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Datasheet for the decision of 2 October 2009

Case Number: T 0720/07 - 3.3.06

Application Number: 99933807.2

Publication Number: 1144567

IPC: C11D 17/00

Language of the proceedings: EN

Title of invention:
Detergent tablet

Patentee:
THE PROCTER & GAMBLE COMPANY

Opponent:
Henkel AG & Co. KGaA

Headword:
Detergent tablet/P&G

Relevant legal provisions:
EPC Art. 56
RPBA Art. 13(1)

Relevant legal provisions (EPC 1973):
-

Keyword:
"Admissibility of late-filed test (no)"
"Inventive step - all requests (no)"

Decisions cited:
-

Catchword:
-

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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0720/07 - 3.3.06

D E C I S I O N
of the Technical Board of Appeal 3.3.06
of 2 October 2009

Appellant: (Opponent)
Henkel AG & Co. KGaA
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Respondent: (Patent Proprietor)
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Decision under appeal:
Decision of the Opposition Division of the European Patent Office posted 26 February 2007 rejecting the opposition filed against European patent No. 1144567 pursuant to Article 102(2) EPC 1973.

Composition of the Board:

Chairman: P.-P. Bracke
Members: E. Bendl
J. Geschwind

Summary of Facts and Submissions

I. This appeal is against the decision of the Opposition Division to maintain the European patent 1 144 567 as granted.

II. The independent claims 1, 4 and 8 as granted read as follows:

"1. A multi-phase detergent tablet for use in a washing machine, the tablet comprising a first phase in the form of a shaped body having at least one mould in the surface thereof wherein the first phase is in adhesive contact with one or more second phases, at least one second phase contained within the mould being in the form of a compressed particulate solid incorporating adhesive which is liquid at 28°C and having an average porosity of less than 0.15 ml/g as measured by mercury porosimetry."

"4. A multi-phase detergent tablet for use in a washing machine, the tablet comprising a first phase in the form of a shaped body having at least one mould in the surface thereof wherein the first phase is in adhesive contact with one or more second phases, at least one second phase contained within the mould being in the form of a compressed particulate solid incorporating adhesive which is liquid at 28°C selected from polyethylene glycols having an average molecular weight in the range from 200 to 700."

"8. A multi-phase detergent tablet for use in a washing machine, the tablet comprising a first phase in the form of a shaped body having at least one mould in the

surface thereof wherein the first phase is in adhesive contact with one or more second phases, at least one second phase contained within the mould being in the form of a compressed particulate solid incorporating adhesive which is liquid at 28°C and wherein the liquid adhesive is incorporated by post-addition, preferably as a spray-on, to the particulate solid prior to compression."

III. In the course of the opposition procedure among others the following documents were cited:

D5 = WO-A-97/05226
D13= GB-A-911 204

IV. In its decision the Opposition Division concluded inter alia that, starting from D13 as the closest prior art, the combination with D5 would not lead to the subject-matter of the claims as granted.

V. The Opponent (Appellant) filed an appeal against this decision and argued that the patent-in-suit would not involve an inventive step.

VI. The Board scheduled oral proceedings on 26 June 2009, which had to be postponed on the day of the proceedings because of the sudden illness of the Representative of the Proprietor.

VII. The Board issued another summons for oral proceedings to be held on 02 October 2009.

VIII. With the letter of 26 August 2009 the Appellant filed a comparative test allegedly showing that the presence of

polyethylene glycol (PEG) 400 did not have a positive effect on hardness or disintegration properties of the tablets.

IX. With the letter of 02 September 2009 the Respondent submitted the following five auxiliary requests in addition to the main request (claims as granted):

First auxiliary request
The wording of the claims is identical to the wording of the main request, with the exception that Claims 1-3 were deleted and the remaining claims and references were re-numbered.

Second auxiliary request
The wording is identical to the wording of the first auxiliary request, but additionally Claim 5 was deleted; the numbering and references of the remaining claims were adapted accordingly.

Third auxiliary request
The wording of the claims is identical to the claims of the main request, but at the end of Claims 1, 4 and 8 the passage "and wherein the second phase comprises enzyme" was added.

Fourth auxiliary request
The wording is identical to the fourth auxiliary request, but the first three claims were deleted, the numbering and the references were amended accordingly.

Fifth auxiliary request
The wording of this request is identical to the fourth auxiliary request with the additional deletion of

Claim 5 and the re-numbering of the subsequent claims and references.

X. In the oral proceedings before the Board the Respondent argued that the Appellant's test submitted with the letter of 26 August 2009 was late filed and that he neither had any possibility to analyse the test carefully nor to perform a test himself. He requested that the test should not be taken into account.

The Appellant argued that the test was a reaction of Respondent's statement that the burden of proof was on the Appellant's side. He could not have submitted the test results earlier, because they were simply not available.

XI. With regard to inventive step of Claim 4 of the main request Appellant's main arguments were, that:

- D13 represented the closest state of the art,

- no proof had been submitted that the incorporation of PEG 200-700 leads to any effects,

- the objective problem solved with regard to D13 was thus the provision of an alternative; in combination with D5 the subject-matter would be rendered obvious.

The Respondent replied that:

- even the provision of an alternative involved an inventive step,

- the problem underlying the present invention were the provision of robust tablets which dissolve quickly enough and show phase integrity,

- when combining the teaching of D13 with D5 the skilled person would not end up with a PEG containing second layer, since D5 taught to coat only the alkalinity system with PEG and only PEG 1500 would be preferred in D5.

XII. The Appellant (Opponent) requested that the decision under appeal be set aside and that the European patent No. 1 144 567 be revoked.

The Respondent (Patentee) requested that the appeal be dismissed or in the alternative that the patent be maintained on the basis of one of the auxiliary requests 1 to 5 filed with letter of 02 September 2009.

Reasons for the Decision

1. *Admissibility of the comparative tests filed by the Appellant*

1.1 In the course of the oral proceedings the Respondent argued that the comparative tests filed with Appellant's letter of 26 August 2009 were only received by the Respondent in September. Because of being late filed, the Respondent did not have any chance to carefully analyse the data and to make any further tests. He requested not to take these tests into account.

1.2 The Appellant argued that the tests were carried out as a reaction to Respondent's comments that the burden of proof is on the Appellant and that he had submitted the test as soon as he got the results.

1.3 However, the Board cannot see any reason why the Appellant did not present its test report in due time. In the present case the Respondent already argued in the letter dated 27 November 2007 that the burden of proof was up to the Appellant and it was only with letter of 26 August 2009, thus 21 months later, that the Appellant filed the test report.

1.4 In order to properly respond to the objections raised by the Appellant, the experiment has to be analysed by the Respondent, it possibly has to be repeated to identify possible reasons for the deviation from the results shown in the patent-in-suit and if necessary further tests have to be carried out.

1.5 To have waited with the presentation of the tests until only about six weeks before the oral proceedings jeopardizes the whole object of such proceedings, which was to prepare a case for decision on conclusion of the oral proceedings, and denies the Respondent the right to file a detailed counterstatement and, possibly, an additional test report supporting his statements.

1.6 The situation is even more crucial, as the test was not submitted prior to the **first** scheduled date for the oral proceedings, but only thereafter. The fact that the Representative of the Respondent fell ill on the day of the oral proceedings cannot disadvantage the Respondent.

1.7 The Board therefore decides not to admit the test report in the proceedings in accordance with Art. 13(1) RPBA (Supplement to OJ EPO, 1/2009, page 41).

2. *Inventive step - Claim 4 of the main request*

2.1 The patent-in-suit states in paragraph [0001] that the problem underlying the patent-in-suit is the provision of multi-phase detergent tablets with improved robustness, product integrity and excellent dissolution characteristics.

Document D13 describes detergent tablets comprising bleach enhancing agent and ingredients detrimental to the stability of the bleach enhancing agent in separate sections. Examples 1 and 2 show tablets with a mould; the tablets of D13 are described to be firm, disintegrate within a few minutes and show cohesivity of the sections.

The problems described in both documents are identical. Since both parties started their argumentation from D13, the Board does not see any reason to deviate from this approach.

2.2 The disclosure of D13 differs from the subject-matter of Claim 4 of the patent-in-suit in the adhesive being liquid at 28°C, which is a PEG with an average molecular weight between 200 to 700 daltons (PEG 200-700).

Since no effect, which is based on this difference, has been proven or at least made credible, the objective

problem has to be re-defined in a less ambitious way, namely to provide an alternative to the multi-phase tablet of D13.

2.3 The proposed solution to this problem can be found in Claim 4.

2.4 The question to clarify is, whether it was obvious to the skilled person to use a PEG 200-700 as a binder for the second phase.

2.5 According to page 3, line 48 of D13, **disintegrating agents** are present in the tablets. Lines 72-81 of the same page recommend to use **rapidly dissolving types of surface-active agents** for use as **binding agents**. Thus, D13 aims at providing binding and disintegrating properties simultaneously to the tablets.

2.6 D5 also relates to dishwashing and detergent tablet compositions. The following passage can be found on page 2, last full paragraph, with regard to organic **binder material**, particularly **polyethylene glycol**: "The use of such an organic binder material also aids product **disintegrability** in the wash which assists cleaning performance. Thus, in accord with the invention a product having cleaning effectiveness [...] and which has a suitably hard and very strong compacted form may be obtained at low pressures." (emphasis added).

Since D5 gives a hint towards the inclusion of PEG into detergent tablets with regard to binding and disintegration properties, it is considered to be obvious to the person skilled in the art to substitute

two separate compounds for disintegration and binding by one compound, which fulfils both tasks.

2.7 Since D13 demands on page 3, line 74 the use of a "**rapidly dissolving**" type of surface active agent, the skilled person would use the PEGs from the **lower** end of the molecular weight range indicated in D5 (page 8, penultimate paragraph), e.g. 600, since low molecular PEGs are less hydrophobic and consequently more soluble in water than long-chain PEGs.

2.8 Even when disregarding the conclusions concerning solubility, no effect has presently been mentioned with regard to the use of the molecular weight range 200-700. This would consequently only mean an arbitrary selection of molecular weights.

2.9 Respondent's argumentation, that the skilled person would not combine the teaching of D13 with D5 (point XI) cannot be followed, because the teaching about the binding properties of PEG in D5 is not only related to the coated alkalinity system, but is more general. In the last full paragraph on page 2 it is stated that the "binder also aids product disintegrability". With other words, PEG helps binding the particles together **and** helps to release them upon disintegration. Although in D5 the alkalinity system is coated with PEG, the disclosed properties of PEG are generally applicable.

2.10 Also Respondent's conclusion that the combination of D13 with D5 would not lead to tablets containing the PEG in the **second** phase cannot be accepted by the Board: According to page 3, lines 104-107 of D13 the **persalt** containing section of the tablets should dissolve **prior**

to the section containing the bleach enhancer. In Example 1 a sodium perborate and starch (i.e. a disintegrant) containing 2,5 cm diameter tablet was produced by a first compression and further compressed with additional ingredients at the bottom of a 5,75 cm tablet.

With other words this means that in D13 the **second phase**, which dissolves - like in the patent-in-suit - more quickly than the first phase, contains the disintegrant. Replacing the disintegrant (starch) by PEG, which possesses disintegrating and binding properties, would lead to the subject-matter of the patent-in-suit.

2.11 Thus, the combination of D13 with D5 leads the skilled person to the subject-matter of present Claim 4. The requirements regarding the inventive step are consequently not met for the main request.

3. *Inventive step - Auxiliary requests 1 and 2*

Since the Claims 1 of the first and second auxiliary request are identical with Claim 4 of the main request, the same considerations apply here too.

4. *Inventive step - Auxiliary requests 3-5*

4.1 Claim 4 of the third auxiliary request and Claims 1 of the fourth and fifth auxiliary requests are identical. They distinguish from Claim 4 of the main request by the insertion of the passage "and wherein the second phase comprises enzyme".

4.2 The Respondent argued, that enzyme containing tablets are particularly sensitive to compression and present problems when they are included in a second phase, because subjecting this phase to high compression not only leads to dissolution problems, but can also detrimentally affect the activity of the enzyme.

4.3 However, all this has not been mentioned in the application as originally filed and no evidence has been filed showing any effect of the claimed detergent tablets on the dissolution and/or the activity of enzymes.

4.4 Thus, the presence of an enzyme is merely regarded as a non-inventive variation.

4.5 Claim 4 of the third auxiliary request and Claims 1 of the fourth and fifth auxiliary requests do not meet the requirement of inventive step for the reasons given for the main request. Therefore, auxiliary requests 3-5 are not considered to meet the requirements of Article 56 EPC.

Order

For these reasons it is decided that:

The decision under appeal is set aside.

The patent is revoked.

The Registrar The Chairman

G. Rauh P.-P. Bracke