Datasheet for the decision
of 24 May 2007

Case Number: T 0465/06 - 3.3.06
Application Number: 98901965.8
Publication Number: 0966264
IPC: A61K 7/50

Language of the proceedings: EN

Title of invention:
Cleansing composition with separately dispensed cleansing base and benefit base wherein benefit base also comprises surfactant

Patentee: UNILEVER PLC, et al

Opponent: HENKEL KGaA

Headword: surfactant and benefit stripes/UNILEVER

Relevant legal provisions:
EPC Art. 56

Keyword:
"Late request (admissible): minor amendments - no delay of the proceedings"
"Inventive step (main and auxiliary request): no - desired technical effect not achievable over the whole area of claim 1; obvious alternative"

Decisions cited:
T 0939/92, T 0694/92, T 0583/93, T 0668/94

Catchword: -
Case Number: T 0465/06 - 3.3.06

DECISION
of the Technical Board of Appeal
of 24 May 2007

Appellants: UNILEVER PLC
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UNILEVER N.V.

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Respondent: HENKEL KGaA
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 23 January 2006 revoking European Patent No. 0966264 pursuant to Article 102(1) EPC.

Composition of the Board:
Chairman: P. Ammendola
Members: G. Raths
U. Tronser
Summary of Facts and Submissions

I. This appeal is from the Opposition Division's decision to revoke European patent No. 0 966 264.

Claim 1 of the patent as granted reads:

"1. An aqueous liquid cleansing and moisturising composition comprising:
(a) 10% to 99.9% by weight of the total product of a base formulation, the base formulation comprising: 1 to 35% by weight of an anionic, nonionic, amphoteric/zwitterionic or cationic surfactant or mixture thereof; and the balance water; and
(b) 0.1% to 90% by weight of the total product of an additive formulation, the additive formulation comprising:
(i) 5 to 80% by weight of a skin benefit agent;
(ii) 0.1% to 20% by weight of an anionic, amphoteric/zwitterionic or cationic surfactant or mixture thereof; and
(iii) the balance water;
wherein the additive formulation and the base formulation are physically separate but are combinably dispensed from a single packaging means as individual stripes thereby avoiding the need to post-mix the base formulation with the additive formulation prior to use; wherein each stripe has a width of at least 1000 microns."

II. An opposition based on lack of novelty and inventive step (Articles 100(a), 54 and 56 EPC) was filed against this decision.
The following document was filed, inter alia, with the notice of opposition:

(2) EP-B-0 755 243.

During the opposition proceedings the opponent (now the respondent) filed, inter alia, the following documents:

(10) Umbach: Kosmetik, Thieme Verlag, 1988, pages 223-231 and

III. In its decision the Opposition Division held that the subject-matter of Claim 1 of the patent as granted did not involve an inventive step.

The patent proprietors (now appellants) filed an appeal against this decision and, under cover of the letter dated 7 April 2004 containing the statement of grounds of appeal, a main request and four auxiliary requests.

IV. At the beginning of the oral proceedings which took place on 24 May 2007, the appellants withdrew auxiliary requests 1 to 4 and submitted a new auxiliary request.

Claim 1 of the auxiliary request differs from Claim 1 as granted in that the passage

"(a) 10% to 99.9 % by weight" was replaced by
"(a) 30 to 70 wt.% by weight" and
"(b) 0.1% to 90% by weight" was replaced by
"(b) 70 - 30% by weight"
V. The appellants argued in writing and orally in essence as follows:

The difference between the patent in suit and document (2) as the closest prior art lied, in essence, in the absence of surfactants in the benefit additive formulation. The addition of a specified amount of surfactant to the benefit stripe in order to obtain an increased foaming volume would not be obvious since the skilled person would have had no incentive to add surfactants to the benefit stripe.

The Opposition Division was not right in assuming that it was known that oily benefit agents suppress foaming and that the benefit agent used according to the invention was of foam suppressing nature. Therefore, the Opposition Division's argument to add a surfactant in order to counteract against the foam suppressing nature was not acceptable.

The results in table III of the patent in suit would prove that there was an increase in foam levels.

The effect would also have been shown over the whole scope of the claims.

VI. The respondent's arguments can be summarized as follows:

It would have been known from document (2) to add the benefit agent in form of an emulsion comprising oil, a surfactant and water. The requirement of physical separation of base and additive formulation would also be met by the compositions according to document (2).
It would have been known that a combination of anionic and amphoteric surfactant agents would lead to synergistic effects and that nonionic surfactants foam less than anionic and amphoteric surfactants.

The comparative examples would provide inconsistent results. Moreover, they would not be appropriate for drawing any conclusions because of the following reasons:

(a) the effective concentration of the active surfactants in the base formulation would not be known,
(b) compositions known as foaming would be compared with compositions known as not foaming,
(c) different amphoteric surfactants were used in the benefit stripe and surfactant stripe, respectively.

VII. The appellants requested that the decision under appeal be set aside and that the patent be maintained as granted or alternatively on the basis of the auxiliary request submitted during oral proceedings.

The respondent requested that the appeal be dismissed.

Reasons for the Decision

1. Late request

The admissibility of the appellants' auxiliary request presented at the beginning of the oral proceedings was put in question by the respondent for being late.
The request however did not change the legal or factual framework of the case since the amendments introduced into Claim 1 of the auxiliary request were minor and clearly allowable (see herein below point 3.1). Also, the subject-matter claimed in the auxiliary request was manifestly known to the respondent so that it did not argue that it was taken by surprise or not reasonably prepared for discussing it. Hence, it was apparent that the admission of the late filed auxiliary request would not delay the proceedings.

For the above reasons, the Board admitted the auxiliary request into the appeal proceedings.

2. Main request

2.1 Inventive step

2.1.1 The patent in suit relates to detergent compositions suitable for topical applications for cleansing and improving the condition of the human body.

It acknowledges that it was already known to dispense the cleansing and moisturizing components separately but combinedly as discrete stripes (page 2, lines 5 to 8, 22 to 23). The benefit agent stripe of the separately dispensed, non-mixed prior to use, dual cleanser/moisturizer compositions of the present invention has, however, been modified so that it now includes surfactant (page 2, lines 29 to 31).

2.1.2 According to the patent in suit by this modification 1) the total lather can be enhanced,
2) the problems associated with inadvertent, uneven striping can be ameliorated and
3) control to the user can be added as to how much or little cleansers is dispensed (page 2, lines 41 to 45).

2.1.3 Prior art detergent compositions suitable for topical application for cleansing and moisturising the skin are disclosed in document (2). In these compositions the cleansing and moisturising benefit components are separate but combinedly dispensable from packaging means as discrete domains (page 1, lines 1 to 9, page 2, lines 1 to 6).

Exactly as in the patent in suit, the surface active agent of the compositions according to document (2) is selected from anionic, nonionic, zwitterionic and cationic surface active agents.

Therefore, this document is a suitable starting point for assessing inventive step.

2.1.4 The problem underlying the patent in suit has to be determined in the light of the teaching of document (2).

During the oral proceedings the appellants did not rely on the effects alleged in the patent in suit and recalled above under points 2.1.2 2) and 2.1.2 3), but only argued that the problem solved in the patent in suit was to obtain an increased foam volume over the prior art compositions wherein the benefit stripe did not contain surfactant agents (see point above 2.1.2, 1)).
2.1.5 The Board observes that the breadth of the claim has also to be taken into consideration. Therefore, the question has to be answered whether the alleged technical advantage is achievable over the whole area claimed (T 939/92, OJ EPO 1996, 309; T 694/92, OJ EPO 1997, 408; T 583/93, OJ EPO 1996, 496; T 668/94), in particular within the whole concentration ranges of the surface active agents in the base (i.e. 1 to 35 % by weight) and additive (i.e. 0.1 to 20% by weight) formulations.

2.1.6 Tables II and IV of the patent in suit display the foam volume (in ml) as a function of the combinations of different surfactant stripe concentrations with different benefit stripe concentrations.

The Board notes that each invention composition of experiments 6 in tables III and V, i.e. samples comprising 90% surfactant stripe and 10% benefit stripe, generates a foam volume which is lower than that of the corresponding comparative example wherein the benefit stripe does not contain surfactant agents, namely 88 vs. 89 ml and 152 vs. 172 ml, respectively. So, the performance of the compositions according to the invention examples 6 of tables III and V is worse than that of the corresponding comparative examples 6. Hence the technical problem identified by the appellants is manifestly not solved within the whole range of 10 to 99,9% by weight of surfactant stripe (base formulation) and 0,1 to 90% by weight of benefit stripe (additive formulation).

2.1.7 The consequence is that the property of obtaining high foam volumes is to be disregarded in the determination
of the objective problem underlying the patent in suit, and, thus, in the assessment of inventive step.

2.1.8 For the above reasons, and since the Board considers the other technical effects alleged in the patent in suit (see above points 2.1.2. 2) and 2.1.2.3) manifestly lacking credibility, the sole objective problem underlying the patent in suit can be seen in providing further aqueous liquid cleansing and moisturising compositions.

The patent in suit proposes as the solution to this problem the aqueous liquid cleansing and moisturising compositions according to Claim 1 of the patent in suit.

2.1.9 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 state of the art.

The subject-matter of claim 1 of the patent in suit differs from that of document (2) only for the additional presence of surfactant agents in the benefit stripe.

In particular, the question is therefore whether the addition of surfactants to the benefit agent according to document (2) involves an inventive step.

2.1.10 According to the appellants the addition of a surfactant to the benefit stripe (additive formulation) would not be obvious.

2.1.11 The Board cannot agree. Document (2) disclosed a benefit agent which may be provided in the form of an
emulsion (page 5, line 16), which may comprise surfactant active agents, water and oil.

Further document (2) disclosed a base formulation comprising sodium cocoyl isethionate (7.5 wt.-%) i.e. an anionic surfactant agent, cocoamidopropyl betaine (3.75 wt.-%) i.e. an amphoteric surfactant and stearic acid and behenyl alcohol both defined as benefit agents (page 15, lines 1 to 10, page 3, line 17 and page 4, lines 3 and 7). The fact that this formulation was called a base formulation in document (2) is not relevant. What is of importance is that document (2) teaches the addition of surfactants to a benefit agent.

Hence, for a skilled person, the possibility of adding the active agent to a benefit agent was known from document (2) and, therefore, in the patent in suit this measure cannot contribute an inventive step.

2.1.12 It follows that the subject-matter of Claim 1 does not involve an inventive step, and therefore, does not meet the requirements of Article 56 EPC.

Consequently, the main request is not allowable.

3. Auxiliary request

3.1 Claim 1

Claim 1 of the auxiliary request differs from Claim 1 as granted in that the passage

"(a) 10% to 99,9 % by weight" was replaced by
"(a) 30 to 70 wt.% by weight" and
"(b) 0.1% to 90% by weight" was replaced by
"(b) 70 - 30% by weight"

The Board is satisfied that these amendments meet the requirements of Article 123(2) EPC, since the amendments find their support in claims 2 and 4 of the application as filed.

3.2 Inventive step

3.2.1 The reasoning set out under points 2.1.1 to 2.1.6 applies mutatis mutandis to the subject-matter of Claim 1 of the auxiliary request. In particular, the appellants however still argued that, in the light of document (2) as closest state of the art, the problem underlying the patent was to obtain an increased foam volume over the prior art compositions wherein the benefit compositions did not contain surfactant agents.

However, a narrower range than in Claim 1 of the main request is now at stake in Claim 1 of the auxiliary request, namely 30 to 70% surfactant stripe and 70 to 30% benefit stripe.

Hence, the Board has to examine whether there is sufficient evidence that this technical problem was at least solved within this narrower range. Therefore, it focuses on the experiments 3, 4 and 5 (hereinafter called examples 3, 4 and 5 and comparative examples 3, 4 and 5) in rows 3 to 5 of table III and table V which are representative of the range of 30 to 70% surfactant stripe and 70 to 30% benefit stripe.
3.2.2 The Board concurs with the appellants that the problem of obtaining a high foam volume has been plausibly solved by the experiments of tables III and V.

Nevertheless the Board has to point to the concentrations of the anionic, nonionic and amphoteric surfactants involved in solving the above mentioned technical problem of high foaming. All the compositions according to the examples 3, 4 and 5 comprised anionic, nonionic and amphoteric surfactants in the specific concentrations indicated in tables I, II and IV.

3.2.3 However the Board notes that according to Claim 1 of the auxiliary request the base formulation still comprises 1 to 35 wt% of an anionic, nonionic, amphoteric/zwitterionic or cationic surfactant and the additive formulation 0.1 to 20% by weight of anionic, amphoteric, zwitterionic or cationic surfactant.

Therefore, according to Claim 1 the simultaneous presence of anionic, nonionic, amphoteric or cationic surface active agents in the base formulation and anionic, amphoteric or cationic surface active agents in the additive formulation is not compulsory. So, the base formulation may comprise, for instance, only 1% by weight of an amphoteric surfactant and the additive formulation 0.1% by weight of an amphoteric surfactant without any other type of surfactant being present.

However, this combination would reasonably lead to a low foam volume since amphoteric surfactants are insignificant if used alone, what is common general knowledge (see document (10), page 228, bottom of the page).
Also the combination of 1% by weight of a nonionic surfactant in the base formulation and 0.1% by weight of a cationic surfactant in the additive formulation would reasonably not lead to the desired result since it was known that nonionic surfactants are poor foaming agents (see document (12), page 8, left column, line 1).

It follows that the desired technical effect cannot reasonably be expected to be achieved when considering the whole subject-matter of the auxiliary request relating to compositions having 30 to 70 wt%-% of surfactant stripe and 70 to 30 wt-% of benefit stripe.

The consequence is that the property of obtaining high foam volumes is also to be disregarded in the determination of the objective problem underlying the invention as claimed in the auxiliary request and, thus, in the assessment of inventive step.

3.2.4 Hence, also for the present request, the sole problem credibly solved is that of providing further aqueous liquid cleansing and moisturising compositions.

The proposed solution to this problem is the aqueous liquid cleansing and moisturising compositions according to Claim 1 of the auxiliary request.

3.2.5 It remains to be decided whether or not this is obvious in view of the state of the art.

The subject-matter of claim 1 of the patent in suit differs from that of document (2) only for the
additional presence of surfactant agents in the benefit stripe.

In particular, the question is therefore whether the addition of surfactants to the benefit agent according to document (2) involves an inventive step.

The reasoning continues in the same way as under points 2.1.11 to 2.1.12. In summary, document (2) already teaches the possibility of adding surfactants to the benefit agent.

Hence, for a skilled person looking for further aqueous liquid cleansing and moisturizing compositions this measure cannot contribute an inventive step.

3.2.6 It follows that the subject-matter of Claim 1 does not involve an inventive step, and therefore, does not meet the requirements of Article 56 EPC.

The auxiliary request is not allowable.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:          The Chairman:

G. Rauh               P. Ammendola