DECISION of 4 April 2003

Case Number: T 0423/00 - 3.2.6
Application Number: 92925155.1
Publication Number: 0617602
IPC: A61F 13/15
Language of the proceedings: EN

Title of invention:
Absorbent article having fused layers

Patentee:
THE PROCTER & GAMBLE COMPANY

Opponent:
SCA Hygiene Products AB
Kimberly-Clark Corporation

Headword:

Relevant legal provisions:
EPC Art. 54, 84, 123

Keyword:
"Clarity (main request) (no)"
"Auxiliary request (yes)"
"Allowability amendments (main request) (no), (auxiliary request) (yes)"
"Novelty (claim 1, auxiliary request) (yes, in respect of the two documents considered in the decision under appeal)"
"Remittal to first instance (yes)"

Decisions cited:
T 1067/97, T 0284/94

Catchword:
-
Case Number: T 0423/00 – 3.2.6

DECISION
of the Technical Board of Appeal 3.2.6
of 4 April 2003

Appellant: THE PROCTER & GAMBLE COMPANY
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 27 March 2000 revoking European patent No. 0617602 pursuant to Article 102(1) EPC.

Composition of the Board:

Chairman: P. Alting van Geusau
Members: H. Meinders
         M. Vogel
Summary of Facts and Submissions

I. European Patent No. 0 617 602, granted on application Nr. 92925155.1, was revoked by the Opposition Division by decision posted on 27 March 2000. It based the revocation on the finding that claim 1 of the patent as amended according to the main request did not comply with Article 123(2) and (3) EPC. The subject-matter of claim 1 according to the auxiliary request lacked novelty in respect of either disclosure:

D5: EP-A-0 304 617 or


Claim 1 of the second and third auxiliary requests failed to meet the requirements of Articles 123(2) and 84 EPC and Article 123(2) EPC, respectively.

II. The Appellant (Patentee) both filed a notice of appeal against this decision and paid the appeal fee on 1 April 2000. On 25 July 2000 the grounds of appeal were filed.

III. Oral proceedings were held on 4 April 2003.

The Appellant requested that the decision under appeal be set aside and the patent be maintained in amended form according to a main request or an auxiliary request, both as filed during the oral proceedings. In case the Board would decide to only examine the formal allowability of the claims of these two requests and the novelty of their subject-matter, it requested
remittal of the case to the first instance for further prosecution.

Respondents 01 and 02 (Opponents 01 and 02) requested dismissal of the appeal.

IV. Claim 1 of the patent according to the main request reads:

"An absorbent article (20) comprising a liquid pervious apertured thermoplastic film topsheet (28), having apertures (29), a liquid impervious backsheet (30) having a garment facing face and being joined to said topsheet (28), and an underlying layer (34) having a thickness and being liquid pervious, and preferably also being absorbent, positioned between said topsheet (28) and said backsheet (30), said topsheet is fused to said underlying layer (34) at individual bonded areas (44), said individual bonded areas (44) penetrate the topsheet (28) and at least part of the way into the thickness of said underlying layer (34) without penetrating the garment-facing face of said backsheet (30), and at least some of said bonded areas (44) provide structures with drainage passageways for liquids to pass through to said underlying layer (34); wherein said absorbent article (20) is characterised in that:

said underlying layer (34) is a fibrous acquisition layer (34) and

said topsheet (28) and said underlying layer (34) have an average peel strength when measured on a sample of 2,5 cm x 15 cm (1" x 6") of at least 50 g/2,54 cm
(g/inch), and preferably of at least 65 g/2,54 cm (g/inch), and said individual bonded areas (44) are spaced further apart than the apertures (29), measured in the shortest distance between the bonded areas."

Claim 1 of the patent according to the auxiliary request reads:

"An absorbent article (20) comprising a liquid pervious apertured thermoplastic film topsheet (28), having apertures (29), a liquid impervious backsheet (30) having a garment facing face and being joined to said topsheet (28), and an underlying layer (34) having a thickness and being liquid pervious, and preferably also being absorbent, positioned between said topsheet (28) and said backsheet (30), said topsheet is directly fused to said underlying layer (34) at individual bonded areas (44), said individual bonded areas (44) penetrate the topsheet (28) and at least part of the way into the thickness of said underlying layer (34) without penetrating the garment-facing face of said backsheet (30), and at least some of said individual bonded areas (44) provide structures with drainage passageways for liquids to pass through to said underlying layer (34); wherein said absorbent article (20) is characterised in that:

said underlying layer (34) is a fibrous acquisition layer (34) and

said topsheet (28) and said underlying layer (34) have an average peel strength when measured on a sample of 2,5 cm x 15 cm (1 inch x 6 inches) of at least 50 g/2,54 cm (g/inch), and preferably of at least 65 g/2,54 cm (g/inch), and
said individual bonded areas (44) have a circular plan view shape and are spaced apart between 5 mm and 16 mm, this spacing being measured in the direction of the shortest distance between individual bonded areas, and said individual bonded areas are spaced further apart than the apertures (29)."

V. In support of its requests the Appellant argued essentially as follows:

Main request:

Claim 1 according to the main request now included the feature of the underlying layer being a fibrous acquisition layer, which overcame the objection raised pursuant to Article 123(2) EPC in the decision under appeal against the then valid main request. It no longer comprised the feature of the bonded areas being spaced apart between 5 mm and 16 mm, to which the opposition division had also raised an objection pursuant to Article 123(2) EPC.

It had further reintroduced the word "and" in the phrase "penetrate the topsheet and at least part of the way into ...", which deletion the opposition division considered to be infringing Article 123(3) EPC.

Defining the spacing between the bonded areas as being measured in the direction of the shortest distance between them (and thus rim to rim) overcame the objections of the Respondents pursuant to Article 83 EPC (sufficiency of disclosure of the way in which the distance between the bonds should be measured). It was
not necessary to include the further limitation of the individual bonded areas being in a regular or even only in a diagonal pattern as argued by the Respondents and as required by the opposition division in the decision under appeal (for the then existing second and third auxiliary request), as such patterns were only mentioned in the patent in suit as being preferable embodiments of the invention. For the same reason it was not necessary to limit the claim to a certain shape (circular, with certain diameters) or to the combination of larger and smaller bonds.

As regards the average peel strength, it was evident that the skilled person, when determining this parameter, would provide for a regular pattern of the individual bonded areas and cut the samples as now defined in the claim in such a way that the same amount of bonded areas would be present in each sample and that these areas would be in identical locations on each sample.

Auxiliary request:

If the Board were to consider valid the argumentation of the Respondents based on inconsistency of claim 1 with the embodiments of Figure 13 relating to the bonded areas being in the form of (intersecting) lines, the Appellant would agree to deletion of these embodiments from the description.

In that case claim 1 fulfilled the requirements of Articles 123(2) and 84 EPC in respect of the feature added to this claim: "said bonded areas have a circular plan view shape and are spaced apart between 5 mm and
16 mm". The opposition division had raised an objection against this amendment in the decision under appeal (again in respect of the then existing second and third auxiliary requests), for the reason of isolating some features from an embodiment disclosed as a combination of features. It should, however, suffice that the direction of measurement of the spacing was now defined as being along the direction of the shortest distance between individual bonded areas of circular plan view shape and that this spacing was within certain numerical limits. As already stated for the main request, it was not necessary to limit the claim further by including references to the pattern being regular, the bonds including smaller and larger sized bonds or the bonds having a certain diameter, as such features had only been mentioned as preferred embodiments, not as features functionally or structurally linked to the above mentioned added feature.

In respect of D5 and D12, upon each of which the opposition division had based its objection for lack of novelty of the subject-matter of claim 1, it submitted the following:

In comparison with D12 the subject-matter of claim 1 was novel, as the booster liner disclosed in that document had a polyethylene topsheet with an EVA layer which was used as a hot melt adhesive to provide the bonding with the underlying absorbent layer, thus there was no direct fusing of the topsheet to that layer, as now claimed. Further, there was no impervious backsheet in a booster liner, as such articles were to be used together with an existing sanitary napkin, to provide
transmission to the underlying sanitary napkin. The daisy pattern shown in D12 was not identical with the circular plan view shape for the bonded areas as now claimed, nor was the claimed spacing disclosed in D12.

As concerns D5 the subject-matter of claim 1 was also novel, as the fibrous material which was considered to be the underlying layer was flocked onto the topsheet, thus had no structural integrity as required for an underlying layer as claimed. Further, there were no bonded areas providing structures with drainage passageways, nor the numerical values for the spacing, as now claimed.

VI. In response to the Appellant's submissions The Respondents essentially brought forward the following:

Main request

Sufficiency of disclosure (Article 83 EPC) as well as clarity of the claim (Article 84 EPC) and inadmissible amendment (Article 123(2) EPC) were still at issue, as the manner in which the spacing was measured (rim-to- rim or center-to-center) was not disclosed, particularly not if the apertures and the bonded areas were disposed irregularly. This was all the more the case for the embodiments of Figure 13 of the patent in suit, which showed bonding areas in the form of (intersecting) lines, which simply could not have the spacing as claimed. The fact that these lines could be intermittent lines, thus comprising a plurality of bonded areas extending along the line and the spacing thus being measured in the direction of the line, was only a preferred embodiment of the patent in suit. If
any spacing was mentioned in the original application documents, it was only in connection with a regular pattern in the form of diagonal lines, the bonded areas being circular in shape. In a different context (US-A-4 772 444), but also for a pattern of apertures, the patentee used the center-to-center distance, thus it was not self-evident that a rim-to-rim spacing was the only possibility.

Respondent 02 argued in addition that consistency with and support in the description (Article 84 EPC) was at stake in view of the materials suggested in the patent in suit for the "liquid pervious apertured thermoplastic film topsheet", which not necessarily involved a thermoplastic film, but could also be a woven or a nonwoven material, foams, scrims, etc. The skilled person would not consider such materials to fall under the presently claimed topsheet.

Further, Respondent 02 submitted that due to:

- the large number of possible combinations of materials for the apertured topsheet and the underlying layer, as mentioned in the patent in suit, and

- the indication that all known fusion bonding techniques were suitable for fixing the topsheet to the underlying layer,

it was implausible that the claimed peel strength thresholds were critical. The patentee also admitted this by indicating in the patent in suit that there could be embodiments for which these values were not
reached. The claimed feature thus was only an arbitrary wish, not a technical teaching which could properly be followed by the skilled person. No single example of a specific combination of materials resulting in the claimed peel strength was given in the patent in suit.

Finally, the way in which the samples were to be cut from the article for testing the peel strength was not sufficiently disclosed in the patent in suit; even with a regular pattern of bonded areas each of the resulting samples could have a different number of such areas, which further would not necessarily be identically located on each sample. Thus, with the present possibility of even an irregular pattern or the bonded areas being lines, the measurement of the peel strength values became virtually impossible.

**Auxiliary request**

The arguments of the Respondents against claim 1 of the main request were also brought forward in respect of claim 1 of the auxiliary request.

Novelty was put into question, according to the Respondents, by D5, which was relevant due to its mention of the peel strength being an important factor for the connection between topsheet and the underlying layer. The feature of the underlying layer having its own integrity did not figure in present claim 1, thus could not distinguish its subject-matter from the disclosure of the absorbent layer 7 in D5. Further, this layer could, according to D5, be a nonwoven, thus it would in any case be a layer. There were two apertures in each bonded area, and the bonded areas had
a spacing between them which was larger than the spacing between two apertures within one bonded area, thus that claimed feature could not distinguish claim 1 over D5's disclosure. The claimed specific spacing was implicitly disclosed in D5.

**Reasons for the Decision**

1. The appeal is admissible.

2. *Main request - amendments - clarity (Article 84 EPC)*

2.1 Claim 1 as granted has been amended on appeal so as to include the feature that the "individual bonded areas are spaced further apart than the apertures, measured in the shortest distance between the bonded areas".

The description of the patent in suit, column 16, lines 29 to 34; column 21, lines 12 to 41 and Figures 13B to 13D refer to embodiments in which the bonded areas are in the form of continuous lines which intersect. With such bonded areas the indication of a spacing as claimed has no meaning, as such a spacing does not exist, nor is there a "shortest distance" between such lines.

2.2 The Appellant argued that Figures 13B to 13D were to be considered graphic representations of intermittent lines, i.e. consisting of individual bonded areas disposed along a line. In that case there would be support for the claimed feature in the description and the claim would be clear.
The Appellant overlooks the fact that the relevant passage in column 20, line 58 to column 21, line 3 of the patent in suit only mentions intermittent lines as one of the possible embodiments, which also may involve geometrical shapes, graphical patterns, curved or straight lines, etc. There is, however, no indication available that the lines shown in the embodiments of Figure 13 are to be considered such intermittent lines. According to the description and the figures the invention, when relating to the bonded areas being arranged in the form of a line, is therefore not limited to an intermittent line, providing individual bonded areas as claimed.

The subject-matter of claim 1 of the main request is therefore unclear when read in conjunction with the description (Article 84 EPC).

3. **Main request - amendments - Article 123(2) EPC**

3.1 The question also arises whether this amendment in claim 1 as granted ("... individual bonded areas are spaced further apart than the apertures, measured in the shortest distance between the bonded areas..."") fulfils the requirements of Article 123(2) EPC.

The original application documents, page 26, second paragraph, provide the only mention of the bonded areas being spaced further apart than the apertures: "The bonds 44 are typically spaced further apart than the apertures 29 in the topsheet 28." The spacing being measured in the shortest distance between the bonded areas finds its origin in the first paragraph of page 26: "This spacing is measured in the direction of the shortest distance between the bonds". However, in
the view of the Board these two features do not stand on their own, but relate directly to the mention in the sentence preceding the latter phrase: "The bonds are preferably spaced between about 5 mm and about 16 mm apart, more preferably between about 5 mm and about 8 mm apart."

3.2 According to the case law of the Boards of Appeal, see e.g. T 1067/97 (not published in OJ EPO) and T 284/94 (OJ EPO 1999, 464), it is normally not admissible under Article 123(2) EPC to extract isolated features from a set of features which has originally been disclosed in combination for a certain embodiment, except where there was no clearly recognisable functional or structural relationship among said features.

In the present case the essence of the invention lies in the **average peel strength** of the topsheet and the underlying layer being above a certain level. In such a case it is evident that there is a functional and structural relationship between the feature of the bonds being spaced further apart than the apertures and of the specific size of the spacing. Such features essential to the invention cannot be separated.

3.3 Claim 1 of the main request therefore fulfils neither the requirements of Article 123(2) nor of Article 84 EPC.

For the reasons mentioned above the main request is therefore not allowable.
4. Auxiliary request - Amendments- Article 123(2) and (3) and Article 84 EPC

4.1 According to the auxiliary request the following features (in bold) have been added to claim 1 as granted, which are in accordance with the requirements of Article 123(2) EPC (in brackets the basis in the original application documents):

... liquid pervious apertured thermoplastic film topsheet, having apertures (page 10, second paragraph and page 45, fourth paragraph);

... said topsheet is directly fused to said underlying layer at individual bonded areas (page 16, last paragraph and page 24, last paragraph);

... said underlying layer (34) is a fibrous acquisition layer (34) (page 13, second paragraph - page 22, first paragraph);

said topsheet (28) and said underlying layer (34) have an average peel strength when measured on a sample of 2.5 cm x 15 cm (1 inch x 6 inches) of at least 50 g/2.54 cm (g/inch), and preferably of at least 65 g/2.54 cm (g/inch) (page 24, fourth paragraph);

said individual bonded areas (44) have a circular plan view shape and are spaced apart between 5 mm and 16 mm, this spacing being measured in the direction of the shortest distance between individual bonded areas, and said individual bonded areas are spaced further apart than the apertures (29) (page 25, first paragraph - page 26, second paragraph).
4.2 In claim 1 has been deleted the word "preferably" in the phrase "the underlying layer having a thickness and preferably being liquid pervious", which makes a previously optional feature now an obligatory feature. This does not infringe Article 123(2) EPC either.

The amendments all amount to a further limitation of the subject-matter of claim 1, thus also the conditions of Article 123(3) EPC are fulfilled.

The amendment to the underlying layer being a fibrous acquisition layer as well as the reintroduction of the word "and" in the phrase "... penetrate the topsheet and at least part of the way into the topsheet..." both overcome objections of the opposition division which led to the decision under appeal.

The inclusion of the specific size of the spacing between bonded areas overcomes the objection made by the Board against the main request (see point 3.1 above).

4.3 In the decision under appeal the opposition division had objected to the inclusion of feature of the 5 to 16 mm spacing between the individual bonds, their circular plan view shape and the fact that individual bonded areas were spaced further apart than the apertures as infringing Article 123(2) EPC, as these features had only been disclosed in combination with other features. This combination was namely the embodiment of Figures 1, 2 and 8, i.e. "an absorbent article having a plurality of bonds arranged in a pattern, having smaller and larger bonds, wherein the bonds have a certain diameter etc. (see column 16, line 35 to column 29)". In view of the same objection having been raised twice in the
The Board cannot support the view of the opposition division nor that of the Respondents in this respect. From the original application documents as well as the patent it is clear that the arrangement of the bonded areas is not limited to the embodiment of Figures 1, 2 and 8 referred to. This is derivable from pages 25, 26 and 31 of the original application documents, which refer to each of these allegedly missing features: regular pattern, the bonds in diagonal lines, the bonds being large as well as small, the bonds having certain diameters, etc. as preferred embodiments of the invention, without being linked functionally or structurally with the features now included in claim 1.

In the decision under appeal the opposition division also found the amendments to be infringing Article 84 EPC in respect of the range of values for the spacing between the bonded areas which did not clearly define the configuration of the bonded areas nor of the manner in which this distance should be measured.
The Board finds that since the manner of measurement is now defined as being in the direction of the shortest distance between individual bonded areas, this objection is no longer valid. This distance is measured in the direction of the shortest distance, i.e. between the rims of the bonded areas/apertures. In this respect the reference to US-A-4 772 444 is no longer relevant.

In point 4.4 it has already been explained that the invention is not limited to a pattern, i.e. a specific configuration, of the bonded areas. For the sake of clarity it is also not necessary to incorporate this in the claim, as the present wording is clear: each and every shortest distance between the rims of two adjacent bonded areas should be in the range claimed and all bonded areas should be spaced further apart than the apertures.

4.6 The presently claimed circular plan view shape of the bonded areas excludes all embodiments which involve bonded areas in the form of continuous lines as shown in Figure 13. Thus the claim is now clear. The question of consistency between the wording of the claims and the description (Article 84 EPC) caused by this amendment is to be addressed if the patent is to be maintained in amended form, with an adapted description. The Appellant has indicated its willingness to such modifications (see point V, "Auxiliary request").

4.7 The amendments to the dependent claims 2 to 6 involve mere clarifications which have a basis in the original application documents, without extending the protection conferred. All amendments to the claims therefore fulfil the requirements of Article 123(2) and (3). The
claims in their amended form fulfil the requirements of Article 84 EPC.

5. **Sufficiency of disclosure - Article 83 EPC**

5.1 Since the spacing between bonded areas/apertures is now measured in the direction of the shortest distance between individual bonded areas, which implies for the skilled person that the spacing of the apertures is measured in the same way, the invention is disclosed in the patent in suit in a manner sufficiently clear for it to be carried out by the skilled person.

The method of determining the peel strength can be found in columns 32 to 34 of the patent in suit. The embodiments involving the bonded areas in the form of lines no longer fall under the terms of claim 1 (see point V and 4.6 above), thus the objection of Respondent 02 that the peel strength measurement was rendered useless in case of bonded areas in the form of a line or lines is no longer relevant.

5.2 The disclosure of the manner of cutting of the samples was insufficient, according to the Respondents, because the patent did not state how the samples should be cut in connection with the location of the bonded areas. They could be cut in any kind of manner, thus including none, one or even a plurality of bonded areas. The skilled person would end up with greatly differing results, thus without any proper indication of whether he actually had arrived at the product claimed.
The Board agrees with the Appellant in that on the basis of the information in the patent in suit a skilled person would firstly choose a regular pattern of individual bonded areas and secondly would make sure that each and every sample would have the same number of bonds, located at the same place in each sample, otherwise the peel strength test would not make sense. The direction in which the samples are to be cut is not arbitrary, having been described as being either in the cross- (CD) or in the machine-direction (MD).

5.3 Respondent 02 presented the argument that the very large number of possible combinations of topsheet and underlying layer, as mentioned in the patent in suit, combined with the indication that all fusion bonding techniques were suitable, made it implausible that the claimed peel strength could be arrived at for all these combinations.

Present claim 1 is limited to a liquid pervious apertured thermoplastic film topsheet having apertures, which excludes:

- woven and nonwoven materials,
- apertured plastic films,
- hydro-formed films,
- porous foams,
- reticulated foams,
thermoplastic scrims, (see column 6, lines 43 to 55, column 7, line 17 to column 9, line 10), as they do not result in an apertured thermoplastic film topsheet having apertures going through and through the topsheet;

an apertured thermoplastic film covered on the body side with an (unapertured) nonwoven material, see column 7, lines 27 to 32 and Figure 16, as it results in a topsheet without the apertures going through and through the topsheet;

the above materials insofar as discussed in the patents referred to in column 7, lines 17 to 27 and 32 to 37;

the fiber entangling of the thermoplastic film as discussed in column 7, line 38 to column 9, line 10, as the apertures are not going through and through the topsheet;

the scrim with hydro-entangled nonwoven fibers as discussed in column 15, line 21;

the unapertured film of column 30, lines 20, 21 of the patent in suit.

Thus the number of possible topsheet materials is already considerably reduced.

5.4 The claim further specifies the underlying layer as being a **fibrous acquisition layer**, to which the topsheet is directly fused to arrive at the claimed peel strength. This excludes the following materials:
- loose fibers, which lack consistency (column 10, line 21 and line 56 to column 11, line 5) and cannot be tested with the peel strength testing method as described;

- which are indirectly fused to the topsheet (column 11, line 11);

- which are part of the topsheet (column 11, line 17 and column 22, lines 32 to 35), or

- which are simple meltblown or carded nonwovens (i.e. without additional bonding of the nonwovens themselves), see column 14, lines 45 to 54;

- which are not capable of being fused or are not fused to the topsheet (column 12, line 55, column 15, lines 38 to 40).

The above limits the number of possible materials for the acquisition layer.

5.5 The fusion bonding methods discussed in the patent in suit are methods known to the skilled person.

Specific materials for the topsheet and the acquisition layer have been mentioned in the patent in suit, see the patents mentioned in column 7, lines 17 to 27, insofar as they relate to apertured thermoplastic films or apertured formed thermoplastic films for the topsheet and the patents mentioned in columns 12 and 13 for the acquisition layer.
In view of the above the Board is of the opinion that the skilled person will be able to carry out the invention on the basis of the information in the patent in suit.

5.6 The requirements of Article 83 EPC are thus fulfilled for the invention as claimed in claim 1.

6. Substantive examination

In the decision under appeal the Opposition Division came to the conclusion that none of the requests presented during the opposition proceedings were acceptable, as they did not comply with the requirements of either Article 123, Article 84 or Article 54 EPC.

Since a complete substantive examination has not yet been carried out, the Board considers that it should make use of its powers pursuant to Article 111(1) EPC to remit the case to the first instance for further prosecution, if a set of claims is available which overcomes the objections raised in the decision under appeal.

In respect of the examination as to novelty (Article 54 EPC) the Opposition Division found D5 as well as D12 novelty destroying for the subject-matter of claim 1 of the first auxiliary request then on file. The Board will therefore limit the examination of novelty of the subject-matter of claim 1 to these two documents, to allow for a two-instance examination of the issue of novelty in respect of the other state of the art in the file as well as of inventive step.
7. **Novelty of the subject-matter of claim 1 in respect of D5 and D12 - Article 54 EPC**

7.1 The absorbent article of D12 involves a liquid pervious apertured thermoplastic film (polyethylene) topsheet which is apertured, fixed to an underlying layer of nonwoven material by the melting of the EVA layer, coextruded with the polyethylene layer. Thus there is no **direct fusing** of the topsheet to the underlying layer. The further differences between the subject-matter claimed in claim 1 and this disclosure are:

- the circular plan view shape of the bonded areas;

- the size of the claimed spacing.

Contrary to the Appellant the Board finds there is a backsheet present, either in the form of the protective release strip 20, or by the backsheet of the sanitary napkin to which the liner of D12 will be attached.

7.2 As concerns D5, this document discloses the claimed requirement of the peel strength between the topsheet and the underlying layer only for the film layer 5 and the fiber layer 6, not for a perforated topsheet comprising film layer 5 together with fiber layer 6, fixed to an underlying fiber layer 7.

According to D5, the film layer 5 and the fiber layer 6 should be integrated with each other as firmly as possible to achieve this peel strength (page 8, lines 30 to 34). This integration can be achieved in two ways (page 6, lines 47 to 55):
integrating a film free of openings with a fiber layer by means of thermal adhesion and perforating the resulting integral structure,

- perforating the film layer first to create a three dimensional side pore film and integrating the fiber layer with such a layer by thermal adhesion.

7.3 In the first mentioned process the film and the fiber layer are integrated in the step of melt-extruding a starting resin to prepare a film. This is done by "dry thermal adhesion", see page 22, line 7, thus the topsheet is fused over its entire surface to the underlying fiber layer.

According to D5 the perforation is thereafter done by embossing rollers (page 22, lines 6 to 9) to form a predetermined opening region. This results in individual areas which penetrate the topsheet and the underlying layer without penetrating the garment facing face of the backsheet of the absorbent article to which this topsheet and underlying layer are fixed. These areas provide structures with drainage passageways for liquids to pass through to said underlying layer, as the two layers are bonded together these areas are individual bonded areas as claimed in claim 1.

According to Figures 11 to 13 they have a circular plan view shape.
What D5 does not disclose or imply is the spacing of these individual bonded areas, thus also does not allow an assessment whether the spacing of the bonded areas is larger than the spacing of the apertures provided by the perforation.

7.4 How exactly the underlying fiber layer is connected to the three dimensional perforated film layer resulting from the second mentioned process is not disclosed in D5. The only mention is to thermal adhesion (page 6, line 54). Thus it is not clear whether individual bonded areas which penetrate at least part of the way into the underlying fiber layer will result as claimed. Even if that were the case, the claimed spacing is not disclosed nor implied, nor is there any information about the spacing of the apertures achieved by perforation so as to compare it with the spacing of the bonded areas.

7.5 Thus the subject-matter of claim 1 is novel over D5 as well as D12.

The subject-matter of dependent claims 2 to 8 is for preferred embodiments of the absorbent article of claim 1 (Rule 29(3) EPC), thus also fulfils the requirements as to novelty in respect of these two documents. Independent claim 9 has not been addressed in the decision under appeal, is therefore not under examination of the Board.

The claims of the auxiliary request overcome the objections raised in the decision under appeal, thus the case is to be remitted to the opposition division for further prosecution.
8. If in this further prosecution a version of the claims ensues, which allows maintenance of the patent in amended form, the opposition division should ensure that the changes which are necessary (see points V, 4.2, 5.4 and 5.5), to bring the description in line with the claims insofar as these have been discussed in this decision, are carried out by the Appellant.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance for further prosecution.

The Registrar:       The Chairman:

M. Patin            P. Alting van Geusau