Datasheet for the decision of 23 September 2011

Case Number: T 0564/09 - 3.3.06
Application Number: 01991959.6
Publication Number: 1337621
IPC: C11D 17/04, C11D 17/00, C11D 3/43
Language of the proceedings: EN
Title of invention: Dishwashing method
Patentee: THE PROCTER & GAMBLE COMPANY
Opponent: Henkel AG & Co. KGaA
Headword: Dishwashing method/PROCTER & GAMBLE
Relevant legal provisions: -
Relevant legal provisions (EPC 1973): EPC Art. 56
Keyword: "Inventive step: yes"
Decisions cited: -
Catchword: -
Case Number: T 0564/09 - 3.3.06

DECISION
of the Technical Board of Appeal 3.3.06
of 23 September 2011

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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 3 February 2009 rejecting the opposition filed against European patent No. 1337621 pursuant to Article 101(2) EPC.

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

I. This appeal is from the decision of the Opposition Division to reject the opposition against European patent No. 1 337 621, relating to a dishwashing method.

II. The patent as granted comprises eleven claims, whereby claim 1 reads:

"1. A method of washing dishware/tableware in an automatic dishwashing machine, the method comprising simultaneously or sequentially delivering quantities of a particulate or densified particulate automatic dishwashing product and of an anhydrous liquid, gel or paste form dishwashing detergent auxiliary contained in separate compartments of a water-soluble multi-compartment pouch into the same or different cycles of the dishwashing machine wherein the particulate automatic dishwashing product comprises a detergency bleach and the detergent auxiliary comprises a humectant in levels sufficient to act as a moisture sink for stabilizing the moisture-sensitive detergent active wherein the humectant is selected from non-aqueous hydrophilic organic solvent inclusive of glycols and polyhydric alcohols and wherein the compartment comprising the detergency auxiliary is placed above the compartment comprising the detergency bleach."

Claims 2 to 11 as granted define preferred embodiments of the method of claim 1.
III. The Opponent sought revocation of the patent-in-suit on the grounds of, inter alia, lack of inventive step (Article 100(a) in combination with Articles 52(1) and (2) and 56 EPC 1973). During the opposition proceedings it cited, inter alia, the documents:

(1) = EP-A-0 414 463;

(2) = US-A-4 973 416

and

(3) = WO 01/83667.

IV. In its decision the Opposition Division preliminarily noted that the part of the subject-matter of granted claim 1 relating to the use of a particulate automatic dishwashing product that is "densified" (hereinafter this part of the patented subject-matter is referred to as the densified-PAD-product method) was only entitled to the priority date of 14 November 2001. Accordingly, document (3), published on 8 November 2001, represented state of the art for the densified-PAD-product method only.

The Opposition Division then found, inter alia, that:

- as apparent from paragraph [0009] of the patent-in-suit, the technical problem addressed by the patented method was, inter alia, that of providing dishwashing methods with improved cleaning performance and product stability;
- document (1) was considered the closest state of the art because it related to the use of a water-soluble multi-compartment pouch (hereinafter WM pouch) for separately containing the mutually incompatible ingredients of laundry washing compositions;

- the objective technical problem starting from document (1) was considered to be the provision of a further method for washing dishware/tableware in an automatic dishwashing machine;

- there was no indication within document (1) that the products for laundry treatment disclosed therein could be used for washing dishware/tableware;

and

- the skilled person searching for a solution to the posed technical problem would also not look at the (non-anhydrous) liquid compositions of document (2) which were exclusively disclosed for use as laundry detergents.

Hence the patented method was not rendered obvious by the teachings contained in documents (1) and (2).

With regard to the further Opponent's objection based on document (3) to the inventiveness of the densified-PAD-product method, the Opposition Division noted that this citation although disclosing WM pouches mainly for laundry use, also indicated that these pouches could be used for delivering dishwashing compositions. However, there was no indication in document (3) that the specific laundry compositions exemplified therein were
also applicable to a dishwashing process in an automatic dishwashing machine. Thus, the densified-PAD-product method was found to involve an inventive step also when starting from document (3).

Hence, the patented method was found based on an inventive step.

V. The Opponent (hereinafter "Appellant") appealed this decision. In the grounds of appeal it referred to, \textit{inter alia}, the following documents:


(7) = WO 00/02980

(8) = EP-A-0 481 793

(9) = WO 00/53709

and

(10) = WO 01/11002.

The Patent Proprietor (hereinafter "Respondent") submitted with a letter of 22 August 2011 a set of amended claims labelled as first auxiliary request.

VI. The Appellant disputed in writing and orally the findings of the Opposition Division in respect of inventive step only.
It stressed that the patent-in-suit contained no comparative test and that the wording used therein for describing the aimed and allegedly achieved levels of stability and cleaning performance was vague.

Moreover, all the features characterising the subject-matter of granted claim 1 described aspects of the WM pouch containing the detergent composition and not of the actual dishwashing operations.

Thus, the definition provided in paragraph [0009] of the objective of the invention was not correct and the purpose of the invention was rather the provision of further WM pouches for stably carrying moisture-sensitive detergent bleaches, such as percarbonate, and other detergent ingredients.

In view of this purpose and since, as confirmed e.g. by claims 1, 7 and 11 of document (7), the skilled person already knew that WM pouches containing percarbonate were suitable for dishwashing as well as for laundry washing, it would be justified to take into consideration for the assessment of inventive step of the patented method any WM pouches for detergent compositions of the prior art, inclusive of those disclosed for laundry washing e.g. in example 5 of document (1), or in example 1 of document (2) or in Example V of document (3).

The Appellant presented then four different objections to the presence of an inventive step for the patented method.
According to the Appellant's first line of reasoning, the WM pouch for laundry washing of example 5 of document (1) represented the prior art of departure and the technical problem solved by the patented method vis-à-vis this prior art was just the stabilization of the percarbonate. Since document (2) disclosed the stabilizing effect of organic solvents also known as humectants, such as propylene glycol, on WM pouches carrying percarbonate-containing detergent compositions, it would be obvious to solve the posed technical problem by adding such solvents also in example 5 of document (1). Thus, the patented method was obvious in view of the combination of documents (1) and (2).

In the second line of reasoning, the Appellant considered that the skilled reader of document (1) would also be aware of the fact, also confirmed in documents (8) to (10), that ingredients acting as moisture sink, such as carbonate, were conventionally used to stabilize percarbonate-containing detergent compositions. Hence, the carbonate ingredient present in example 5 of document (1) was a moisture sink and, thus, already stabilized the moisture-sensitive detergent bleach of this example. Accordingly, the WM pouches of patented method represented just an alternative to the WM pouch of the prior art. Since it would be well known, e.g. from document (6), that glycerine and other glycols were able to act as humectants and, thus, suitable for performing the same moisture sinking function provided by the carbonate in the prior art example of departure, then the combination of documents (1) and (6) would render obvious to replace the carbonate in the WM pouch of
example 5 of document (1) by e.g. glycerine, thereby arriving at the WM pouches of patented method.

In the opinion of the Appellant the subject-matter of claim 1 of the patent-in-suit would also be an obvious arbitrary modification of the WM pouch for laundry washing of example 1 of document (2). According to this third line of reasoning, document (6) would prove that the propylene glycol used in the examples of document (2) was also an humectant. Hence, the WM pouch of the patented method only differed from that of example 1 of document (2) for the presence of an inferior amount of water, i.e. for a modification explicitly suggested as possible in the same citation.

In the fourth and final line of reasoning of the Appellant, the densified-PAD-product method was considered obvious when starting from the WM pouch for laundry washing of Example V of document (3). Indeed, the WM pouch of this example already contained not only a bleach but also "propanediol", i.e. a glycol falling under the definition of humectant given in claim 1 of the patent-in-suit. Thus, the skilled person would have arrived at the patented densified-PAD-product method by taking into account, inter alia, the teachings from page 6, line 26 to page 7, line 3, of the same document (3) as to the possible presence in the WM pouches disclosed therein of dishwashing compositions.

VII. The Respondent disputed in writing and orally all four Appellant's objections by presenting, inter alia, the following arguments.
The objectives of the invention were clearly identified in paragraph [0009]. In particular, the aimed advantages resulted from the use in the patented dishwashing method of a WM pouch in which sufficient amount of an organic humectant, i.e. of a compound capable of acting as moisture sink, was located in a compartment immediately neighbouring the compartment comprising a moisture-sensitive detergent bleach, thereby reducing the amount of moisture actually reaching the bleach e.g. during storage of the WM pouch.

The Respondent stressed that automatic dishwashing compositions would be regarded by the person skilled in the art as substantially different from the compositions used for laundry washing.

Since none of documents (1), (2), (6) or (8) to (10) disclosed a method for automatic dishwashing, the prior art disclosed therein did not possibly represent a reasonable starting point for the assessment of inventive step and would not be regarded as relevant by the formulator of unitised dishwashing compositions.

The only documents providing information on dishwashing compositions were the documents (3) and (7), which, however, did not mention the possible presence therein of humectants.

Moreover, even the list of solvents disclosed in these two citations as possibly also present in dishwashing compositions, had not been proven by the Appellant to comprise compounds also generally known as humectants.
In addition, the general instruction contained from page 6, line 26 to page 7, line 3 of document (3) as to the possible use of the WM pouches disclosed therein for delivering, among others, dishwashing compositions, did not imply that the ingredients of the laundry composition disclosed e.g. in Example V of this citation were also suitable for formulating dishwashing compositions.

Finally, the Appellant's allegation that the glycol "propanediol" used in this example was also necessarily a humectant was unsupported by any evidence.

Thus, none of the available documents disclosed or implied the possibility of formulating a composition for automatic dishwashing simultaneously containing a moisture-sensitive detergent bleach and an anhydrous liquid additive comprising an organic humectant.

Accordingly, the patented method for automatic dishwashing, inclusive of the densified-PAD-product embodiments thereof, was not possibly rendered obvious by the teachings in the available citations.

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 or alternatively that the patent be maintained in amended form on the basis of the set of claims of the First auxiliary request filed with the letter dated 22 August 2011.
Reasons for the Decision

Patent as granted (Respondent's main request)

1. Inventive step assessment for the subject-matter of claim 1 as granted (Article 100(a) in combination with Articles 52(1) and 56 EPC 1973)

1.1 Claim 1 as granted (see section II of the Facts and Submissions above) defines an automatic dishwashing method comprising the delivery of a WM pouch during the washing cycle(s) of a dishwashing machine.

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.

1.3 The technical field of automatic dishwashing methods is indisputably well-established since many decades.

It is, thus, apparent to the Board already from the wording of claim 1 (and e.g. independently on the correctness or the credible relevance of the statements as to the objectives of the invention contained in paragraph [0009] of the description of the patent-in-suit) that the patented subject-matter can only reasonably have the purpose of rendering available an improvement of, or an alternative to, the dishwashing methods of the prior art.
The Board sees also no reason to deviate from the implicit finding of the Opposition Division that a method of washing dishware/tableware in an automatic dishwashing machine and a method for washing laundry are substantially different. In particular, the existence of certain specific compositions suitable for both sorts of washing (as possibly proved by the Appellant by filing document (7)) is insufficient at rendering plausible that the skilled formulator of compositions for automatic dishwashing would normally search for technical information in the field of laundry washing only.

Hence, a reasonable prior art of departure for the assessment of inventive can only be found within the prior art in the field of dishwashing methods and not among the WM pouches already disclosed as suitable for laundry washing only.

1.4 The Appellant has instead submitted four lines of reasoning against the inventiveness of the patented automatic dishwashing method, all starting from prior art examples of laundry compositions (see above section VI of the Facts and Submissions).

It has acknowledged that the WM pouches of example 5 of document (1) and that example 1 of document (2) are only disclosed to be suitable for laundry washing, but has also argued that the pouch of Example V of document (3) would also be disclosed as applicable to dishwashing because this latter citation contains a passage (from page 6, line 26 to page 7, line 3 of document (3)) mentioning the possible presence of
dishwashing compositions in the WM pouches disclosed therein.

The Board finds, however, that this passage only amounts to a generic instruction and, thus, certainly does not imply that all WM pouches for laundry washing disclosed of this citation, inclusive of e.g. Example V therein, are also suitable for dishwashing.

Thus, each of the four lines of reasoning proposed by the Appellant is found to start from a prior art which is only relevant for laundry washing.

In view of the considerations given above at point 1.3, it is, hence, also apparent to the Board that all the points of departure for the assessment of inventive step proposed by the Appellant are unreasonable. The consequence is that the subject-matter of claim 1 as granted cannot possibly be obvious in the light of this prior art.

The Board concludes, therefore, that the Appellant has not succeeded in rendering credible that the subject-matter of claim 1 as granted does not comply with the requirements of Article 56 EPC (1973).

1.5 For the sake of completeness, the Board also wishes to stress that the whole disclosure provided by documents (1), (2), (3) and (6) to (10) (i.e. the documents on which the four Appellant's lines of reasoning are based) is manifestly insufficient at rendering obvious the subject-matter of claim 1 of the patent-in-suit, already because none of these citations discloses or
implicitly suggests the possible presence of humectants in compositions suitable for automatic dishwashing.

1.5.1 Indeed, no information on how to formulate compositions to be used in dishwashing methods (automatic or not) is derivable not only from the specific examples but also from the general description in documents (1), (2) and (8) to (10), all exclusively referring to methods and compositions for laundry washing. The same applies to the examples of document (3) all undisputedly referring to laundry compositions and whose applicability for dishwashing is found by the Board, as already discussed above, not implied by the generic instruction in the same citation as to the possible presence of dishwashing compositions in the WM pouches disclosed therein.

1.5.2 Information on dishwashing is indisputably also absent in the scientific literature of document (6), only indicating that glycerine and other polyols are also known to be humectants.

1.5.3 Explicit or implicit disclosure relevant to dishwashing methods is, thus, only contained in (part of the general description of) document (3) and in document (7).

The Board notes, however, that:

- these two citations do not mention the possible presence in dishwashing compositions of organic humectants in general or of specific compounds explicitly acknowledged therein to also be humectants,
and

- none of the other specific organic compounds disclosed in these documents as possibly present in dishwashing composition has been proved to also be a humectant (e.g. disclosed to be a humectant in document (6) or acknowledged as such in the patent-in-suit).

In particular, in respect of the "propanediol" used in Example V of document (3) and considered a humectant by the Appellant in its fourth line of reasoning, the Board wishes to stress again that, even in the hypothetical case that this specific glycol had been proved to also be a humectant, this Example V provides information apparently relevant for laundry washing only.

1.6 Accordingly, the Appellant's objections are found not convincing and the subject-matter of claim 1 as granted is found based on an inventive step and, thus, to comply with the requirements of Article 56 EPC 1973.

2. Inventive step assessment for the subject-matter of claim 2 to 11 as granted (Article 100(a) in combination with Articles 52(1) and(2) and 56 EPC 1973).

The reasons given above for rejecting the Appellant's lines of reasoning as to the obviousness of automatic dishwashing method of granted claim 1, apply also to the preferred embodiments of this latter defined in granted claims 2 to 11.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

D. Magliano P.-P. Bracke