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**D E C I S I O N**  
of 20 January 1995

**Case Number:** T 0527/93 - 3.2.2

**Application Number:** 86850196.6

**Publication Number:** 0228353

**IPC:** A61F 5/443

**Language of the proceedings:** EN

**Title of invention:**

A device for collecting and absorbing liquid, and a method of manufacturing an absorption and spreading layer intended for liquid

**Patentee:**

Mattsson, Lars

**Opponent:**

Mölnlycke AB

**Headword:**

**Relevant legal provisions:**

EPC Art. 56, 111(1), 114(1)

EPC R. 67

**Keyword:**

"Late-filed document (admitted)"

"Inventive step (yes)"

"Remittal to the first instance (no) - completion of the previous written proceedings - no fundamental deficiencies"

"Reimbursement (no)"

**Decisions cited:**

G 0012/91, T 0416/87

**Catchword:**



Case Number: T 0527/93 - 3.2.2

**D E C I S I O N**  
of the Technical Board of Appeal 3.2.2  
of 20 January 1995

**Appellant:** Mölnlycke AB  
(Opponent) S-405 03 Göteborg (SE)

**Representative:** Kierkegaard, Lars-Olov  
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**Respondent:** Mattsson, Lars  
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**Representative:** Barnieske, Hans Wolfgang  
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**Decision under appeal:** Decision of the Opposition Division of the  
European Patent Office dated 8 April 1993  
rejecting the opposition filed against European  
patent No. 0 228 353 pursuant to Article 102(2)  
EPC.

**Composition of the Board:**

**Chairman:** H. J. Seidenschwarz  
**Members:** M. G. Noël  
J. Van Moer

### Summary of Facts and Submissions

- I. European patent No. 0 228 353 was granted on the basis of European patent application No. 86 850 196.6.

Independent Claim 1 reads as follows:

"A device for collecting and absorbing liquid, particularly urine, comprising at least one absorption body (6;7) of super-absorbent type which, upon absorption of liquid forms an expandable gel, the device (1) comprising a laminate composed of several layers, in which there is a first layer of substantially liquid-proof material (2) in combination with a second layer of material permeable to liquid (3), which form at least one space (4;5) enclosing a first absorption body (6), a layer (8) having an open-celled structure arranged in a first said space (4) to spread the liquid over a first said absorption body (6) arranged in said first space (4) to avoid gel blocking, the layer (8) of open-celled structure consisting of a substantially elastic non-absorbent material wherein the liquid-proof material (2) consists of a plastic layer (9) constituting one side of the multi-layer laminate and wherein the material (3) permeable to liquid consists of a non-woven fabric constituting the other side of the laminate, the first said absorption body (6) and the elastic material (8), which consists of a foam plastic being enclosed in the space (4) therebetween, a second absorption body (7) which is provided between the non-woven fabric (3) and the first said absorption body (6), and an inner, substantially liquid-proof third layer (10) which is arranged at least partially between the layer (8) of open-celled structure and the liquid-permeable layer (3), to form a second space (5) holding said second

(said) absorption body (7), **characterized in that** an opening or recess (11) extends through the second said absorption body (7) and the inner, liquid-proof layer (10)."

II. The opposition was rejected by the Opposition Division for the reasons that the claimed subject-matter was novel and involved an inventive step, having regard in particular to the prior art document (1) EP-A-0 140 478.

III. The Opponent lodged an appeal against this decision, filed a Statement of Grounds and paid the appropriate fee in due time.

IV. In the Notice of Appeal, in the Statement of Grounds and in its further written submissions the Appellant submitted substantially the following arguments:

- (i) The decision of the Opposition Division is dated 8 April 1993, namely after receipt by the EPO, by facsimile in the morning of 7 April 1993, of the Appellant's letter containing a clearly relevant prior art reference (document (5) US-A-4 413 996) and argumentation. It is therefore requested that the proceedings be referred back to the Opposition Division for consideration of the above letter. It is further requested that the appeal fee be refunded since if that previous letter had been considered by the first instance, the present appeal would not have been necessary.
- (ii) Document (5) is clearly relevant in that, like the second absorption body 7 of the device according to the contested patent, the purpose of the second absorbent matting layer 21 of the known diaper, enclosed between the liquid-proof layer and the skin-contacting porous layer, is to retain any

spillage and to absorb small amounts of liquid which may splash or overflow from the liquid-receiving recess, i.e. to provide reliable absorption without risk of over-filling.

Since super-absorbent materials were previously well known, for example from prior art document (1), it was then obvious to the skilled person to choose an absorbent material having the highest possible liquid retention and associated expansion capabilities and thus to combine the teachings of documents (5) and (1) to arrive at the solution claimed in the opposed patent.

V. The Respondent (Proprietor of the patent) argued as follows:

- (i) In view of Article 114(2) and Rule 59 EPC, the Opposition Division is not bound to consider evidence neither enclosed with the Notice of Opposition nor filed in due time. Therefore, the Opponent's request for referral of the case back to the Opposition Division by reason of the decision in suit having a later date than the date of receipt by the EPO of said additional evidence was entirely unfounded.
  
- (ii) While the opening or recess of the device according to the invention extends through both the inside second absorption body and the third liquid-proof layer, that is the layers close to the patient's skin, the well or recess according to the diaper according to document (5) differs in that it is provided principally in the remote outside absorbent matting layer. Further, the restriction to expandable gel forming super-absorbent material is far from being immaterial in the present

invention. The liquid distribution and retaining concept is specifically adapted to the properties of that particular type of material, whereas the absorbent material used in the diaper disclosed in document (5) is not even specified. For these reasons the claimed subject-matter meets the standards for inventive step required by the EPC.

- VI. The Appellant requested that the decision under appeal be set aside, that the case be referred back to the first instance for further prosecution and that the appeal fee be refunded. As an auxiliary request, that the patent be revoked.

The Respondent requested that the appeal be dismissed and the patent be maintained as granted.

#### **Reasons for the Decision**

1. The appeal is admissible.
2. *Admissibility of document (5)*

Document (5) was submitted by the Appellant at a very late stage of the opposition proceedings, that is by fax received by the EPO on 7 April 1993, i.e. after the decision had been signed (17 March 1993) by the three members of the Opposition Division on EPO Form 2339.2. In view of the relevance of document (5) as closest prior art (see point 3.1 below) for the assessment of the patentability of Claim 1, the Board decided to admit this evidence in the appeal proceedings in the exercise of discretion under Article 114(1) EPC.

3. *Novelty*

- 3.1 The pre-characterising portion of Claim 1 comprises a combination of features which is not disclosed by any cited document, but corresponds to prior art acknowledged by the Respondent itself in the course of the examination procedure.

In the Board's view, document (1) was correctly acknowledged by the Opposition Division with respect to the feature analysis of Claim 1 made in points 2.2.1 and 2.2.2 of the contested decision. The disposable incontinence product described in document (1) differs essentially from the liquid collecting and absorbing device according to the patent, in that the former has no additional absorbent layer in the vicinity of the patient's skin contacting surface as compared with the second absorption body 7 described in the patent. It results that the opening 14 extends only through the upper layer of the liquid impervious bag 12, as clearly shown in Fig. 1 and 2 of document (1).

The diaper disclosed in document (5) (see in particular the embodiments of Fig. 7 and 8) shows more structural similarities with respect to the present invention than the diaper of document (1). Besides a first outside absorbent matting layer or wadding 13, a second inside absorbent matting layer 21 is disposed between a water-impervious barrier sheet 15 and a skin contacting porous sheet 22 and, for this reason, the Board considers document (5) as the closest prior art.

- 3.2 With respect to the diaper according to the embodiments of Figures 7 to 10 of document (5), the subject-matter of Claim 1 differs in the following respects:

- the absorption bodies 6,7 consist of super-absorbent material which, upon absorption of liquid, forms an expandable gel (preamble)
- the open-celled structure of layer 8 consists of a substantially elastic non-absorbent foam plastic material (preamble)
- the opening or recess 11 extends through both the second absorption body 7 and the inner, liquid-proof layer 10 (characterising portion).

3.3 Since none of the documents reveals the combination of all the features of Claim 1, its subject-matter must be regarded as novel within the meaning of Article 54(1) EPC.

4. *Inventive step*

4.1 The differences listed above form the solution of the technical problem underlying the present patent of proposing a liquid collecting and absorbing device for providing reliable absorption of liquid without risk of over-filling or leakage (column 1, lines 32 to 37 and column 3, lines 39 to 43).

4.2 In the Board's view, the device proposed in the contested patent could not be suggested by either the teachings of document (5) or document (1) taken alone or in combination, because both of them differ from the patented device by their structure and their functioning, as set out below.

According to the description of the patent, the absorption bodies 6 and 7 are made of super-absorbent material, i.e. a laminate consisting of soft paper or tissue integrated primarily with a super-absorbent



polymer which forms an expandable gel upon absorption of liquid (column 2, lines 51 to 56 and column 3, lines 17 and 18). The first absorption body 6 is caused to expand within the space 4 to fill it up but not through the opening 11, however, since the intermediate non-absorbent layer 8 forms a barrier, thereby avoiding so-called "gel blocking" of the opening, in accordance with Claim 1.

The second absorption body 7 consists of a material having a large quantity of super-absorbent polymer powder. In case of absorption due to liquid overfilling, because the first absorption body has become saturated, the second absorption body will swell and fill out any unevenness, the expanding gel of which will result in complete sealing ("gel blocking") of the opening, provided the quantity of super-absorbent is large enough (column 3, lines 39 to 43 and column 4, lines 18 to 29). It still should be noticed that the gel is allowed to expand freely in the recess since, in accordance with the characterising feature of Claim 1, the opening is formed through the second absorption body and the inner liquid-proof layer, successively. Expansion of the gel to ensure gel-blocking is even facilitated by the guiding channel formed between the skin-contacting liquid-permeable layer 3 and the intermediate non-absorbent layer 8, as illustrated in Figure 1.

In document (5) wadding of absorbent layer 13 may be selected from a wide range of materials exhibiting a broad range of porosity and moisture retention (column 3, lines 42 to 53). However, none of the proposed materials exhibits super-absorbent properties so as to form an expandable gel comparable with the super-absorbent polymer powder used in the patented device. Thus, the skilled person would obtain no lead

from this document to the use of a material having expandable properties. The use of such material is not suggested either by the teaching of document (1) since, though super-absorbent material is said to be preferably used for the absorbent layer 18 (see page 4, lines 7 to 9), expandable characteristics are not meant nor sought. The material selected there is selected exclusively for its liquid absorption and retention capabilities and in the form of a multiply absorbent layer (page 5, lines 20 to 24).

Even in the unlikely event that the material used in document (1) would offer super-absorbent properties similar to those disclosed in the patent so as to form an expandable gel, the use of this material alone for making the absorbent matting layers of document (5) would not allow the skilled person to arrive at the subject-matter of Claim 1. For in document (5) the liquid-impervious inner sheet 15 is secured by bonding 24 to the skin-contacting porous sheet 22 (column 2, lines 66 to 68 and column 3, lines 37 to 41). The inside absorbent layer 21 would thus be impeded from expanding towards the recess 17 to ensure gel blocking. The skilled person would have to modify the known arrangement still further.

Moreover, in document (5), if there were to be any liquid spillage due to over-filling, notwithstanding the absorbent layer 13 being normally provided for inhibiting sloshing and flow back from the recess (see column 2, lines 58 to 62), the liquid in excess will flow outside the diaper through the skin-contacting porous sheet 22 to thereby impregnate adjacent absorbent matting layer 21. Hence, the skin is not effectively protected from wetness. In contrast, any risk of leakage is avoided with the device according to the patent since overflow is directly absorbed by the second absorption

body enclosing the opening. Therefore, even by combining the teachings of documents (5) and (1) the skilled person would not have arrived at the subject-matter of Claim 1.

For all the above reasons, in the Board's judgment, the subject-matter of Claim 1 involves inventive step with respect to the state of the art within the meaning of Article 56 EPC.

- 4.3 Examination by the Board of the remaining feature of Claim 1 related to the particular open-celled structure of layer 8 (see point 3.2 above) can be dispensed with, since, for the assessment of inventive step of the claimed combination, this feature is of minor importance compared with the essential feature regarding the super-absorbent material of the second absorption body.

5. *No remittal to the first instance*

Two dates are important with regard to the taking of a decision. 17 March 1993 is the date signed by the three members of the Opposition Division on EPO Form 2339.2 after it had been decided to reject the opposition. 8 April 1993 is the date stamped on Form 2330.2, with Form 2916 attached. This is the date on which the decision is to be despatched by the EPO postal service according to the Office's current practice. This date is systematically post-dated by three days as explained by the Enlarged Board of Appeal in its recent decision G 12/91, OJ EPO 1994, 284, points VI and 9.

According to this decision of the Enlarged Board the decision-making process following written proceedings is completed on the date the decision to be notified is handed over to the EPO postal service by the formalities section, i.e. three days before the date stamped on the

decision. In the present case, this date is, therefore, 5 April 1993. After this date, the Opposition Division could no longer amend its decision and any fresh matter or evidence submitted by the parties had to be disregarded. Since the Appellant's fax of 7 April 1993 communicating document (5) to the EPO was received after completion of the written proceedings before the EPO, the Opposition Division had to disregard document (5) irrespective of its relevance.

According to Article 10 of the Rules of Procedure of the Boards of Appeal, a Board shall remit a case to the first instance if fundamental deficiencies are apparent in the first instance proceedings. As previously seen, no fundamental deficiencies appears in the present case. Moreover, the parties were given sufficient time and opportunity to express their arguments about late-filed document (5) and so they did. The Board, therefore, decided to exercise the power of the first instance without remittal of the case, pursuant to Article 111(1) EPC (see also T 416/87, OJ EPC 1990, 415, point 9).

6. *No reimbursement of the appeal fee*

According to Rule 67 EPC, the reimbursement of appeal fees shall be ordered in the event where the Board of Appeal deems an appeal to be allowable, if such reimbursement is equitable by reason of a substantial procedural violation. Since the appeal is not allowable as results from above point 4.2, reimbursement of the appeal fee must be refused.

Order

For these reasons it is decided that:

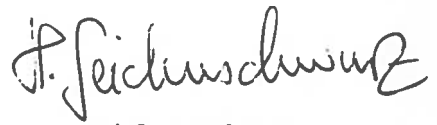
The appeal is dismissed.

The Registrar:



S. Fabiani

The Chairman:



H. Seidenschwarz

*M. Wal.*

16.2.95

*JMM*

16-2-95

