Datasheet for the decision of 26 July 2012

Case Number: T 2393/09 - 3.3.06
Application Number: 02794042.8
Publication Number: 1451286
IPC: C11D 3/50, C11D 17/06, C11D 17/00
Language of the proceedings: EN
Title of invention: Fabric treatment composition
Patentee: The Procter & Gamble Company
Opponents: Henkel Kommanditgesellschaft auf Aktien UNILEVER PLC / UNILEVER NV
Headword: Perfumed laundry composition/PROCTER & GAMBLE
Relevant legal provisions (EPC 1973): EPC Art. 56
Keyword: "Inventive step - no: obvious modification"
Decisions cited: -
Catchword: -
Case Number: T 2393/09 - 3.3.06

DECISION
of the Technical Board of Appeal 3.3.06
of 26 July 2012

Appellant: Henkel Kommanditgesellschaft auf Aktien
(Opponent 1)
Henkelstraße 67
D-40589 Düsseldorf (DE)

Representative: Semrau, Markus
Henkel AG & Co. KGaA
VTP Patente
D-40191 Düsseldorf (DE)

Respondent: The Procter & Gamble Company
(Patent Proprietor)
One Procter & Gamble Plaza
Cincinnati, OH 45202 (US)

Representative: Howard, Phillip Jan
Procter & Gamble
Technical Centres Limited
Whitley Road
Longbenton
Newcastle upon Tyne NE12 9TS (GB)

Party as of right: UNILEVER PLC / UNILEVER NV
(Opponents 2)
Unilever House, Blackfriars/Weena 455
London EC4P 4BQ/3013 AL Rotterdam (GB)

Representative: Elliott, Peter William
Unilever Patent Group
Colworth House
Sharnbrook
Bedford MK44 1LQ (GB)

Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 22 October 2009 rejecting the opposition filed against European patent No. 1451286 pursuant to Article 101(2) EPC.

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

I. This appeal is from the decision of the Opposition Division to reject the opposition against European patent No. 1 451 286, relating to a fabric-treatment composition.

II. Claim 1 of the patent as granted (hereinafter granted claim 1) reads:

"1. A solid particulate fabric-treatment composition comprising:

(a) a first perfume component comprising a perfume compound that is the product of a reaction between an amino-functional compound comprising at least one primary and/or secondary amine group and an amine-reactive perfume molecule comprising a ketone and/or an aldehyde functionality; and

(b) a second perfume component comprising:

(i) at least 20% by weight of the second perfume component of volatile perfume molecules having:

   (i) a boiling point of less than 250°C; and
   (ii) a ClogP value of greater than 2; and
   (iii) an odour detection threshold of less than 50 parts per billion; and

(ii) less than 35% by weight of the second perfume component of non-volatile perfume molecules having:
(i) a boiling point of greater than 250°C; and
(ii) a ClogP value of greater than 3; and
(iii) an odour detection threshold of less than 50 parts per billion; and

(c) optionally, adjunct detergent components;

wherein, the composition comprises particles that comprise at least 1% by weight of the particle of the first perfume component, and less than 1% by weight of the particle of the second perfume component."

III. Opponents I and II sought revocation of the patent-in-suit on the grounds of, inter alia, lack of novelty and of inventive step. During the opposition proceedings they cited, inter alia, document

(1) = WO 99/46318.

IV. In its decision the Opposition Division rejected the opposition by considering, inter alia, that the granular laundry composition disclosed in Example 4 of document (1) sought to solve the same technical problem addressed in the patent-in-suit and, thus, represented the closest prior art.

The Opposition Division noted that whereas 20% by weight of the perfume composition "*2" used in Example 4 of document (1) was made of an ingredient (i.e. tatrahydro linalool) according to the definition of the volatile perfume molecules (hereinafter VP molecules) given in "(b)(i)" of granted claim 1, the remaining 80% by weight of this perfume composition was
made of benzyl salicylate, ethylene brassylate, galaxolide and hexyl cinnamic aldehyde.

The Opposition Division found that these latter four ingredients were all according to the definition of the non-volatile perfume molecules (hereinafter NVP molecules) given in "(b)(ii)" of granted claim 1 and, thus, concluded that the fabric-treatment formulation claimed in the patent-in-suit was not anticipated by this prior art because in the former the relative amount of NVP molecules had to be less than 35% by weight.

The Opposition Division considered that neither document (1) itself nor the other available citations would motivate the skilled person searching for an alternative to the prior art, to specifically replace perfume composition "*2" used in Example 4 with another composition according to the definition of component "(b)" of granted claim 1.

Hence, the patented formulation was considered to be also inventive and the opposition was rejected.

V. Opponent I (hereinafter Appellant) appealed this decision (notice of appeal and appeal fee received by the EPO on 10 December 2009, grounds of appeal received on 4 February 2010).

VI. The Appellant disputed the above-resumed finding of the Opposition Division in respect of the difference existing between the second perfume ingredient "(b)" of the patented formulation and the perfume composition
"\*2" of the laundry composition of Example 4 of document (1).

In case the Board would nevertheless concur with this finding, the Appellant stressed that the patent-in-suit did not mention document (1) among the background art and contained no evidence suggesting that the features defining the composition of ingredient "(b)" were critical in order to obtain a good perfume of the damp-fabric. Hence, it had not been rendered credible that the patented compositions resulted in a more intense damp-fabric perfume in comparison to that perceivable when using the laundry composition of Example 4 of document (1), wherein the perfume ingredient "\*2" was explicitly indicated as providing fragrance also during the laundering process.

The patented composition would therefore only represent an alternative to the prior art.

Since the perfumes normally used in detergent compositions could also be made prevailingly of VP molecules, the Appellant concluded that no inventive step would be required for arriving at the subject-matter of the patent-in-suit.

In any case, it would also be self-evident that the fragrance perceivable during the use of a laundry composition had to be attributed to the VP molecules present in the perfume ingredient. Hence, even if the problem to be solved was identified in that of increasing the damp-fabric perfume provided by the laundry composition of example 4 of document (1), still
the skilled person would have arrived at the patented compositions without exercising any inventive ingenuity.

VII. The Patent Proprietor (hereinafter Respondent) rebutted this reasoning by arguing essentially as follows.

The inventors of the patent-in-suit had realised that it was important for e.g. a laundry composition not only to provide a long-lasting perfume, but also a good damp-fabric perfume. The subject-matter of granted claim 1 represented therefore a composition specifically formulated to obtain these effects in combination.

The Opposition Division had correctly identified the closest prior art in the laundry composition of Example 4 of document (1), which however only addressed the part of the above identified combination of effects relating to the provision of a long-lasting perfume. Indeed, the fact that this citation suggested the possibility of producing "in package and in-use (wash-time) fragrance" by incorporating fully-formulated fragrances in the laundry compositions (such as the perfume composition "*2" in Example 4), did not imply that these fully-formulated fragrances also provided the same good perfume to the damp-fabric provided by the formulation of the patent-in-suit.

The Opposition Division had also correctly identified the difference between the patented formulation and this prior art, but had erred in considering the former as just representing an alternative to the latter.
The Respondent conceded that the patent-in-suit contained no experimental data allowing to directly conclude that the level of damp-fabric perfuming obtained when using the formulations of the patent-in-suit was superior to that possibly achieved by Example 4 of document (1). Nevertheless, the comparison between the combination of the essential features characterising the component "(b)" of the patented composition with the explicit teaching in paragraph [0023] of the patent-in-suit that this component was responsible for the "good damp-fabric perfume release", was sufficient at rendering plausible for the skilled person that the perfume composition "*2" of the prior art contained too much NVP molecules to also result in the provision of a good perfume to damp-fabric.

Hence, the technical problem credibly solved vis-à-vis the prior art was the provision of a good perfume to the damp-fabric and the solution proposed could not possibly be obvious since no available citations referred to or even just implied some perfuming of the damp-fabric.

The Appellant's allegation that it was self-evident for the skilled person that a good damp-fabric could be favoured by increasing the fraction of volatile perfumes present in the laundry composition of document (1) was not only unsupported by any evidence but also a reasoning a posteriori.

If nevertheless the Board would concur with this argument of the Appellant, still the absence of any documents considering the need of associating a good perfume to damp-fabric would demonstrate that an
inventive step lied already in the fact that the inventors of the patent-in-suit had identified a new problem.

VIII. The Appellant requested that the decision under appeal be set aside and that the European patent be revoked.

The Respondent requested that the appeal be dismissed.

**Reasons for the Decision**

*Patent as granted (Respondent's sole request)*

1. Inventive step assessment for the subject-matter of claim 1 as granted (Article 56 EPC 1973)

1.1 Claim 1 as granted (see section II of the Facts and Submissions above) defines a fabric-treatment composition comprising a first perfume component "(a)" containing a pro-perfume compound, and a second perfume component "(b)" wherein:

- at least 20% by weight of component "(b)" is made of the VP molecules defined at "(b)(i)"

and

- less than 35% by weight of component "(b)" is made of NVP molecules defined at "(b)(ii)".

It is self-evident that these definitions of the % by weight of the ingredients "(b)(i)" and "(b)(ii)" also equate e.g. at setting a minimum for the ratio between
the amount of VP molecules and the total amount of VP and NVP molecules (hereinafter this ratio is indicated as the VP content).

1.2 According to the established jurisprudence of the Boards of Appeal, the prior art of departure for assessing inventive step is normally a prior art document disclosing subject-matter conceived for the same purpose or aiming at the same objective as the claimed invention.

1.2.1 The Board notes that the patent-in-suit, after having acknowledged the prior art relating to laundry detergent compositions comprising perfume ingredients to provide long-lasting perfume to the treated fabric, identifies the addressed technical problem in that of rendering available a perfume system for e.g. a laundry composition "that provides both an initial good perfume performance immediately after the washing stage of the laundering process, and a good perfume release from dry-fabric over a prolonged period of time" (see the patent-in-suit, paragraphs [0002] to [0004]). In particular, it is apparent from paragraph [0023] of the patent in suit that the second perfume component "(b)" is used to provide "good initial perfume performance, such as good damp-fabric perfume odour release".

Hence, the Board concurs with the Respondent that the patent-in-suit aims at rendering available fabric-treatment compositions that provide a good perfume to the damp-fabric as well as a long-lasting perfume to the treated fabric.
1.2.2 Since also document (1) undisputedly addresses the problem of providing long-lasting perfume to the treated fabric, the Board sees no reason to deviate from the undisputed finding of the Opposition Division that the granular laundry composition of Example 4 of this citation represents a suitable starting point for the assessment of inventive step.

1.3 The Board is satisfied that the Opposition Division has correctly identified the NVP molecules present in this prior art (see above Section IV of the Facts and Submissions). Since this has also been acknowledged by the Respondent and since the outcome of these appeal proceedings is favourable to the Appellant, no further details need to be given in this respect.

Hence, the difference between the claimed subject-matter and this prior art is found to consist in the fact that granted claim 1 sets for the NVP molecules in component "(b)" a maximum amount of less than 35% by weight, i.e. in the fact that in the patented formulation the VP content of the second perfume compound is larger than that present in perfume composition "*2" of Example 4 of document (1).

1.4 The Appellant has argued that the patent-in-suit contained no element rendering credible that the damp-fabric perfume provided by the patented compositions was superior to that perceivable when using the laundry composition of Example 4 of document (1), in particular since this citation explicitly indicated that the perfume ingredient "*2" was used for providing fragrance also during the laundering process.
The Board notes that document (1) indeed explicitly attributes to the perfumes optionally present in the laundry compositions disclosed in this document the function of providing "desirable in-package and in-use fragrance" (see in document (1), page 21, lines 17 to 20). Hence, the perfume composition "*2" is certainly used in Example 4 in order to provide a fragrance perceivable during the whole laundering process (i.e. starting from the opening of the package containing the laundry composition to the fabric drying step).

However, the Board finds that, contrary to the above line of reasoning of the Appellant, this disclosure of document (1) does not permit per se any sound conclusion as to whether this prior art is (at least) as effective as the patented composition in providing a good perfume specifically to the damp-fabric.

The Board is instead of the opinion that (as also argued by the Appellant) it is self-evident to the skilled person that the more volatiles among the perfume ingredients conventionally used for laundry composition are more likely to provide stronger fragrance during the laundering process (but e.g. to result in a perfume of the treated fabric that does not last).

In view of this consideration the Board finds that the difference in volatility of the perfume compounds between the patented formulation and Example 4 of document (1) may plausibly result in the latter producing a stronger perfume (during the laundering process and, thus, also) of the damp-fabric.
Thus, the Board concurs with Respondent that, in the absence of any evidence to the contrary provided by the Appellant, it is plausible that the subject-matter of granted claim 1 actually solves vis-à-vis the fabric-treatment composition of the prior art the technical problem of providing a more intense perfume to the damp-fabric.

1.5 The Respondent has argued that the very fact that the perfuming of damp-fabric is not even mentioned in the prior art would already imply the non-obviousness of the solution to this problem provided by the patented formulation. An inventive step would indeed be necessary already for identifying the problem of providing a good perfume to the damp-fabric.

The Board finds this argument not convincing. Indeed, the problem addressed, although not mentioned *per se* in the prior art, is part of the more general problem, also explicitly recalled in the above-cited paragraph at page 21 of document (1), of associating a fragrance to the whole laundering process and to the treated fabric, i.e. the more ample technical problem of generating a desirable fragrance "*in package*" and "*in-use (wash-time)*" as well as on the treated fabric, this latter possibly over a prolonged time. No inventive ingenuity appears necessary for focusing on just a segment of this more ample technical problem, which is already well established in the relevant technical field.

1.6 Hence, in the present case the assessment of inventive step boils down to the question whether the skilled
person aiming at generating a more intense damp-fabric perfume, would modify the chemical composition of the perfume composition "*2" of Example 4 of document (1) so as to arrive at the subject-matter of granted claim 1.

As already indicated above at point 1.4, the Board considers self-evident for the person skilled in the field of laundry compositions that, in general, the more the used perfume ingredients are volatile the more likely is the emission of a stronger fragrance during the laundering process.

Thus, in the opinion of the Board it would be obvious for the skilled person to solve the posed problem by replacing, partially or totally, any of the perfumed ingredients of the perfume composition "*2" by means of more volatile perfumed ingredients (already conventionally used in the field of laundry composition). In particular, it would be obvious to solve the posed problem by replacing at least part of the perfumed ingredients thereof, by means of any other conventional perfume ingredient(s) for laundry compositions which is(are) known to be more volatile than the most volatile perfume ingredient already present in the perfume composition "*2" (i.e. the tetrahydro linalool explicitly acknowledged in paragraph [0028] of the patent-in-suit as being itself a VP molecule). Similarly, it would also be particularly obvious to solve the posed problem by just increasing the % by weight of this most volatile perfume ingredient (i.e. the tetrahydro linalool) already present in the perfume composition "*2".
Accordingly, the Board concludes that to arrive at embodiments of the claimed formulation the skilled person only needs to additionally make the arbitrary selection (among the above-identified particularly obvious ways of increasing the volatility of the perfume composition "*2" which also certainly increase the VP content thereof) of preparing those formulations in which more than 65% by weight of the perfume composition "*2" is made of tetrahydro linalool or of other conventional perfume ingredients that are more volatile than tetrahydro linalool (thereby also inevitably reducing the amount of any possibly remaining NVP molecules to less than 35%).

As also this arbitrary selection involves no inventive step, the claimed subject-matter is found obvious for the skilled person starting from the prior art disclosed in document (1).

1.7 The Board finds therefore that the patent as granted does not comply with the requirements of Article 56 EPC 1973.
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:

D. Magliano     P.-P. Bracke