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**Datasheet for the decision  
of 2 May 2007**

**Case Number:** T 0499/06 - 3.2.06

**Application Number:** 98850174.8

**Publication Number:** 0916328

**IPC:** A61F 13/15

**Language of the proceedings:** EN

**Title of invention:**

Absorbent article with improved forming ability

**Patentee:**

SCA Hygiene Products AB

**Opponents:**

The Procter & Gamble Company  
Kimberly-Clark Worldwide, Inc.

**Headword:**

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**Relevant legal provisions:**

EPC Art. 83, 84, 123(2), 54

**Keyword:**

"Main request: claim 1 - novelty - no"

"First auxiliary request: claim 1 - novelty - yes"

**Decisions cited:**

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**Catchword:**

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Case Number: T 0499/06 - 3.2.06

**DECISION**  
of the Technical Board of Appeal 3.2.06  
of 2 May 2007

**Appellant:** The Procter & Gamble Company  
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**Decision under appeal:** Decision of the Opposition Division of the  
European Patent Office posted 13 February 2006  
rejecting the opposition filed against European  
patent No. 0916328 pursuant to Article 102(2)  
EPC.

**Composition of the Board:**

**Chairman:** P. Alting van Geusau  
**Members:** G. L. de Crignis  
K. Garnett

## Summary of Facts and Submissions

- I. The mention of the grant of the European Patent No. 0 916 328 with respect to European patent application No. 98 850 174.8 filed on 12 November 1998 was published on 19 February 2003. The granted patent was based on twelve claims. Claim 1 was the only independent claim and reads as follows:
- "An absorbent article with a longitudinal direction and a transverse direction and displaying a crotch part (7) and two end parts (5,6) and comprising a liquid-permeable cover layer (2) intended to face towards a user during use, a liquid-impermeable cover layer (3) intended to face away from the user during use and an absorbent body (13) enclosed between the two cover layers (2,3), wherein the two cover layers (2,3) have differing extensibility in the transverse direction of the article, characterized in that a forming element (16,514,814) which is rigid in the transverse direction and which extends in the transverse direction of the article at least in the crotch part (7) is permanently attached to at least one component in the article, whereby compression of the article in the transverse direction will force the forming element (16,514,814) to curve in a direction towards the most extensible cover layer (2,503,802,803)."
- II. A notice of opposition was filed against the granted patent by opponent OI with fax of 17 November 2003 and by opponent OII with fax of 19 November 2003. Both opponents requested revocation of the patent in its entirety on the grounds of lack of novelty and lack of

inventive step under Article 100(a) EPC and on the ground of the patent not being disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Article 100(b) EPC). The opposition was supported *inter alia* by the following documents:

- D1 US-A-5 324 278
- D2 US-A-5 171 302 and
- D3 US-A-4 950 264.

III. In a decision posted on 13 February 2006, the opposition division rejected the oppositions. The opposition division held that the patent disclosed the subject-matter in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Article 100(b) EPC) and that the subject-matter of claim 1 was novel and involved an inventive step (Article 100(a) EPC). In particular it was of the opinion that the skilled person would have no difficulty in knowing how to choose layers which met the requirements characterised by the terms "different extensibility" and "rigidity".

IV. On 7 April 2006 a notice of appeal against this decision was filed by the appellant (opponent OI) and the appeal fee was paid that same day, followed by the statement of grounds of appeal filed on 12 June 2006. The appellant requested that the decision of the opposition division be set aside and the patent be revoked on the grounds of Article 100(a) EPC (lack of novelty and lack of inventive step), particularly because the subject-matter of claim 1 as granted was not novel over D1 and D2.

V. With a communication dated 21 December 2006 the parties were informed that the Board did not share the opinion of the opposition division with regard to novelty of claim 1 as granted and that also the subject-matter of claim 1 of the first auxiliary request did not appear to be novel over the embodiment disclosed in relation to Figure 17 of D1.

VI. Oral proceedings were held on 2 May 2007. The appellant requested that the decision under appeal be set aside and that the patent be revoked. In the alternative, it was requested that if the claims according to the respondent's first auxiliary request were found to be novel over D1, D2 or D3, the case should be remitted to the opposition division for continuation of the opposition proceedings. The respondent (patent proprietor) requested that the appeal be dismissed and, in the alternative, that the patent be maintained on the basis of the amended set of claims filed during the oral proceedings (first auxiliary request), alternatively on the basis of one of the second to sixth auxiliary requests filed on 25 October 2006. The other party (opponent OII) had indicated by letter of 8 March 2007 that it did not intend to be represented at the oral proceedings.

Claim 1 according to the first auxiliary request differs from claim 1 as granted in that the characterizing portion has been amended as follows (amendments in italics):

"a forming element (16,514,814) which is rigid in the transverse direction and which extends in the

transverse direction of the article at least in the crotch part (7) is permanently attached to at least one component in the article, *the difference in extensibility between the cover layers being chosen such that* compression of the article in the transverse direction will force the forming element (16,514,814) to curve *into an arch shape between the side edges of the article* in a direction towards the most extensible cover layer (2,503,802,803)."

Further requests have been filed but these are not now relevant in these proceedings.

VII. The appellant argued essentially as follows:

D1 deprived the subject-matter of claim 1 of the main request of novelty.

In D1, the liquid-permeable cover layer could be pleated in the longitudinal direction which allowed this cover layer to extend in the transverse direction of the article and thus it certainly had a different extensibility with regard to the liquid-impermeable cover layer, which was not pleated. Furthermore, the spacing structure shown in Figures 2, 4 and 17 of D1 was permanently attached to the absorbent core and compression of the article in the transverse direction forced the spacing structure to move the topsheet away from the absorbent core by curving towards the liquid-permeable cover layer. Besides this being shown in these Figures, this was also expressed throughout the description and in claim 1 of D1. Accordingly, the same effect as specified in the functional feature of claim 1 of the patent in suit was obtained.

The subject-matter of claim 1 was also known from D2 and D3. Both documents referred *inter alia* to an apertured topsheet, which implicitly had more extensibility than a non-apertured backsheet of the same material and thickness. D2 disclosed a deformation element which was equivalent to the forming structure. D3 disclosed at least one layer having a rigidity which could be considered as equivalent to the forming structure and referred to the sanitary napkin as being cup-shaped in use (column 15, lines 11 to 14).

The subject-matter of claim 1 of the first auxiliary request did not meet the requirements of Article 123(2) EPC and was not clear (Article 84 EPC).

Feature (A) referred to a difference in extensibility between the cover layers. However, no method was specified how to determine this difference. Hence, it was not clear how to establish the difference in extensibility. This might even amount to a problem under Article 83 EPC.

Feature (B) referred to an arch shape between the side edges of the article following lateral compression. All disclosed embodiments referred to a forming element which was originally flat and after compression of the article was arch shaped. The necessity for an originally flat article was not expressed in the claim and thus neither the requirements of Article 123(2) EPC nor those of Article 84 EPC were met. Support for the inserted feature was allegedly found in paragraph [0053]. However, this paragraph referred exclusively to the embodiment shown in Figure 8 which had a forming structure which was flat before curving and the arch

formed upon compression had to extend all along between the side edges. These features should, therefore, be inserted into claim 1 (Article 84 EPC and Article 123(2) EPC).

The first auxiliary request should not be admitted under Rule 57a EPC since it was not clear why it would overcome the objections raised under Article 100 EPC, particularly the objection with respect to lack of novelty. D1 also disclosed an originally flat structure for the spacing structure, which then curved into an arch shape by compression; its extension was also within the side edges of the article. Therefore, the subject-matter of claim 1 of the first auxiliary request lacked novelty in view of D1. The novelty objection with regard to D3 also remained valid.

The amendments to claim 1 were based on the description and could not have been anticipated. The first auxiliary request was only filed during these oral proceedings and thus represented a late-filed request. No preparation was possible particularly with regard to a discussion on inventive step. A further search might be necessary. Therefore remittal to the first instance should be ordered.

VIII. The respondent argued essentially as follows:

The word "whereby" in the characterizing portion of claim 1 of the main request already clearly expressed the fact that the curving of the article was caused by the difference of extensibility of the two cover layers. With respect to the cover layers having "different extensibility", no lack of clarity could be present.



Any method could be used to establish this property. The skilled person was well aware of such methods and no convincing evidence to the contrary was put forward by the opponent.

The rigidity of the forming element was specified via its function such that it had to allow the compression of the article and at the same time the whole article should maintain its comfort. The rigidity of the forming element should be considered in relation to the other components of the article and with regard to the intended function and use. Therefore, it was also not necessary to disclose any method or test.

Concerning novelty of the main request, D1 did not disclose that the two cover layers should have differing extensibility in the transverse direction of the article. D1 disclosed a pleated topsheet. The reason for providing pleats in the topsheet was to allow the topsheet to separate from the core. Compression of the article in the transverse direction did not force the spacing structure 44 in D1 to curve in the direction towards the most extensible cover layer but inevitably resulted in a curvature towards the topsheet. Concerning D2 and D3, no different extensibility of the cover layers in the transverse direction of the article was disclosed. D2 required the deformation element to have hinges and in D3 no forming structure could be identified.

With respect to the first auxiliary request, it was clearly specified in claim 1 of this request that it was the difference in extensibility between the cover layers which caused the forming element to curve in the

direction towards the most extensible cover layer. It was further specified that the forming element curved into an arch shape which arch shape extended between the side edges of the article. Support for these amendments could be found in paragraphs [0016] and [0053] and Figure 8.

As already set out with regard to the main request above, in D1 it was not the difference in extensibility between the cover layers which caused the spacing element to curve in the direction towards the most extensible cover layer. In D1 it was the compression of the spacing structure which resulted in moving the topsheet away from the absorbent core. Furthermore, in D1 no arch shape of the forming element was present but rather a C-folded shape which upon compression moved inwardly toward the longitudinal centreline and thus provided a convex upward configuration of the upper structure. Hence, the subject-matter of claim 1 was novel over D1. D2 as well as D3 neither disclosed the difference in extensibility between the cover layers nor a forming element curving into an arch shape between the side edges of the article.

It was not necessary to insert further features into claim 1. The disclosure in paragraph [0016] already gave the skilled person the general knowledge that the curving would always occur in the direction towards the more extensible layer. The disclosure in paragraphs [0016] and [0017] in combination with the embodiment shown in Figure 8 and described in paragraphs [0052] and [0053] disclosed clearly the arch shape of the forming element.

The case should be decided during these oral proceedings as the amendments now inserted into claim 1 had already been the subject of dependent claims 2 and 3 and could have been anticipated by the appellant. Therefore the request for remittal to the opposition division should be refused.

### **Reasons for the Decision**

1. The appeal is admissible.
2. *Interpretation of the claim (main request)*

An essential issue in the discussion was the question whether claim 1 as granted comprised the feature relied upon by the respondent, according to which the difference in extensibility between the cover layers made the forming element to curve only in a direction towards the most extensible cover layer. The Board concludes that no such requirement is explicitly or implicitly derivable from the features of claim 1. In fact only lateral compression is specified as the reason for the curving of the forming element in claim 1. Therefore, the subject-matter of the claim is not limited in the manner relied upon by the respondent.

3. *Novelty*

D1 discloses an absorbent article (column 1, lines 9/10) which comprises a liquid-pervious topsheet 28, a liquid impervious backsheet 30 and an absorbent core 36 enclosed between these two cover layers (Figures), wherein the topsheet 28 is easily deforming in the

presence of external forces (column 7, line 49) or may be a pleated material 68 (Figure 17) and the backsheet may be any flexible, liquid impervious material, (column 8, line 45 - column 9, line 14 and column 27, lines 27 to 30). A spacing structure 44 which can be an element of any shape (column 11, lines 59/60 and Figures 2, 4, 17) is secured to the absorbent core (Figures 2, 4, 17) and/or to the topsheet 28 (column 15, lines 45 to 47). The spacing structure is capable of spacing the topsheet away from the core when it is subjected to lateral compressive forces (claim 1, column 2, lines 55 to 57, lines 66 - column 3, line 1). The compressive forces exerted by the wearer's thighs are used to improve the contact between the napkin and the wearer's body (column 2, lines 30 to 34 and column 18, lines 36 to 67). Compression of the article in the transverse direction will force the spacing structure to bulge in a direction towards the topsheet as shown in Figure 4. D1 refers to a "convex upward" configuration which is arched and the bases of the arch are adjacent the core (column 10, lines 54 to 57).

Hence, in D1 the topsheet can be extensible in the transverse direction due to the pleats (see Figure 17). Therefore, in such an embodiment, the topsheet clearly has a different extensibility in the transverse direction when compared to the backsheet. Furthermore, compression of the article of D1 leads to the topsheet moving away from the absorbent core by the action of the spacing structure. The effect of this action results in a bulged shape of the article which involves the curving of the spacing structure towards the topsheet.

Accordingly, D1 specifies all structural characteristics claimed in claim 1 of the patent in suit. D1 also discloses the compression of the article in the transverse direction, which is the only reason specified for the curving of the article in claim 1 of the patent in suit. Hence, the subject-matter of claim 1 lacks novelty with respect to D1.

4. *First auxiliary request*

4.1 Amendments

4.1.1 Article 123(2) EPC

Claim 1 specifies the different extensibility between the cover layers as being responsible for the direction in which the forming element is allowed to curve into an arch shape between the side edges of the article upon compression. It further specifies that the forming element curves into an arch shape extending between the side edges of the article.

The amendments are based upon the embodiment shown in Figure 8 and disclosed in the originally filed application in the description on page 15, line 29 to page 16, line 8 in combination with the general disclosure on page 4, line 28 to page 5, line 7.

The appellant and the other party were of the opinion that the embodiment of Figure 8 showed further details, in particular that the forming element was flat and a single arch was formed, that these details should be incorporated in order that the claim complied with the requirements of Article 123(2) EPC.

However, the Board is of the view that the text of the claim makes it sufficiently clear that there is only one such arch formed because it is specified that the forming element curves into an arch shape between the side edges of the article. Considering that the forming element is smaller than the total width of the absorbent article there is no room for another interpretation than that the forming element has a single curve. Furthermore, although the drawing appears to show a flat forming-element, this is not mentioned in the description of the embodiment of Figure 8. It further follows from the text of the claim ("to curve into an arch shape") that before applying the lateral compression force the forming element is not in an arch shape. Whether the forming element is fully flat or not before applying the lateral force is irrelevant for the functioning of the article and thus there is no unambiguous and clear disclosure derivable from the drawing that the forming element must be flat.

In view of the above conclusions the Board is satisfied that the present text to claim 1 does not give rise to objections under Article 123(2) EPC

The insertion of reference numerals 808/809 into Figure 8 was requested under Rule 88 EPC. Such request should be dealt with by the Opposition Division in the further proceedings.

#### 4.1.2 Article 83 EPC

The appellant and other party raised the point that no method for determination of a difference in

extensibility between the liquid permeable and liquid impermeable cover layer was disclosed in the patent in suit. This would lead to difficulties in carrying out the invention.

The Board draws attention to the fact that only the difference in extensibility is involved, which is a different issue from a determination of absolute values of each part based on a particular method. For establishing the difference in extensibility any known method is suitable and the skilled person is well capable of selecting the measuring method in accordance with the materials involved. Therefore, these objections with respect to insufficiency are not accepted as valid.

#### 4.2 Novelty

When compared to claim 1 of the main request, claim 1 of the auxiliary request now specifies clearly that it is the difference in extensibility between the cover layers that allows the forming element to curve only in a direction towards the most extensible cover layer upon compression of the article and that the curving results in an arch shape between the side edges of the article.

##### 4.2.1 Novelty over D1

In D1 it is not only the different extensibility of the cover layers which causes the spacing member to curve in a certain direction. It is also the form (folded sheet, tube, c-shape, unitary or separate pieces), material (compressible, deformable, flexible, liquid-

pervious, soft tissue, plastic nets, absorbent) and position (symmetrical, asymmetrical, limited width) of the spacing member which causes the spacing member to curve in certain directions. For this reason alone the subject-matter of claim 1 is novel over the disclosure in D1. Furthermore, in D1 the arch shape does not extend between the side edges of the article but is more limited in its lateral extension. This is set out in column 20, lines 47 to 52 of D1, where it is stated that the shape into which the spacing structure deforms can vary, but preferably the overall article deforms into a W-shape. Also for this reason, the subject-matter of claim 1 is novel over the disclosure in D1.

#### 4.2.2 Novelty over D3

D3 discloses a thin, flexible sanitary napkin. D3 does not disclose clearly and unambiguously:

(a) a forming element:

One of the layers is disclosed as having a density which corresponds to the one disclosed for the forming element in the patent in suit. However, it is not clear whether a corresponding density is sufficient to arrive at a corresponding forming element. Further components, for example stiffening agents, might influence the characteristics of the layer and thus its capability to act as a forming element.



- (b) an arch shape between the transverse side edges of the article

The only reference to an arch shape of the sanitary napkin is in column 15, lines 5 to 14 of D3. This reference does not specify whether the whole sanitary napkin will form one cup or arch shape which starts and ends at the transverse side edges of the article. Since in column 10, lines 32 to 36, it is highlighted that the napkin is "highly flexible and conforms very well to the various shapes of the female urogenital region", (also on column 2, lines 31 to 35) such an assumption cannot be made.

- (c) the difference in extensibility between the cover layers causes the curving of the forming element in a certain direction

No *expressis verbis* disclosure is present for a difference in extensibility between the cover layers. Accordingly, no disclosure is present for the curving of a forming element in a certain direction being caused by such a difference. The mere possibility of choosing an apertured topsheet in combination with a non-apertured backsheet out of the list of possible combinations does not necessarily mean that in such a case it would be a different extensibility of the cover layers which would cause the forming element to curve in a certain direction. Hence, the subject-matter of claim 1 is novel over D3.

4.3 To date, no novelty objections with regard to other documents have been put forward and novelty has only been discussed having regard to D1 and D3.

5. *Request for remittal to the first instance*

The first auxiliary request was filed during oral proceedings and is thus late-filed. It contains features which have been taken from the description and which were not present in any of the dependent granted or originally filed claims. Hence, these amendments could not have been anticipated by the appellant. They may render necessary a further search.

The patent proprietor was aware of the difficulties in the interpretation of the claim as these had been the subject of discussion during the oral proceedings before the opposition division. The appellant should not be placed at a disadvantage by the filing of a claim dealing with these difficulties at such a late stage. Hence, the case is remitted to the opposition division in order to continue the proceedings on the basis of the finding that the claims according to the first auxiliary request filed during oral proceedings before the board were found to be novel over D1 and D3 and to meet the requirements of Article 84 and 123(2) EPC.

**Order**

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

1. The decision under appeal is set aside.
2. The case is remitted to the opposition division for continuation of the opposition proceedings.

The Registrar

The Chairman

M. Patin

P. Alting van Geusau