge impact on the method. It influenced significantly the yield value and the plastic viscosity.
- The relationship between these properties and the fat content at values below 25% by weight was not linear but logarithmic. The critical point of the change of that relationship was not directly and unambiguously derivable from D27 or the rest of the submitted state of the art. D27 (page 5, diagram) did not provide any information for fat contents lower than 27% by weight.
- Furthermore D27 did not directly and unambiguously disclose the sequential addition of the emulsifiers.
- Though the diagram on page 4 comprised two arrows, each relating to an emulsifier (represented by a green and a yellow box), they both pointed towards the middle of a white box defined as "1 hour before end of conching process", which meant that they both pointed to the same chronological moment of the conching step. Under these circumstances the skilled person would immediately understand that both lecithin and Palsgaard 4125 (PGPR) should be added one hour before the end of the conching process.
- Anyway there was no disclosure in D27 relating to the importance of the order of addition of the emulsifiers.
- Nor would the skilled worker consider that the simultaneous addition of the two emulsifiers was technically problematic, thus suggesting a different

manner of addition. On the contrary, the Appellant itself carried out conching with the simultaneous addition of lecithin and PGPR without encountering any technical difficulty (see D17: page 5, last paragraph).

- Furthermore, D27 contained limited technical information and it was not clear if special processing steps were involved or not.
- The skilled person starting from D27 and aiming at reducing the fat content would not find any guidance in the state of the art concerning the measures to be taken in order to successfully achieve this aim. Already the state of the art (see D4, page 1, 8 lines from the bottom) disclosed the technical restraints resulting from the fat reduction in chocolate compositions.
- Consequently D27 when combined with the common general knowledge of the skilled person would not lead to the method of the opposed patent.
- Considering D3, D4 or D10 as the closest state of the art the technical problem to be solved by the claimed method was to provide low fat chocolate with useful rheological properties which could be commercially prepared using conventional equipment and procedures, without the addition of any extra steps to standard procedures and without any modification to standard equipment.
- The skilled person departing from any of D3, D4 or D10 would realize that these documents neither disclosed standard equipment and processes nor suggested that the solution of the technical problem could be overcome by adding the two emulsifiers sequentially.

- The solution of the technical problem was shown in the experimental part of the patent specification, which provided a clear description of the sequential addition of the emulsifiers. It was clear to the skilled person that the disclosure of Example 1 should be read in connection with the disclosure of paragraph [0021] and Table 1.
  - Example 2 related to another invention and was irrelevant.
  - The position of the Respondent that technical evidence was necessary to establish a beneficial effect of the choice of the sequential addition of the emulsifiers was wrong. The reason was that D3, D4 or D10 represented the closest state of the art. The benefit of the claimed method over the closest state of the art was that it involved standard (simpler) processes and equipment.
  - With regard to the objection relating to the statement in paragraph [0022] of the description of the patent in suit and in particular to the disclosure that "when the base emulsifying agent comprises two or more emulsifying agent ingredients ... the emulsifying agent ingredients may be added in any order or may be added simultaneously", that statement concerned exclusively the addition of the "more than one base emulsifiers" and not the order of a base emulsifier and another emulsifier.
- X. The Appellant (Opponent) requested that the decision under appeal be set aside and that the patent be revoked in its entirety.



XI. The Respondent requested that the patent be maintained in amended form on the basis of Claims 1-5 according to its sole request filed with letter of 23 March 2007.

### **Reasons for the Decision**

1. The appeal is admissible.
2. *Admissibility of document D27*

According to the Appellant the brochure D27, which concerns the product Palsgaard<sup>®</sup> 4125, is a complete copy of D7', a brochure from Palsgaard Industri A/S, the manufacturer and marketer of "Palsgaard" polyglycol polyricinoleate (PGPR) emulsifiers destined for the use in chocolate and confectionery.

D27 was filed by the Appellant with its written statement setting out the grounds of appeal dated 19 November 2006. In view of its *prima facie* relevance, as this will become apparent below, the Board decided to admit it into these appeal proceedings.

As regards its publication date, the Board accepts the explanations of the Appellant, which were not contested by the Respondent, and according to which the publication date of D27 was November 1996 (printed on the last page of this document; see the vertical line at the bottom right corner). Under these circumstances, it is concluded that D27 became available to the public before the priority date (12 March 1998) of the opposed patent.

As regards its content, the Appellant filed at the oral proceedings document D7', the original brochure from which D27 was copied, which allowed it to be confirmed that the content of D27 was indeed identical to that of D7'. The Respondent did not raise any objection in this respect.

3. *Claim 1 - Novelty*

At the oral proceedings held before the Board the Appellant withdrew the novelty objections raised in the written phase of the appeal. The Board concurs with the parties that the claimed method is novel over the disclosure of all submitted documents.

4. *Claim 1 - Inventive step*

4.1 Closest state of the art

4.1.1 In the Appellant's view, and the Board concurs with it, D27 should be considered as the closest state of the art. The reason is that D27 relates to a method for preparing chocolate confectionery which has a reduced fat content and good rheological properties using conventional equipment and procedures. In this way D27 not only belongs to the technical field of preparing low fat content confectionary products but also achieves the desired aim by using the same conventional technical means (emulsifiers, equipment and procedures) as the opposed patent.

4.1.2 The Board does not concur with the Respondent that any of D3, D4 or D10 could be considered to represent the closest state of the art.

D3 (abstract; column 1, lines 9-25; column 5, lines 49-62; claim 1) relates to low fat confectionery products with a fat content of 20 to 24.5% by weight but which are prepared by a non-standard chocolate making step of adding water in the presence of a surfactant to remove ultrafine particles and then removing the water. Accordingly, D3 does not concern a method that only uses conventional equipment and procedures.

D4 (abstract; page 4, lines 19-21; page 10, lines 1-8; claim 1) relates to a method of making chocolate with a preferred fat content of less than 25% by weight. This method relates to the preparation of chocolate by mixing two chocolate portions, a major portion of a chocolate composition having a fat content higher than the desired final fat content with a minor proportion of a chocolate having a fat content lower than the desired final fat content. The method of D4 is not a conventional process. Moreover it does not concern the preparation of chocolate with the specific rheological properties of the claimed confectionery products.

D10 (page 3, last paragraph; page 6, lines 1-6; page 9, last paragraph; claim 1) also relates to a method of making a chocolate with a desired fat content which involves making a chocolate with a fat content higher than that desired and then reducing the fat content by pressing the chocolate. Thus D10 does not disclose conventional equipment and procedures. Nor does D10 address the issue of chocolate rheological properties. It is additionally remarked that the main purpose of the method of D10 appears to be to ensure adequate

flavour development rather than the reduction of fat content *per se*.

4.1.3 Comparing the claimed subject-matter with the closest state of the art D27 (in particular the diagram on page 4) the Board considers that it is distinguished from the disclosure of D27 with regard to:

- the addition of the emulsifiers, which according to Claim 1 shall be sequential whereas D27 does not directly and unambiguously disclose the sequence of addition, and
- the fat content of the confectionery, which according to the Claim 1 shall be less than 25% by weight whereas that disclosed in D27 is 27% by weight.

4.2 The technical problem to be solved

The Board concurs with the parties that the technical problem to be solved over the disclosure of D27 is the provision of a low fat confectionery such as a low fat chocolate confectionery with a fat content less than 25% by weight, having rheological properties such that it can be used for enrobing (see patent specification: page 2, lines 7-10; page 3, lines 55-57).

4.3 Obviousness

4.3.1 The skilled man starting from the method of D27 (diagram on page 4) and aiming at reducing the fat content of the confectionery product while maintaining good rheological properties necessary for enrobing, namely yield value and plastic viscosity, would find in this document (page 3, last two lines: "Palsgaard 4125

should thus be considered as a tool for the chocolate manufacturer by which he can obtain the correct flow property of his chocolate, even with a low fat %) the hint to further reduce the disclosed fat content of 27% by weight. Values of less than 25% by weight, albeit not disclosed in D27 are not very distant from the disclosed value of 27% by weight and it would be obvious for a chocolate manufacturing expert to try out the production of such chocolates with a reasonable expectation of success. Indeed the values for yield value and plastic viscosity quoted in D27 are so far below the upper limits specified in Claim 1 of the opposed patent [3.6 Pa (equivalent to 36 dyne/cm<sup>2</sup>) and 3.8 Pa.s (equivalent to 38 poise) versus 250 dyne/cm<sup>2</sup> and 100 poise respectively], that the skilled person would confidently expect on the basis of the table on page 5 of D27 that the fat content could be safely reduced from 27% by weight to 25% by weight and further while fulfilling the required rheological properties specified in the claim.

The skilled person's motivation would be enhanced by the disclosure in the state of the art that:

- such low fat content values for chocolate confectioneries are technically possible (D10: abstract; page 3, last paragraph; page 6, lines 1-6; page 9, third paragraph; claim 9; D3: column 1, lines 9-25; column 5, lines 49-59; column 6, lines 23-27; D4: abstract; page 4, lines 19-21; claims 9 and 10; D5: page 4, first full paragraph; claims 1 and 4),
- such low fat chocolates were manufactured and commercially sold before the priority date of the patent in suit - in accordance with the submissions

of the Appellant at the oral proceedings with regard to low fat "Chocolat Meunier" which were not objected to by the Respondent,

- the combination of the emulsifiers used in D27, lecithin and PGPR, dramatically reduces the yield value and the plastic viscosity of a chocolate mixture, thus overcoming the technical problems encountered when reducing the fat content (D6: page 109, middle column, last paragraph), and that
- such low fat content chocolate could be obtained on the basis of the combination of lecithin with PGPR since this combination provides a fat reduction of 8% by weight (D11: page 243, lines 8-9 and page 244, last paragraph of section 9.2.3), which when applied to eg conventional milk chocolate with fat content 31% by weight (D5: page 1, second paragraph), leads to a low fat chocolate of 23% by weight.

4.3.2 Moreover, the Board does not accept the argument of the Respondent that the order of the sequential addition of the emulsifiers has an influence on the properties of the chocolate other than that to be expected by the skilled practitioner, since no technical evidence has ever been submitted to demonstrate this alleged effect. Consequently no inventive merit could be acknowledged for such a manner of addition. It is noted in this context that the most probable way of putting into practice the information in D27 concerning the addition of the two emulsifiers lecithin and Palsgaard 4125 would anyway be to add lecithin first during the conching process proper and thereafter, towards the end of the conching process, the Palsgaard emulsifier. This is because the skilled person would be aware on the one hand of the beneficial contribution of lecithin with

regard to the plastic viscosity during conching (see D21: page 117, right column, first full paragraph; D6: page 109, paragraph bridging left and middle columns), and on the other hand of the usefulness of Palsgaard 4125 for enhancing the yield property, ie the flowability, of the conched confectionery product required for transferring it out of the conching tank (see D21: page 117, right column, first full paragraph and D6: page 109, middle column, first full paragraph; D11: page 243, lines 2-4).

The Board also rejects the argument of the Respondent that the skilled person would not have reasonably expected the successful reduction of the fat content below 25% by weight. The Respondent has not submitted the necessary technical evidence in order to substantiate the allegation that the value of 25% by weight has any specific technical significance. In particular, it has failed to establish that at this percentage point the relation between the fat content and the rheological properties changes from a linear to logarithmic one. On this issue the Board concurs with the Appellant that the criticality of the value of 25% fat for chocolate is essentially related to legal - not technical - restrictions because confectionery products with a fat content of less 25% by weight were not permitted to be sold as chocolate in certain countries before the priority date of the opposed patent (D4: page 4, lines 21-23; D10: page 1, lines 15-18; page 6, lines 7-8).

4.4 Under these circumstances the Board considers that the solution of the above technical problem is obvious and that the subject-matter of Claim 1 does not involve an inventive step.

## **Order**

### **For these reasons it is decided that:**

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:

C. Moser

P. Kitzmantel