

Internal distribution code:

- (A) [-] Publication in OJ
(B) [-] To Chairmen and Members
(C) [-] To Chairmen
(D) [X] No distribution

**Datasheet for the decision
of 13 October 2017**

Case Number: T 1517/13 - 3.2.06
Application Number: 04809198.7
Publication Number: 1845913
IPC: A61F5/452, A61F5/44, A61F13/15,
D04H13/00
Language of the proceedings: EN

Title of invention:

ABSORBENT ARTICLE HAVING IMPROVED PROPERTIES OF HANDLING LOW-
VISCOSITY FECAL MATERIALS

Patent Proprietor:

SCA Hygiene Products AB

Opponent:

Paul Hartmann AG

Relevant legal provisions:

EPC Art. 83, 54, 56, 114(2)
RPBA Art. 13(1)

Keyword:

Sufficiency of disclosure - enabling disclosure (yes)

Novelty - main request (yes)

Inventive step - main request (no) - auxiliary request (yes)

D9 - newly argued concerning lack of novelty - not admitted in this respect

Decisions cited:

T 0252/02



Beschwerdekammern
Boards of Appeal
Chambres de recours

European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 1517/13 - 3.2.06

D E C I S I O N
of Technical Board of Appeal 3.2.06
of 13 October 2017

Appellant: Paul Hartmann AG
(Opponent) Paul-Hartmann-Straße 12
89522 Heidenheim (DE)

Representative: DREISS Patentanwälte PartG mbB
Postfach 10 37 62
70032 Stuttgart (DE)

Respondent: SCA Hygiene Products AB
(Patent Proprietor) 405 03 Göteborg (SE)

Representative: Valea AB
Box 1098
405 23 Göteborg (SE)

Decision under appeal: **Interlocutory decision of the Opposition**
Division of the European Patent Office posted on
6 May 2013 concerning maintenance of the
European Patent No. 1845913 in amended form.

Composition of the Board:

Chairman T. Rosenblatt
Members: G. de Crignis
W. Ungler

Summary of Facts and Submissions

I. In its interlocutory decision, the opposition division found that European patent No. 1 845 913 as amended according to the main request met the requirements of the European Patent Convention (EPC).

II. The appellant (opponent) filed an appeal against this decision. In its appeal grounds it referred to previously cited documents

D1 US-A-2004/0106911
D2 EP-B-1 236 827
D3 EP-A-0 953 324
D4 WO-A-00/28929
D5 US-A-5 342 343
D6 US-A-6 409 715
D7 US-A-2002/0028624
D8 US-B-6 417 426
D9 WO-A-99/55273
D10 US-A-5 342 338

and in addition filed

D11 EP-A-0 359 501.

III. In its reply to the appeal grounds the respondent (patent proprietor) requested that the appeal be dismissed, or in the alternative that the patent be maintained on the basis of one of auxiliary requests 1 and 2, and requested that D11 not be admitted.

IV. In a communication annexed to the summons to oral proceedings, the Board indicated its preliminary view.

V. With a letter dated 8 September 2017 the respondent submitted auxiliary requests 1 to 6.

VI. Oral proceedings were held before the Board on 13 October 2017, in the course of which the respondent withdrew auxiliary requests 1, 2 and 4 to 6.

The appellant requested that the decision under appeal be set aside and that the patent be revoked.

The respondent requested that the appeal be dismissed, and auxiliarily that the patent be maintained in amended form on the basis of claims 1 to 9 of auxiliary request 3 filed with letter dated 8 September 2017.

VII. Claim 1 of the main request reads as follows:

"An absorbent article comprising an absorbent core (5) and a cover enclosing the absorbent core, said cover comprising a liquid pervious inner cover (6) on the body facing side of the absorbent core and a liquid impervious outer cover (7) on the garment facing side of the absorbent core, said article having a front portion (2), a rear portion (3) and a crotch portion (4) there between, wherein said inner cover (6) in at least a fecal receiving area, comprising parts of the rear and crotch portions (3, 4) of the article, comprises a three-dimensionally structured hydrophilic fibrous web material (12) having on the body facing surface a plurality of alternating recessed (13) and elevated portions (14), wherein the recessed as well as the elevated portions are hydrophilic and said three-dimensionally structured hydrophilic fibrous web material (12) defines the body facing surface of the inner cover (6) in at least parts of the rear portion

(3) and crotch portion (4) of the article, which parts are covered by the absorbent core (5) characterized in that a material layer underlying the three-dimensionally structured hydrophilic fibrous web material (12) is more hydrophilic and/or has a smaller mean pore size than said three-dimensionally structured hydrophilic web material, so that a surface energy gradient and/or a pore size gradient is created, striving to draw aqueous fluid through the three-dimensionally structured hydrophilic web material to the underlying material layer."

Claim 1 of auxiliary request 3 differs from claim 1 of the main request in that the following feature is inserted after the designation of its subject-matter:

"said article being a diaper, a pant diaper, an incontinence garment or an incontinence insert"

and in that in addition the following feature is inserted in the characterising portion immediately after the expression "characterized in that":

"apertures (16) are provided in the recessed portions (13) of the three-dimensionally structured hydrophilic fibrous web material (12) and ".

VIII. The arguments of the appellant may be summarised as follows:

In order to know whether the three-dimensionally structured hydrophilic fibrous web material was positioned as defined in claim 1, the skilled person had to be able to determine the position of the crotch portion relative to it. According to the description,

the "crotch portion" feature in claim 1 was defined by the position of a "crotch point", which had to be determined by the method disclosed in paragraphs 29 and 30. The exact position of the crotch point however was dependent on the anatomy of the wearer and could shift from a central transverse axis to the front or rear portions. Consequently the limits of the crotch portion could not be determined accurately; rather, arbitrary choices would be necessary in order to determine its limits. Moreover, the claim covered embodiments, such as an incontinence insert or a bed protection sheet, see claim 11, for which it was not clear how a crotch portion could be defined at all. The skilled person could therefore not be sure of working within or outside the scope defined in the claim. In case of parameter patents it was not acceptable to leave the skilled person with such a degree of uncertainty, see T 252/02. Rather, it was necessary to indicate a test method giving an unambiguous result enabling the skilled person to identify whether the article was in the claimed range. Thus the patent was not disclosed in a manner sufficiently clear and complete to be carried out by the skilled person.

The subject-matter of claim 1 was known from D6. It was *inter alia* disclosed in relation to Figures 4 and 6 that the preferred material for the liquid-pervious topsheet 1, comprising a three-dimensional structure in a fecal receiving area of the absorbent article was a hydrophilic nonwoven fabric, see column 2, lines 42/43. Furthermore, Figure 5 disclosed a material layer 27 underlying the fibrous web material of the top sheet 1 and encasing the absorbent core 22. This layer was made of tissue paper, see column 4, lines 52/53. The pore size of a nonwoven fabric was in any case greater than the pore size of tissue paper, since tissue paper had

to be strongly densified in order to allow its cellulose fibres to adhere to each other to form the paper.

The subject-matter of claim 1 was also known from D9 (D3). This objection should be admitted into the proceedings since lack of novelty had always been an issue. D9 had already been in the proceedings and was highly relevant in this regard. Its discussion under this aspect could thus not have come as a surprise. D9 disclosed a diaper (page 6, l. 10 ff) having a two-layered laminate as a topsheet. The first layer was a nonwoven hydrophilic web (page 13, line 18, page 9, line 10 ff) which extended along the length of the area. The hydrophilicity of the lower layer was disclosed such as to be greater than the hydrophilicity of the upper layer (page 13, line 17; abstract). The laminate presented alternating elevated and recessed portions, whereby the recessed portions were constituted by apertures 46/48. The material delimiting the apertures' circumference was hydrophilic.

Concerning inventive step, D6 represented an appropriate starting point. The subject-matter of claim 1 was distinguished from the absorbent article of D6 by the features in its characterising portion. The objective problem would be to ensure aqueous liquid transfer to the absorbent core. When starting from the embodiment shown in Figure 5 of D6, there was already disclosed a tissue paper - having inherently a very small pore size and highly hydrophilic characteristics - below the topsheet. Hence, the skilled person would not ignore the well-known advantages of a pore size gradient (with regard to the capillary effect) or a hydrophilicity gradient when selecting the topsheet -

which was disclosed as preferably being a nonwoven material.

The subject-matter of claim 1 of auxiliary request 3 did not involve an inventive step. The problem to be solved was not altered by the added feature. The nonwoven liquid-pervious topsheet in D6 inherently included pores for liquid transport and thus also in the recessed portions. No distinction could be made between the pores of the nonwoven topsheet and the apertures here claimed. Moreover, if the apertures were considered to be something different from the pores, and could consequently be considered to accelerate dewatering of excrements disposed on the topsheet, the subject-matter of claim 1 would still be obvious because apertured topsheets were known from D9 or D3. The claim did not define how many apertures should be provided in the recessed portion, nor did it exclude providing them over the entire topsheet. The skilled person would have been aware of apertures in the elevated parts of the material not being functional to the same extent as those in the recessed portions and would thus obviously have chosen to arrange such additional apertures in the recessed portions. A particular pointer to the recessed portions would not be required, since the problem concerned fluid handling in general, which was dealt with in D9/D3 by apertures distributed over the entire surface of the topsheet. Some of the apertures would then be situated in the recessed portions. This would be sufficient to fall under the claim because it did not provide any limitation in view of the number of apertures in the recessed portions.

IX. The arguments of the respondent may be summarised as follows:

The patent disclosed the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art. Although the crotch portion was defined in paragraphs 29 and 30 of the patent in suit such as to be determined in relation to the "crotch point", there was no requirement that in order to carry out the invention defined in claim 1 the "exact" position of the crotch portion needed to be determined. The skilled person was in a position to determine where the fecal area comprising parts of the rear and crotch regions was located in an absorbent article.

The subject-matter of claim 1 was novel over the disclosure in D6. The topsheet disclosed in D6 could be made of different materials, including a porous thermoplastic synthetic resin film. Sheet 27 underlying the top sheet in Figure 5 was not defined in more detail. Tissue paper was mentioned as just one example of this underlying layer 27. The claimed relationship between the topsheet's pore size or its hydrophilicity and the underlying layer's respective property was not clearly and unambiguously disclosed.

The novelty objection in relation to D9 (D3) should not be admitted. It had been raised for the first time late in the appeal proceedings. D9 referred to a laminate topsheet wherein the second material should have a greater hydrophilicity than the first. However, the first material should be a relatively hydrophobic material in order to decrease the dewatering effect of fecal material as mentioned in paragraph 57 of D9. The subject-matter of claim 1 was novel over the disclosure in D9.

Concerning inventive step, when starting from D6 in view of the distinguishing feature defined in the characterising portion of claim 1, the objective problem would be to improve the dewatering effect (as also set out in paragraph 60 in the patent in suit). No suggestion towards selecting the claimed relationship could be deduced from the disclosure in D6. D6 was directed to a different way of handling the fecal material by immobilising it in the area of the cylindrical depression in the absorbent core; dewatering of this area was not suggested at all.

When considering the teaching of D9 (D3), this document referred to an apertured laminate web having a relatively hydrophobic material on the body-facing surface. The material of the topsheet should prevent premature dewatering of excrement, as pointed out in paragraph 57 of D9. Accordingly, the combination of D6 and D9 could not lead obviously to the claimed subject-matter.

The subject-matter of claim 1 of auxiliary request 3 involved an inventive step. The three-dimensionally structured hydrophilic web material was defined as having a specific mean pore size (larger than that of the underlying material layer) and additionally apertures in its recessed portions in order to improve the dewatering effect referred to in paragraph 60 of the patent. No suggestion was present in any of the cited documents to provide apertures in addition to pores inherently present in the cover layer in combination with the gradient of the pore sizes or hydrophilicity of an underlying layer.

Reasons for the Decision

1. Sufficiency of disclosure

1.1 The appellant contested that the invention was disclosed in a manner sufficiently clear and complete to be carried out by the skilled person, because the limits of the "crotch portion" with respect in particular to the rear portion and therewith the relative position of the three-dimensionally structured web material could not be reliably determined. It was thus impossible for the skilled person to know whether a given absorbent article fell within the scope of claim 1 or not. This was notably due to the fact that, according to paragraphs 29 and 30 of the patent in suit, the extension and position of the "crotch portion" relied on the position of a "crotch point", which in turn depended strongly on the anatomy of the wearer.

1.2 The Board is not convinced by the appellant's arguments for the following reasons.

1.3 The crotch portion is referred to in claim 1 in the following features:

- "said article having a front portion (2), a rear portion (3) and a crotch portion (4) there between";

- "said inner cover (6) in at least a fecal receiving area, comprising parts of the rear and crotch portions (3, 4) of the article, comprises a three-dimensionally structured hydrophilic fibrous web material (12) having on the body facing surface a plurality of alternating recessed (13) and elevated portions (14)";

- "said three-dimensionally structured hydrophilic fibrous web material (12) defines the body facing surface of the inner cover (6) in at least parts of the rear portion (3) and crotch portion (4) of the article, which parts are covered by the absorbent core (5)".

- 1.4 Accordingly, the crotch portion is referred to in claim 1 for specifying a location relative to it of a fecal receiving area comprising the three-dimensionally structured web material on the absorbent article's inner cover (topsheet), where the fecal receiving area and its three-dimensionally structured web material have to lie partly in the rear and crotch portions.
- 1.5 The Board considers that the skilled person generally understands how to provide an absorbent article having front, rear and crotch portions and thus knows where such portions of the article are generally positioned. The skilled person is also able to determine where a fecal receiving area is located in an absorbent article.
- 1.6 The Board can further agree with the respondent's argument that the claim does not require the determination of precise limits of the extension of the crotch portion. Indeed, the invention defined by claim 1 is not limited by the method of determining the extension and location of the crotch portion on the inner cover through determination of the "crotch point" according to paragraphs 29 and 30 of the patent's description, which - the Board in this regard agrees with the appellant - is certainly dependent on the anatomy of each wearer of the absorbent article and therefore may admittedly result in varying positions of the crotch portion along the extension of the inner

cover.

- 1.7 The present case is thus different from inventions defined by parameters. Therefore the principles arising from the case law of the Boards of Appeal for such parameter inventions, such as in case T 252/02 referred to by the appellant, do not apply.
- 1.8 Some uncertainty might indeed exist when the skilled person is faced with a particular absorbent article for which it has to be decided whether a three-dimensionally structured material of a fecal receiving area thereof extends partly in a rear portion and partly in a crotch portion; but this is not sufficient to conclude that the claimed invention cannot be carried out. The skilled person has to give each feature defined in claim 1 its broadest, technically meaningful interpretation. In the same way that the claim cannot be considered to be limited to the determination of the location of the crotch portion on the inner cover by the method disclosed in paragraphs 29 and 30, it is also not limited in respect of the extension of the crotch portion mentioned there (equivalent to 50% of the total length of the inner cover). Hence, the alleged deficiency in respect of the requirement of Article 83 EPC amounts merely to a question of the breadth of claim 1 or at most to a problem of clarity (Article 84 EPC).
- 1.9 Concerning the argument that a crotch portion could not be identified in a bed sheet or incontinence insert, because it would be entirely unclear how to delimit its extension in the case of a bed sheet due to the lack of a well-defined crotch point for such sheet or, in the case of the incontinence insert, due to the additional variations related to the placement of the insert in

the underwear, the Board is also not convinced that these deficiencies hinder the skilled person from carrying out the invention claimed. As noted before, the claim does not require a precisely limited crotch portion nor the identification of a crotch point, and so the issues raised relate more to the requirement of clarity, rather than raising doubts whether the skilled person would be able to identify the different corresponding portions in these types of article.

1.10 The Board concludes that the requirement of Article 83 EPC is met.

2. *Novelty - claim 1 - main request - D6*

2.1 D6 in Figures 4 to 7 discloses two embodiments of an absorbent article which both comprise *inter alia* a topsheet 1 corresponding to the liquid-pervious inner cover defined in claim 1.

2.2 The (entire) topsheet 1, including the portion which extends in parts of the rear and crotch portions (32, 31) of the article and which comprises therein a fecal receiving area 2 with undulated pleats 2a corresponding to the claimed three-dimensional structure on the body-facing surface of the liquid-pervious inner cover, is disclosed as being made of either a hydrophobic nonwoven fabric treated to become hydrophilic or a hydrophilic nonwoven fabric formed by hydrophilizing agent rubbed in fiber or a porous thermoplastic synthetic resin film (col. 2, lines 41-46). The materials intended for the topsheet of D6 thus encompass the material defined for the liquid-pervious inner cover of claim 1, namely a hydrophilic fibrous web material.

- 2.3 The absorbent articles shown in Figures 4/5 and 6/7 of D6 both also include a material layer 27 underlying the three-dimensionally structured material of the liquid-pervious inner cover or topsheet 1.
- 2.4 The respondent argued that, unlike the first feature in the characterising portion of claim 1, this layer 27 would not be in contact with the three-dimensionally structured area of the topsheet 1 due to its recessed shape in this area, so that a gradient in surface energy or mean pore size as further defined in the characterising portion of claim 1 could not be obtained. The Board does not find this argument convincing since, if the three-dimensionally structured area of the topsheet were loaded with fecal matter, contact between both sheets would form according to the disclosure of D6, see for example, col. 3, lines 43-51.
- 2.5 The only question thus to be decided with regard to the requirement of novelty of the subject-matter of claim 1 in view of D6 is whether the feature in its characterising portion defining specific relative differences in hydrophilicity and/or mean pore size between the material of the layer 27 and the material of the topsheet 1 itself is disclosed in D6. Such difference would inherently provide for the creation of a surface energy gradient and/or pore size gradient, respectively, and thereby also achieve the technical effect defined at the end of claim 1.
- 2.6 D6 does not explicitly disclose any relationship between the hydrophilicity or the mean pore size of the topsheet 1 and the sheet 27. The issue thus is whether such relationship of the claimed gradients in either or both, pore size or hydrophilicity, is implicitly disclosed.

- 2.7 Whether the claimed relationship is achieved by the articles of D6 depends for both parameters on the specific selection of the materials chosen for the topsheet and for the underlying layer - as well as on the treatment of these materials/layers.
- 2.8 As mentioned before, the topsheet can be a nonwoven fabric which either is treated to become hydrophilic or is formed by fibres which are made hydrophilic - or it can be a porous thermoplastic synthetic resin film (col. 2, lines 41-46).
- 2.9 Concerning the underlying layer 27, the description in D6, col. 4, lines 52/53, refers to it rather generally, without specific reference to the other sheet materials to be used in the absorbent articles in combination with it, as being a "liquid-pervious sheet such as tissue paper", suggesting tissue paper as just one typical material for this layer 27.
- 2.10 The skilled person thus has to select the material of the topsheet either such as disclosed generally (col. 2, lines 41-46) or as disclosed for the embodiments shown in Figures 1 to 3 (col. 2, lines 4-6 and 22-27).
- 2.11 Amongst the possible choices, there are combinations of materials selected for the two relevant layers, which do not necessarily result in the relative differences in hydrophilicity or mean pore size required by claim 1. For example, even assuming for the sake of argument that the skilled person selected tissue paper for the sheet 27, which is known for being hydrophilic and having a small mean pore size, a topsheet made of a porous thermoplastic resin does not necessarily have to have a lower hydrophilicity or higher mean pore size

than such tissue paper. Although it appears likely that a nonwoven layer or a material would be chosen by the skilled person for the topsheet in combination with tissue paper for the underlying layer, thereby inevitably resulting, at least with respect to required mean pore size, in the claimed relationship, no direct and unambiguous disclosure for this specific combination is present in D6.

2.12 Hence, the Board concludes that the subject-matter of claim 1 is novel over D6.

3. *Novelty in view of D9 - admittance into the proceedings*

3.1 The objection against the subject-matter of claim 1 based on D9 was raised for the first time by the appellant in a letter submitted after the Board had issued its preliminary opinion in preparation for the oral proceedings, and so after the time limit for filing the appeal grounds, by which, according to Article 12(1) and (2) of the Rules of Procedure of the Boards of Appeal (RPBA), the appellant should have submitted its complete case. This new objection thus constitutes an amendment to the appellant's case.

3.2 According to Article 13(1) RPBA, any amendment to a party's case may be admitted and considered at the Board's discretion, which is to be exercised in view of *inter alia* the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy.

3.3 In particular, the relevance of a late-filed submission as well as the question why it had not been submitted earlier should normally be factors which are taken into

account when considering how to exercise this discretion.

- 3.4 The reasons given by the appellant for raising this objection late were that lack of novelty had always been an issue, D9 was highly relevant and so its discussion under this aspect was not surprising since D9 had already been in the proceedings.
- 3.5 None of these arguments justifies the late presentation of arguments concerning lack of novelty with regard to D9.
 - 3.5.1 Lack of novelty was an issue from the very beginning of the proceedings exclusively on the basis of D6 (which was numbered D4 during the opposition proceedings). The additional argument that D9 too was relevant in this respect could not be expected at such a late stage of the proceedings. The fact that D9 had always been in the proceedings is correct - but only with regard to the discussion of inventive step.
 - 3.5.2 Moreover, the relevance of this document did not change during the proceedings. The appellant in its status as opponent argued with regard to D9 exclusively in the context of lack of inventive step (see appealed decision, points 4.7/4.8, last sentence of each point, D9 - or rather its family member D3 - referred to as D1). In its preceding submission the topsheet of D9 was acknowledged as being "relatively hydrophobic" by the opponent. This hydrophobicity does indeed result from the material of the layer constituting the body-facing surface of the topsheet which is disclosed in D9 as being an apertured liquid-pervious material, preferably a nonwoven fibrous web being formed from polymeric fibres or filaments. Hence, the feature of claim 1

requiring a hydrophilic fibrous web material for the body-facing surface of the inner cover is not disclosed in D9. The reference to the hydrophilicity gradient set out on page 13, lines 18/19, of D9 does not change the "relatively hydrophobic" property of the surface referred to on page 13, line 19.

3.6 Also, the objection was based on an interpretation of the disclosure of D9 which the Board considers not to be in line with the skilled person's common understanding of the features of claim 1. The claim specifies that the body-facing surface side of the three-dimensionally structured web material comprises a plurality of alternating recessed and elevated portions, both portions being hydrophilic. The appellant identified the hydrophilic recessed portions in the topsheet of D9 with apertures extending completely through the topsheet, arguing that the circumferential wall of the apertures was made of hydrophilic material. This interpretation appeared to be far-fetched and would have required discussion of questions which had never been an issue before in the proceedings, such as whether the patent in suit itself supported such a broad interpretation.

3.7 In summary, the Board *prima facie* could not see that this objection was highly relevant and likely to succeed.

3.8 Hence, the Board exercised its discretion under Article 13(1) RPBA and did not admit the objection of lack of novelty based on D9 into the proceedings.

4. *Inventive step - main request - claim 1*

- 4.1 The appellant considered D6 to represent the closest prior art. The Board considers that D6 is indeed appropriate to be taken as closest prior art for the problem-solution approach in order to examine inventive step for the subject-matter of claim 1.
- 4.2 The respondent contested that D6 was appropriate as closest prior art. According to the respondent, D6 solved the problem of fecal containment differently. The depression in the article thereof was arranged below the stretchable region of the topsheet and adapted to receive the fecal matter. D6 focused on immobilisation of fecal matter in a depression formed in the absorbent core. The skilled person would not further consider dewatering the fecal matter in this depression.
- 4.3 The Board cannot follow these arguments. D6 is directed to the same purpose or effect as the invention, in that it concerns the management of fecal matters and accordingly the handling of fluid, semi-fluid and solid matters. The fact that D6 discloses immobilisation and receiving of fecal matter in the depression is irrelevant in that claim 1 concerns gradients in the layers covering the absorbent core and does not exclude the presence of such depressions in the underlying absorbent core. When trying to provide appropriate fluid-handling properties in an absorbent article, dewatering is to be considered anyway. Urine and fecal deposition cannot be considered completely independently of each other and also cannot be localised exclusively in a portion provided for this purpose in an absorbent article.
- 4.4 The objective technical problem when starting from D6 as closest prior art, based on the identified

distinguishing features, i.e. the particular selection of a hydrophilic nonwoven fabric for the inner cover in combination with the features in the characterising portion of claim 1 concerning the relative difference in hydrophilicity and/or mean pore size between the two relevant layers and the consequently resulting gradients in surface energy and/or mean pore size, can be regarded as ensuring fluid handling between the different layers providing an appropriate dewatering effect.

- 4.5 Faced with this objective problem the skilled person would have to select appropriate materials for the topsheet 1 and the underlying sheet 27 in the absorbent article of D6. He would thereby consider the materials which are explicitly mentioned in D6 itself.
- 4.6 D6 discloses as preferred embodiments for the topsheet the use of liquid-pervious nonwoven fabrics, see col. 2, lines 4-6 and 23-27. According to col. 2, lines 41-43, these nonwoven fabrics are treated to become hydrophilic. The skilled person would thus clearly consider using such hydrophilic nonwoven fabrics as liquid-pervious outer cover, corresponding to the hydrophilic fibrous web material as defined in the preamble of claim 1.
- 4.7 The skilled person would also understand that a layer of tissue paper underlying the top sheet, as mentioned in col. 4, lines 51/52, of D6, would allow fast acquisition and transfer of liquid to the absorbent core 22. The need to draw aqueous fluid through the topsheet for storing it in the absorbent core is common to all absorbent articles.

- 4.8 Although the selection of these two specific materials in combination could not be seen to comply with the (photographic) novelty requirement of a direct and unambiguous disclosure (see above), it is obvious for the skilled person having to produce an absorbent article of D6 to try this arrangement when faced with the above objective technical problem.
- 4.9 With such an obvious selection the skilled person would inevitably arrive at the combination of features according to claim 1, including the feature in its characterising portion relating to the relative difference and gradient as far as the mean pore size of the two layers is concerned.
- 4.10 This is so because, as argued by the appellant and not contested by the respondent, tissue paper is made of highly compressed cellulose fibre material having a very small mean pore size, whereas nonwoven fabrics generally used in the field of absorbent articles are less dense and have a greater mean pore size compared to that of tissue paper. This smaller mean pore size of the tissue paper creates a pore size gradient, which inherently strives to draw aqueous fluid from the three-dimensionally structured (pleats 2a) hydrophilic web material (hydrophilic nonwoven topsheet 1) to the underlying material (tissue paper 27).
- 4.11 Consequently, the subject-matter of claim 1 does not involve an inventive step (Article 56 EPC).

5. *Auxiliary request 3*

- 5.1 Claim 1 in addition to the features of claim 1 of the main request defines the following features in its

preamble, inserted after the designation of the subject-matter,

"said article being a diaper, a pant diaper, an incontinence garment or an incontinence insert"

and at the end of its characterising portion the feature

"that apertures (16) are provided in the recessed portions (13) of the three-dimensionally structured hydrophilic fibrous web material (12)."

This subject-matter is disclosed in claims 13 and 5 as filed. The amendments thus satisfy the requirement of Article 123(2) EPC, which has also not been contested by the appellant.

- 5.2 The amendment concerning the feature cited first above does not change the considerations in respect of inventive step since the claimed absorbent article was always to be considered as including these articles. Moreover, the absorbent article disclosed in Figures 4 to 7 of D6 is also a diaper.
- 5.3 In contrast, the amendment concerning the feature included in the characterising portion constitutes an addition of a further feature which was not previously included in the claimed subject-matter. The addition of this feature alters the conclusions set out for inventive step for the subject-matter of claim 1 of the main request.
- 5.4 The appellant argued that the pores represented apertures and were present in the recessed portions and accordingly did not constitute a further distinguishing

feature; the more so since there was no hint at a separate manufacturing procedure for providing the apertures. However, these arguments are not convincing.

5.4.1 The Board considers that the skilled person understands from the wording of the claim that the apertures constitute features being particularly made in the three-dimensionally structured hydrophilic fibrous web material, at particular locations, i.e. in the recessed portions. This is so because the claim specifies that the outer cover is made of a fibrous web material which inherently includes pores having a certain mean pore size, as defined in the characterising portion (see also the discussion above for the main request). The skilled person would understand that the pores are present throughout the entire three-dimensionally fibrous web material, including its recessed portions. Apertures provided in the recessed portions of such web material would therefore be understood by the skilled person to constitute some feature specifically made or formed, by whatever method, in the web material comprising the pores, leading to openings bigger than the pores inherently present. That no specific method of making such apertures is disclosed in the patent in suit is irrelevant, since no such method is defined in the claim. The ability of the skilled person to provide such apertures in the recessed portions has in any case not been questioned.

5.4.2 Apertures as defined additionally in claim 1 are not disclosed in D6, and so this added feature constitutes a further distinguishing feature to be considered when examining whether the requirement of Article 56 EPC is met.

- 5.5 The effect of these additional apertures in the recessed portions of the three-dimensionally structured hydrophilic web material is to improve, or in the words of the appellant, to accelerate the dewatering of liquid or fecal excrement. Accelerating the dewatering of excrement may thus be considered to constitute the objective technical problem to be solved.
- 5.6 Neither D6 nor D9 or its family member D3 comprises an indication that would lead the skilled person to provide, in addition to the pores which are generally present in the fibrous web material, apertures in the recessed portions of the three-dimensionally structured (undulated) non-woven material of the topsheet according to D6.
- 5.7 As mentioned before, D6 does not show any apertures at all and can thus not lead the skilled person to the solution of the problem as defined in claim 1. Moreover, there is no motivation for the skilled person, based on the common general knowledge, to provide apertures in the recesses of the pleats of the topsheet of D6, since the pleats are primarily provided in order to make the topsheet stretchable, see col. 3, lines 10-13, as argued by the respondent. It can only be through hindsight that the skilled person would have provided apertures in specifically the pleated region and even more specifically in its recessed portions.
- 5.8 The appellant's argument that apertures on elevated portions would not make any sense cannot change the Board's conclusion that there is no pointer to providing apertures in the recesses of D6.
- 5.9 D9 (and D3) discloses a flat laminate web material comprising apertures distributed over its entire

surface. This web material may be used as a topsheet in an absorbent article, see for example the abstract of these documents. However, D9 (and D3) also does not comprise any link between particular positions of such apertures, let alone any effect to be achieved by selecting such positions. The apertures are just indifferently distributed over the entire surface. Only hindsight could lead the skilled person to provide such apertures in recesses of the pleated region of the topsheet according to D6.

- 5.10 The Board is also not convinced by the appellant's argument that a pointer to the provision of apertures in the recessed portions would not be required due to the distribution of the apertures over the entire surface in the topsheet of D9/D3. Following this approach, the skilled person could arrive at a combination of features according to claim 1 if the entire topsheet of D6 were replaced by the apertured topsheet of D9, such that some of the apertures did indeed coincide with the recessed portions of the undulated pleats provided for in D6 - assuming thereby for the sake of argument that the skilled person would already have considered keeping this three-dimensional structure, in contrast to the flat configuration disclosed in D9.
- 5.11 Besides the fact that, as pointed out by the respondent, according to D9 the intention was to avoid premature dewatering of excrement (see paragraph 57), which *per se* is inconsistent with the objective problem formulated above, and the fact that the laminate's outermost layer was hydrophobic (cf. point 3.9 above), rather than being hydrophilic, such that a combination of the absorbent article of D6 with a topsheet according to D9 for these reasons alone would not lead

obviously to the subject-matter of claim 1, the achievement of the claimed structure (apertures in recessed portions) would rely primarily on chance. It would require an appropriate superficial density of apertures to be selected for a sheet of D9 which had to be compatible with the dimensions of the pleated structure according to D6 such as to obtain apertures coincident with the recessed portions. Without there being any explicit pointer to providing apertures in recessed portions of a three-dimensionally structured topsheet, such fortuitous coincidence cannot be considered to constitute an obvious solution to the above technical problem.

- 5.12 It follows that, starting from D6 as closest prior art, the subject-matter of claim 1 is not rendered obvious by D6 or D9/D3.
- 5.13 The appellant did not raise any other objection with regard to the subject-matter of claim 1.
- 5.14 The Board concludes that the subject-matter of claim 1 of auxiliary request 3 involves an inventive step (Article 56 EPC).
6. Thus the patent can be maintained on the basis of this set of claims. No amended description has been provided that is linked to this set of claims. Accordingly, the Board remits the case to the department of first instance in order for the description to be adapted to the amended claims of auxiliary request 3.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the department of first instance with the order to maintain the patent with claims 1 to 9 of auxiliary request 3 filed with letter dated 8 September 2017 and a description to be adapted.

The Registrar:

The Chairman:



M. H. A. Patin

T. Rosenblatt

Decision electronically authenticated