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**D E C I S I O N**  
of 17 December 1997

**Case Number:** T 0442/94 - 3.3.4

**Application Number:** 86302163.0

**Publication Number:** 0196210

**IPC:** A23D 7/00

**Language of the proceedings:** EN

**Title of invention:**  
Cacao butter substitute composition

**Patentee:**  
Kao Corporation

**Opponent:**  
Unilever PLC / Unilever N.V.

**Headword:**  
Cacao butter substitutes/KAO

**Relevant legal provisions:**  
EPC Art. 123(2), (3), 54, 56, 83, 87

**Keyword:**  
Main request:  
"Sufficiency of disclosure (yes)"  
"Priority validly claimed (yes)"  
"Novelty (yes)"  
"Inventive step (yes)"

**Decisions cited:**  
T 0153/85, T 0233/90, T 0288/90, G 0002/88

**Catchword:**



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Boards of Appeal

Chambres de recours

Case Number: T 0442/94 - 3.3.4

**D E C I S I O N**  
of the Technical Board of Appeal 3.3.4  
of 17 December 1997

**Appellant:** Unilever N.V. et al  
(Opponent) P.O. Box 760  
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**Representative:** Dries, Antonius Johannes Maria  
Unilever N.V. Patent Division  
P.O. Box 137  
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**Respondent:** Kao Corporation  
(Proprietor of the patent) 14-10, Nihonbashi Kayabacho 1-chome  
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**Representative:** Bannermann, David Gardner  
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**Decision under appeal:** Decision of the Opposition Division of the  
European Patent Office posted 3 May 1994  
rejecting the opposition filed against European  
patent No. 0 196 210 pursuant to Article 102(2)  
EPC.

**Composition of the Board:**

**Chairman:** L. Galligani  
**Members:** R. E. Gramaglia  
J.-C. Saisset

## Summary of Facts and Submissions

I. European patent No. 0 196 210 based on application No. 86 302 163.0 and claiming priority from JP 60267/85 dated 25 March 1985, was granted on the basis of claims 1 to 3, of which claim 1 read as follows:

"1. A cacao butter substitute composition which consists essentially of:

- (a) at least 80 percent by weight, based on the total weight of the composition, of 1,3-disaturated-2-oleoyl glycerols consisting of:
  - (a-1) up to 10 percent by weight of 1,3-dipalmitoyl-2-oleoyl glycerol, based on the total weight of (a),
  - (a-2) 25 to 45 percent by weight of 1-palmitoyl-2-oleoyl-3-stearoyl glycerol, based on the total weight of (a), and
  - (a-3) 45 to 70 percent by weight of 1,3-distearoyl-2-oleoyl glycerol, based on the weight of (a), and
- (b) up to 20 percent by weight, based on the total weight of the composition, of glycerides comprising:
  - (b-1) up to 10 percent by weight of triglycerides having two unsaturated bonds in the molecule,
  - (b-2) up to 6 percent by weight of diglycerides,
  - (b-3) up to 5 percent by weight of 1,2-disaturated-3-oleoyl glycerols,

- (b-4) up to 5 percent by weight of trisaturated glycerides, and
- (b-5) up to 5 percent by weight of triglycerides having three or more unsaturated bonds in the molecules, wherein said percentages always add up to 100%.

Dependent claims 2 and 3 were directed to specific embodiments of the composition of claim 1.

II. An opposition was filed on the grounds of Articles 100(a) and 100(b) EPC, i.e., lack of novelty, lack of inventive step and insufficiency of disclosure having regard, in particular, to the following documents:

(Ib) GB-A-2 159 527, based on priority documents JP 59/110333 and JP 59/110334 (Ia) of 30 May 1984

(II) NL-A-7 809 374.

III. The Opposition Division rejected the opposition with decision dated 3 May 1994.

IV. The Appellants (Opponents) lodged an appeal against this decision. The Respondent (Patentee) filed counterarguments. Two new citations were introduced by the Appellants into the appeal proceedings:

(VI) H.A. Boekenoogen, "Analysis and Characterization of Oils, Fats and Fat Products", Vol. 2, pages 290-291 (1968), Interscience Publishers, London, New York, Sidney.

(VII) B.W. Minifie, "Chocolate, Cocoa and Confectionery: Science and Technology", pages 65-72 (1970), J. and A. Churchill, London.

The Respondent filed new claims 1 to 3 in the form of use-type claims.

V. Oral proceedings were held on 17 December 1997. During oral proceedings a new main request and an auxiliary request were filed. The main request consisted of claims 1 to 3 which were identical to the claims as granted, except that they now related to the **use as a cacao butter substitute** of the compositions specified in granted claims 1 to 3. An amended description adapted to these claims was also filed.

VI. The submissions by the Appellants can be summarised as follows:

*Sufficiency of disclosure*

- The skilled person was not in a position to reproduce the invention since the solvent fractionation referred to in the examples of the patent in suit had not been given in detail.

*Novelty*

- Document (VII) demonstrated that Illipe butters had already been used as cacao butter equivalents in the prior art. Table XXXIII of Document (VI) showed that Illipe butters fell within the formulation recited in claim 1 of the patent in suit. The claimed subject-matter thus lacked novelty.

- The requirements of Article 87 EPC were not met by the patent in suit because the priority document JP 60267/85 dated 25 March 1985 underlying the patent in suit was not the first disclosure of the present invention. Compositions disclosed therein and falling within claim 1 of the patent in suit were already described in the earlier JP application (Ia) filed by the Respondent on 30 May 1984, from which document (Ib), published before the filing date of the patent in suit claimed priority. Thus, this subject-matter could not enjoy the priority date of 25 March 1985 but merely the filing date of the patent in suit (24 March 1986). Hence, document (Ib) published before this date became genuine prior art.

In particular, it was stated on page 3, lines 24-26 of the patent in suit that the compositions of the present invention could easily be prepared by a 1,3-position selective ester exchange reaction which was disclosed in document (Ia). The patent in suit (page 4, lines 15 to 30) and its priority document JP 60267/85 (pages 12 to 13) disclosed indeed the preparation of a crude product by enzymatic interesterification. This crude product was successively subjected to solvent fractionation to yield a cocoa butter substitute according to the present invention. Also document (Ia) (see Examples 1 and 2 on pages 17 and 18) disclosed a crude product obtained by enzymatic interesterification which could be used as such or upon further purification eg, by liquid-liquid extraction (page 10, lines 13-18 and page 15, lines 14-18), as a cacao butter substitute (*ibidem*, page 16, line 15). Therefore, the skilled person following the teaching of document (Ia) would **inevitably** arrive

at the subject-matter of the priority document. Thus, the latter was not the first patent application thereof.

*Inventive step*

- The closest prior art was represented by new citations (VI) and (VII). Since the Respondent failed to show that the claimed compositions exhibited any unexpected advantageous effect in comparison with the Illipe fat disclosed by documents (VI) and (VII), the claimed use was obvious.

VII. The submissions by the Respondent can be summarised as follows:

*Sufficiency of disclosure*

- The claimed compositions could easily be arrived at by blending together the ingredients recited in claim 1, as stated on page 3, lines 24-24 of the patent in suit.

*Novelty*

- The Borneo Illipe whose composition is given in Table 3 of document (VII) did not fall within the formulation defined in claim 1 of the patent in suit because it comprised 16% of triglycerides having two unsaturated bonds, whilst claim 1 (b-1) prescribed up to 10% of such triglycerides. Further, the author of document (VII) considered the addition of Borneo Illipe to chocolate as undesirable. Therefore, document (VII) did not anticipate the claims.

- Document (Ia) did not disclose any process inevitably leading to a product as defined in claim 1 of the patent because the liquid-liquid extraction referred to therein was not done for the purpose of obtaining a composition as recited in claim 1 of the patent in suit, but merely for removing fatty acids and small amounts of mono- and diglycerides. For this reason, the priority right was validly claimed according to Article 87 EPC.

*Inventive step*

- There was no suggestion in the prior art literature that Illipe could be used alone as a cacao butter substitute. Given that the Borneo Illipe disclosed in document (VII) did not have a composition as defined in the claims and given that the author of document (VII) was critical of the use of Illipe in chocolate, the claims of the patent in suit were not be obvious in view of this citation.

VIII. The Appellants (Opponents) requested that the decision under appeal be set aside and that the European patent No. 0 196 210 be revoked.

The Respondent (Patentee) requested that the appeal be dismissed, that the decision under appeal be set aside and that the patent be maintained on the basis of either claims 1 to 3 filed at oral proceedings as main request or the set of claims 1 to 3 filed also at oral proceedings as auxiliary request.



## Reasons for the Decision

### *Main request*

#### *Article 123(2) and (3) EPC*

1. There is a basis on page 1, lines 1-2 of the application as filed reciting: "The invention relates to a composition which can be employed as a substitute for cacao butter" for re-formulating the product claims as use claims. This re-formulation does not extend the scope of protection since, if anything, a use claim confers less protection than a product claim (see decision G 2/88, OJ EPO 1990, 93). Therefore the requirements of Article 123(2) and (3) are met.

#### *Sufficiency of disclosure*

2. The Appellants raise an objection of insufficiency of disclosure because the solvent fractionation referred to in the examples of the patent has not been given in detail. However, in the Board's view, solvent fractionation is not the only way for arriving at the claimed compositions. It is stated on page 3, lines 24-24 of the patent in suit that the claimed compositions can easily be arrived at by blending together the ingredients recited in claim 1. The ingredients themselves can be obtained by organic synthesis and/or from natural oils (see eg US-A-4 199 611, column 8, lines 9-15, equivalent to document (II)). Therefore, in the Board's judgement, the requirements of Article 83 EPC are met.

*Novelty*

3. As regards the Appellants' proposition that the claims lack novelty over the combination of documents (VI) and (VII), it is noted that it is normally not permissible to read two documents together for the purpose of evaluating the novelty. Only in situations where there is a specific reference in one document to a second document providing technical information which is thereby incorporated or the second document (eg a well known textbook) is merely illustrative of the common general knowledge (see eg decisions T 153/85 (OJ EPO 1988, 1), T 233/90 of 8 July 1992 and T 288/90 of 1 December 1992), can an exception to this rule be made. The present situation, however, does not correspond to any such situations since no direct link can be established between document (VI) and document (VII).
  
4. If the disclosure of document (VII) is taken alone, it is noted that the Borneo Illipe disclosed by this document includes 3% palmitodiolein (POO) and 13% steardiolein (SOO) thus giving rise to 16% of triglycerides having two unsaturated bonds. This, however, is contrary to requirement (b-1) of claim 1 which prescribes that such triglycerides cannot overcome 10%. The Board thus cannot infer from this document taken alone that an Illipe fat having the composition recited in claim 1 of the patent in suit has been used as cocoa butter substitute.
  
5. Neither can this conclusion be drawn from document (VI) taken alone. It is true that Table XXXIII of document (VI) discloses a fat product named Illipe which falls within the formulation recited in claim 1 of the patent in suit, however, no mention is made in document (VI) of the use of this Illipe as cocoa butter substitute.

6. The Board also disagrees with the Appellants' objection under Articles 54 and 87 EPC based on document (Ia). The skilled person following the teaching of document (Ia) would not inevitably arrive at the subject-matter of the priority document for the following reasons:
  
7. It is true that both the priority document underlying the patent in suit and document (Ia) disclose a crude reaction product, namely the interesterification product referred to on page 8, first full paragraph of the priority document and in Table 1 of document (Ia). In both documents, this crude product is further processed to yield a cocoa butter substitute. The Appellants maintain that liquid-liquid extraction carried out on the crude product of document (Ia) will inevitably lead to a cocoa butter substitute composition and its use as described in the priority document and recited in the claims of the patent in suit.
  
8. The Board has first to consider whether or not the crude product (i.e. the interesterification product) of document (Ia) as such, i.e. before it is subjected to liquid-liquid extraction, is susceptible to fall within the formulation recited in claim 1 of the patent in suit. Document (Ia) discloses on page 12, line 2 to page 13, line 15 a series of fats, oils, fatty acids and fatty acid esters which can be subjected to interesterification. It is also stated (see page 14, last line to page 15, line 3) that 100 parts by weight of fat or oil is caused to react during one to three days (line 13) with 25 to 300 parts of a fatty acid or an alcohol ester of fatty acid or another fat or oil. The document does not indicate a specific fat formulation, i.e. a direction in which the skilled person should go. In the absence of a direction in which to go, the Board cannot accept that anyone mixing

100 parts by weight of any oil or fat or any one of the 21 oils or fats listed in document (Ia) (loc. cit.) with 25 to 300 parts by weight of any fatty acids having 8 to 22 carbon atoms or any ester of fatty acid or any other fat or oil, and applying lipase interesterification for one to three days, would **inevitably** obtain the same product as described in the priority document of the patent in suit and recited in claim 1 at issue.

9. It is stated in document (Ia) that "a purified interesterification product can be obtained by removing the fatty acids and small amounts of monoglyceride and diglyceride from the interesterification product by a known separation and purification method such as liquid-liquid extraction..." (see page 10, lines 13-18). In the Board's judgement, this step merely affects the diglyceride and monoglyceride content of the crude product, i.e. component (b-2), but not components (a), (a-1), (a-2), (a-3), (b), (b-1), (b-3), (b-4) and (b-5) listed in claim 1 of the patent in suit. Thus, if anyone further purifies the interesterification product of document (Ia) by liquid-liquid extraction for lowering its diglyceride and monoglyceride content, this purified interesterification product would also not be the same as the one described in the priority document underlying the patent in suit. Thus, the latter has to be considered as the first patent application thereof, i.e. the patent in suit validly claims priority pursuant to Article 87 EPC and, as a consequence, document (Ib) is **not** genuine prior art for the purpose of Article 54(2) EPC.
10. For these reasons, the subject-matter of the claims is found to fulfil the requirements of Article 54 EPC.

*Inventive step*

11. At the appeal stage, the Appellants did not contest the conclusion arrived at by the Opposition Division that the then claimed substitutes for cocoa butter recited in claim 1 are inventive over the cocoa butter substitute described in Example V of document (II), which the Parties and the Opposition Division agreed at the opposition stage to be the starting point for evaluating the inventive step of the then claimed cocoa butter substitute compositions. It is now argued by the Appellants that the inventive step of the use-type claims presently at issue should be evaluated taking new citations (VI) and (VII) as the closest prior art.

12. In the Board's view, however, the closest prior art underlying the use-type claims presently at issue remains the teaching of document (II). Example V of document (II) discloses the use as cocoa butter substitute of a fat comprising inter alia 72.9% by weight of 1,3-disaturated-2-oleoyl glycerols instead of at least 80% by weight as recited in claim 1 (a) of the patent in suit. The technical problem the patent in suit purports to solve is **improving** (see patent in suit, page 2, line 39) a series of properties, in particular the thermal stability and the resistance to fat blooming, of the cocoa butter substitutes of the prior art represented by Example V of document (II) when used in milk chocolate products. This problem is indeed solved by the use recited in the claims of the patent in suit.

Since the skilled person was faced with the problem of **improving**, inter alia, blooming resistance upon storage (see patent in suit, page 2, line 54 and Table 5: "Blooming resistance") of the cocoa butter substitutes of the prior art when used to make chocolates, in the

Board's view, the skilled person would not have taken into consideration the technical teaching of documents (VII) and/or (VI) dealing with Illipe. This is because Illipe is a fat which often increases blooming upon storage (see document (VII), page 70, line 3). In view of this and other drawbacks such as the formation of unstable "seeds" (loc. cit), the author of document (VII) (loc. cit., lines 4-5) is critical of the use of Illipe as a cocoa butter substitute: "The use of Illipe fat was **rife** in the late 1920's and early 1930's and there were some **disastrous** results from the lack of knowledge of the special properties of the fat" (emphasis added).

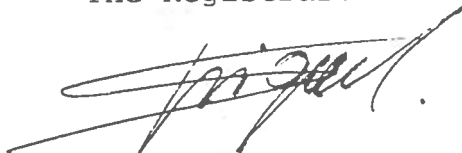
13. Even by assuming that document (VII), in spite of the stated drawbacks, could give the skilled person a hint toward using Illipe in general as cocoa butter substitute, a pointer would still have to be found in the direction of modifying the composition of said Illipe so as to satisfy the glycerides range requirements recited in claim 1 of the patent in suit in order to reduce blooming and improve thermal stability (patent in suit, page 2, line 61). Such a hint is found neither in document (VII) nor in document (VI).
14. It is likewise the Board's view that also document (II) contains no pointer in the said direction. In view of this, the subject-matter of the claims is found to involve an inventive step (Article 56 EPC).
15. It follows from the above that the claims of the main request satisfy the requirements of the EPC and that no need arises for the Board to consider the claims of the auxiliary request.

**Order**

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

1. The decision under appeal is set aside.
2. The case is remitted to the first instance with the order to maintain the patent on the basis of the set of claims 1 to 3 and the adapted description both filed at oral proceedings as main request.

The Registrar:



D. Spigarelli

The Chairman:



L. Galligani

RG. 27.88

5-7-98

