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**Datasheet for the decision  
of 19 May 2009**

**Case Number:** T 1617/06 - 3.3.06

**Application Number:** 01916551.3

**Publication Number:** 1276844

**IPC:** C11D 17/04

**Language of the proceedings:** EN

**Title of invention:**

Detergent product

**Patentee:**

THE PROCTER & GAMBLE COMPANY

**Opponent:**

Henkel AG & Co. KGaA

**Headword:**

Multi-compartment pouch/PROCTER

**Relevant legal provisions:**

-

**Relevant legal provisions (EPC 1973):**

EPC Art. 56

**Keyword:**

"Inventive step - yes"

**Decisions cited:**

-

**Catchword:**

-



Case Number: T 1617/06 - 3.3.06

**D E C I S I O N**  
of the Technical Board of Appeal 3.3.06  
of 19 May 2009

**Appellant:** Henkel AG & Co. KGaA  
(Opponent) VTP Patente  
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**Representative:** -

**Respondent:** THE PROCTER & GAMBLE COMPANY  
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**Representative:** Jones, Helen M.M.  
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**Decision under appeal:** Decision of the Opposition Division of the  
European Patent Office posted 31 August 2006  
rejecting the opposition filed against European  
patent No. 1276844 pursuant to Article 102(2)  
EPC 1973.

**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 rejecting the opposition against the European patent No. 1 276 844, relating to a detergent product.

II. The patent as granted comprised nine claims, whereby claim 1 read:

*"1. A multi-compartment pouch made from a water-soluble film and having at least two compartments, said multi-compartment pouch is obtainable by the process of closing an open compartment with a pre-sealed compartment, the process forms a second seal on the pre-sealed compartment which is in a different position to the first seal of the pre-sealed compartment."*

Claims 2 to 8 defined preferred embodiments of the pouch of claim 1.

Claim 9 read:

*"9. A process for making a multi-compartment pouch according to any preceding claim, said process comprises the step of closing an open compartment with a pre-sealed compartment."*

III. The Opponent sought revocation of the patent in suit on the grounds of 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:

(3) = WO 93/08095

and

(6) = WO 92/17382.

IV. In its decision, the Opposition Division noted that document (3) disclosed multi-compartment packages formed by filling a first compartment made of a first water-soluble film, covering this compartment with a second water-soluble film, sealing these two films together so as to close the first compartment, using one side of this latter and a third water-soluble film to form and close, by means of a seal, a second filled compartment (hereinafter this step sequence is indicated as two-step closing process).

Even though the explicit disclosure of such two-step closing process in such citation did not specify the relative position of the first and of the second seal, it would nevertheless be implicitly disclosed e.g. in figure 1 of document (3) that the second sealing occurred between the (re-heated) first seal and the portion of the third film in direct contact with such first seal (hereinafter the seals resulting from this closing process are indicated as overlapping seals).

The Opposition Division found that the patented multi-compartment pouch differed from this prior art only in that the patented multi-compartment pouch contained two distinct seals instead of overlapping seals.

The Opposition Division concluded that neither document (3) nor document (6) rendered obvious for the skilled

person aiming at reducing the risk of leakage through the overlapping seals of the multi-compartment packages of document (3), to dislocate these seals at different positions. Hence, the subject-matter of the granted claims was based on an inventive step.

- V. The Opponent (hereinafter "Appellant") appealed this decision.

The Patent Proprietor (hereinafter "Respondent") submitted with a letter of 29 May 2007 five sets of amended claims respectively labelled as first to fifth auxiliary requests.

On 19 May 2009 oral proceedings took place before the Board in the presence of both parties.

- VI. The Appellant submitted in writing and orally the following arguments in respect of the inventive step assessment for the subject-matter of the granted claims.

The Opposition Division had erred in accepting the alleged reduction of the risk of leakage vis-à-vis the prior art as the technical problem credibly solved by the patented pouch, since the disclosure of the patent itself necessarily implied that any such reduction was already present also in the prior art multi-compartment packages with overlapping seals disclosed in document (3).

Indeed, the patent in suit, beside not containing any evidence demonstrating that the leakage of the claimed multi-compartment pouches was inferior to that

observable in multi-compartment packages of the prior art, indicated explicitly

a) in paragraphs [0005] and [0006] that superior leakage only occurred in multi-compartment packages wherein the compartments were "*simultaneously sealed*", i.e. formed in a one-step closing process,

and

b) in paragraph [0007] that it was sufficient to avoid the simultaneous sealing and, thus, to use a two-step closing process, for producing a "*multiple seal*" that ensured the aimed reduction of the risk of leakage.

However, also the overlapping seals of the packages of document (3) were a "*multiple seal*" in the sense of paragraph [0007], i.e. formed in a two-step closing process. Hence, the patent in suit was not only silent as to the function played by the sole feature distinguishing the patented subject-matter from the multi-compartment packages of document (3), i.e. the different positioning of the seals, but deprived of relevance and credibility any attempt of the Respondent to attribute to such distinguishing feature the same technical advantage that the patent itself attributed exclusively to the multiple nature of the seal of the invention.

Accordingly, also the allegations first submitted by the Respondent during the opposition and appeal proceedings, as to the importance of avoiding the thinning and/or the cross-linking allegedly occurring when overlapping two seals, were unsupported and

unrelated to the alleged reduction of leakage that the patent itself attributed exclusively to the two-step closing process and not to the different positioning of the two seals.

Thus, the patented pouch and process only provided an obvious solution to the technical problem of rendering available an alternative to the prior art. Indeed, even though document (3) did not disclose the possibility of locating the two seals at different positions, still the skilled person would have considered a dislocation of the two seals as a possible alternative - actually the sole existing alternative - to their overlap.

If the Board would nevertheless consider credible that the presence of two distinct seals in the patented pouch could, as alleged, ensure a reduction in leakage in comparison to the overlapping seals of the prior art packages, then it should be considered that the patented subject-matter encompassed the possibility of forming the second seal joining all the three films constituting the pouch and, thus, that at least such part of the patented subject-matter resulted from the simple duplication of the overlapping seals contained in the packages of document (3). Accordingly, a reduction of the risk of leakage would be predictable on the simple consideration that two seals were evidently more effective than one in preventing leakage.

Finally, the whole patented subject-matter would also be obvious for the skilled person who learned from document (6) that the leakage of thermally sealed water-soluble films occurred in particular where two seals intersect each other. Accordingly, the skilled

person aiming at a reduced leakage would consider it obvious to avoid any intersection between the overlapping seals in the package of document (3), thereby necessarily placing the two seals at different positions and, thus, arriving at the patented subject-matter without exercising any inventive ingenuity.

VII. The Respondent disputed the Appellant's objections to the inventiveness of the patented subject-matter by presenting in writing and orally the following arguments.

The section of the patent in suit referring to the background art had been erroneously interpreted by the Appellant. Indeed, the patent description, after having made reference to the prior art disclosed also in document (3), stressed explicitly in paragraphs [0005] and [0006] the high risk of leakage present in the multi-compartment packages of the prior art when the different compartment are simultaneously sealed. The resulting leakage-prone seal was that indicated in the subsequent paragraph [0007] with the term "*multiple seal*".

The overlapping seals formed in the two-step closing process of document (3) would also appear to the skilled reader of this document as manifestly equivalent to the leakage-prone "*multiple seal*" of paragraph [0007] of the patent in suit, since during the second sealing step of the two-step closing process of document (3) the previously formed first seal would also unavoidably be melt, thereby resulting in the same structure as when simultaneously sealing both compartments in one step. Accordingly, it was evident



to the skilled person that the same risk of leakage attributed to the "*multiple seal*" in the patent in suit, would also necessarily occur in the overlapping seals of document (3).

But even if the Board concluded that the paragraphs [0005] to [0007] of the patent did not necessarily imply that the same risk of leakage of the "*multiple seal*" was also present in the case of the overlapping seals of document (3), still the absence of such indication would not justify to disregard the overall disclosure in the patent in suit that the patented pouch possessed a reduced risk of leakage vis-à-vis the prior art. The EPC did not require a European patent to necessarily identify separately the relevance of each of the features characterizing the invention in view of the desired technical effect(s). Since the patent in suit consistently stated that the presence of distinct seals at different positions was an essential feature of the invention, the skilled person had reasonably to assume that also such feature contributed to the achievement of the aimed reduction of risk of leakage. The possible presence in the patent specification of an explanation as to why another feature characterizing the invention contributed to the aimed effect would not necessarily mean that such effect was exclusively dependent on such other feature.

Moreover, it would also be apparent to the skilled person how the distinct positioning of the seals of the invention could have contributed to the reduction of leakage during storage vis-à-vis the overlapping seals of the prior art. As a matter of fact, the location at different positions manifestly avoided the thinning of

the first seal inevitably occurring in the prior art during its two-fold melting. A further evident advantage of such dislocation was the avoidance of the cross-linking possibly occurring at the re-heated portions of the water-soluble films.

Accordingly, the skilled reader of the patent in suit had no reason to doubt that the patented pouch solved the technical problem mentioned in the patent vis-à-vis the prior art referred therein and, thus, also vis-à-vis the packages of document (3).

None of the possible embodiments of the claimed subject-matter could be regarded as based on the simple duplication of the overlapping seals of document (3), since any such duplication would necessarily result in two subsequent seals separating each of the compartments from the outside environment. On the contrary, in all patented multi-compartment pouches, even in those in which the second sealing step is carried out so as to seal all the three films at once, the second compartment only remained separated from the outside environment by one single seal.

Finally, document (6) did not teach to avoid any overlapping of seals, but exclusively to avoid the geometry present when two seals intersect angularly, thereby forming a leakage-prone 90° corner of the seal. However, no such angular intersection was present in the overlapping seals of document (3).

Hence, neither document (3) nor document (6) disclosed the two distinct seals of the patented pouch or a teaching rendering obvious to dislocate the overlapping

seals of document (3) at two different positions in order to reduce the risk of leakage. Thus, the prior art cited by the Appellant could not possibly have rendered obvious the patented subject-matter.

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 (main request) or alternatively that the patent be maintained in amended form on the basis of any of the first to fifth auxiliary requests filed with letter of 29 May 2007.

## **Reasons for the Decision**

### *Patent as granted (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 This claim (see section II of the Facts and Submissions above) defines a multi-compartment pouch made from water-soluble films. In particular, the pouch is defined in such claim as that obtainable by the process of closing an open compartment with a compartment that has been previously sealed, i.e. by a two-step closing process, whereby the second sealing is carried out in a different position to the first seal so that two distinct seals are formed.

It is undisputed that according to the patent in suit the water-soluble pouch of the invention aims at reducing the risk of leakage of materials packaged in multi-compartment water-soluble pouches, such as e.g. the leakage possibly occurring through the pouch seals during storage.

- 1.2 The Board notes that document (3) undisputedly discloses a multi-compartment package resistant to leakage obtainable by means of, *inter alia*, a two-step closing process, without however expressly mentioning the relative positioning of the first and of the second seals (see document (3) page 2, lines 16 to 20; page 6, lines 20 to 25; and from page 11, line 26 to page 12, line 14). It is also undisputed that such positioning is implicitly disclosed in this citation by the combination of the just-identified passage at pages 11 to 12 with e.g. the general processing method described with reference to figure 1 at page 14, lines 4 to 13.

It is therefore apparent that the sealing of the second compartment in the two-step closing process of document (3) is made by heating and pressing against each other the firstly formed seal (i.e. that already closing the first compartment formed between the first two films) and the portion of the third film laying in direct contact with that first seal, thereby arriving to the formation of overlapping seals.

Taking into account

- this citation addresses substantially the same technical problem as the invention,

- that the multi-compartment package of this prior art is (similarly to the patented multi-compartment pouch) formed by a two-step closing process

and

- that this prior art is acknowledged as relevant background art in paragraph [0004] of the patent in suit (which cites "US5224601", i.e. the US equivalent of document (3)),

the Board concurs with the parties that this prior art represents a reasonable starting point for the assessment of inventive step for the subject-matter of claim 1 of the patent in suit.

1.3 It is self-evident that the subject-matter of claim 1 as granted differs from the multi-compartment packages of document (3) only in that the seals of the former are distinct, i.e. located at different positions, whereas in document (3) they are overlapping. This has not been disputed by the parties.

1.3.1 The Appellant, however, although acknowledging that paragraphs [0005] to [0007] of the patent in suit describe a reduction of the risk of leakage as the technical problem solved by the patented invention vis-à-vis the background art, has nevertheless argued that in these paragraphs such reduction is alleged to have been obtained **only** in respect of multi-compartment packages of the prior-art wherein both compartments are simultaneously sealed.

In particular, paragraph [0007] of the patent in suit would, in the Appellant's interpretation, expressly attribute the allegedly achieved reduction of the risk of leakage to the fact that the seal of the patented pouch is a "*multiple seal*", i.e. a seal obtained by repeated sealing, regardless of the relative positioning of the formed seals.

Since also the packages of document (3) have seals that are not obtained by simultaneous sealing of both compartments, but by repeated sealing, then also the seals formed in such prior art would be a "*multiple seal*" as that of the patented pouch. Accordingly, no difference in the risk of leakage could credibly exist between the patented subject-matter and the prior art of document (3).

Moreover, the patent in suit contained no experimental evidence of the alleged reduction of the risk of leakage.

Accordingly, the sole technical problem credibly solved by the feature distinguishing the subject-matter of claim 1 as granted from the prior art of document (3), i.e. the fact of carrying the second seal in a different position to the first seal, was that of rendering available further water-soluble multi-compartment packages, i.e. an alternative to the prior art.

- 1.3.2 The Respondent has disputed this reasoning considering in essence that the interpretation of paragraphs [0005] and [0007] given by the Appellant would be erroneous (see section VIII of the Facts and Submissions above).

Nevertheless, it has turned out unnecessary for the Board to establish the meaning of these paragraphs because, even assuming, for the sake of an argument in favour of the Appellant, that the Board would concur with the Appellant's interpretation of paragraphs [0005] to [0007], still the reasoning given at point 1.3.1 above would remain unconvincing for the following reasons:

- the statements in the patent in suit as to the reduced leakage achieved vis-à-vis the prior art are not deprived of credibility for the sole reason that the patent in suit did not report any experimental evidence supporting such statements;
- these statements reasonably also apply in respect to the packages of document (3) since the section of the description of the patent in suit recalling the background of the invention, i.e. from paragraphs [0002] to [0007], indisputably also refers to this prior art in paragraph [0004];
- as convincingly argued by the Respondent, the EPC does not require a European patent to clarify the details of the mechanism with which each of the essential features of the patented subject-matter contribute the aimed technical effect, but only to indicate the problem addressed and its solution. Accordingly, the fact that paragraph [0007], when interpreted according to the Appellant's line of argument, would attribute to only one of the two essential features of the invention (i.e. the multiple nature of the seal resulting from the two-

step closing process) the achieved technical advantage, does **not necessarily** imply that such technical advantage is **only** due to such feature, i.e. that the reduction of leakage is completely independent from the other feature also consistently acknowledged in the patent in suit as essential for the invention (i.e. the fact that the seals are located at different positions, see paragraphs [0008] and [0032], as well as, claim 1 of the patent as granted).

Hence, even if the Board would find correct the Appellant's interpretation of paragraphs [0005] to [0007] of the patent in suit, still the disclosure of these paragraphs does **not** necessarily imply the acknowledgment that the dislocation of the seals of the patented pouch at different positions has no bearing on their risk of leakage.

1.3.3 Therefore, the Appellant's arguments cannot possibly deprive of credibility the plausible statement in the patent in suit as to the technical problem solved, i.e. that the patented water-soluble multi-compartment pouch possesses a **reduced** risk of leakage vis-à-vis the prior art explicitly referred to in the patent in suit and, thus, also vis-à-vis the packages of document (3).

1.4 Accordingly, in the present case the inventive step assessment boils down to the question as to whether or not the available prior art renders obvious to locate at different positions the overlapping seals of the multi-compartment packages of document (3) in order to achieve a reduction of the risk of leakage.



1.5 The Board notes that none of documents (3) and (6) discloses multi-compartment packages containing two distinct seals located at different positions.

Moreover, the Board does not find the argument of the Appellant convincing that at least part of the claimed subject-matter would result from a simple duplication of the overlapping seal present in the multi-compartment packages of document (3). Indeed, in all patented multi-compartment pouches, even in those in which the second sealing step is carried out so as to seal all the three films at once (at a different position in respect of the first seal), the second compartment only remains separated from the outside environment by means of such second seal. On the contrary a duplication of the overlapping seal present in the multi-compartment packages of document (3) would inevitably result in two subsequent seals separating also the second compartment from the outside environment.

Finally, the Appellant's further argument that document (6) would prompt the skilled reader to avoid in general any overlapping of seals and, thus, to modify the packages of document (3) so as to arrive at the patented subject-matter, appears based on an erroneous interpretation of document (6).

As a matter of fact, this latter citation, rather than indicating in general that whatever kind of seal intersection is prone to leakage, only teaches to avoid geometrical discontinuities in seals, such as the angular intersections occurring when sealing perpendicularly to a seam running to the centre of one

of the faces of the package (see document (6) page 9, lines 11 to 26). However, in the overlapping seals of document (3) no such geometrical discontinuity is present. This is explicitly acknowledged at page 6, lines 20 to 25, of document (3).

Hence, document (6) does not prompt the skilled reader to further modify the packages of document (3) in any way.

- 1.6 Therefore, the Board concludes that the prior art cited by the Appellant does not render obvious the patented water-soluble multi-compartment pouch.

Hence, 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 9 as granted (Article 100(a) in combination with Articles 52(1) and(2) and 56 EPC 1973).

The reasoning given above in respect of the water-soluble multi-compartment pouch of claim 1 as granted applies also to the preferred embodiments of this latter as defined in granted claims 2 to 8, as well as to the process of granted claim 9 for making such pouch.

**Order**

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

The appeal is dismissed.

The Registrar:

The Chairman:

G. Rauh

P.-P. Bracke