Datasheet for the decision
of 9 June 2009

Case Number: T 1581/06 - 3.3.06
Application Number: 01943614.6
Publication Number: 1292663
IPC: C11D 17/00
Language of the proceedings: EN

Title of invention:
Multi-phase laundry tablets and methods for producing them

Patentee:
Reckitt Benckiser N.V.

Opponent:
Henkel AG & Co. KGaA

Headword:
Multi-phase tablet/RECKITT

Relevant legal provisions:
-

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

Keyword:
"Inventive step - yes"

Decisions cited:
-

Catchword:
-
Case Number: T 1581/06 - 3.3.06

DECISION of the Technical Board of Appeal 3.3.06 of 9 June 2009

Appellant: Henkel AG & Co. KGaA
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Composition of the Board:
Chairman: P.-P. Bracke
Members: P. Ammendola
U. Tronser

C1660.D
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. 1 292 663 according to the then pending 3rd auxiliary request of the Patent Proprietor.

II. The Opponent had sought revocation of the granted patent on the grounds of lack of novelty and inventive step. It had cited in support of its arguments, inter alia, the following documents:

(2) = WO 00/04116,

(3) = DE-A-19834180,

(4) = DE-A-19834181

and

(5) = WO 99/06522.

The Opponent had disputed the patentability of the multi-phase detergent tablet (hereinafter MPDT) and of the process for its formation claimed in this request only in view of the requirements of Article 56 EPC 1973.

III. Claims 1 and 10 according to this 3rd auxiliary request (hereinafter claim 1 and 10 as maintained) read:
"1. A multi-phase detergent tablet comprising:

   a) a first phase having a flat upper surface or
   the upper surface may be slightly convex or
   concave wherein the difference in heights between
   the highest and lowest points on the surface is
   less than 1mm, and
   b) a second phase adhered to and partially
   covering said upper surface; wherein the second
   phase is in the form of a segment of a sphere or
   ellipsoid, the flat portion of said segment being
   adhered to said upper surface."

"10. A process for preparing a tablet as defined in any
one of the preceding claims which comprises
adhering the second phase to the first phase."

The maintained claims 2 to 9 defined preferred
embodiments of the MPDT of claim 1.

IV. The Opposition Division found in the decision under
appeal that the term "segment of a sphere or ellipsoid"
of claim 1 as maintained identified exclusively
partially spherical or ellipsoidal forms possessing one
single flat portion. Hence, the MPDTs according to such
claim 1 had the same attractive appearance of those of
the prior art wherein one phase was in the form of a
ball held in a cavity punched in the upper surface of
the underlying phase (hereinafter these MPDTs of the
prior art are indicated as ball-type MPDTs, whereas the
claimed MPDTs possessing the same appearance of the
former ones are indicated as the claimed ball-simile
MPDTs).
Accordingly, the Opposition Division considered the ball-type MPDTs of document (3) or document (4) as representing the closest prior art. The skilled person starting from such prior art and aiming at solving the addressed technical problems - i.e. retaining the ball-type appearance while reducing the manufacture and dissolution difficulties associated to the presence of a punched cavity in this prior art - would not find in the relevant prior art any suggestion leading to the subject-matter of the maintained claims. In particular, she/he had no reason to take into consideration document (2) or document (5), because these latter did not address the technical problems under consideration.

Therefore, the subject-matter of the maintained claims 1 to 10 was not obvious in view of the cited prior art.

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

It contested the inventiveness of the subject-matter of the maintained claims in view of document (2), possibly in combination with document (3) or (4), as well as in view of document (5) taken alone, because, in its opinion, the subject-matter of the maintained claims encompassed also MPDTs that did not possess the appearance of the ball-type ones.

The fact that claim 1 as maintained possibly implied that the second phase possessed only one flat portion was in contradiction with the fact that the same claim referred to a "segment of a sphere or ellipsoid", i.e. to a term embracing also the discoidal forms obtainable
by intersecting a sphere or an ellipsoid with two parallel planes.

Nor would claim 1 impose a specific relative positioning and/or dimensioning of the two phases, since such claim allowed for the flat portion of the second phase that adhered onto part of the upper surface of the first phase, to further extend beyond the edges of this latter.

The claimed MPDTs wherein the second phase had two parallel flat faces (hereinafter indicated as the claimed disk-type MPDTs) did not simulate the attractive appearance of the prior art ball-type MPDTs and, thus, only solved the technical problems mentioned in the patent in suit in as far as the avoidance of an unsatisfactory dissolution was concerned. Substantially the same technical problem had however already been solved by the MPDTs disclosed in document (2), which could be obtained by simply adhering flat surfaces of the two phases. Hence, this citation disclosed the most relevant prior art, from which the disk-type MPDTs of the maintained claims substantially differed only in that in these latter the second phase covered just a part of the upper surface of the first phase. Since the patent in suit attributed no technical effect to such partial covering, the sole credibly solved technical problem consisted in the provision of an alternative to the prior art. This problem had been solved by means of an arbitrary modification of the shape of the second phase of the MPDTs of document (2).

In particular, it would have been obvious for the skilled person to possibly provide the second phase of
MPDTs with a flat portion apt at covering just in part the upper surface of the first phase, because:

a) such partial covering would be an alternative open to the skilled reader of document (2) in order to carry out the teaching of this citation

and

b) the possibility that the second phase could only cover a part of the upper surface of the first phase would be suggested per se by the ball-type MPDTs of the prior art, i.e. independently on the fact that the second phase of these tablets possessed the overall form of a sphere.

Additionally, the disk-type MPDTs of claim 1 as maintained were also obvious for the skilled person aiming at MPDTs with a more regular dissolution profile, and starting from the ball-type tablets of document (3) or (4), because she/he could learn from document (2) that it was possible to avoid the dissolution problems of MPDTs by simply adhering flat surfaces of the two phases. Also in this reasoning, the Appellant considered that the possibility of providing the second phase of MPDTs with a flat portion apt at covering just in part the upper surface of the first phase, was obvious for the reasons "a)" and "b)" already indicated above.

VI. The Patent Proprietor (hereinafter Respondent) replied in writing to the grounds of appeal relying in essence on the reasons of the decision of the first instance already resumed above at section IV. It reiterated that
to interpret the term "segment of a sphere or of an ellipsoid" in the context of the patent in suit as also embracing discoidal shapes amounted to a wilful misunderstanding of the scope of the maintained claim 1, in particular since this latter expressly referred to "the" flat portion of the second phase.

VII. The Appellant raised for the first time with a letter of 24 April 2009 a novelty objection against the subject-matter of the claims as maintained. This objection was based onto document (10)=Boletin Oficial De La Propriedad Industrial of 16 February 2000, I 146627, pages 869-878.

VIII. On 9 June 2009 oral proceedings took place before the Board in the announced absence of the Respondent.

At the opening of the hearing the Appellant was informed of the reasons that brought the Board to the conclusion that the belated document (10) was not admitted into the proceedings.

The Appellant expressly acknowledged at the oral proceedings:

- to have no further objection in respect of novelty,

- not to contest the presence of an inventive step for those claimed MPDTs that were ball-simile
- to no longer maintain its previous objection based on document (5) against the inventiveness of the claimed MPDTs that were not ball-simile.

IX. The Appellant requested in writing and orally that the decision under appeal be set aside and the patent be revoked.

The Respondent requested in writing that the appeal be dismissed.

**Reasons for the decision**

1. Formal inadmissibility of document (10) and novelty of the subject-matter of the maintained claims.

1.1 This document has been filed by the Appellant with letter of 24 April 2009, i.e. after that oral proceedings before the Board have been arranged and only about six weeks before their foreseen date.

The Appellant has provided insufficient information as to where, when and by whom document (10) has been published.

Additionally, this document is not in one of the official languages of the EPO. Hence, a delay of the proceedings would be unavoidable in case the Board would, according to the provisions of the EPC, find necessary to obtain a translation of such document in one of the official languages.
Finally, the introduction into the appeal proceedings of document (10) - and, thus, of the novelty objection based thereupon and first raised in said letter - could possibly require to refer the case back to the first instance in order not to deprive the other party of one instance.

Accordingly, the Board concludes that the admission of the document (10) would possibly involve further technical and legal issues, which could require postponing the oral proceedings and/or remitting the case to the first instance. Thus, this belated document is not admitted into the proceedings.

1.2 The Board is satisfied that the subject-matter of the maintained claims is novel. No details need to be given in this respect since the Appellant's sole novelty objection is that based on the not admitted document (10).

2. Inventive step assessment for the subject-matter of claim 1 as maintained (Article 52(1) in combination with Article 56 EPC 1973).

2.1 The subject-matter of this claim is a MPDT comprising a first phase having a substantially flat upper surface and a second phase adhered onto and partially covering said upper surface, wherein the form of the second phase is defined by the expression "a segment of a sphere or ellipsoid" and its connection to the first phase is defined by the expression "the flat portion of said segment being adhered to said upper surface".
2.2 The Appellant has argued that due to such expressions this claim would encompass, in addition to ball-simile MPDTs, also those of the disk-type and those wherein a flat portion of the second phase in part adheres onto the upper surface of the first phase and in part extends beyond the edges of this latter. Hence the Opposition Division would have erred in considering the claimed subject-matter as restricted to ball-simile MPDTs.

2.3 The Board concurs with the Appellant that the term "a segment of a sphere or ellipsoid" usually indicates two different sorts of solid figures:

the partially spheroidal forms bounded by a portion of the surface of a sphere or an ellipsoid and one intersecting plane and, thus, having a single flat portion,

as well as

the discoidal forms bounded by a portion of the surface of a sphere and two parallel intersecting planes and, thus, having two parallel flat portions.

The Board notes also that the apparent contradiction between the normal meaning of such term and the fact that in claim 1 as maintained the portion of the second phase adhering onto the flat upper surface of the first phase is defined as "the flat portion of said segment" (i.e. as if only one flat portion existed in this second phase), is not sufficient for reasonably concluding that the term "segment of a sphere or ellipsoid" in the patent in suit does not cover
discoidal forms as well. Indeed, not only the patent in
suit contains no other teaching that would openly
contradict a normal interpretation of such term, but it
is apparent that a discoidal form wherein one of the
two flat portions is very small in respect of the other
one, would possess substantially the same appearance as
that of a partially spheroidal form of similar
dimensions. Hence, the Board finds that the term
"segment of a sphere or ellipsoid" in the patent in
suit also covers discoidal forms.

The Board also finds, however, that the person skilled
in the art of detergent tablets would not possibly
consider embraced by claim 1 as maintained any tablet
in which part of the flat portion of the second phase
that adheres onto only a part of the upper surface of
the first phase also extends beyond the edges of this
latter. No such forms are known to the Board to have
been previously disclosed for "detergent tablets",
possibly also because the asymmetrical relative
positioning of the two phases might apparently favour
the breaking of the tablets during their handling.

Hence, the Board concurs only in part with the
Appellant's interpretation of claim 1 as maintained and
concludes that the broadest technically reasonable
meaning of such claim covers in addition to the ball-
simile also the disk-type MPDTs, but that such meaning
cannot reasonably embrace tablets in which only part of
a flat portion of the second phase adheres onto the
upper surface of the first phase.

2.4 The Appellant has expressly acknowledged not to have
any objection as to the inventiveness of the claimed
ball-simile MPDTs. It has however objected to the non-obviousness of the claimed disk-type MPDTs.

The Appellant has presented in this respect two objections, one starting from the MPDTs of document (2) and one starting from the ball-type MPDTs of document (3) or (4) (as both these latter citations undisputedly provide fully equivalent disclosure in respect of the issues relevant for the present case, it the followings reference is made to document (3) only).

In both objections the Appellant has considered obvious for the skilled person to provide the second phase of MPDTs with a flat portion apt at covering just in part the upper surface of the first phase because:

a) such partial covering would be an alternative open to the skilled reader of document (2) in order to carry out the teaching of this citation

and

b) the possibility that the second phase could only cover a part of the upper surface of the first phase would be suggested per se in the ball-type MPDTs.

In support of this last argument he Appellant has stressed that e.g. Figure 4 of document (3) would disclose partial covering of the two phases of MPDTs independently from the additional teaching also contained in this citation that such structure could be obtained by shaping the second phase in the form of a sphere to be held in a corresponding punched cavity in the underlying first phase. Hence, the skilled person
could consider the possibility of such partial covering as disclosed per se, i.e. as possibly obtainable also with forms of the second phase other than a whole sphere.

2.5 The Board finds the Appellant's objections not convincing.

2.5.1 The closest prior art for assessing inventive step is a prior art document disclosing subject-matter conceived for the same purpose or aiming at the same objective as the claimed invention.

The patent in suit is concerned with remedying the disadvantages occurring with MPDTs of the prior art wherein one phase possess an attractive shape protruding from the upper surface of the underlying phase, such as in the ball-type MPDTs. Indeed, the presence in such prior art of an insert or cavity that is punched in the first phase and holds parts of the spherically formed second phase implies manufacturing difficulties and an irregular dissolution profile due to the presence of regions beneath and adjacent to the sides of the cavity that are compressed to a greater extent than the rest of the tablet (see paragraphs [0005] and [0006] of the patent in suit).

Hence, and since the sole MPDTs of the available prior art that possess a protruding phase are the ball-type ones of e.g. document (3), the Board finds this latter citation to represent a reasonable starting point for assessing inventive step.
2.5.2 Document (3) discloses especially in Figure 4 a typical ball-type tablet, i.e. a MPDT wherein one phase is in the form of a ball held in a cavity punched in the upper surface of the underlying phase.

2.5.3 Starting from document (3) the problem credibly solved by the whole claimed subject-matter is that, also mentioned in paragraph [0010] of the patent in suit, of rendering available further MPDTs with an attractively shaped protruding upper phase, but which also overcomes the above-discussed disadvantages.

2.5.4 It is apparent and undisputed by the Appellant that, due to the fact that the two phases in all claimed MPDTs adhere to each other through flat surfaces rather than by the insertion of part of the ball-shaped second phase into a cavity punched in the first phase, such problems are effectively solved by the whole claimed subject-matter, i.e. also by the disk-like MPDTs.

2.5.5 Therefore, the question remains whether the proposed solution was obviously derivable from the cited prior art.

The Board finds that the specific tablet construction required by claim 1 as maintained, in which one phase covers only in part the underlying flat surface of another phase, may not be derived in an obvious way from the available citations in the field of ball-type MPDTs, such as document (3), already because in this prior art the sole disclosed partial covering among the phases is exclusively that associated to the esthetical and technical effects of such ball - cavity construction. Indeed, as also recalled in the last
sentence of paragraph [0003] of the patent in suit, such special construction is not only due to esthetical reasons, but also aims at producing a specific dissolution profile.

A partial covering among the phases appears also not suggested by the MPDTs of conventional tablet form, such as those of document (2). Indeed, in the absence of any evidence to the contrary, it appears evident to the person skilled in the art of conventional MPDTs that these latter normally possess very regular outer appearances (e.g. cuboidal, discoidal or spheroidal), because protrusions or indents are manifestly dangerous for the integrity of the tablets during their handling. Accordingly, only regular tablet forms are also to be expected in the MPDTs produced by the methods described from page 10, line 16 to page 11, line 12, of document (2), wherein the different phases are formed by using substantially the same mould and, thus, the connection among such phases can only reasonably be expected to have occurred between respective surfaces of perfectly matching shapes.

Hence, the available prior art does cannot possibly have rendered obvious for the skilled person to conceive MPDTs wherein a flat surface of the upper phase adheres onto only part of the flat surface of the underlying phase.

Thus, the Board finds not convincing the Appellant's objections based on Article 56 EPC 1973 to the subject-matter of claim 1 as maintained.
3. **Claims 2 to 10 as maintained**

The Board finds that the Appellant's objections based on Article 56 EPC 1973 fail in respect to the subject-matter claims 2 to 10 as maintained for substantially the same reasons already considered above in respect of claim 1.

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:  

The Chairman:

T. Buschek  
P.-P. Bracke