Datasheet for the decision of 19 April 2011

Case Number: T 1374/08 - 3.3.06
Application Number: 02762297.6
Publication Number: 1409628
IPC: C11D 3/37

Language of the proceedings: EN

Title of invention:
Liquid unit dose detergent product

Patentee:
Unilever N.V., et al

Opponent:
The Procter & Gamble Company

Headword:
Unit dose/UNILEVER

Relevant legal provisions:
-

Relevant legal provisions (EPC 1973):
EPC Art. 56

Keyword:
"Inventive step: no - obvious modification"

Decisions cited:
-

Catchword:
-
Decision of the Technical Board of Appeal 3.3.06 of 19 April 2011

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Composition of the Board:

Chairman: E. Bendl
Members: P. Ammendola
J. Geschwind
Summary of Facts and Submissions

I. This appeal is from the interlocutory decision of the Opposition Division concerning the maintenance in amended form of European patent No. 1 409 628 according to the then pending first auxiliary request of the Patent Proprietors.

II. The granted patent claims were directed to a liquid unit dose product (hereinafter liquid detergent UD product) containing a substantially non-aqueous liquid detergent composition (hereinafter liquid detergent) encapsulated in a water soluble polymer film (hereinafter WSP film) also containing at least one cleaning composition auxiliary. In particular, claim 1 as granted reads:

"1. A liquid unit dose product comprising a substantially non-aqueous liquid detergent composition inside a capsule formed of a solid water soluble polymer film, wherein said water soluble polymer film has dispersed therein at least one cleaning composition auxiliary selected from bleach catalysts, materials for inhibiting fibre damage and/or for colour care and/or for crease reduction and/or for ease of ironing, enzymes, perfume, buffer agents and effervescent agents."

III. The Opponent had sought revocation of this patent on the grounds of, inter alia, lack of inventive step.
During the opposition proceedings it had made reference, *inter alia*, to documents

(4) EP-B-0 388 105

and

(6) EP-B-0 291 198.

The Patent Proprietors had filed at the oral proceedings before the Opposition Division an amended set of claims labelled as first auxiliary request.

Claim 1 of this first auxiliary request (hereinafter claim 1 *as maintained*) differs from granted claim 1 only in that the final wording of this latter reading "effervescent agents." has been replaced by "effervescent agents, wherein a bleach catalyst is present as a cleaning composition auxiliary."

IV. The Opposition Division found, *inter alia*, that the subject-matter of claim 1 as maintained represented a non-obvious alternative to the stable solid detergent UD products of document (4) possibly containing bleaching agents. The data reported in the patent-in-suit proved that comparable cleaning results would be obtained when the bleach catalyst was encapsulated in the WSP film or mixed with the liquid detergent. Hence, in the absence of any evidence to the contrary, the posed technical problem appeared credibly solved over the whole breadth of the claim as maintained.

In the opinion of the Opposition Division, the conditions for achieving a stable and compatible system
in the case of liquid detergent UD products containing a bleach catalyst were much more critical than those required for the solid detergent UD products of document (4).

The Opposition Division stressed that document (4) gave no reasons further justifying the general teaching therein as to the possible incorporation of substances into the WSP film and concluded the liquid detergent UD product of claim 1 as maintained was based on an inventive step.

V. The Opponent (hereinafter Appellant) lodged an appeal against this decision.

It raised objections of clarity, added subject-matter and lack of inventive step against claim 1 as maintained. In particular, this claim would not comply with the requirement of Article 56 EPC (1973) for, inter alia, the following reasons:

The claimed subject-matter was not limited to UD products possibly affected by stability problems. Thus, the technical problem indicated in the patent-in-suit, i.e. that of providing stability to liquid detergent UD products containing incompatible or reactive ingredients, was of no relevance for the assessment of inventive step.

Also the very limited experimental data reported in the patent-in-suit would at most prove that locating the bleach catalyst in the WSP film rather than in the liquid detergent resulted in a slightly worse level of cleaning.
Hence, in the opinion of the Appellant, the subject-matter of the claims as maintained just represented a further detergent UD product with some bleaching activity, i.e. just an alternative to the prior art disclosed, for instance, in document (4).

The obviousness of this alternative was evident when considering that:

- liquid detergent UD products were conventional and, possibly, even implicitly disclosed in document (4),

- bleach catalysts were, as also acknowledged in the patent-in-suit, normal ingredients of detergent compositions

and

- it was also conventional to separately disperse bleaching ingredients within the WPS films of UD products.

The Appellant also considered reasonable for a skilled person searching for further detergent UD products with some bleaching activity to start from the liquid UD products disclosed in document (6), from which the subject-matter of claim 1 as maintained only differed for the additional presence of the bleach catalyst dispersed within the WSP film. No inventive activity of the skilled person would be required for arriving at the patented subject-matter by simply incorporating conventional bleach catalysts in any part of these already known liquid detergent UD products or, in
particular, by separately dispersing them within the WSP film.

The Appellant stressed the absence of any evidence supporting the allegation of the Patent Proprietors (hereinafter Respondents) that prior to the patent-in-suit the use of bleach catalysts was only known in solid detergent compositions.

VI. The Respondents refuted these objections by relying in essence on the reasons of the Opposition Division already resumed above at section IV.

Moreover, they stressed that the acknowledgement in the patent-in-suit that bleach catalysts were usual ingredients of detergent compositions, only referred to solid detergent compositions, and not to the liquid ones. Hence, and since none of the documents cited by the Appellant referred to bleach catalysts at all, the skilled person starting from the solid detergent UD products of e.g. document (4) could only arrive at the subject-matter of claim 1 as maintained by making modifications of the prior art which were not suggested in the available citations.

The Respondents conceded that detergent UD products containing liquid compositions were known e.g. from document (6) and did not dispute that this citation also indicated the possibility of separately encapsulating bleaches in the WSP film. Nevertheless, in their opinion, the person skilled in the art would find in the available citations no suggestion as to the possibility of separately dispersing a bleach catalyst in the WSP film of a liquid detergent UD product.
VII. The Appellant requested that the decision under appeal be set aside and the patent be revoked.

The Respondents requested that the appeal be dismissed.

**Reasons for the decision**

**Respondents' request (claims as maintained)**

1. Claim 1 as maintained requires that "a bleach catalyst is present as a cleaning composition auxiliary" (see above section III of the Facts and Submissions, emphasis added by the Board).

   In the opinion of the Respondents this wording results in a clear indication that the cleaning composition auxiliary dispersed in the WSP film must either be a bleach catalyst alone or be a combination of a bleach catalyst with one or more of the cleaning composition auxiliaries previously listed in the same claim.

   The Appellant has disputed the clarity of this passage (due to the use of the undetermined article "a") and its basis in the application as originally filed.

   At the oral proceedings it has become apparent to the Board that even if, for the sake of an argument in favour of the Respondents, claim 1 is assumed to have the clear meaning proposed by this Party, nevertheless the subject-matter of the claim remains obvious in view of the prior art, for the reasons indicated here below.
Hence, it has turned out unnecessary for the Board to decide on the objections also raised by the Appellant against claim 1 as maintained under the provisions of Article 84 EPC (1973) and of Article 123(2) EPC.

2. Inventive step assessment (Article 56 EPC (1973)):

2.1 This claim relates to liquid detergent UD products comprising a substantially non-aqueous liquid detergent inside a capsule formed of a WSP film. According to the Respondents' own interpretation of the claim the WSP film must comprise at least a bleach catalyst as cleaning compositions auxiliary.

2.2 The technical problem indicated in the patent-in-suit as the object of the claimed subject-matter, i.e. the so-called "subjective" technical problem, is that of avoiding the instability of the already known liquid detergent UD products and, in particular, of those containing components which interact adversely with one another (see paragraphs [0002] to [0004] of the patent-in-suit).

Since ingredients possibly interacting adversely with one another are also present in the UD products based on solid detergents containing bleaches described in document (4) (see in particular the generic reference to the possible presence of bleaching agent in the encapsulated detergent at page 4, lines 34 to 42), the Board concurs with both Parties (and with the corresponding finding of the Opposition Division) that this prior art represents a suitable starting point for the assessment of inventive step.
2.3 The Board notes however that, as also explicitly acknowledged by the Respondents, claim 1 as maintained embraces, inter alia, any kind of liquid detergent UD products containing any kind of bleach catalysts dispersed in the WSP film encapsulating the liquid detergent. Hence, the claim's wording requires neither implicitly nor explicitly the simultaneous presence of mutually incompatible or reactive ingredients.

Moreover, also the experimental data reported in the patent-in-suit do not aim at demonstrating that the claimed UD products possess a particular level of stability.

Thus, the Board finds convincing the Appellant's argument, undisputed by the Respondents, that the "subjective" technical problem mentioned in the patent-in-suit cannot possibly have been solved over the whole claimed range of products and, hence, cannot possibly represent the "objective" technical problem for the assessment of inventive step.

The Board notes additionally that the experimental data reported in the patent-in-suit only demonstrate that the claimed UD products display a cleaning performance that is substantially similar to that observed when the bleach catalyst is directly mixed with the liquid detergent and worse than that observed when the bleach catalyst is added as such to the washing water not containing any detergent. Hence, the reported data confirm that the level of bleaching achieved in the examples of the claimed invention is not particularly improved.
Hence, the Board sees no reason to depart from the finding of the Opposition Division that the subject-matter of claim 1 actually only solves over its whole range the "objective" technical problem of rendering available further detergent UD products capable of bleaching, i.e. only provides an alternative to the prior art.

2.4 The Board notes that the presently claimed liquid detergent UD products only differ from the prior art in the presence of a bleach catalyst separately dispersed in the WSP film and in that the detergent is a non-aqueous liquid.

Therefore, the assessment of inventive step boils down to the question as to whether the skilled person aiming at solving the posed technical problem would consider it obvious to replace the solid detergent in the UD products of document (4) by a non-aqueous liquid one and to separately disperse a bleach catalyst in the WPS film, in the expectation that these modifications would at least not negatively affect the cleaning performance.

The Board notes that document (6), after having referred to peroxygen bleaches as conventional additives for laundry detergents (see page 2, lines 20 to 21), describes the use of a specific WSP film (namely a modified PVA film) for producing, inter alia, UD products containing cleaning compositions which can be, among others, detergent compositions in solid or non-aqueous liquid form and/or bleaches (see in this citation claim 1 and page 3, lines 52 to 56).
Accordingly, also Table 3 of document (6) appears to contain an example of the possible presence of bleaches as the (only) cleaning composition encapsulated within the WSP film.

Hence, the person skilled in the art starting from the solid detergent UD products possibly containing conventional bleaches of document (4), finds in document (6) a pointer not only as to the possibility of replacing the solid detergents therein with non-aqueous liquid detergents but also to the possibility of dispersing the bleaches in the WSP film (rather than directly adding it in mixture with the detergent). Thus, document (6) renders obvious to solve the posed technical problem by modifying the UD products of document (4) in that the detergent is a non-aqueous liquid instead of solid and in that the bleaching agents are encapsulated by the WSP film instead of contained in the detergent.

The Board notes further that, as also explicitly acknowledged in paragraph [0053] of the patent-in-suit, bleach catalysts are among the ingredients "which would normally be included in a regular detergent composition". A further statement as to the interest shown in the prior art for bleach catalysts is given in paragraph [0056] of the patent-in-suit, preceding a long listing of these already known ingredients.

The Respondents have argued that the skilled person would be aware that these passages only reflected the conventional use of bleach catalysts in combination with solid detergents only. However, such restrictive interpretation of these more general statements in the
patent-in-suit has been disputed by the Appellant and is not supported by any evidence. Hence, the Board rejects it as an unsupported allegation and comes to the conclusion that the patent-in-suit also acknowledges that bleach catalysts were known to be normal ingredients of detergent compositions in general.

The Board finds, therefore, that the skilled person, who aims at carrying out modifications of the UD products of document (4) that are rendered obvious by the disclosure of document (6), needs to exercise no inventive activity for arbitrarily selecting any of the many air bleaching catalysts already known in the prior art as the conventional bleaching ingredient to be possibly dispersed in the WSP film separately from the liquid detergent and, thus, to arrive at the subject-matter of claim 1 as maintained.

In respect to the Respondents' argument that it would not be obvious for a skilled person, in the absence of specific pointer, to choose the bleaching catalysts among the several existing bleaching ingredients, the Board considers that the mere existence of several equally obvious solutions to the problem of providing an alternative to the prior art, does not render inventive the arbitrary selection of any of them. In other words, in the absence of any specific reason for preferring one or the other, the arbitrary selection of one of the alternative solutions to the posed technical problem that are equally obvious in view of the prior art requires no particular skills and, for this reason, does not involve an inventive step.
2.5 The Board concludes therefore that the subject-matter of claim 1 as maintained solves the posed technical problem by means of modifications of the prior art of departure disclosed in document (4) that are obvious in view of document (6) and of the common general knowledge of the skilled person as exemplified in paragraph [0056] of the patent-in-suit, respectively. Thus, the claimed subject-matter is not based on an inventive step.

Accordingly, the sole request of the Respondents is found to violate Article 56 EPC (1973) and, hence, not allowable.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar:    The Chairman:

S. Sánchez Chiquero    E. Bendl