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# Datasheet for the decision of 21 February 2007

T 1048/04 - 3.3.06 Case Number:

Application Number: 96926729.3

Publication Number: 0841898

A61K 7/50 IPC:

Language of the proceedings: EN

## Title of invention:

Topical compositions having improved skin feel

#### Patentee:

THE PROCTER & GAMBLE COMPANY

#### Opponents:

KPSS-Kao Professional Salon Services GmbH HENKEL KGaA

## Headword:

Topical composition / PROCTER

# Relevant legal provisions:

EPC Art. 56

#### Keyword:

"Inventive step (all requests) - no: obvious alternative"

# Decisions cited:

## Catchword:



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Boards of Appeal

Chambres de recours

Case Number: T 1048/04 - 3.3.06

DECISION
the Technical Board of Approx

of the Technical Board of Appeal 3.3.06 of 21 February 2007

Appellant I: KPSS-Kao Professional Salon Services GmbH

(Opponent 01) Zerninstrasse 10-18

D-64297 Darmstadt (DE)

Appellant II: HENKEL KGaA (Opponent 02) VTP (Patente)

D-40191 Düsseldorf (DE)

Respondent: THE PROCTER & GAMBLE COMPANY

(Patent Proprietor) One Procter & Gamble Plaza Cincinnati, Ohio 45202 (US)

Representative: Wilding, Richard Alan

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Decision under appeal: Interlocutory decision of the Opposition

Division of the European Patent Office posted 12 August 2004 concerning maintenance of the European patent No. 0841898 in amended form.

Composition of the Board:

Chairman: P.-P. Bracke
Members: P. Ammendola

A. Pignatelli

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# Summary of Facts and Submissions

- I. This appeal is from the decision of the Opposition Division concerning the maintenance in amended form of European patent No. 0 841 898 according to the then pending main request of the Patent Proprietor.
- II. Opponents I and II had sought revocation of the patent in suit on the grounds of lack of novelty and inventive step (Article 100(a) in combination with Articles 52(1), 54 and 56 EPC). Opponent II had relied also on the ground of insufficient disclosure (Article 100(b) EPC).

The Opponents had based their oppositions on, among others, the following documents:

(3) EP-A-0 247 832

and

- (8) WO 95/13048.
- III. The Opposition Division had found that the subjectmatter of the amended patent claims according to the
  Proprietor's main request complied with the requirements
  of the EPC, inter alia, because it was not rendered
  obvious by the disclosure of the above-cited documents.
  In particular, since document (3) disclosed only
  compositions with excellent conditioning of hair, the
  skilled person aiming at improved skin care compositions
  would neither start from the disclosure in this citation
  nor combine this latter with that given in document (8)
  in respect of skin desquamation compositions.

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- IV. Both Opponent I (hereinafter "Appellant I") and Opponent II (hereinafter "Appellant II") lodged an appeal against this decision. Appellant II filed with the grounds of appeal document
  - (16) "CTFA Cosmetic Ingredient Handbook", 1992, pages 562 to 580.
- V. At the oral proceedings which took place before the Board on 21 February 2007, the Patent Proprietor (hereinafter "Respondent") withdrew any preceding request and filed two amended sets of claims respectively labelled as main request and as first auxiliary request.
- VI. For the present decision it is sufficient to consider claim 1 of each of these requests. Claim 1 of the main request reads:
  - "1. A skin care composition comprising:
    - (a) from 0.1% to 20% by weight of an amphoteric surfactant having the following structure

$$\begin{array}{c} Q & R^2 \\ R^4 - (C-NH-(CH_2)_m)_{n-1}^{n-1} N-R^4 - X^{-1} \\ R^3 \end{array}$$

wherein  $R^1$  is unsubstituted, saturated or unsaturated, straight or branched chain alkyl having from 9 to 22 carbon atoms; m is an integer from 1 to 3; n is 0 or 1;  $R^2$  and  $R^3$  are independently selected from alkyl having from 1 to 3 carbon atoms and monohydroxyalkyl having from 1 to 3 carbon atoms;  $R^4$  is selected from saturated or unsaturated alkyl having from 1 to 5

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carbon atoms and saturated or unsaturated monohydroxyalkyl having from 1 to 5 carbon atoms; X is selected from the group consisting of  $CO_2$ ,  $SO_3$ , and  $SO_4$ ; and pharmaceutically acceptable salts of the foregoing compounds;

- (b) from 0.1% to 20% by weight of an anionic
  surfactant;
- (c) from 0.1% to 15% by weight of a cationic surfactant, wherein the cationic surfactant is an ammonium salt having the formula:

$$\begin{bmatrix} R_1 \\ I \\ R_2 - N - R_3 \\ I \\ R_4 \end{bmatrix} + X$$

wherein in this formula for said ammonium salt,  $R_1$  is an alkyl group having from 12 to 22 carbon atoms,  $R_2$  is H or an alkyl group having from 1 to 22 carbon atoms,  $R_3$  and  $R_4$  are independently selected from H or an alkyl group having from 1 to 3 carbon atoms, and X is an anion selected form chloride, bromide, iodide, acetate, phosphate, nitrate, sulfate, methyl sulfate, ethyl sulfate, tosylate, lactate, citrate, glycolate, and mixtures thereof;

- (d) from 0.1 to 99.7% by weight water, and
- (e) from 0.001% to 20% of an active ingredient; wherein said active ingredient is selected from salicylic acid, benzoyl peroxide, cis-retinoic acid, trans-retinoic acid, retinol, phytic acid, N-acetyl L-cysteine, azelaic acid, lipoic acid, resourcinol, glycolic acid, ibuprofen, naproxen, hydrocortisone, phenoxyethanol, phenoxypropanol, phenoxyisopropanol, 2-ethylhexyl pmethoxycinnamic acid, oxybenzone, 2-

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phenylbenzimidazole-5-sulfonic acid,
dihydroxyacetone, and mixtures thereof;

wherein the skin care composition is not a cleanser consisting of

| Ingredients                                      | Weight Percent |
|--|----------------|
| Water  | QS 100         |
| Cetyl Betaine                                    | 2.00           |
| Sodium Alkyl Sulfate                             | 1.00           |
| PPG-14 Butyl Ether                               | 3.25           |
| Glycerin   | 3.00           |
| Stearyl Alcohol                                  | 2.88           |
| Polyethylene particles $^{\scriptscriptstyle 1}$ | 2.00           |
| Polyethylene particles $^2$                      | 2.00           |
| Salicylic acid                                   | 2.00           |
| Distearyl Dimethyl Ammonium                      | Chloride 1.50  |
| Cetyl alcohol                                    | 0.80           |
| Urea   | 0.50           |
| Steareth-21                                      | 0.50           |
| Behenyl alcohol                                  | 0.32           |
| PPG-30   | 0.25           |
| Steareth-2                                       | 0.25           |
| Fragrance  | 0.15           |
| Polysaccharide gum                               | 0.05 or 0.15   |
| Disodium EDTA                                    | 0.01           |

<sup>&</sup>lt;sup>1</sup> Oxidised polyethylene particles having a mean particle size diameter of 25 microns, available as Acumist A-25 from Allied Signal Corp.

<sup>&</sup>lt;sup>1</sup> Oxidized polyethylene particles having a mean particle size diameter of 45 microns, available as Acumist A-45 from Allied Signal Corp.

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or a cleanser prepared by replacing the polyethylene particles of the above examples with particles of equivalent mean particle size or with particles of other mean particle sizes in the range from 1 micron to 75 microns, selected from one or more of the following materials: polybutylene, polyisobutylene, polymethylstyrene, polypropylene, polystyrene, polyurethane, nylon and teflon.".

Claim 1 of the sole auxiliary request differs from the above claim only in that the wordings of this latter "(a) from 0.1% to 20%", "(b) from 0.1% to 20%", "(c) from 0.1% to 15%" and "(d) from 0.1% to 99.7%" have respectively been replaced by "(a) from 0.1% to 10%", "(b) from 0.1% to 10%", "(c) from 0.1% to 10%" and "(d) at least 60%".

- VII. In respect of the inventiveness of the Respondent's requests the Appellants argued substantially as follows:
  - it was not credible that the compositions encompassed in claim 1 of the main request containing as low as 0.01% by weight water would also provide the improvement of skin feel alleged in the patent in suit;
  - conditioning agents suitable for hair as well as skin were conventional ingredients of many personal care compositions and, in particular, of personal cleansing compositions such as the "body shampoos" for cleansing both hair and skin already conventional at the filing date of the patent in

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suit, hence the person skilled in the art of compositions for conditioning skin would have taken into consideration document (3) because this citation disclosed detergent compositions in general and body shampoos in particular;

- the skilled person would in any case have regarded the conditioning of skin or hair as associated effects since, as demonstrated by document (16), most of hair conditioning ingredients were also skin conditioners and, thus, would immediately have recognised that the conventional skin conditioners contained in the cleansing compositions disclosed in document (3) would necessarily provide conditioning of skin, such as the scalp underlying the hair;
- hence, it would be appropriate in the present case to assess inventiveness starting from either of documents (3) or (8) and, in both cases, it would be appropriate to combine one citation with the other, in order to arrive at further cleansing compositions with improved skin feel;
- the subject-matter of claim 1 of the main request would thus result in an obvious way from the combination of e.g. the desquamation compositions containing salicylic acid disclosed e.g. in examples III or V of document (8) with the complex of anionic, cationic and amphoteric surfactants disclosed e.g. in example 11 of document (3);
- the same reasoning applied to the subject-matter of claim 1 of the auxiliary request.

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- VIII. The Respondent refuted these arguments of the Appellants by substantially relying on the same reasoning of the decision under appeal. It argued in particular that:
  - the Appellants had provided no evidence supporting their allegation that the aimed improved skin feel was not achievable by the compositions according to claim 1 of the main request with low water content;
  - this allegation was moreover manifestly irrelevant in respect of the subject-matter of claim 1 of the auxiliary request;
  - as evident from paragraph 22 of the patent in suit the compositions of the invention would display superior stability vis-à-vis the skin conditioning compositions of the prior art;
  - page 2, lines 13 to 22 and 43 to 62, of document (3) clearly indicated that this citation was instead only focused on conditioning of hair and on the problem of shampoo transparency and stability, depriving of any relevance the few generic references to other detergent compositions also contained in document (3) such as the sole example of "body shampoo", this latter additionally being an expression which would have no clear meaning;
  - even though many hair conditioning ingredients were also known to provide improvements of the skin feel, the technical fields of hair shampoos or skin care compositions would be distinct, since they would encompass formulations of substantially different chemical composition in order to take into account

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the specific needs of hair or of skin, such as, for instance, the very variable hydrophobicity of hair;

- finally the combination of documents (8) and (3) would not lead directly to the claimed subject matter, but would require the selection among the cationic surfactants disclosed in document (3) of those according to the definition of ingredient "(c)" in claim 1 of any of the two requests.
- IX. The Appellants have requested that the decision of the first instance be set aside and that the patent be revoked.

The Respondent has requested that the patent be maintained in amended form on the basis of the main request or of the first auxiliary request both filed during oral proceedings.

## Reasons for the decision

## Main request

- 1. The Board is satisfied that this request complies with the requirements of Articles 54, 84, 123 EPC as well as of Rule 57(a) EPC. However, no reasons need to be given in these respects because of the negative finding on the presence of an inventive step (see here after).
- 2. Claim 1: inventive step (Articles 52(1) and 56 EPC)
- 2.1 This claim (see above section VI of the Facts and Submissions) defines a skin care composition comprising

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the three sorts of surfactants "(a)", "(b)" and "(c)", water and an active ingredient "(e)", this latter possibly being, among others, salicylic acid.

According to the description of the patent in suit (see paragraphs 1 to 5) the claimed skin care composition provides an improved skin feel in that it avoids irritating the skin and promotes skin conditioning by treating the dry skin and by providing desquamation benefits. This is summarised in paragraph 9 of the patent identifying the object of the invention as "to provide skin care compositions having improved skin conditioning properties, and which are also mild and nonirritating to the skin." The same is stated in other portions of the patent description (see paragraphs 21, 22 and 109).

2.2 The Board notes that the same technical problem is explicitly addressed in document (8), as evident from page 1, lines 4 to 6, of this citation, stating that the desquamation compositions disclosed therein improve "the suppleness or smoothness of skin by removing scales from skin surface".

On the contrary, document (3) contains **no explicit** reference to improvements of the skin feel.

Therefore, the Board concurs with the Respondent that the prior art of document (8) is more appropriate than that of document (3) as starting point for the assessment of inventive step.

2.3 The Board notes that document (8) discloses desquamation compositions, such as cleansing compositions or lotions, - 10 - T 1048/04

comprising water (see document (8) claim 1 and from page 7, line 35 to page 8, line 22, and the examples). These compositions contain also an amphoteric surfactant and, optionally, also an anionic surfactant (see document (8) claim 1 and from page 7, lines 35 to 37, page 8, lines 9 to 17, as well as the examples). Hence, the composition claimed in claim 1 of the Respondent's main request differs from, for instance, the hair tonic of example III of this citation only for the additional presence of the cationic surfactant "(c)", and from the other compositions exemplified in document (3), such as the lotion of example V, also for the additional presence of an anionic surfactant "(b)". This has not been disputed by the Respondent.

2.4 The Respondent has argued that the claimed composition would be superior to those of the prior art (see above section VIII of the Facts and Submissions). It has referred in particular to paragraph 22 of the patent specification which describes that the surfactants of the claimed composition form complexes "that are believed to be highly stable relative to the individual surfactant components".

The Board finds however that this sole statement in the whole patent alleging the superior stability of the surfactant complex could just express an opinion or a plausible possibility among others (see therein "... are believed..."), rather than reporting an univocal finding.

Moreover, this statement refers exclusively to a possible improvement vis-à-vis each individual surfactant component, whereas the compositions of document (8) may be mixtures containing already two

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surfactants (the amphoteric and the anionic) capable of forming ionic complexes.

Hence, the above identified statement is found insufficient for rendering credible that the stability of the surfactant system in the composition of the patent in suit were superior to that of the systems present in the relevant prior art.

- 2.5 On the other hand, it is also not convincing the Appellants' argument (see above section VII of the Facts and Submissions) that the compositions encompassed in claim 1 of the main request containing as low as 0.01% by weight water would not provide an improvement of skin feel. Indeed, this argument lacks any supporting experimental evidence or theoretical justification and, thus, represents a mere allegation, disputed by the Respondent.
- Hence, the Board has no reason to disbelieve the statements in the patent in suit that the skin-care compositions of the invention achieve improved skin feel, i.e. the same technical effect already achieved by the desquamation compositions disclosed in document (8). Hence the technical problem solved by the claimed compositions vis-à-vis this prior art is that of rendering available further skin care compositions having improved skin feel, i.e. an alternative to those disclosed in document (8).

Accordingly, in the present case the assessment of inventive step boils down to establishing whether or not the skilled person starting from e.g. example III or V of document (8) would have replaced the sole amphoteric

surfactant or the surfactant pair present therein by the combination of three surfactants as defined in "(a)" to "(c)" in claim 1 under consideration, in the expectation that such modification would at least not impair the skin conditioning properties of these compositions.

2.7 The Opposition Division has considered (see points IIIa and b of the decision under appeal) that document (3) would address the conditioning of hair only and that this latter would be a technical problem remote from that considered in document (8), since the cosmetic requirements of hair and skin would generally be quite different.

The Respondent has added thereto that in particular the variable hydrophobicity of the human hair is such that it necessarily implies special requirements for hair shampoos for hair conditioning.

Hence hair and skin conditioning would be two distinct technical fields and the person skilled in the art of skin care compositions would have no reason to explore the remote technical field of hair shampoos for hair conditioning and, hence, to find document (3).

2.7.1 The Board notes however that the possible existence of some compositional differences between certain hair or body conditioning compositions or of special problems specific for hair but not for skin conditioning (or vice versa) is insufficient to demonstrate that the conditioning of hair and skin would be regarded by the skilled person as two distinct technical fields remote form each other.

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In particular since, as convincingly argued by the Appellants also on the basis of document (16) and undisputed by the Respondent, the skilled person was already aware before the filing date of the patent in suit that

- a) conditioning agents suitable for hair as well as skin were conventional ingredients of many personal care compositions and, in particular, of personal cleansing compositions
- b) the hair conditioning agents contained in hair conditioning shampoos might be - and often were also conventional skin conditioners, thus, it was apparent to the skilled person that the skin (e.g. of the underlying scalp) would also simultaneously be conditioned during hair washing with conditioning shampoos.

Moreover, in the present case it is document (8) itself that reminds its skilled reader that skin conditioning may also be produced by hair care compositions. Indeed, this citation explicitly indicates that also the compositions disclosed therein, which are undisputedly directed to improve skin conditioning, may be in the form of shampoos or of hair lotions (see document (8) the first 6 lines on page 8 and example III).

Hence, the skilled person starting from document (8) was certainly aware that technical information relevant for skin conditioning was in principle spread throughout the whole technical field of personal care compositions for hair and/or body and, in particular, of cleansing

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compositions providing conditioning benefits (to hair and/or skin).

2.7.2 Document (3) certainly belongs to this technical field because it explicitly discloses detergent compositions providing hair conditioning.

Hence, the skilled person searching for a solution to the posed problem would have taken this citation into consideration and found explicitly disclosed therein that skin-safe surfactant systems obtained by combining cationic surfactants such as alkyl ammonium salts, amphoteric betaines and anionic detergents (see page 2, lines 13 to 22 and 43 to 62, as well as examples 1 and 11) may be used in personal care compositions providing excellent conditioning and only a slight irritation of the skin (see in document (3) page 2, lines 7 to 10, and page 7, lines 56 and 57).

2.8 The Board notes however that, contrary to the finding in the decision under appeal, document (3) discloses implicitly skin conditioning compositions as well.

To the skilled reader of this citation it is apparent that the disclosure therein of "body shampoos", rather being obscure as suggested by the Respondent, can only necessarily identify (hair) shampoos that can (also) be used over the body, i.e. the personal care compositions suitable for cleansing both hair and skin that, as maintained by the Appellants and undisputed by the Respondent, were already conventional at the filing date of the patent in suit.

Therefore, the skilled reader of document (3), noting that the specific example of "body shampoo" disclosed

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therein (i.e. example 9) comprises "aloe extract", i.e. a conventional skin conditioning agent (see the list in document (16) page 576, line 18 of the left column and the common general knowledge recalled above at point 2.7.1) would necessarily conclude that at least the body detergent compositions disclosed therein may be formulated to produce conditioning of the body skin.

Thus, the skilled reader of document (3) would necessarily deduce that the skin-safe surfactant complexes disclosed therein might also be employed in compositions providing skin feel benefits.

- 2.9 The Board concludes therefore that the combination of documents (8) and (3) has rendered obvious to solve the posed technical problem by replacing the surfactant(s) used in the compositions of e.g. examples III or V of document (8) by the skin-safe complexes disclosed in document (3). It was, therefore, obvious to replace in document (8) e.g. the 20.5 wt% of surfactants (17.0 wt% of anionic sulfate and 3.5 wt% of amphoteric betaine surfactant) of example III or the 5 wt% of amphoteric betaine surfactant of example V by the corresponding amount of any of the surfactant system complexes disclosed in document (3).
- 2.10 It is undisputed that according to document (3) these latter complexes may comprise all the three ingredients according to the definitions of "(a)" to "(c)" in claim 1. In particular, this would be the case of the surfactant complex used in e.g. example 11.

  However, as correctly observed by the Respondent, some other surfactant complexes also described in this citation are instead not encompassed by the definition

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of the three surfactants in claim 1 under consideration, in particular because in document (3) the cationic surfactant might also be an alkenyl ammonium cationic surfactants (whereas the definition of the cationic surfactant "(c)" in present claim 1 is limited to alkyl ammonium ingredients). Hence, in the Respondent's opinion to arrive at the presently claimed subjectmatter would imply a non-obvious selection of certain specific surfactant complexes among all those disclosed in document (3).

The Board observes, instead, that each surfactant complex disclosed in document (3) - and, thus, also that specifically disclosed, for instance, in example 11 could be expected to be suitable ingredient for personal care compositions providing skin conditioning benefits and, thus, represents an obvious alternative to the surfactant ingredient(s) of the personal care compositions of document (8), such as the anionic and amphoteric surfactants in example III or the amphoteric surfactant in example V. The fact that the claimed subject-matter embraces only a portion of the solutions to the posed technical problem that are equally suggested in the prior art does not attribute any inventiveness to the former. Accordingly, the skilled person would have arrived at the subject-matter of claim 1 without exercising any inventive ingenuity.

2.11 Hence, the Board concludes that the subject-matter of claim 1 of the main request does not comply with the requirements of Article 56 EPC and, thus, that this request is not allowable. - 17 - T 1048/04

## Auxiliary request

- 3. Claim 1: inventive step (Articles 52(1) and 56 EPC)
- 3.1 The same reasoning applies to the assessment of inventive step for the subject-matter of claim 1 of the sole auxiliary request (see above section VI of the Facts and Submissions), since this claim embraces compositions resulting e.g. from the replacement of the 5 wt% betaine surfactant in the lotion of example V of document (8) (wherein the amount of water is above 70 wt%) with, for instance, the same amount of the tertiary surfactant complex used in example 11 of document (3). Hence, also this claim embraces alternatives to the skin care compositions of document (8) that are rendered obvious by the combination of the disclosure of this citation with that of document (3).
- 3.2 Hence the Board concludes that also the subject-matter of claim 1 of the sole auxiliary request does not comply with the requirements of Article 56 EPC and, thus, that also this request is not allowable.

# Order

# For these reasons it is decided that:

The decision under appeal is set aside.

The patent is revoked.

The Registrar:

The Chairman:

G. Rauh

P.-P. Bracke