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Datasheet for the decision of 17 April 2015

Case Number: T 1063/12 - 3.3.06

Application Number: 05757001.2

Publication Number: 1771542

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Language of the proceedings: EN

Title of invention:
MULTI-PHASE DETERGENT TABLET

Patent Proprietor:
Reckitt Benckiser N.V.

Opponent:
Henkel AG & Co. KGaA

Headword:
Detergent tablet/Reckitt

Relevant legal provisions:
EPC Art. 52(1), 56

Keyword:
Inventive step - (no) both requests

Decisions cited:

Catchword:

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Case Number: T 1063/12 - 3.3.06

D E C I S I O N
of Technical Board of Appeal 3.3.06
of 17 April 2015

Appellant: (Patent Proprietor)	Reckitt Benckiser N.V. Siriusdreef 14 2132 WT Hoofddorp (NL)
Representative:	Hodgetts, Catherine Dawn Reckitt Benckiser Corporate Services Limited Legal Department - Patents Group Dansom Lane Hull HU8 7DS (GB)
Respondent: (Opponent)	Henkel AG & Co. KGaA Henkelstrasse 67 40589 Düsseldorf (DE)
Representative:	Henkel AG & Co. KGaA Patente (VTP) Henkelstrasse 67 40589 Düsseldorf (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 16 March 2012 revoking European patent No. 1771542 pursuant to Article 101(3)(b) EPC.**

Composition of the Board:

Chairman	B. Czech
Members:	P. Ammendola
	C. Heath

Summary of Facts and Submissions

I. This appeal lies from the decision of the Opposition Division to revoke European patent no. 1 771 542.

II. The Opponent had sought revocation of the patent *inter alia* on the grounds of lack of inventive step in the light of documents

D1 = WO 00/70008 A1 and D2 = WO 00/06682 A1.

III. In the decision under appeal, the Opposition Division found that the subject-matter of claim 1 as granted was not novel and that claim 1 of the then pending Auxiliary Request was not allowable under Article 123(2) EPC.

IV. With its statement of grounds of appeal, the Appellant (Patent Proprietor) filed two sets of claims as Main request and Auxiliary Request, respectively.

Claim 1 according to the **Main Request** reads:

"*1. A detergent tablet, the tablet comprising a first pre-formed body having a recess, filled with a gel and a second body partially submerged in the gel, wherein the second body penetrates the gel such that at least from 20% of the volume of the second body is beneath the upper surface of the gel.*"

Claim 1 according to the **Auxiliary Request** only differs from claim 1 of the Main Request in that it reads (**amendment** made apparent by the Board):

"*... that at least from 20**-30**% of the volume...* ".

V. With its reply to the statement of grounds of appeal the Respondent (Opponent) raised objections against the Appellant's requests under Article 123(2) EPC and on the grounds of lack of inventive step in view of, *inter alia*, document D1.

VI. Oral proceedings were held before the Board on 17 April 2015.

The Respondent initially questioned the admissibility of the appeal and of the pending requests of the Appellant, but withdrew these objections later on. The debate then essentially focused on the issue of inventive step in the light of D1.

VII. The **Appellant requested** that the decision under appeal be set aside and the patent be maintained on the basis of the Main Request or the Auxiliary Request, both filed with the statement of grounds of appeal.

The **Respondent requested** that the appeal be dismissed.

VIII. The submissions of both Parties of relevance here, i.e. those concerning the obviousness of the subject-matter of the respective claim 1 of the Main Request and Auxiliary Request, can be summarised as follows.

As to claim 1 of the Main Request, the **Appellant** considered that the prior art disclosed in the claims of document D1, and schematically depicted in Figure 1 of the same document, represented a suitable starting point for inventive step assessment.

Compared to this prior art, the multi-phase detergent tablet (hereinafter the **tablet**) according to claim 1 at issue offered two advantages, namely

- less difficulties in its manufacture, and
- high adhesion between the first and the second body and, thus, high stability of the tablet during transport and handling.

The Appellant conceded that the wording "*filled with a gel*" (present in both versions of claim 1) did not necessarily imply that the recess in the first pre-formed body had to be filled up to its edges by the gel. Rather, the advantages of the invention resulted from the feature of the claimed tablet that the second body had to be "*submerged*" in the gel present in the recess of the pre-formed first body (hereinafter just the **recess**), so that "*at least from 20% of the volume of the second body is beneath the upper surface of the gel*" (hereinafter **the 20% submersion requirement**).

In the Appellant's opinion, the 20% submersion requirement resulted in

- simplifying the manufacturing of the claimed tablet, given that the recess and (the portion of) the second body submerged in the gel present in the recess needed not to be so "tightly fitting" to each other as in the prior art, and
- ensuring that a substantial portion of the outer surface of the second body was actually in contact with and hence adhering to the gel within the recess and, thus, providing the desired high adhesion among the two bodies.

The Appellant argued that document D1 did not suggest in any way to its skilled reader the possibility of a substantial difference between the shape of the second body and that of the recess, let alone of the combination of such substantial difference with the use of large amounts of adhesive so as to generate a tablet

complying with the 20% submersion requirement. Hence, the subject-matter of claim 1 of the Main Request was not obvious in view of this prior art.

Since also claim 1 of the Auxiliary Request defined the 20% submersion requirement, the Appellant considered the above reasoning to equally apply to the inventive step assessment vis-à-vis document D1 of the subject-matter of this claim as well.

The **Respondent** rebutted the above reasoning observing that nothing in the description, the claims or the Figure of document D1 justified the Appellant's allegation that according to this prior art the second body was required to be "tightly fitted" within the recess. Moreover, a skilled person wanting to achieve a stable fixation of the second body, would make sure that sufficient adhesive was present in the recess and would push the second body into the recess, thereby inevitably arriving at a tablet wherein the second body was partly "*submerged*" in the gel. The identification of the minimum extent of adhesion corresponding to a certain desired level of stability, i.e. of the 20% submersion requirement, would only require some mere routine experimentation.

Thus, the tablets according to the respective claims 1 of each of the two pending requests was obvious in view of document D1 and, accordingly, none of the Appellant's Requests was allowable.

Reasons for the Decision

Admissibility of the appeal

1. The appeal is admissible, as was no longer in dispute towards the end of the oral proceedings.

Admissibility of the Appellant's requests

2. The Appellant's Main and Auxiliary claim requests were both filed with the statement of grounds of appeal.

2.1 The Board accepts that they were filed in reaction to the reasons given in the decision under appeal and constitute an attempt to overcome the objections which led to the revocation of the patent.

The Respondent ultimately did not maintain any objections against the admissibility of these claim requests.

2.2 The Board thus decided to admit both requests into the proceedings (Articles 114(2) EPC and 12(4) RPBA).

Main Request - Inventive step - claim 1

3. The invention

3.1 The invention concerns a multi-phase detergent tablet and its use in dishwashing (patent in suit: paragraph [0001], claims 1 and 7).

3.2 According to the patent in suit (paragraph [0006] in combination with the preceding paragraph [0005]; paragraph [0010]), the manufacture of the tablet does not require a highly precise and costly process, and

the tablet has nevertheless excellent transport and handling stability.

4. The closest prior art

4.1 For the Board, the closest prior art is represented by document D1. This was not, as such, contested by the Appellant.

4.2 D1 (see page 1, first two paragraphs; claim 10 in combination with claims 1, 3 and 6 to 9, Figure) discloses a multiphase detergent tablet, e.g. for dishwashing purposes, that may be obtained by a process in which a pre-formed recess is provided in the uppermost layer of a tablet, followed by fixing a shaped body in the recess by means of a substance providing a transport-resistant bonding between tablet and the shaped body. In a preferred embodiment, this substance is an adhesive. An example of such a tablet is schematically depicted in the (sole) Figure and described on pages 4 (first paragraph) and page 5 (first paragraph) of D1.

4.3 The Board notes that neither the Figure nor the remainder of the content of D1 implies or points to a particularly "tight fitting" of the shaped body within the recess in the uppermost layer of the tablet, as disclosed e.g. in document D2, Figures 3 and 5, which show a spherical or cylindrical second body that is present in an apparently tightly matching hemispherical or cylindrical cavity in the first body.

4.4 Moreover, it was common ground between the parties that the "adhesive" providing the transport-resistant bonding as disclosed in document D1 fell within the broad and general meaning of the term "*gel*" comprised

in the claims of the patent in suit.

5. Technical problem solved according to the Appellant

5.1 The Appellant submitted that compared to the prior art, the subject-matter of claim 1 at issue provided the twofold technical advantage of not requiring a highly precise and thus costly manufacturing process whilst nevertheless achieving excellent stability during transport and handling (see 3.2, *supra*).

5.1.1 Hence, the technical problem to be solved in the light of D1 was to provide a multi-phase detergent tablet which despite its simpler manufacturing had excellent stability during transport and handling.

5.2 The proposed solution

As a solution to this problem, the patent proposes a multiphase tablet according to claim 1, wherein a first pre-formed body has a recess "*filled with a gel*" and wherein a second body is "*submerged*" in the gel, so that "*at least 20% of the volume of the second body is beneath the upper surface of the gel*".

6. Success of the solution

6.1 The Board notes that the 20% submersion requirement implies the presence of a certain amount of (adhesive) gel in the recess and the shapes of the second body and of the recess to be such that a layer of the gel connects a substantial area of the second body's outer surface to the surface of the recess. The Board accepts that meeting this requirement ensures an unspecified "high" level of adhesion between the two bodies, superior to the level obtainable when the surfaces of

the second body and of the recess are connected to a lower extent via a gel (adhesive) layer.

6.2 However, for the Board, the 20% submersion requirement does not necessarily imply a difference in shape between the outer surface of the second body submerged in the gel and the inner surface of the recess in contact with the gel in a manner that would be manifestly incompatible with the shapes of the two bodies of the tablet schematically depicted in the Figure of D1. Indeed, as already mentioned (4.3, *supra*), no element in the disclosure of document D1 implies or points to a particularly "tight" fitting of the second body within the recess.

6.2.1 In other words, the 20% submersion requirement may be met even when the thickness of the gel layer connecting the two bodies is relatively small and may thus also be met when using a combination of second body and recessed first body of the type illustrated by the Figure of D1.

6.2.2 Accordingly, it appears that (at least part of) the claimed subject-matter requires a precision in the manufacturing process comparable to the one required in the prior art process of D1. Thus, the Board is not convinced that the claimed subject-matter also solves (across the full ambit of claim 1) the technical problem of simplifying manufacture.

6.3 Accordingly, the technical problem to be solved must be reformulated in a less ambitious manner.

7. Reformulated technical problem

Based on above considerations, the Board concludes that

in the light the closest prior art as disclosed in D1, the technical problem can only be seen in providing a further multiphase detergent tablet with a (satisfactorily) high stability during transport and handling.

8. Success of the solution

The Board accepts that this problem is solved by a tablet with the features of claim 1, considering the substantial contact, implied by the submerged volume of at least 20%, between the outer surface of the second body and the gel within the recess.

9. Obviousness

9.1 In the Board's judgement, the skilled person looking at the detergent tablet schematically depicted in the Figure of D1 would immediately realise that the strength of adhesion between the two bodies and, hence, the stability of this multiphase tablet necessarily depends *inter alia* on the extent to which the second body's surface is actually bound to the interior of the recess via the adhesive.

9.2 Accordingly, a skilled person starting from a prior art as schematically depicted in the Figure of D1 and aiming to solve the posed technical problem would immediately consider
- using an amount of adhesive sufficient to ascertain a good adhesion of the outer surface of the second body to the interior of the recess and/or
- setting the depth or shape of the recess such as to a favour a deeper penetration of the second body therein.

9.3 For the Board, this putting into practise of the teaching of D1 only requires routine experimentation. No inventive ingenuity is required to identify which minimum extent of the outer surface of a given second body must actually be connected to the interior of the recess via the adhesive layer in order to result in satisfactorily high level of adhesion.

9.4 Accordingly, the skilled person arrives at the subject-matter of claim 1 by taking the appropriate amount of a given adhesive (gel) and, if necessary, adapting the respective dimensions of the recess and the second body until a sufficiently high adhesion and tablet stability is achieved.

9.5 The Board concludes that the subject-matter of claim 1 of the Main Request does not involve an inventive step (Articles 52(1) and 56 EPC)

10. Thus, the Appellant's Main Request is not allowable.

Auxiliary Request - Inventive step - claim 1

11. According to the Appellant, claim 1 of the Auxiliary Request does not impose an upper limit on the percentage of the second body's volume to be "*submerged*" in the gel, but expresses a range of lower limit values.

11.1 Since claim 1 according to the request at issue is supposed to cover the same subject-matter as claim 1 according to the Main Request, the Board's findings with respect to the latter apply *mutatis mutandis* to the former.

11.2 Hence, the subject-matter of claim 1 according to the Auxiliary Request does not involve an inventive step over D1, either (Articles 52(1) and 56 EPC).

12. Thus, the Appellant's Auxiliary Request is not allowable either.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

D. Magliano B. Czech

Decision electronically authenticated