Datasheet for the decision
of 16 November 2011

Case Number: T 0009/10 - 3.3.06
Application Number: 03029675.0
Publication Number: 1433476
IPC: A61K 8/34, A61K 8/39,
A61K 8/6, A61Q 19/10,
A61Q 1/14

Language of the proceedings: EN

Title of invention:
Skin cleansing composition

Patent Proprietor:
KAO CORPORATION

Opponents:
Henkel AG & Co. KGaA
BASF Personal Care and Nutrition GmbH

Headword:
Isotropic bicontinuous skin cleansing composition/KAO

Relevant legal provisions
EPC Art. 123(3)

Relevant legal provisions (EPC 1973):
EPC Art. 54(1)(2), 56

Keyword:
"Main request: Art. 123(3) EPC not met"
"1st auxiliary request: Art. 123(3) EPC, Art. 54(1)(2), 56 EPC 1973 met"
Decisions cited:
T 2017/07

Catchword:
-
Case Number: T 0009/10 - 3.3.06

DECISION of the Technical Board of Appeal 3.3.06 of 16 November 2011

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Composition of the Board:
Chairman: P.-P. Bracke
Members: E. Bendl
U. Tronser
Summary of Facts and Submissions

I. The appeals are from the decision of the Opposition Division to maintain the European patent 1 433 476 in amended form.

II. The only independent claim of the set of claims as granted read as follows:

"1. A skin cleansing composition comprising (A) 3 to 80 wt.% of an oil component, (B) 1 to 45 wt.% of a hydrophilic nonionic surfactant, (C) 1 to 45 wt.% of a lipophilic amphiphile, (D) 3 to 80 wt.% of a water-soluble solvent and (E) 3 to 80 wt.% of water, and having an isotropic liquid phase exhibiting a bicontinuous structure".

III. In opposition procedure the Opponents cited inter alia documents

D3 = EP-A-0 103 910
D6 = EP-A-0 217 105
D7 = Int. J. Pharm. 137, 177-186, 1996
D8 = J. Agric. Food Chem. 50, 6917-6922, 2002

With the letter of 30 October 2008 the Proprietor filed a test comparing Example 2 of D2 with a composition according to the invention and furthermore presented document

D10 = "Additional test data related to exp.3 in D9"
IV. The Opposition Division maintained the patent on the basis of an amended set of claims (filed as the Proprietor's main request) containing in total eight claims with the only independent claim reading as follows:

"1. A skin cleansing composition comprising
   (A) 3 to 80 wt.% of an oil component,
   (B) 1 to 45 wt.% of a hydrophilic nonionic surfactant, having an HLB value of more than 8 and has a hydrophobic group with 8 or more carbon atoms,
   (C) 1 to 45 wt.% of a lipophilic amphiphile, selected from nonionic surfactants having an HLB value of 8 or less, fatty alcohols having 8 to 25 carbon atoms, fatty acids having 8 to 25 carbon atoms and monoalkylphosphoric acids having 8 to 25 carbon atoms,
   (D) 3 to 80 wt.% of a water soluble solvent and
   (B) 3 to 80 wt.% of water,
   and having an isotropic liquid phase exhibiting a bicontinuous structure."

V. Opponent I/Appellant I filed on 21 December 2009 an appeal against this decision, paid the appeal fee on the same day and submitted the grounds of appeal on 26 February 2010. Furthermore documents

\[ \text{D11} = \text{WO-A-00/76 460} \]
\[ \text{D12} = \text{Coloured photographs} \]

were submitted.
VI. Opponent II/Appellant II filed an appeal on 24 December 2009, paid the appeal fee on the same day and submitted the grounds of appeal on 03 March 2010.

VII. With the letter of 14 October 2011 the Proprietor/Respondent submitted the amended set of claims filed in the opposition procedure as the main request with the wording "has a hydrophobic group" being changed into "having a hydrophobic group" (emphasis added) and submitted inter alia document D13 = Photography comparing example 3 of D9 with water.

The independent Claim 1 of the amended first auxiliary request reads as follows:

"1. A skin cleansing composition comprising
(A) 3 to 80 wt.% of an oil component,
(B) 1 to 45 wt.% of a hydrophilic nonionic surfactant,
(C) 1 to 45 wt.% of a lipophilic amphiphile,
(D) 3 to 80 wt.% of a water soluble solvent and
(E) 3 to 80 wt.% of water,
and having an isotropic liquid phase exhibiting a bicontinuous structure,
wherein the hydrophilic nonionic surfactant (B) has an HLB value of more than 8 and has a hydrophobic group with 8 or more carbon atoms, and
wherein the lipophilic amphiphile (C) is selected from nonionic surfactants having an HLB value of 8 or less, fatty alcohols having 8 to 25 carbon atoms, fatty acids having 8 to 25 carbon atoms and monoalkylphosphoric acids having 8 to 25 carbon atoms."
VIII. The main arguments of Appellants I and II were as follows:

a) Main request

*Article 123(3) EPC*

- The term "comprising" in Claim 1 allows further components, like other hydrophilic nonionic surfactants having an HLB of 8 or less and/or having less than 8 carbon atoms in the hydrophobic group to be present in the skin cleansing composition. In total the upper limit of 45 wt.% hydrophilic nonionic surfactant, as defined in Claim 1 as granted, may be exceeded.

- Therefore, Claim 1 extends the protection conferred. An identical situation is described in T 2017/07.

b) First auxiliary request

*Article 123(3) EPC*

- Identical considerations as for Claim 1 of the main request apply.

*Article 54(1),(2) EPC 1973*

- Example 3 of D9 destroys novelty of Claim 1 of the patent-in-suit.

- The isotropic bi-continuous phase of Example 3 can be derived from the transparent or translucent appearance of the composition, as is described in the patent-in-suit.

- Furthermore D12 proves the isotropic properties of Example 3 of D9.
Given the simultaneous presence of an oil and a hydrophilic compound, a bi-continuous structure must exist.

Therefore, novelty of Claim 1 is not given.

**Article 56 EPC 1973**

- Either of D2, D6 or D11 represents the closest state of the art.

- D2 may be combined with either of D3, D7, D8, D11 to arrive at the claimed subject-matter.

- Although an effect has been shown, the proposed solution how to achieve this effect was obvious.

The main arguments of the **Respondent** were as follows:

a) Main request

**Article 123(3) EPC**

- The combination of features of Claim 1 can be found in Claims 1, 5 and 8 as granted.

- Since the wording of Claim 1 excludes the presence of hydrophilic nonionic surfactants other than component (B), the requirement of Article 123(3) EPC is met.
b) First auxiliary request

Article 123(3) EPC

- The change of the order to features was introduced to further highlight the absence of hydrophilic nonionic surfactants other than component (B).

Article 54(1),(2) EPC 1973

- Documents D10 and D13 demonstrate that no isotropic phase exists in the examples of D9.

- Also the bi-continuous structure is not disclosed in D9.

- Therefore, the claimed subject-matter is novel.

Article 56 EPC 1973

- D2 is the closest state of the art.

- Example 2 of D2 differs from Claim 1 in the presence of component (C). In the annex to the letter of 30 October 2009 it was shown that an effect has been achieved by this difference.

- Starting from D2 as the closest prior art, this effect is not rendered obvious.

IX. The Appellants requested that the decision under appeal be set aside and that the European patent no. 1 433 476 be revoked.

The Respondent requested that the patent be maintained on the basis of the main request submitted with the letter dated 14 October 2011 or on the basis of one of
the auxiliary requests 1 to 5 filed during the oral proceedings.

Reasons for the Decision

1. **Main request**

1.1 **Article 123(3) EPC**

1.1.1 Claim 1 as granted defines a skin cleansing composition comprising inter alia "1 to 45 wt.% of a hydrophilic nonionic surfactant", referred to as component (B).

1.1.2 The use of the term "comprising" in connection with a numerical range defining the amount of a component implicitly means, that the protection conferred by the claim does not extend to compositions containing that component in amounts outside the defined range (see the head note of T 2017/07; the decision not being published in the OJ EPO).

1.1.3 In the present case this means that the protection conferred by claim 1 as granted, as far as component (B) is concerned, is restricted to skin cleansing compositions containing not less than 1 wt.% and not more than 45 wt.% of any kind of hydrophilic nonionic surfactant.

1.1.4 The same considerations apply for components (A) and (C) to (E) in claim 1 as granted.

1.1.5 In Claim 1 of the main request, the following definition is given for component (B): "1 to 45 wt.% of
a hydrophilic nonionic surfactant, having an HLB value of more than 8 and having a hydrophobic group with 8 or more carbon atoms”.

1.1.6 Given the amended definition of component (B) in the main request, this feature is to be regarded as restricting component (B) to the specific group of hydrophilic nonionic surfactants with the defined HLB value and number of carbon atoms in the hydrophobic group.

1.1.7 As however the wording of claim 1 according to the main request is restricted as far as the specifically defined component (B) is concerned, due to the non-exclusive term "comprising" any other hydrophilic nonionic surfactant with HLB values and/or a number of carbon atoms in the hydrophobic group outside the definition given may be present in the skin cleansing composition.

1.1.8 Consequently, since claim 1 as granted excludes any hydrophilic nonionic surfactant in an amount less than 1 and more than 45 wt.%, whereas claim 1 according to the main request allows the presence in undefined amounts of any hydrophilic nonionic surfactants not having the specific HLB values and/or the number of carbon atoms in the hydrophobic group, the protection conferred by claim 1 according to the main request is extended in comparison with the protection conferred by claim 1 as granted, contrary to the requirement of Art. 123(3) EPC.

1.1.9 Similar considerations apply to feature (C) of the claimed composition.
2. First auxiliary request

Since claim 1 is a combination of the wording of granted claims 1, 5 and 8, any unclarity may not be considered to originate from the amendment and therefore the Board does not have the power to contest the clarity thereof.

2.1 Article 123(3) EPC

2.1.1 Since component (B) is now defined in claim 1 as

"1 to 45 wt.% of a hydrophilic nonionic surfactant [...] wherein the hydrophilic surfactant has an HLB value of more than 8 and has a hydrophobic group with 8 or more carbon atoms" (emphasis added),

the question arises, whether the wording of claim 1 excludes the presence of any hydrophilic nonionic surfactant other than those having the defined HLB value and number of carbon atoms in the hydrophobic group.

2.1.2 As it is not clear from claim 1 as such how its wording is to be interpreted, a skilled person reading such claim would try to find information in the description of the patent in suit.

Given the teaching of the description of the patent-in-suit, paragraph [0010], which states that the inventions relates to a skin cleansing composition "having [...] (B) a hydrophilic nonionic surfactant" (emphasis added), and taking into account paragraph
[0021], defining that component (B) is present "in an amount of from 1 to 45 wt.%", the Board takes the view that in the specific case it is made clear that no hydrophilic nonionic surfactant outside the 1 to 45 wt.% range is present.

2.1.3 Similar considerations apply to feature (C).

2.1.4 Consequently, the protection conferred by claim 1 of the auxiliary request is identical with the protection conferred by claim 1 as granted and, thus, the requirement of Art. 123(3) EPC is met.

2.2 Article 123(2) EPC

It has not been disputed that the requirement of Art. 123(2) EPC is met. The Board shares this view.

2.3 Articles 54(1),(2) EPC 1973

2.3.1 In the Board's view D9 does not destroy novelty of the subject-matter of Claim 1. The parties agreed, that Example 3 of D9 discloses components (A)-(E) in the amounts defined in Claim 1 of the patent-in-suit.

2.3.2 With regard to the feature of isotropy contradicting tests were submitted by the parties. Respondent's submissions (D10, D13) showed that Example 3 of D9 does not possess an isotropic phase, whereas Appellant I's document D12 came to the opposite conclusion.

2.3.3 Given these contradicting results the Board concludes that different processing conditions must have lead to the contradicting results, as the method for preparing
Example 3 is only defined in general terms: the components were mixed, heated and cooled, without indication of precise values. This conclusion is also confirmed by D9, column 5, lines 42-47, stating, that "in some cases" anisotropic compositions may be obtained.

2.3.4 Furthermore, no proof was submitted by the Appellants, that the compositions of D9 possess a bi-continuous structure. The presence of an oil phase and a hydrophilic phase, as argued by the Appellants, cannot be regarded as a proof that both phases are bi-continuous.

2.3.5 Also the transparent or translucent appearance alone is no proof for the structure. Although the passages in paragraphs [0043] and [0044] of the patent-in-suit might be interpreted in this way, it is common knowledge that transparency and low viscosity alone are no guarantee for a bi-continuous structure, as is for instance the case for water, which is transparent, has low viscosity and is isotropic (see D13), but does not contain a bi-continuous phase.

2.3.6 Thus, the tests provided by the parties make it clear that D9 does not directly and unambiguously disclose, that the compositions have an isotropic phase and a bi-continuous structure.

2.3.7 Therefore, novelty of Claim 1 of the first auxiliary request is given.
2.4  Article 56 EPC 1973

According to the problem and solution approach, which is used by the Boards of Appeal of the European Patent Office in order to decide on the question of inventive step, it has to be determined which technical problem the object of a patent objectively solves vis-à-vis the closest prior art document. It also has to be determined whether or not the solution proposed to overcome this problem is obvious in the light of the available prior art disclosures.

2.4.1 The patent-in-suit relates to "skin cleansing compositions having excellent detergency for the removal of oil soluble stains and water soluble stains and having good rinsability". The example relates to the removal of waterproof mascara.

In the course of the appeal procedure the Appellants cited documents D2, D6 and D11 as the closest prior art documents.

D2 relates to improved cosmetic preparations for removing make-up.

D6 refers to a substrate for cosmetic compositions or drugs for external application.

D11 is concerned with cleaning compositions suitable for personal care applications.

Although D6 and D11 relate to neighbouring fields, only D2 focuses concretely on the removal of cosmetic stains like make-up. Since the intended purpose of a
disclosure is the primary selection criterion for choosing the closest state of the art, D2 is considered to represent the best starting point for the problem and solution approach.

2.4.2 As agreed by all parties, Example 2 of D2 reports on the use of components (A), (B), (D) and (E) in the amounts as defined in Claim 1 of the first auxiliary request. The product obtained possesses an "isotropic surfactant continuous phase", which is in the paragraph bridging pages 5 and 6 of D2 defined as an optically isotropic bi-continuous phase. Thus, Example 2 of D2 differs from the subject-matter of Claim 1 only in the presence of component (C).

In opposition procedure the Respondent submitted with the letter of 30 October 2008 a test comparing Example 2 of D2 with a composition containing 1,5 wt.% of component (C) and a correspondingly reduced amount of water, but being otherwise identical. Given this difference the cleansing performance with regard to waterproof mascara was significantly improved. The effect achieved was not disputed by the Appellants.

The Appellants did also not dispute, that the problem is solved over the entire range claimed. The Board shares this view.

2.4.3 Thus, the objective problem vis-à-vis D2 is the provision of skin cleansing composition with improved effectiveness.
2.4.4 As the solution to this problem the composition according to Claim 1 of the first auxiliary request was proposed by the Respondent.

2.4.5 The question to clarify is, whether the proposed solution is obvious in view of D2 alone or in combination with the remaining documents cited by the Appellants in this respect, i.e. D3, D7, D8 and D11.

D2 alone does not give a hint towards the use of a combination of surfactants and the associated improved cleansing properties.

D3 refers to compositions acting as skin conditioner by delivery of emollients through the skin. D7 relates to system for transdermal delivery and D8 to food-grade micro-emulsions. Due to the fact that all three disclosures relate to entirely different technical fields, a person skilled in the art would not combine their teachings with the one of D2 to improve the cleansing effect with respect to make-up by adding a second surfactant.

Finally, D11 relates to cleaning composition for personal care. Although two surfactants are present in the compositions, their definitions are only overlapping with the ones of Claim 1 of the first auxiliary request and no teaching is given, that the addition of a second surfactant improves cleansing performance. Additionally, the last paragraph on page 10 of D11 teaches away from combining the disclosures of D2 and D11, as water soluble solvents (corresponding to component (D) of the patent-in-suit) are undesirable and may only for "special purposes" at most be present.
in amounts of 5 wt.% (instead of between 3 to 80 wt.% in the patent-in-suit).

2.4.6 Thus, neither D2 nor its combination with other available prior art documents lead to the solution as proposed by the patent-in-suit. The requirement of Article 56 EPC 1973 is therefore met.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of the first instance with the order to maintain the patent on the basis of the first auxiliary request filed during the oral proceedings.

The Registrar The Chairman

D. Magliano P.-P. Bracke