Datasheet for the decision of 5 December 2006

Case Number: T 0238/01 - 3.3.07
Application Number: 93105070.2
Publication Number: 0562638
IPC: A61K 7/06
Language of the proceedings: EN
Title of invention: Stable conditioning shampoo containing cationic and suspended water-insoluble conditioning agents
Patentee: UNILEVER N.V., et al
Opponent: KPSS-Kao Professional Salon Services GmbH
Headword: -
Relevant legal provisions:
EPC Art. 54, 56, 84, 87(1), 113(1)
EPC R. 71(2)
Keyword:
"Claim 1 - entitled to priority (no)"
"Inventive step (no) - arbitrary selection"
"Oral proceedings in respondents' absence"
Decisions cited:
G 0004/92, G 0002/98, T 0501/92, T 0522/02, T 0939/92
Catchword: -
Case Number: T 0238/01 - 3.3.07

DEcision
of the Technical Board of Appeal 3.3.07
of 5 December 2006

Appellant: KPSS-Kao Professional Salon Services GmbH
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Respondent: UNILEVER N.V.
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Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted
25 January 2001 concerning maintenance of
European patent No. 0562638 in amended form.

Composition of the Board:

Chairman: S. Perryman
Members: F. Rousseau
B. ter Laan
Summary of Facts and Submissions

I. The mention of the grant of European patent No. 0 562 638, in respect of European patent application No. 93 105 070.2, filed on 27 March 1993 and claiming a priority in the USA of 27 March 1992 (US 858712), was published on 14 October 1998.

Claim 1 of the priority document read:

"An aqueous hair conditioning shampoo composition comprising an emulsion of water; about 5% to about 65% by weight of an anionic cleansing surfactant; from about 0.1% to about 10% by weight of a water-soluble or water-miscible cationic conditioning compound; from about 0.01% to about 15% by weight of a suspended water-insoluble conditioning compound having a viscosity at 25°C less than 20 centipoises, a specific gravity less than 1.0, a refractive index at 25°C of at least 1.4, and capable of lubricating hair; and from about 0.1% to about 15% by weight of a suspending agent for the water-insoluble conditioning compound."

II. The patent as granted comprised nine claims, independent claim 1 reading as follows:

"An aqueous hair conditioning shampoo composition comprising an emulsion of water; 5% to 65% by weight of an anionic cleansing surfactant; from 0.1% to 10% by weight of a water-soluble or water-miscible cationic conditioning compound, comprising a cationic guar gum; from 0.01% to 15% by weight of a suspended water-insoluble conditioning compound namely, a water-insoluble emollient ester having a viscosity at 25°C
less than 20 mPas. (centipoises), a specific gravity less than 1.0, a refractive index at 25°C of at least 1.4, and capable of lubricating hair; and from 0.1% to 15% by weight of a suspending agent for the water-insoluble conditioning compound."

Dependent claim 8 read:

"The hair conditioning composition as defined in anyone of claims 1 to 7, wherein the suspending agent for the water-insoluble conditioning compound is a solid at room temperature and is selected from the group consisting of (a) primary or secondary fatty acids or fatty alcohols having about 12 to about 40 carbon atoms in long chain radical, (b) a fatty ester having a long chain C_{12}-C_{36} radical, and (c) mixtures of any two or more of (a) -(b)."

III. A notice of opposition against the granted patent was filed on 14 July 1999, in which the revocation of the patent in its entirety was requested on the grounds of lack of novelty and inventive step as set out in Article 100(a) EPC.

The opposition was supported by the following documents:

(1) EP-A-0 511 652
(2) WO 93/08787
(3) JP-A-01 168 612
In a decision issued in writing on 25 January 2001, the Opposition Division held that the subject-matter of the claims as granted was not novel over document (1) and that the first auxiliary request did not fulfil the requirements of Article 123(2) EPC, but that the patent could be maintained in amended form based on the second auxiliary request filed during the oral proceedings.

Claim 1 of the second auxiliary request read:

"An aqueous hair conditioning shampoo composition comprising an emulsion of water; 5% to 65% by weight of an anionic cleansing surfactant; from 0.1% to 10% by weight of a water-soluble or water-miscible cationic conditioning compound, comprising a cationic guar gum; from 0.01% to 15% by weight of a suspended water-insoluble conditioning compound namely, a water-insoluble emollient ester having a viscosity at 25°C less than 20 mPas (centipoises), a specific gravity less than 1.0, a refractive index at 25°C of at least 1.4, and capable of lubricating hair; and from 0.1% to 15% by weight of a suspending agent for the water-insoluble conditioning compound, wherein the suspending agent for the water-insoluble conditioning compound is a solid at room temperature and is selected from the group consisting of (a) primary or secondary fatty acids or fatty alcohols having about 12 to about 40 carbon atoms in long chain radical, (b) a fatty ester...
having a long chain C<sub>12</sub>-C<sub>36</sub> radical, and (c) mixtures of any two or more of (a) -(b)."

Concerning the second auxiliary request, the Opposition Division held that the Opponent's objection of lack of clarity of claim 1 was not an issue since the combination of two claims as granted was not open to an objection under Article 84 EPC. As to novelty, neither document (1) nor document (2) clearly and unambiguously disclosed a composition as defined in claim 1. The claimed subject-matter involved an inventive step as it was not obvious to combine the teaching of documents (5) and (4) to arrive at an aqueous hair conditioning shampoo composition having a good stability and imparting wet stage and dry stage conditioning properties.

IV. On 5 February 2001, the Appellants (Opponents) lodged an appeal against the decision of the Opposition Division and paid the prescribed fee simultaneously. With the statement setting out the grounds for appeal, which was received on 27 March 2001, the Appellants further filed document (5b) (page 156 of document (5) identified above). The Appellants' arguments can be summarized as follows:

(a) Concerning clarity, claim 1, although being a combination of granted claims 1 and 8, was a new claim that had not existed previously. It should therefore be fully examined, also for compliance with Article 84 EPC. In claim 1 the meaning of "a fatty ester having a long chain C<sub>12</sub>-C<sub>36</sub> radical" that should be "solid at room temperature" was not clear since "room temperature" was an indefinite
concept subject to great variation. Also, there was no clear differentiation between the water-insoluble conditioning compound and suspending agent (b).

(b) Regarding novelty, all the features of claim 1 were disclosed in document (1) as well as in document (2). The obligatory presence of silicone in the compositions of those documents was not excluded by present claim 1, so that its subject-matter lacked novelty.

(c) As to inventive step, the problem to be solved was that which was the aim of any conditioning shampoo, to provide a composition with good cleansing and conditioning properties. Document (5) was a standard reference showing the general knowledge of the skilled person. Document (4) provided additional knowledge which the skilled person would have combined with document (5). Moreover, the patent in suit did not show any unexpected effect linked to the claimed composition. Therefore, the claimed subject-matter was obvious.

V. The Respondents (Proprietors) did not take position on the issues raised by the Appellants, but, in a letter dated 14 January 2003, merely requested oral proceedings.

VI. With a communication posted on 3 August 2006 the parties were summoned to oral proceedings. In the communication, the attention of the parties was drawn to the fact that document (1) and document (2) had been published between the priority date claimed by the
patent in suit and its filing date. Since the present claims contained several amendments as compared to the claims as originally filed, the question arose whether the amended claims were entitled to the claimed priority date and hence whether document (1) and document (2) were prior art pursuant to Article 54(2) EPC. If the claims were not entitled to the claimed priority date, document (1) and document (2) could be taken into account for assessing the presence of an inventive step. It was pointed out that, in that case, document (1) and document (2) might be more relevant than the prior art documents on which the contested decision was based.

VII. In response to the summons to oral proceedings, the Respondents withdrew their request for oral proceedings (letter dated 21 November 2006) and stated that they would accept the Board's written decision.

VIII. The Appellants indicated that they would not participate at the oral proceedings and requested that a decision be taken on the basis of the file (letter dated 23 November 2006).

IX. By communication of 24 November 2006, the parties were informed that the oral proceedings would take place as scheduled. Oral proceedings before the Board were held on 5 December 2006 in the absence of the parties pursuant to Rule 71(2) EPC.

X. The Appellants had requested in writing that the decision under appeal be set aside and the patent be revoked.
The Respondents had not made any request.

XI. At the end of the oral proceedings the decision of the Board was given orally.

Reasons for the Decision

1. The appeal is admissible.

2. Procedural matters

2.1 Absence of the Respondents at oral proceedings

As indicated in section IX above, the Respondents, although duly summoned, were absent from the oral proceedings held on 5 December 2006. In accordance with Article 11(3) of the Rules of Procedure of the Boards of Appeal, the Respondents were treated as relying only on their written case.

According to the Opinion of the Enlarged Board of Appeal G 4/92 (OJ EPO 1994, 149), a decision against a party, that has been duly summoned but fails to appear at oral proceedings, may not be based on facts put forward for the first time during those oral proceedings. In the Reasons, point 4, the Enlarged Board also emphasised that, in accordance with Rule 71(2) EPC and in the interests of the proper administration of justice, no party should be able to delay the issue of a decision by failing to appear at the oral proceedings.
In the present case, in view of the Board's communication accompanying the summons (see section VI above), the Respondents had been informed that the issue of priority and its possible consequences on inventive step in view of document (1) would be discussed at oral proceedings. The Respondents, however, did not avail themselves of the opportunity to comment on any of the substantial issues addressed in the Board's communication. They only withdrew their request for oral proceedings and stated that they were "prepared to accept the Board of Appeal's written decision", a statement that can only be understood as their acceptance of any decision that the Board might take with a view to any of the issues raised, in particular inventive step over document (1). The assessment of the validity of the claimed priority implied solely a comparison between the wording of the amended claims and the content of the priority document and thus in analogy with the reasoning in case T 0522/02 of 20 July 2004, Section 2.2 (not published in OJ EPO), was not based on facts introduced into the case for the first time during oral proceedings. The analysis of inventive step in view of prior art document (1) was based, on the one hand, on the technical problem solved by document (1) which had been addressed in the Board's communication and, on the other hand, on the shampoo compositions and various ingredients disclosed therein which had been addressed in relation to the question of novelty over document (1), both in opposition and opposition appeal proceedings. Hence, the present decision, based on a lack of inventive step over document (1) (see point 6. below) was not based on facts put forward for the first
time during oral proceedings but only new arguments developed in relation to that issue.

Therefore, the present decision taken at oral proceedings in the absence of the Respondents is in conformity with the requirements of Article 113(1) EPC.

2.2 Respondent's substantive request

In the absence of any indication from the Respondents (proprietors) that revocation of the patent in suit was requested or that maintenance of the patent in a form different from that underlying the impugned decision was sought, the Board must still examine and decide whether the patent in suit can be maintained on the basis of the text underlying the impugned decision (see decision T 0501/92, OJ EPO 1996, 261, point IV of the headnote).

3. Clarity

The subject-matter of present claim 1 is a combination of granted claim 1 and granted claim 8, which was dependent on claim 1. As a consequence, the subject-matter of present claim 1 corresponds to the subject-matter of granted claim 8. It follows that the clarity objection raised by the Appellants does not arise out of amendments made in opposition or opposition appeal proceedings. Consequently, the Appellant's objection to the clarity of claim 1 must be rejected as Article 84 EPC is not a ground for opposition under Article 100 EPC.
4. **Novelty**

Novelty of claim 1 has been objected to by the Appellants only in view of documents (1) and (2).

4.1 **Document (1)**

Document (1) discloses in claim 1 a hair shampoo-conditioner composition comprising:

(a) from about 1% to about 15% by weight of an anionic cleansing surfactant;
(b) from about 0.1% to about 2% by weight of a polymeric cationic conditioning compound;
(c) from about 0.2% to about 10% by weight of a cationic conditioning surfactant;
(d) from about 0.1% to about 3% by weight of a fatty ester; and
(e) a suitable carrier comprising water.

According to claim 8 as well as the examples, the water soluble cationic conditioning compound may be a guar gum.

As an example of a fatty ester serving as a conditioning agent, and therefore capable of lubricating hair, cetearyl octanoate is mentioned (page 11, line 38 to page 12, line 4), which, according to the appellant's submission dated 3 November 2000, which remained uncontested by the respondent, exhibits a viscosity at 25°C of 11-12 mPa.s, a specific gravity of 0.853 and a refractive index at 25°C of 1.4435, hence falling within the definition of the emollient ester in present claim 1.
In examples 9, 11 to 17, 24, 27 and 28 of document (1) aqueous hair conditioning shampoo compositions are disclosed containing an anionic cleansing surfactant in amounts varying from 8.0 to 12.9% by weight, a guar hydroxypropyl trimonium chloride in amounts varying from 1.0 to 2% by weight and cetearyl octanoate in amounts varying from 1.3 to 2.1% by weight, hence falling within the amounts defined in present claim 1.

Document (1) (page 13, lines 20-24) also discloses that the shampoo conditioning compositions can as well include optional conditioning agents and emulsifiers such as stearyl alcohol, cetearyl alcohol or cetyl alcohol in general in an amount ranging from 0% to about 3% by weight of the composition, which compounds are suspending agents according to present claim 1 (see patent in suit, page 6, lines 53-55).

Document (1), however, fails to disclose the combination of those optional conditioning agents and emulsifiers with a shampoo composition comprising cationic guar gum and cetearyl octanoate. Since none of the other esters disclosed in document (1) has been shown to fulfil the parametric requirements of the emollient ester of present claim 1, novelty of present claim 1 over document (1) must be recognised.

4.2 Document (2)

Document (2) discloses in claim 1 an aqueous shampoo composition characterized in that it comprises:
(a) from 5 to 50%, by weight, of an anionic surfactant selected from the group consisting of anionic
surfactants and amphoteric surfactants that are anionic at the pH of the composition;
(b) from 0.05 to 10%, by weight, of a dispersed, insoluble, non-volatile, nonionic silicone hair conditioning agent;
(c) from 0.05 to 5%, by weight, of a water-soluble, organic, cationic polymer hair conditioning agent having a cationic charge density of from 0.9 meq/gram to 4 meq/gram;
(d) from 0.05 to 5%, by weight, of an organic, non-volatile, water insoluble, liquid selected from the group consisting of hydrocarbon oils, fatty esters having at least 10 carbon atoms, and mixtures thereof;
(e) an aqueous carrier.

Suitable water soluble cationic polymers can be selected from the list described from page 23, line 3 to page 26, line 5. It may be a guar gum (page 25, lines 31 to 33). The fatty esters having at least 10 carbon atoms can be selected from the group listed from page 29, line 21 to page 30, line 31. The appellants, however, failed to show that the group of fatty esters listed in document (2) comprises a fatty ester fulfilling the parametric definition given in present claim 1, and should such be the case, that document (2) discloses the combined use of this ester with a cationic guar gum. Novelty over document (2) is therefore acknowledged.

4.3 Documents (3) to (7)

The disclosure of documents (3) to (7) does not come closer to the present claimed subject-matter than that of documents (1) or (2). In particular, document (3)
does not disclose compositions comprising a cationic guar gum and the shampoo compositions of documents (4) to (7) have not been shown to include a water-insoluble emollient ester as defined in present claim 1. Novelty over documents (3) to (7) is therefore given, which was not disputed by the Appellants.

5. **Priority right (Article 87(1) EPC)**

5.1 Documents (1) and (2) are intermediate documents having a publication date between the priority date claimed by the patent in suit and the filing date thereof. As shown in points 4.1 and 4.2 above, they are related to the presently claimed subject-matter. In order to establish whether documents (1) and (2) are to be considered in deciding on the issue of inventive step, the question arises therefore whether present claim 1 is entitled to the claimed priority.

5.2 In accordance with the opinion of the Enlarged Board of Appeal G 2/98 (OJ EPO 2001, 413), claim 1 of the patent in suit would be entitled to the claimed priority only if the skilled person could derive the subject matter of the claim directly and unambiguously, using common general knowledge, from the previous application as a whole.

5.3 The subject-matter of present claim 1 differs from the broadest disclosure of the priority document as reflected in its claim 1, in that

(i) the water-soluble or water-miscible cationic conditioning compound should comprise a cationic guar gum;
(ii) the suspended water-insoluble conditioning compound should be a water-insoluble emollient ester; and
(iii) the suspending agent for the water-insoluble conditioning compound should be a solid at room temperature and should be selected from the group consisting of (a) primary or secondary fatty acids or fatty alcohols having about 12 to about 40 carbon atoms in long chain radical, (b) a fatty ester having a long chain C_{12}-C_{36} radical, and (c) mixtures of any two or more of (a) -(b).

Regarding the first difference, the use of a cationic guar gum finds a basis in claim 4 of the priority document. The second difference, the emollient ester, finds a basis in claim 6 of the priority document and the third difference, the suspending agent, originates from claim 11 of the priority document.

Claims 4, 6 and 11 of the priority document each refer indirectly or directly to claim 1, but there is no mutual reference so that there is no disclosure in the claims of the priority document for the particular combination of features of present claim 1.

In the description of the priority document page 13, line 22 to page 14, line 28, not only guar gums are mentioned as useful water-soluble or water-miscible cationic conditioning compounds, but also many other useful compounds such as other polyquaternium and cellulosic compounds.

Similarly, the disclosure of the priority document in respect of the water-insoluble conditioning compound is
not restricted to an emollient ester, but also mentions the use of further compounds such as silicones and hydrocarbon compounds (page 16, from line 13 to page 18, line 20).

Regarding the suspending agent for the water-insoluble conditioning compound, according to the description of the priority document, suitable compounds are long chain alkyl-containing compounds including alcohols, esters and acids and their derivatives, natural and synthetic waxes that include long chain alcohols, esters and/or acids, and hydrocarbon waxes, such as paraffinic waxes (page 18, line 21 to page 19, line 4).

However, in the description of the priority document nothing is indicated about a possible combination of certain compounds selected out of the above-indicated lists.

In the single example of the priority document a composition is described that contains very specific compounds in very specific amounts, that cannot serve as a basis for a more general disclosure.

Finally, present claim 1 allows any amount of cationic guar gum as long as the total amount of water-soluble or water miscible cationic compound in the shampoo composition is comprised between 0.1% and 10% by weight. The use of a cationic guar gum in the priority document is, however, always disclosed in combination with specific amounts thereof (see claim 2, page 7, lines 26-30 or example page 24). Thus, present claim 1 allows amounts of cationic guar gum which have no basis in the priority document.
5.4 In view of the above, it is concluded that claim 1 underlying the contested decision pertains to a combination of features which is not directly and unambiguously derivable from the priority document as a whole. In order for the priority claim of present claim 1 to be valid, the priority document not only has to disclose its features individually, but also their combination. In those circumstances, the Board concludes that the invention as defined in claim 1 underlying the appealed decision is not the same as that disclosed in the priority document, so that present claim 1 does not enjoy the priority date of 27 March 1992. Therefore, the subject-matter of claim 1 is only entitled to the filing date of the patent in suit so that documents (1) and (2) belong to the state of the art pursuant to Article 54(2) EPC.

6. Inventive step

6.1 Closest state of the art

The patent in suit concerns a conditioning shampoo composition comprising an anionic surfactant and a cationic conditioning agent. It addresses the problem of inherent incompatibility between these two components in shampoo compositions that significantly reduces their respective cleaning and conditioning properties (see page 2, lines 41-46). It also addresses the problem of poor dry hair combing induced by the cationic conditioning agent (page 2, line 53-56) and the problem of instability that results from the use of insoluble conditioning agents (page 3, lines 6-9). The patent in suit therefore seeks to provide compositions
that are stable, have excellent cleansing properties, wet and dry combing properties, improved physical and cosmetic properties (gloss, thickness, manageability, softness and body) and do not lead to build-up on the hair shaft, over time, of the conditioning agent (page 3, lines 25 to 40).

Document (1) is also directed to a conditioning shampoo comprising an anionic surfactant and a cationic conditioning agent. The conditioning shampoo according to document (1) simultaneously cleanses the hair and imparts desirable physical and cosmetic properties to the hair. The hair treated is combed easily when wet and the hair possesses satisfactory cosmetic properties when dry, including, in particular, elasticity, body, sheen and manageability. It is stable and incompatibility problems normally encountered when a cationic surfactant and anionic surfactant are present in the same composition have been overcome (page 4, lines 41-51). The conditioning shampoo of document (1) also allows to deposit conditioning agents on the hair without an excessive build-up of the conditioning agents on the hair shaft after repeated treatment (page 5, lines 38-40). The shampoo compositions of document (1), in general, impart both excellent wet combing and excellent dry combing properties to shampooed hair (page 22, lines 48-49). In order to arrive at that result, document (1) proposes in particular the use of shampoo compositions as disclosed in its examples 9, 11-17, 24 and 27-28, namely composition comprising an anionic cleansing surfactant, a cationic guar gum and cetearyl octanoate, which is an emollient ester as defined in present claim 1 (see point 4.1 above).
Document (2) also concerns a conditioning shampoo composition comprising an anionic surfactant and a cationic conditioning agent. It addresses the problem of improving overall conditioning, and especially shine and luster, wet and dry combing. However, having regard to the composition of the shampoo according to document (2) (see point 4.2 above) and the purposes it was conceived for, it must be concluded that document (2) does not come closer to the patent in suit than document (1).

The same holds true for documents (3) to (7) which do not or only partially address the problems the patent in suit and document (1) seeks to solve and also do not have more relevant technical features in common with the patent in suit than document (1) (see point 4.3 above).

It follows, therefore, that document (1) is the closest state of the art.

6.2 Problem solved

As can be seen from the foregoing, the problems addressed by the patent in suit, namely reduced cleaning and conditioning properties due to the incompatibility between the anionic surfactant and the cationic conditioning agent, poor dry hair combing induced by the cationic conditioning agent and instability that results from the use of insoluble conditioning agents, have already been solved by the compositions of document (1). The shampoo compositions of the patent in suit, as those described in document

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(1), exhibit stability, have excellent cleansing properties, wet and dry combing properties, satisfactory cosmetic properties and do not lead to build-up on the hair shaft, over time, of the conditioning agent. The patent in suit contains no indication that any improvement over document (1) could be achieved, nor is there any evidence on file from which the existence of such an improvement could be derived. Therefore, the technical problem to be solved over document (1) can only be seen as to provide further conditioning shampoo compositions.

6.3 Obviousness

It remains to be decided whether or not the proposed solution to the problem underlying the patent in suit is obvious in view of the prior art documents on file.

The shampoo compositions of document (1), apart from the compounds defined in claim 1, may also include optional conditioning agents and emulsifiers like fatty alcohols such as myristyl alcohol, stearyl alcohol, ceteteryl alcohol or cetyl alcohol in general in an amount ranging from 0% to about 3% by weight of the composition (page 13, lines 20 to 24).

Myristyl alcohol (C₁₄, melting point 38°C) falls within the category of primary fatty alcohol suspending agents as defined in present claim 1 and cetyl alcohol, stearyl alcohol and cetearyl alcohol are exemplified in the patent in suit as useful suspending agents (page 6, lines 53 to 55).
It follows from the above that the present combination of compounds as defined in claim 1 is an arbitrary combination of features disclosed in document (1) from which the skilled person could pick and choose at liberty when looking for further conditioning shampoo compositions. All compositions known from document (1) such as those disclosed in examples 9, 11-17, 24 and 27-28 are equally suitable as the starting point for a compositional modification and no inventive skill needs to be exercised in selecting any of the conditioning or suspending agents disclosed on page 13, lines 20-24 of document (1), such as myristyl alcohol, stearyl alcohol, cetearyl alcohol or cetyl alcohol and in adding them in the amount described in that document. A mere arbitrary choice from all the possible solutions offered by document (1) cannot involve an inventive step (see also e.g. T 939/92, OJ EPO 1996, 309).

6.4 It follows that claim 1 underlying the impugned decision lacks an inventive step so that the claimed subject-matter does not comply with the requirements of Article 56 EPC.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: 

S. Fabiani

The Chairman:

S. Perryman