

Internal distribution code:

- (A) [] Publication in OJ
(B) [] To Chairmen and Members
(C) [X] To Chairmen
(D) [] No distribution

D E C I S I O N
of 8 November 2002

Case Number: T 0067/99 - 3.3.6

Application Number: 89200162.9

Publication Number: 0328176

IPC: C11D 17/00

Language of the proceedings: EN

Title of invention:

Aqueous detergent compositions and methods of forming them

Patentee:

UNILEVER N.V., et al

Opponent:

PROCTER & GAMBLE EUROPEAN TECHNICAL CENTER N.V.
Henkel Kommanditgesellschaft auf Aktien

Headword:

Structured detergent/UNILEVER

Relevant legal provisions:

EPC Art. 56

Keyword:

"Inventive step (no) - solution suggested in the prior art
(main request and first auxiliary request)";
"Second auxiliary request allowed - *reformatio in peius*"

Decisions cited:

-

Catchword:

-



Case Number: T 0067/99 - 3.3.6

D E C I S I O N
of the Technical Board of Appeal 3.3.6
of 8 November 2002

Appellant: UNILEVER N.V.
(Proprietor of the patent) Weena 455
NL-3013 AL Rotterdam (NL)

Representative: Rosen, Jacobson, Frans Lucas M.
Unilever N.V.,
Patent Division
P.O. Box 137
NL-3130 AC Vlaardingen (NL)

Respondent I: PROCTER & GAMBLE EUROPEAN TECHNICAL CENTER N.V.
(Opponent 01) Temselaan 100
B-1853 Strombeek-Bever (BE)

Representative: TER MEER STEINMEISTER & PARTNER
Patentanwälte
Mauerkircherstrasse 45
D-81679 München (DE)

Respondent II: Henkel
(Opponent 02) Kommanditgesellschaft auf Aktien
TTP / Patentabteilung
D-40191 Düsseldorf (DE)

Representative: -

Decision under appeal: Interlocutory decision of the Opposition Division
of the European Patent Office posted 16 December
1998 concerning maintenance of European patent
No. 0 328 176 in amended form.

Composition of the Board:

Chairman: P. Krasa
Members: G. N. C. Raths
M.-B. Tardo-Dino

Summary of Facts and Submissions

I. This appeal is from an interlocutory decision of the Opposition Division to maintain the European patent 0 328 176 in amended form. In two notices of opposition, both based on lack of novelty and inventive step, and one, additionally on insufficiency of disclosure, *inter alia*, the following document was cited:

(1) EP-A-0 086 614.

II. In its decision the Opposition Division found that the claims of the appellant's "amended second auxiliary request" filed during oral proceedings before the Opposition Division met the requirements of the EPC, but rejected the appellants' main request, and the second auxiliary request for lack of novelty in view of document (1), the first auxiliary request having been withdrawn.

Claim 1 of the main request comprising ten claims read as follows:

"1. A structured aqueous detergent composition containing detergent-active material in the form of at least one detergent-active component and at least one electrolyte and having an isotropic aqueous solution forming a continuous phase (a) and one or more suspending phases (c) which cause the composition to be structured characterised in that the composition further comprises distributed and suspended in said solution (a) discrete units of one or more non-network-forming phases (b), each selected from the following:

(i) solid particles containing detergent-active material,
(ii) lyotropic liquid crystals containing detergent-active material; and
(iii) non-encapsulated liquid droplets containing detergent-active material;
said phase (c) suspending the non-network forming phase (b); and
said non-network-forming phase (b) having a higher concentration by weight of detergent-active material than said aqueous solution (a)
provided that if said phase (c) is a lamellar phase formed by detergent-active material, then the detergent-active material in said lamellar phase is different in composition from the detergent-active present in the non-network-forming phase (b)."

III. The appellant (one of the proprietors) filed an appeal against this decision. It argued as follows:

The state of the art, in particular the examples of document (1), did not anticipate the claimed subject-matter in view of the requirement that the concentration of detergent-active material in the non-network-forming phase (b)(i) was greater than the concentration of the detergent-active material in the continuous phase (a). Further, the surfactant spheroids or vesicles of document (1) could not be equated to the non-encapsulated liquid droplets (b)(iii) but were in fact the suspending phase (c).

IV. The Respondents contested this. They maintained that the non-network-forming phase (b) provided by the builder particles according to claim 13 of

document (1) had a higher concentration of detergent-active material than the predominantly aqueous separable phase corresponding to phase (a). This difference of concentration was due the adsorption processes.

With respect to the non-network-forming phase (b)(iii), they maintained that the spheroids or vesicles of citation (1) were suspended as the non-network-forming phase (b)(iii) in the continuous isotropic aqueous solution (a) and the G-phase was the lamellar suspending phase (c).

They concluded that the subject-matter of the claims of the appellant's main and auxiliary requests was anticipated by the disclosure of document (1).

Claim 1 of the first auxiliary request differs from Claim 1 of the main request in that the term "containing" was replaced by "consisting of" in (i), and the passage "provided...phase (b)" was deleted.

- V. The appellant requests that the decision under appeal be set aside and the patent be maintained on the basis of the main request or, alternatively, on the basis of the first or second auxiliary request submitted with the grounds of appeal. The claims of the second auxiliary request were identical to those as maintained. Therefore, this second auxiliary request amounted to a confirmation that the patent should be maintained in the form as considered by the Opposition Division, should the appeal be dismissed.

The respondents request that the appeal be dismissed.

VI. The appellant had announced in its letter dated 2 October 2002 not to be represented during the oral proceedings which took place on 8 November 2002. At the end of the oral proceedings the Chairman announced the decision of the Board.

Reasons for the Decision

1. *Main request*

1.1 Articles 84 and 123 EPC

The Board is satisfied that the claims of the main request satisfy the requirements of Articles 84 and 123 EPC. Since this request fails for other reasons no detailed reasons need be given.

1.2 Novelty

The Board is satisfied that the claims of the main request satisfy the requirements of Article 54 EPC. Since this request fails for other reasons no detailed reasons need be given.

1.3 Inventive step

1.3.1 Claim 1 is directed to a structured aqueous detergent composition comprising, *inter alia*, a detergent-active component, a continuous phase (a) and one or more suspending phases (c) which cause the composition to be structured as well as discrete units of one or more non-network-forming phases (b) distributed and suspended in said solution (a), said phase (c) suspending the non-network forming phase (b) which has

a higher concentration by weight of detergent-active material than said aqueous solution (a).

1.3.2 The problem of the patent in suit was to provide liquid compositions containing detergent active material at relatively high concentrations which are stable and have low enough viscosities for ease of handling and ease of dispersion in use (page 2, lines 6 to 8).

This problem was solved by the detergent compositions according to Claim 1.

1.3.3 The same problem as stated in the patent in suit was already solved by the detergent compositions according to document (1). While this document aimed at providing detergent compositions containing detergent builder at relatively high concentrations, the goal was the same as in the patent in suit, namely to provide aqueous based, pourable and fluid detergent compositions (page 1, lines 2 to 4).

1.3.4 The claimed solution, therefore, can be seen as an alternative solution to the same problem.

In its letter dated 3 July 1997 (page 3, lines 9 to 13), the appellant had conceded that phases (a) and (c) were disclosed by document (1). So the question was whether the detergent compositions according to document (1) contained also one of the phases (b).

Phase (b)(iii) was defined in Claim 1 as non-encapsulated liquid droplets containing detergent-active material.

1.3.5 In contrast to droplets consisting only of a solvent, liquid droplets containing a surfactant can be regarded as having both a liquid phase and a surfactant phase; thus, they exhibit a structured phase which is due to the content of the surfactant. Also, the sixth embodiment according to document (1) comprises spheroids or vesicles formed from one or more shells of surfactant. Said vesicles may contain a predominantly aqueous liquid phase and one or more spherical or rod shaped surfactant micelles (page 14, lines 4 to 10). Said vesicles or spheroids are non encapsulated.

Since a more precise description of phase b(iii) cannot be found in the patent in suit, the Board cannot establish a distinction between spheroids according to document (1) and the droplets according to the patent in suit.

1.3.6 The only remaining difference between document (1) and the patent in suit to be discussed lies in the requirement that the detergent concentration in phase (b) should be higher than in phase (a).

1.3.7 Further, document (1) teaches that "the higher the undissolved material the more stable the composition" and "... the lower the proportion of the Active Ingredients dissolved in the liquid aqueous phase, and the higher the proportion present as a Interspersed structure of solid or lamellar phase, the more readily can a Non-sedimenting, Pourable product be obtained at high Payloads" (page 7, lines 1 to 7 from the bottom). According to document (1), "Payload" means the functional ingredients based on the total weight of the composition, "Active Ingredients" are surface

active materials, "Interspersed" describes two or more phases which are either co-continuous or of which one or more is dispersed in the other or others (page 3, lines 5 to 7 and 30 to 33).

The increase of the concentration of detergent active material in phase (b) with respect to phase (a) however does not require an inventive step for the following reasons:

- 1.3.7.1 The detergent composition according to the sixth embodiment of document (1) comprises a continuous, at least predominantly aqueous separable phase, containing dissolved electrolyte, a solid or liquid crystal separable phase containing a substantial proportion of the active ingredient (page 11, lines 26 to 30). An effect of the electrolyte is to limit the solubility of active ingredient in the at least one predominantly aqueous phase, thereby increasing the proportion of surfactant available to provide a solid, or liquid crystal, a matrix which stabilises the compositions (page 27, lines 1 to 5).
- 1.3.7.2 The phase (a) may even contain no surfactant at all (document (1), page 16, line 28).
- 1.3.8 Consequently, the skilled person would infer from document (1) to keep the concentration of detergent-active material in phase (a) as low as possible.

Moreover, if the detergent-active material is not in phase (a), it must necessarily be in phase (b) or phase (c).

The feature that the detergent in phase (c) should

differ from that of phase (b) if phase (c) is lamellar does not lead to special effects in phase (b). This requirement is an arbitrary measure for the skilled person and, therefore, cannot be based on an inventive step.

Hence one of the embodiments of Claim 1, namely the one exemplified by a detergent composition comprising, *inter alia*, phase b(iii) does not involve an inventive step. Consequently, Claim 1 does not meet the requirements of Article 56 EPC.

Therefore, the main request is not allowable.

2. *First auxiliary request*

The differences between Claim 1 and that of the main request are not relevant since Claim 1 comprises, *inter alia*, detergent compositions containing phase (b)(iii).

So, the reasoning under 1.3.1 to 1.3.8 applies *mutatis mutandis* to this request.

Therefore Claim 1 does not meet the requirements of Article 56 EPC.

The first auxiliary request is not allowable, and the appeal is dismissed. Pursuant to the principle of the prohibition of *reformatio in peius*, the dismissal of the appeal implies that the patent may be maintained in the form as amended before the Opposition Division i.e. on the basis of claims 1 to 10 of the "amended second auxiliary request" annexed to the decision of the Opposition Division with a description adapted

thereto.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

G. Rauh

P. Krasa