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DECISION of 18 March 2003

| Case Number: | T 0817/00 - 3.2.6 |
|---------------------|-------------------|
| Application Number: | 89105197.1 |
| Publication Number: | 0335253 |
| IPC: | A61F 13/15 |

Language of the proceedings: EN

Title of invention: Absorbent article

Patentee:

THE PROCTER & GAMBLE COMPANY

Opponents:

McNeill-PPC, Inc. GEORGIA-PACIFIC FRANCE Mölnlycke AB

Headword:

Relevant legal provisions: EPC Art. 83, 111(2), 56

Keyword: "Disclosure - sufficiency (yes)" "Binding effect of an earlier decision of the Board of Appeal" "Inventive step (yes)"

Decisions cited: G 0001/95, T 0431/95, T 0037/82, T 0292/85, T 0153/93, т 0934/91

Catchword:



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Beschwerdekammern

Boards of Appeal

Chambres de recours

Case Number: T 0817/00 - 3.2.6

DECISION of the Technical Board of Appeal 3.2.6 of 18 March 2003

| Appellant I: (Opponent I) | McNeill-PPC, Inc. Van Liew Avenue Milltown New Jersey (US) |
|---|--|
| Representative: | Fisher, Adrian John CARPMAELS & RANSFORD 43, Bloomsbury Square London WC1A 2RA (GB) |
| Party as of right: (Opponent II) | GEORGIA-PACIFIC FRANCE 11, route industrielle Kunheim F-68320 Kuhnheim (FR) |
| Representative: | David, Daniel Cabinet Bloch & Associés 2, square de l'Avenue du Bois F-75116 Paris (FR) |
| Appellant II: (Opponent III) | Mölnlycke AB S-405 03 Böteborg (SE) |
| Representative: | Hammond, Andrew David Ström & Gulliksson IP AB Sjöporten 4 S-417 64 Göteborg (SE) |
| Respondent: (Proprietor of the patent) | THE PROCTER & GAMBLE COMPANY One Procter & Gamble Plaza Cincinnati Ohio 45202 (US) |
| Representative: | Boon, Graham Anthony Elkington and Fife Prospect House 8 Pembroke Road Sevenoaks Kent TN13 1XR (GB) |
| c | nterlocutory decision of the Opposition Division f the European Patent Office posted 9 June 2000 oncerning maintenance of European patent o. 0 335 253 in amended form. |

Composition of the Board:

Chairman: P. Alting van Geusau Members: G. Pricolo M. J. Vogel

Summary of Facts and Submissions

I. The appeal is from the interlocutory decision of the Opposition Division posted on 9 June 2000 concerning the maintenance in amended form of European patent No. 0 335 253, granted in respect of European patent application No. 89 105 197.1.

Independent claim 1 of the main request filed with letter dated 13 March 2000 reads as follows:

"A disposable sanitary napkin (10) adapted to be held in place by the adjacent surface of the wearer's undergarment and the wearer's thighs, the napkin being elongate and having longitudinal side edges, the napkin comprising absorbent means (39) including an absorbent core (40) and a fluid permeable topsheet (45) having a body surface (13) overlying said absorbent core (40), said napkin optionally comprising a fluid impermeable barrier sheet (55) underlying said absorbent core, a portion of said body surface (13) having a convex upward configuration in use, characterized in that said article comprises a moisture stable deformation element (20) associated with said absorbent means (39), said deformation element having a flexure resistance of at least 100 g in a Modified Circular Bend procedure whereby said deformation element maintains said portion of said body surface (13) in a convex upward configuration when said napkin is subjected to lateral compressive forces in use, and in that said deformation element (20) has flexure hinges (23, 23A, 23B, 23C) for inducing said body surface (13) and the absorbent core (40) of a central region (62) of said napkin to have a W-shaped configuration, when said napkin is subjected to lateral compressive forces, the "W" including the

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said in-use convex upward portion, which convex upward portion is generally symmetrically disposed between said longitudinal side edges and which is assumed, or, if present before use, increased by said lateral forces."

- In the decision under appeal the Opposition Division II. considered that the ground for opposition (lack of inventive step) under Article 100(a) and the ground for opposition (insufficient disclosure) under Article 100(b) EPC did not prejudice maintenance of the patent in the form according to the main request as filed during the oral proceedings held on 13 April 2000. The claims of the main request were identical to the claims on which the Board of Appeal 3.2.2 based its earlier decision T 431/95 in respect of the patent in suit. In this decision, Board of Appeal 3.2.2 held that the amendments made in accordance with the main request met the requirements of Articles 123(2) and (3) EPC and of Article 84 EPC, and that the claimed subject-matter was novel over the available prior art.
- III. The appellants I and II (opponents I and III) lodged an appeal against this decision, received at the EPO on 21 and 8 August 2000, respectively, and simultaneously paid the appeal fee. The statements setting out the grounds of appeal were received at the EPO on 4 and 11 October 2000, respectively.
- IV. The following documents which featured in the opposition procedure were considered as relevant to the appeal proceedings:

D12: EP-A-0 136 524;

D14: SE-B-374 650, with English translation;

D17: EP-B-0 140 470.

V. Oral proceedings took place on 10 October 2002.

The appellants requested that the decision under appeal be set aside and that the patent be revoked. During the oral proceedings appellant II referred additionally to document

D18: EP-A-0 336 578;

filed on 24 December 1994 after expiry of the opposition period set out in Article 99(1) EPC, but not admitted by the Opposition Division in its earlier decision dated 4 April 1995 because it was found to be irrelevant for that decision.

The respondent (patentee) requested that the appeal be dismissed and that the patent be maintained in the form as upheld by the Opposition Division.

As previously announced by letter dated 14 March 2003, the opponent II (party as of right), did not attend the oral proceedings. The proceedings were continued without him (Rule 71(2) EPC). Opponent II did not file any observations during the present appeal proceedings.

VI. In support of its requests appellant I relied essentially on the following submissions:

In decision T 431/95 taken at an earlier stage of the opposition proceedings, Board of Appeal 3.2.2 did not decide that D12 did not disclose that the article

claimed comprised a separately identifiable deformation element, as held by the Opposition Division in the present decision under appeal, but that D12 did not disclose a napkin having a separately identifiable deformation element "having the characteristics specified in claim 1". Although the principle of res judicata in respect of a decision of a Board of appeal was not contested, decision T 431/95 was at least unclear in respect as to whether the Board held that D12 did not disclose a deformation element at all or that D12 did not disclose a deformation element having the characteristics specified in claim 1, implying thereby that a deformation element was actually present in the napkin of D12. The unclear statement in the decision could not be used to establish res judicata in respect of the lack of disclosure in D12 of a separately identifiable deformation element. It was apparent that D12 in fact disclosed a separately identifiable deformation element, namely the laminate of paper and polyethylene sheet constituting the bloodimpermeable layer of the napkin in the example on page 11. The patent in suit explicitly contemplated that the deformation element might be such a laminate and that it might form the barrier sheet. Moreover, the laminate of D12 was provided with flexure hinges in the form of bending grooves. Since D12 disclosed that the bending grooves could be formed on one side of the napkin, it was clear that the grooves could all be formed on the laminate. Figure 2 of D12 showed an embodiment of a napkin having two grooves on the top side and one on the underside of the napkin. However, claim 1 of the patent in suit did not exclude the provision of grooves also on the top side, ie on the absorbent means. Furthermore, the three bending grooves shown on Figure 2 constituted flexure hinges for

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inducing the napkin to adopt a W-shaped configuration in a central region thereof. In that respect, claim 1 of the patent in suit did not require that the flexure hinges themselves be provided in a central region, but only that a W-shape be obtained at that location. Hence, not only the blood-impermeable layer of the napkin of D12 had the same structure of the deformation element according to the patent in suit, it also provided exactly the same result. If, as submitted by the respondent, a layer consisting of a laminate of paper and polyethylene such as the blood-impermeable layer of D12 could not represent a deformation element, then the invention was not sufficiently disclosed (Article 83 EPC), because there was no disclosure in the patent in suit of what modifications were necessary for such layer to become a deformation element.

Thus, the only feature of claim 1 of the patent in suit which was not explicitly disclosed in D12 was that the laminated sheet had a flexure resistance of at least 100 g in a Modified Circular Bend procedure. However, it was routine matter for a skilled person to determine the appropriate degree of flexure resistance. Moreover, a flexure resistance of at least 100 g was very low, and it was inconceivable that a skilled person employing the teaching of D12 would use a laminate having a value of flexure resistance under 100 g.

Even assuming that D12 did not disclose a separately identifiable deformation element, ie an element whose primary function was to constrain the way in which the napkin folded, the subject-matter of claim 1 did not involve an inventive step. Since there were no advantages obtainable with the distinguishing feature, the problem solved could be seen in providing an

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alternative form of a napkin for inducing the desired W-shape. It would be obvious for the skilled person to solve this problem by means of a separate element which was predominantly responsible for constraining the form of the napkin, because it was known to provide structural integrity in napkins by means of a separate element which was moisture stable and possessed a flexure resistance within the range of claim 1 of the patent in suit. Such a separate element was disclosed for example by document D17, where it was shown in the form of a shell element. Document D17 related to a urinary pad and was therefore in the same technical field of sanitary napkins and for this reason it would have been taken into consideration by a skilled person when confronted with the above-mentioned problem.

VII. Appellant II concurred with the argumentation of appellant I and additionally submitted that in the earlier decision T 431/95 of Board of Appeal 3.2.2 it was stated that D12 disclosed that the grooves were provided throughout the whole structure of the napkin, thereby implying that the grooves were also provided on the blood-impermeable layer forming the barrier sheet of the sanitary napkin. Furthermore D12 disclosed, in particular on page 2 and in claim 3, that the grooves could be disposed on at least one identical side of the napkin. This was also disclosed in Figure 1, wherein the grooves were all shown in solid lines, thus implying that they were all on the same side. Clearly, the disclosure that the grooves could be all disposed on the same side of the napkin implied that they therefore could all be disposed on the backsheet. The text of claim 11 confirmed that it was intended in D12 to provide the grooves on the backsheet, since claim 11 recited that the grooves were provided on the side of

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the absorbent material, thus making it clear that the other side meant with the expression "at least one identical side" in claim 3 was the side with the backsheet. Furthermore, the laminate of the example of D12 inherently had a flexure resistance of at least 100 q, since any element suitable for providing a W-shape by means of bending grooves must possess sufficient flexure resistance. Moreover, a flexure resistance of 100 g was a very low value, and indeed document D18, filed by the respondent itself, disclosed a value of 400 g as characterizing a very flexible napkin. It followed that there were no features distinguishing the subject-matter of claim 1 from the sanitary napkin of D12. Although in the present appeal proceedings novelty could not be questioned again because it was subject to res judicata in earlier decision T 431/95, the fact that D12 disclosed all the features of claim 1 implied, by analogy with the principle set out in G 1/95, that the claimed subject-matter did not involve an inventive step.

Even if D12 were regarded as not disclosing a separate deformation element which provided the function of inducing a W-shaped configuration in a central region of the napkin, the subject-matter of claim 1 still lacked an inventive step. Indeed, since D12 left open where to emboss the napkin in order to provide the bending grooves, the skilled person would obviously consider the alternatives of embossing the napkin throughout the whole structure or embossing only the garment facing side thereof. In both cases, the skilled person would provide the bending grooves on the bloodimpermeable layer, thereby directly arriving at the subject-matter of claim 1. Anyway, the feature that the deformation element was separately identifiable did not

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contribute to the solution of the problem as set out in the patent in suit. Consequently, in accordance with decision T 37/82, this feature must be ignored when assessing inventive step. Neither did this feature provide any technical effect or advantages. In any case, the use of a separately identifiable deformation element for the same purpose of the patent in suit, to ensure that a desired shape was maintained, was well known. In addition to D17, a further example was to be found in D14, where a support member was provided in an incontinence napkin.

The provision of a moisture stable deformation element was a direct consequence of the provision of bending grooves on the blood-impermeable layer of the sanitary napkin of D12, due to the fact that the layer was impermeable. Anyhow, the skilled person seeking a solution to the problem of avoiding that the napkin lost its shape when wet, would obviously consider the provision of grooves in an impermeable layer only, ie on the blood-impermeable layer. In this respect, the argument of the respondent that it was easier to provide the grooves in the absorbent material was only speculative.

VIII. The respondent essentially argued as follows.

The Board in the present appeal was bound by the ratio decidendi of earlier decision T 431/95 of Board of Appeal 3.2.2. As regards the interpretation of the claims of the patent in suit, the Board in T 431/95 found that they required the presence of a deformation element separate from the absorbent means. As regards D12, the ratio decidendi of the earlier decision included a finding that D12 did not disclose an article

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which had a separately identifiable deformation element. Moreover, the backsheet of D12 did not have an arrangement of grooves as required by claim 1 of the patent in suit, since there was no clear disclosure of all the grooves being provided on the backsheet. In this respect, Figure 1 was a highly diagrammatic drawing, and claim 3 of D12 was unclear and drafted in very general terms. Neither did D12 disclose that the grooves extended throughout the whole structure of the napkin. In the napkin of D12, at least some of the grooves were always provided in the absorbent material, and therefore D12 did not disclose a deformation element which was moisture stable, as that of the patent in suit. The reason for providing the grooves on the absorbent material was that it was easier to form grooves on the absorbent material than on other layers of the napkin. There were no incentives in D12 to provide all the grooves on the blood-impermeable layer. The advantages of such arrangement were first recognized by the inventor of the patent in suit.

D17 related to a urinary pad using a foam shell. In view of its rigidity, the skilled person would not contemplate using this shell as a deformation element: even if grooves were provided on the shell, it would be difficult to bend it in a W-shaped configuration.

D14 disclosed an incontinence device which was a large article intended to be applied on the body by means of a belt passing around the waist. A support member having the form of a lattice was used to provide a U, not a W-shape. Moreover, the lattice was used for maintaining the U-shape under the action of forces much higher than those acting on the napkin of D12. In fact, the device of D14 had to support the force of the belt

and the weight of urine, which was certainly greater than the weight of the liquid absorbed in use by a sanitary napkin. In any case, the lattice of D14 was not practical for providing a W-shaped configuration.

Reasons for the Decision

- 1. The appeals are admissible.
- 2. Insufficiency of disclosure
- 2.1 The Board agrees with the finding of the Opposition Division under point 4 of the decision under appeal, that the invention is sufficiently disclosed (Articles 100(b) and 83 EPC) having regard to the disclosure in column 11, line 1 to column 12, line 11 of the patent in suit. Indeed, this passage of the patent in suit contains sufficient technical information to reproduce at least an embodiment of a napkin having all the features of claim 1.
- 2.2 Appellant I submitted that if a layer consisting of a laminate of paper and polyethylene such as the bloodimpermeable layer of D12 could not represent a deformation element, then the invention was not sufficiently disclosed, because there was no disclosure in the patent in suit of what modifications were necessary for such layer to become a deformation element.

An invention is in principle sufficiently disclosed if at least one way is clearly indicated enabling the person skilled in the art to carry out the invention (see eg T 292/85, OJ 1989). Appellant I did not argue that the patent in suit does not disclose at least one way to carry out the invention, but only that if a particular embodiment of a deformation element is selected, namely one consisting of a laminate of polyethylene and paper as generally contemplated by the patent in suit, then the invention cannot be carried out. However, this argument only implies that the particular embodiment is not suitable for the invention, not that there is no disclosure in the patent in suit of at least one way of carrying out the invention. Thus, already for this reason the objection of appellant I fails.

Furthermore, the patent in suit discloses that the deformation element might consist of a laminate of films or sheets of materials such as polyethylene, heavy-weight paper such as cardboard, coated paper (see col. 12, lines 11 to 18). Insofar as the materials and thickness of the laminate are selected such as to provide a deformation element which is moisture stable and has a flexure resistance of at least 100 g, and insofar as the deformation element can be provided with the necessary hinges so that the desired function referred to in claim 1 is effectively achieved, the Board is satisfied that no further technical features are necessary for such a laminate to effectively correspond to a deformation element meeting the requirements of claim 1 of the patent in suit.

3. Binding effect of the earlier decision of the Board of Appeal

3.1 According to the established case law of the Boards of Appeal, the same binding effect applies to a subsequent appeal in respect of an earlier decision of a Board of

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Appeal as it applies to the department of first instance (see eg T 153/93). Accordingly, the Board in the present appeal proceedings is bound by the ratio decidendi (Article 111(2) EPC) of earlier decision T 431/95 of Board of Appeal 3.2.2.

This means in particular that as far as the respondent's main request is concerned the questions of clarity (Article 84 EPC), allowability of the amendments (Article 123 EPC), and novelty are matters finally settled by the earlier decision.

3.2 Appellant II argued that the fact that D12 disclosed all the features of claim 1 implied, by analogy with the principle set out in G 1/95, that the claimed subject-matter did not involve an inventive step.

> G 1/95 refers to the case in which an objection of lack of novelty cannot be introduced into the appeal because it constitutes a fresh ground for opposition but the closest prior art document nevertheless destroys the novelty of the claimed subject-matter. In accordance with G 1/95 such subject-matter cannot involve an inventive step, and a finding of lack of novelty in such circumstances inevitably results in such subject-matter being unallowable on the ground of lack of inventive step.

The case at issue is, however, different, because lack of novelty is here not a fresh ground of opposition, but a ground of opposition on which a final decision has already been taken by Board of Appeal 3.2.2. As explained above, the Board in the present appeal proceedings is bound by the ratio decidendi of the above-mentioned final decision, in particular by the

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ground or the reason for making the decision that the subject-matter of claim 1 is novel over D12 (see T 934/91, point 2, for the meaning of the legal concept of ratio decidendi). In decision T 431/95 it is clearly stated (point 3.4) that D12 does not disclose a napkin having a separately identifiable deformation element having the characteristics specified in claim 1. Thus, there can be no doubt that the reason for finding the subject-matter of claim 1 to be novel over D12 was that D12 did not disclose some of the features of claim 1. Accordingly, the argument of appellant II that D12 discloses all the features of claim 1 in fact clearly seeks to question a matter which was already finally settled in decision T 431/95. It follows that appellant's II argument is against res judicata and must be disregarded in view of the binding effect of decision T 431/95 in the present appeal proceedings.

4. Inventive step

- 4.1 The technical problem underlying the patent in suit is to provide a sanitary napkin which by the mere act of putting it on will itself merge in with, closely conform to, and fit exactly the cross-sectional outline of the external surfaces of the pudendal region (see column 3, lines 17 to 21).
- 4.2 In the decision under appeal document D12 was considered to represent the closest prior art. This view was not contested by the parties during these appeal proceedings. Since D12 (see page 3, first paragraph) aims at the same objective of the patent in suit and relates to a sanitary napkin having structural similarities with the napkin of the patent in suit, the Board shares the view expressed by the Opposition

Division.

4.3 Document D12 undisputedly discloses a disposable sanitary napkin according to the preamble of claim 1 of the patent in suit, namely a napkin adapted to be held in place by the adjacent surface of the wearer's undergarment and the wearer's thighs, the napkin being elongate and having longitudinal side edges, the napkin comprising absorbent means including an absorbent core (absorbent material) and a fluid permeable topsheet (covering material) having a body surface overlying said absorbent core, said napkin optionally comprising a fluid impermeable barrier sheet (blood-impermeable material) underlying said absorbent core, a portion of said body surface having a convex upward configuration in use (see page 7, lines 5 to 13).

> In accordance with the earlier decision T 431/95 (point 3.4), D12 does not disclose a napkin having a separately identifiable deformation element having the characteristics specified in claim 1.

4.4 The implications of this statement in decision T 431/95 have been a crucial point of dispute between the parties in the present appeal proceedings.

Earlier decision T 431/95 clearly states (see point 2) that, in accordance with the definition of claim 1, the deformation element is provided with hinges, which are localisable construction elements, and is an element which - although associated with the absorbent element - is separate therefrom. Thus, there is no doubt that the deformation element of the patent in suit must be regarded as a separately identifiable element which has the flexure hinges. According to the wording of

claim 1, the flexure hinges have the purpose of inducing the body surface and the absorbent core of a central region of the napkin to have a W-shaped configuration. Thus, there can be no doubt that the deformation element of the napkin according to claim 1 must be a separately identifiable element on which are provided all the necessary flexure hinges for inducing the above-mentioned W-shaped configuration.

Such a separately identifiable deformation element is not disclosed by document D12. Indeed, there is no disclosure in D12 of any of the elements composing the napkin (the absorbent material, the blood-impermeable material and the covering material) being provided with grooves so that it is *the grooves in that element* which provide the desired function of inducing a W-shaped configuration in the napkin.

In decision T 431/95 (see point 3.4) it is stated, referring to the passage on page 2, lines 15 to 26 of D12, that the grooves are provided i) on one or both sides of the layer of the absorbent material for menstrual blood, ii) the integrated layer of the absorbent material and the blood-impermeable layer, or iii) the whole structure of the napkin. This clearly implies that the grooves are at least in part provided in the absorbent core. In case i) the grooves are provided on the layer of absorbent material only, in case ii) on both the integrated layer of absorbent material and on the blood-impermeable layer, and in case iii) on all the layers of the napkin. Considering that it is each groove in its entirety which provides the function of a flexure hinge, it follows from the above that in D12 the flexure hinges are not provided on a deformation element separate from the absorbent

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core, but on more than one element including the absorbent element. There is no disclosure in D12 that the portion of a groove which is provided on the bloodimpermeable layer itself provides the function of a flexure hinge for inducing the body surface and the absorbent core of the napkin to have a W-shape. Consequently, the blood-impermeable layer of the napkin of D12 cannot constitute the deformation element as defined in claim 1 of the patent in suit.

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The appellants referred to claims 3 and 11 of D12 to support the argument that D12 disclosed the provision of bending grooves on the side of the napkin with the blood-impermeable layer. However, these claims refer to the *side* and do not specify that the grooves *in their entirety* (ie the flexure hinges) are provided on one element only, namely on the blood-impermeable layer. Only in case of such a positive disclosure would it be possible to conclude that the grooves on the bloodimpermeable layer form the flexure hinges suitable for performing the intended function in accordance with claim 1 of the patent in suit.

The example on pages 11 and 12, referred to by the appellants, confirms this view. Indeed, it discloses the provision of three grooves (see page 12, line 3, referring to Figure 1) which are suitable for inducing a W-shape, and which are formed on both sides of the napkin (page 12, lines 2 to 5) in the manner shown in Figure 2 (see page 5, lines 1 and 2), ie two grooves on the upper side and one on the lower side. In this example, the W-shape is obtained because the grooves are provided on both sides of the napkin and because all the grooves extend through the absorbent core as shown in Figure 2, due to the fact that stamping dies

are used for making them (see page 12, line 2). Thus, there is no element separate from the absorbent core that could constitute the deformation element having flexure hinges referred to in claim 1 of the patent in suit.

Appellant I argued that claim 1 of the patent in suit did not exclude the provision of grooves on the absorbent means in addition to those on the deformation element. In this respect, the Board concurs with the appellant's view. However, where a groove is also provided on the absorbent means, such as in Figure 9 of the patent in suit where the linear central hinge 23A which consists of a groove on one side of the deformation element 20 provides a ridge on the other side thereof and consequently a groove on the absorbent core 40, this groove does not essentially contribute to the function of the flexure hinge to induce, with the other flexure hinges, the body surface and the absorbent core of the napkin to have a W-shaped configuration. In fact, it is clear that in the abovementioned embodiment of Figure 9 the function of flexure hinge is performed by the groove 23A whilst the groove on the relatively thicker and softer absorbent core does not play any role in practice.

Therefore, the Board comes to the conclusion that the finding of T 431/95 that D12 does not disclose a napkin having a separately identifiable deformation element having the characteristics specified in claim 1 can only imply that the subject-matter of claim 1 of the patent in suit is distinguished from the sanitary napkin of D12 by the features defined in the characterizing portion of claim 1, that the napkin comprises a moisture stable deformation element

associated with said absorbent means, said deformation element having a flexure resistance of at least 100 g in a Modified Circular Bend procedure whereby said deformation element maintains said portion of said body surface in a convex upward configuration when said napkin is subjected to lateral compressive forces in use, and that said deformation element has flexure hinges for inducing said body surface and the absorbent core of a central region of said napkin to have a W-shaped configuration, when said napkin is subjected to lateral compressive forces, the "W" including the said in-use convex upward portion, which convex upward portion is generally symmetrically disposed between said longitudinal side edges and which is assumed, or, if present before use, increased by said lateral forces.

- 4.5 The napkin of D12 is such that by the mere act of putting it on, it will itself merge in with, closely conform to, and fit exactly the cross-sectional outline of the external surfaces of the pudendal region (see page 3, first paragraph), due to the provision of flexure hinges (the bending grooves) in the structure of the napkin for inducing the body surface and the absorbent core of a central region to have a W-shaped configuration (see page 8, lines 20 to 23). Therefore, D12 already discloses a solution to the technical problem acknowledged in the patent in suit (see point 4.1 above). Starting from the closest prior art disclosed by D12, the objective technical problem can therefore be seen in providing an alternative manner of solving the same technical problem.
- 4.6 The alternative solution proposed by claim 1 of the patent in suit is not suggested by document D12. In

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fact, as explained above (point 4.4), the whole thrust of D12 is to provide the grooves at least in part in the absorbent element. There is no suggestion that the provision of grooves on the element separate from the absorbent means, which is the blood-impermeable layer in D12, would be suitable for the intended purpose.

Appellant II argued that the skilled person confronted with the disclosure of D12 would obviously consider the alternatives of embossing the napkin throughout the whole structure or embossing only the garment facing side thereof, thereby providing the bending grooves on the blood-impermeable layer. However, these alternatives would not have as a result to provide flexure hinges, each constituted by a groove in its entirety, on the blood-impermeable layer.

Documents D14 and D17 were cited by the appellants in order to show that the use of separately identifiable elements in absorbent articles for providing a desired configuration thereof was well known. However, neither the lattice element of the incontinence napkin of D14, which could be considered to be a moisture stable deformation element associated with the absorbent means (see T 431/95, point 3.5), nor the liquid impermeable flexible shell of the urinary pad of D17, are provided with any flexure hinges (see T 431/95, point 3.5, last paragraph). Therefore, these documents could not suggest the provision, in the sanitary napkin of D12, of flexure hinges in a deformation element which is separate from the absorbent means.

Neither is any useful suggestion to be found in document D18, which was cited by appellant II only to show that a value of flexure resistance of 100 g was

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very low, nor in any of the other available documents.

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Finally, appellant II argued that the skilled person faced with the problem that the napkin of D12 lost its shape when wet, would obviously consider the provision of grooves in the impermeable layer. However, on the basis of the disclosure of D12 there is no apparent reason why the napkin should lose the W-shaped configuration when wet, and therefore the skilled person would not even consider this problem. Neither have any experimental data been filed by appellant II referring to the use of the napkin of D12. In fact, the napkin of D12 assumes a W-shaped configuration in use under the lateral pressure exerted by the thighs of the wearer and the upward pressure exerted by the undergarment (see page 7, lines 5 to 13). It is clear for a skilled person that these pressures not only produce such configuration by bending the napkin at the grooves, but also maintain it in use when the napkin becomes wet.

4.7 The above considerations lead the Board to consider the subject-matter of claim 1, and of dependent claims 2 to 8, to involve an inventive step.

Order

For these reasons it is decided that:

The appeals are dismissed.

The Registrar:

The Chairman:

M. Patin

P. Alting van Geusau