Datasheet for the decision of 17 November 2006

Case Number: T 1408/04 - 3.2.06
Application Number: 98930276.5
Publication Number: 0988015
IPC: A61F 13/15
Language of the proceedings: EN
Title of invention: Absorbent interlabial device
Patentee: THE PROCTER & GAMBLE COMPANY
Opponent: Kimberly-Clark Corporation
Headword: -

Relevant legal provisions: EPC Art. 123(2), 84, 56, 114(2)

Keyword:
"Main request - intermediate generalisation (yes)"
"First auxiliary request - inventive step - age of prior art document not relevant in this case"
"Second auxiliary request - not admitted"
"Third auxiliary request - intermediate generalisation (no)"
"Fourth auxiliary request - inventive step (yes)"

Decisions cited:
T 0190/99, T 0412/91, T 0334/92, T 0964/92, T 1077/92

Catchword: -
Case Number: T 1408/04 – 3.2.06

DEcision
of the Technical Board of Appeal 3.2.06
of 17 November 2006

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Decision under appeal:
Decision of the Opposition Division of the European Patent Office posted 18 October 2004 revoking European patent No. 0988015 pursuant to Article 102(1) EPC.

Composition of the Board:
Chairman: W. Sekretaruk
Members: M. Harrison
G. De Crignis
Summary of Facts and Submissions

I. The appellant (proprietor) filed an appeal against the opposition division's decision of 18 October 2004 revoking European patent EP-B-0 988 015. With the grounds of appeal, maintenance of the patent in an amended form was requested based on the claims of a main request or one of five auxiliary requests.

II. In its reply of 12 September 2005, the respondent (opponent) requested dismissal of the appeal.

III. With the summons to oral proceedings, the Board issued a communication informing the parties of its provisional opinion. Concerning inventive step, the Board indicated inter alia that, despite its age, the most relevant state of the art for considering inventive step appeared to be represented by:

D1: US 2 682 875 (published in 1954)

IV. In its response of 17 October 2006, the appellant replaced all its requests by a new main request and six auxiliary requests, and additionally filed the following documents in regard to inventive step:

D6: US 2 917 049 (published in 1959)
D8: US 3 983 873 (published in 1976)
D9: US 4 175 561 (published in 1979)
V. In the oral proceedings of 17 November 2006, an amended main request and amended first to fourth auxiliary requests were filed.

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

"An absorbent device comprising a liquid pervious topsheet defining the top surface of the device, a liquid impervious backsheet defining the opposite surface of the device and joined to said topsheet, and an absorbent core positioned between said topsheet and said backsheet, characterised in that: said absorbent device is completely insertable into the interlabial space of a female wearer, said absorbent device has a length, a width, a thickness, and a longitudinal centreline, wherein said length of said absorbent device is between 60mm and 127mm, preferably between 85mm and 127mm, said width of said absorbent device is between 25mm and 40mm, said thickness of said absorbent device is less than 6mm, said absorbent device comprises an axis of preferred bending along the longitudinal centre line, such that when said absorbent device is folded along said axis and inserted into the wearer's interlabial space said topsheet of said absorbent device maintains contact with the walls of the wearer's labia."

VII. Claim 1 of the first auxiliary request is the same as that of the main request, except that the preamble reads as follows:
"An absorbent device comprising a liquid pervious topsheet, a liquid impervious backsheet joined to said topsheet, and an absorbent core positioned between said topsheet and said backsheet,"

VIII. Claim 1 of the second auxiliary request is the same as that of the first auxiliary request, with the addition of the following wording at the end of the claim:

"and the backsheet provides protection for the wearer's fingers as the device is removed with the fingers."

IX. Claim 1 of the third auxiliary request is the same as that of the first auxiliary request, except that the preamble reads as follows:

"An absorbent device comprising a liquid pervious topsheet, a liquid impervious backsheet, and an absorbent core positioned between said topsheet and said backsheet, and wherein the edges of the topsheet and backsheet extend outward beyond the edges of the absorbent core and are directly secured to each other along a seam which extends around the entire periphery,"

X. Claim 1 of the fourth auxiliary request is the same as that of the third auxiliary request, with the addition of the following wording at the end of claim 1, after the last mention of the word "labia":

"and wherein the device has a substantially ovoid planar shape."
XI. The appellant's arguments may be summarised as follows:

(a) In regard to the main request in respect of Article 123(2) EPC, the wording introduced into claim 1 concerning the liquid pervious topsheet "defining the top surface of the device" and the liquid impervious backsheet "defining the opposite surface of the device", was implicitly part of the application as filed in particular when taking account of the well-accepted meaning of "topsheet" and "backsheet". Moreover, the embodiment depicted in Figures 1 to 3 also disclosed the normally understood arrangement with a topsheet forming the top surface and a backsheet opposite to this and thus forming the back surface. Additionally, even though these features were depicted in one embodiment of the invention, the structure was clearly not limited to the specific embodiment shown in the drawings. It was also clear from paragraph [0042] of the patent, that the topsheet, backsheet and absorbent core could be "assembled in any suitable manner", so that the situation shown in Figs. 1 to 3 was not limiting and had to be interpreted with this in mind. Further, as stated in e.g. T 190/99, the claims should be read by a "mind willing to understand", in order that a sensible interpretation was applied to the meaning of the amendment when comparing this to the content of the application as filed.

(b) In regard to claim 1 of the first auxiliary request, D1 was not suitable as a starting point to assess inventive step, its filing date being some 45 years before that of the contested patent.
EPO case law in e.g. decisions T 334/92, T 964/92 and T 1077/92 consistently demonstrated that the age of a document was significant in ruling out the use of an old document, in some cases only 20 years or 30 years old, as the closest prior art or for indicating a solution to the problem posed.

D1 was also a non-enabling disclosure and should thus be ignored as explained in e.g. T 412/91. This was because claim 1 of D1 defined, as an essential feature, that the lining was held within a groove. However, in accordance with column 1, line 35 \textit{et seq} and column 2, line 20 \textit{et seq} the lining was held in the groove by the covering (20). Since column 2, lines 20 to 25 described the covering as being highly flexible, the covering could not structurally hold the liner in the groove as required.

To start from D1 would mean an artificial application of the problem/solution approach to inventive step.

If D1 were a suitable starting point, the differences over claim 1 anyway resulted in an inventive step. In terms of the differences of D1 over claim 1, D1 had no "backsheet" since the topsheet extended completely around the rear surface of the liner (22), so that the liner in D1 was not at the "back". The function of a backsheet was stated in paragraph [0037] of the patent, this being clearly different to D1. Additionally the D1 product was not "completely insertable into the interlabial space" as could be seen in Fig. 1.
where the two extremities extended beyond the labia. A further important feature differing over D1 was the thickness "less than 6mm". The thickness dimension "less than 6mm" as claimed was very thin compared to the product in D1, which would be a larger dimension to achieve the required absorbency in the year when D1 was filed. Nothing in the prior art indicated using such a thin dimension. Claim 1 also defined a product which had to be folded, so claim 1 related by implication to a planar product, whereas the D1 product was pre-folded. Regarding the thickness of the device shown in D1, without knowing the exact type of cellulose and without seeing exact experimental data, no conclusion could be drawn as to the thickness of the item in D1.

As opposed to the claimed device, the D1 product substantially filled up the interlabial space allowing it to be held in place. This was a good indication of a thick article and one which functioned entirely differently, somewhat as an absorbent plug. The device of claim 1 on the other hand was very thin and relied on the topsheet's highly hydrophilic nature, rather than a large bulk, to keep it in place on the labial walls so as to perform its protective function.

Paragraphs [0006] and [00053] disclosed the problems to be solved by the invention, these being: easy insertion; comfort when inserted; one product for a variety of user sizes; catching blood clots; effective covering of labial walls; reducing bypassing and thus reduce soiling of the
body and undergarments; fitting while protecting user's fingers. Due to the D1 device structure, it failed to solve these problems or teach a solution as claimed. D1 not only failed to reduce soiling due to its topsheet structure extending around the backsheet, which wicked fluids to the undergarments rather than protecting them, but even relied on wicking of bodily fluids to its outer extremities (column 3, lines 44 to 50). D1 thus clearly did not provide a solution which would reduce soiling.

A solution to these problems, in a way which led to the solution in claim 1, was also not provided by any of the remaining cited prior art, namely:

D2: FR 595 971
D3: US 4 673 403
D4: WO-A-97/18784
D5: US 5 336 208

These prior art documents were equally as unsuitable as D1 for forming a closest prior art starting point for assessing inventive step. D8 or D10 was closer prior art but led the skilled person in a different direction, which underlined the existence of an inventive step.

The question to be asked should be why, if the invention was obvious starting from D1, did it take 45 years to alter the features in D1 to provide the device now claimed? The problem was clearly not merely providing smaller lighter products because in the 1970's it was already
possible to make very thin absorbent products with high absorbency, yet no-one considered providing such an improved product at that time. Also, when considering the trend in technology as shown by e.g. D6 to D11, the skilled person was led away from providing an article as claimed. Thus no incentive existed for a skilled person to consider modifying the D1 type of product, since this was not in line with the skilled person's normal considerations. If arguendo any incentive did exist, it was to modify the D1 device according to D6 to D11 by keeping in step with normal technical development.

The problem mentioned in the Board's communication, regarding a general desire in this technical area to produce smaller and lighter products, was incorrect since the evidence D6 to D11 showed that the skilled person did not have any such general desire but instead considered entirely different solutions to that in D1, possibly because D1 presented old technology, thus requiring a skilled person to go against the normal technological trend.

(c) In regard to the second auxiliary request, the introduced wording "and the backsheet provides protection for the wearer's fingers as the device is removed with the fingers" met the requirement of clarity under Article 84 EPC, since the expression was clear when construed by a mind willing to understand it. Furthermore, in terms of inventive step, this wording defined that the backsheet was at the outside surface, contrary to
the structure and also the function of the device in D1, which necessitated that the topsheet covered the outer surface of the impervious liner.

(d) As regard the third auxiliary request, the requirements of Article 123(2) EPC were met because the embodiment shown in Figures 1 to 3 was not limiting for the invention, as was evident from paragraph [0042]. The amendment introduced was thus applicable to a more general definition of the invention.

In terms of inventive step, and with D1 as a starting point, no cited prior art indicated a solution that was combinable without inventive skill with D1 to thereby arrive at the claimed solution. In particular whilst D3 showed a topsheet/core/backsheet structure per se, it was not an interlabial pad as claimed. Also, the D1 and D3 structures were entirely incompatible. Moreover, as claim 1 related to a planar product, D1 and D3 were not appropriate prior art for considering inventive step since they related to pre-folded products only.

(e) In claim 1 of the fourth auxiliary request features from granted claim 8 were introduced. This removed any doubt regarding the fact that the absorbent device was planar. Claim 1 as amended was now very distant from D3 in particular, but also D1. D1 and D3 could not be combined to arrive at a solution as in claim 1. No other cited prior art disclosed or led towards the product shape defined in claim 1.
XII. The respondent's arguments may be summarised as follows:

(a) The terminology introduced into claim 1 was an intermediate generalisation of the original disclosure, because a topsheet defining the top surface and a backsheet defining the opposite surface was only disclosed in the embodiment of Figures 1 to 3 and not generally applicable to the broad definition of the device according to the other features of claim 1. This embodiment distinctly showed a separate top sheet and a separate backsheet joined in a sandwich structure around a continuous peripheral seam, yet none of these features were defined, thus clearly showing the generalisation made. The terminology as such was also not generic to all topsheet and backsheet absorbent devices, since configurations were known in which the topsheet overlapped the backsheet, as shown in D1. Likewise paragraph [0039] of the patent disclosed composites with a nonwoven layer over an impermeable material but still forming a "backsheet". It was also not clear (Article 84 EPC) what was to be understood in claim 1 by the backsheet defining an "opposite surface" to the "top surface of the device", especially if this were to be used as a way to distinguish claim 1 over D1.

(b) As regard claim 1 of the first auxiliary request, the foraminous covering and liner in D1 corresponded to the topsheet and backsheet in claim 1. These features were thus not novel. In regard to the length dimension defined as "between
60mm and 127mm", the extremities of the device in D1 which protruded from the labia were not part of "the device", because the device had to be "completely insertable into the interlabial space"; claim 1 had to be interpreted in this way because the patent at paragraph [0074] proposed the addition of removal devices such as strings or loops which were clearly also not inserted completely into the interlabial space. Thus, the only difference over D1 was the thickness of the product being defined as "less than 6mm", whereas in D1 the thickness dimension was not explicitly defined.

If the testing method for thickness (paragraph [0021] of the contested patent) were applied to the product shown in Fig. 1 of D1, it might be expected that the dimension of "less than 6mm" in claim 1 would be more or less fulfilled, especially since D1 at column 12, line 12 et seq indicated a loose packing of the cellulosic material which would allow it to collapse easily from its depicted form. While the dimension in D1 could be larger than 6mm, choosing a dimension up to 6mm was merely a routine implementation of D1. Moreover D1 solved all the problems mentioned in the patent. Likewise, if the technical problem to be solved starting from D1 were to be the implementation of D1 using modern methods and materials, which thus followed the general trend of making absorbents lighter and smaller, it would be evident that a product under 6mm thickness would necessarily result, especially under the rigorous thickness test conditions disclosed using
a gauge load of 1.7 kPa. It was also obvious to a skilled person that, especially with interlabial products, the thinner the product the more comfortable it was, which gave a further incentive to produce the interlabial product of D1 with less than a 6mm thickness, especially as modern materials can easily meet the absorbency needs at such thickness values.

The age of D1 was irrelevant. The reasons why the D1 product was not developed further in 45 years could merely be due to the perceived market for interlabial pads and consumer choice which steered development focus, which was the case. When choosing a suitable starting point for a problem/solution approach to inventive step, D1 was clearly ideally suited as it solved the same problem in the same way as in the patent (see D1, column 3, lines 32 to 39).

Contrary to the appellant's view, D1 was an enabling disclosure. The covering layer was tightly bound around the absorbent core and the liner and thus the pad behaved as a single unit as shown in e.g. Fig. 3. This arrangement held the liner in the groove as stated. Thus a skilled person would have no difficulty with carrying out the disclosure of D1.

(c) Regarding claim 1 of the second auxiliary request, this was filed for the first time during proceedings and was thus late filed and not immediately allowable. Firstly, the amendment was unclear since the terminology "provides
"protection" did not define any clear structure and it was not clear in which way and to what extent protection was provided. Secondly, the introduced features provided no further difference over D1, since in D1 the backsheet in the form of liner 22 also provided such protection. Thus the reasons for lack of inventive step applicable to the first auxiliary request would remain unchanged.

(d) In claim 1 of the third auxiliary request, the introduced terminology from paragraph [0042] was an intermediate generalisation since it referred to the specific embodiment shown in Figures 1 to 3, which had further features such as an oval planar pad. Furthermore, the many possibilities contained within the patent description when viewed together with the introduced wording and the wording already in claim 1, together defined sets of entirely new subject matter. Applying the novelty test emphasised this; there was for example no disclosure of a topsheet and backsheet joined around the periphery along a seam together with the feature of a composite backsheet as known from paragraph [0039] of the patent.

Concerning inventive step, the problem to be solved over D1 was to find a suitable modern method of manufacture of the D1 product. Use of the topsheet/core/backsheet sandwich structure of D3 was clearly ideally suited and indeed the most common method used in the art. D3 was the same general type of device as in D1, as was clear from e.g. column 1, lines 5 to 17 and lines 39 to 48 and column 3, lines 51 to 56 and column 4,
lines 18 to 21. Applying the D3 method to the D1 device would involve omitting the twisted end extremities of the D1 device, but the edge seal benefits outweighed any disadvantage of such omission.

(e) With respect to the fourth auxiliary request, the objection under Article 123(2) EPC made against the third auxiliary request remained unaltered. There was nothing to add on inventive step matters.

Reasons for the Decision

1. Main request

The terminology introduced into claim 1 to further limit the topsheet and backsheet positions, namely "a liquid pervious topsheet defining the top surface of the device, a liquid impervious backsheet defining the opposite surface of the device", is not disclosed expressis verbis in the filed application. A topsheet forming the top surface and a backsheet forming the opposite surface is however disclosed as part of Figures 1 to 3, but the disclosure of these elements cannot be seen in isolation since the topsheet and backsheet are depicted only in a form where the peripheral edges of each extend beyond the core where they are joined along a seam extending around the periphery.

The appellant also wished to rely on paragraph [0042] of the patent (which corresponds to page 13, second paragraph of the filed application) as providing a
disclosure of the introduced features. Paragraph [0042] discloses merely that the components of topsheet, backsheet and core "can be assembled in any suitable manner". For interpreting claim 1 as granted this covered a very broad range of possibilities, without being specific to any particular type of arrangement. However, when limiting the claim to a specific arrangement, the limitation must be restricted to what is unambiguously disclosed to a skilled person taking into account the skilled person's general knowledge. In this case, the only unambiguous disclosure of a device in which the topsheet can be said to define the "top surface" and the backsheet to define the "opposite surface" is in the embodiment of Figures 1 to 3, where these features appear only together in a specific joined relationship. Thus whilst the skilled person could possibly arrive at other arrangements where a topsheet/backsheet structure did not require this specific joined relationship, no such other arrangements are disclosed.

Claim 1 as granted indeed covers a multitude of possibilities for topsheet/backsheet structures, including those where the topsheet does not define the top surface (e.g. when a backsheet is extended upwards and wrapped over the sides and upper edges of a top sheet, leaving only a central portion of the topsheet exposed) or where the topsheet defines the top surface but where it may also extend partially or fully around a back sheet. Thus it is clear that from the broad range of topsheet/backsheet structures within the scope of claim 1 as granted, a specific selection has now been made. To avoid an intermediate generalisation (i.e. an undisclosed combination of selected features
lying somewhere between an originally broad disclosure and a more limited specific disclosure), all necessary features of the specific selection must be included in the claim. The selection in this case comes from the drawings, which however also show a particular (albeit commonly used) type of topsheet/backsheet connection. This particular connection is however lacking from the claim. Thus an intermediate generalisation is present.

The Board also does not agree with the appellant's argument that an intermediate generalisation has not occurred because a topsheet defining a top surface and backsheet defining the opposite surface of a device simply reflects the normal wording used to indicate the well understood meanings of these terms. As mentioned in the foregoing paragraph, absorbent products are indeed known where the topsheet and backsheet do not necessarily define the top and opposite surfaces of the device, such that an alleged "well understood meaning" according to the appellant does not apparently exist, nor has any evidence been submitted to suggest that it does.

In terms of the appellant's reference to T 190/99, the Board agrees that the claims must be interpreted by a "mind willing to understand" and not by "a mind desirous of misunderstanding". However, this is understood to mean only that technically illogical interpretations should be excluded (see e.g. item 2.4 of the Reasons in T 190/99). As stated in the foregoing, the terms "backsheeth" and "topsheeth" have wider technical interpretations than envisaged by the appellant. Furthermore the appellant has provided no evidence that the meaning which it alleges should be
assigned to the terms "topsheet" and "backsheet" are the only technically logical interpretations of these terms. Additionally, the Board concludes that a "mind willing to understand" does not require that a broad term needs to be interpreted more narrowly (even if, as in the present case, the narrow interpretation would refer to a topsheet/backsheet structure which is very common, but not exclusive, in the technical field concerned), but instead that a broad term should be interpreted with regard to all technically logical interpretations thereof.

The Board consequently concludes that the amendment made to claim 1 results in an intermediate generalisation of the original disclosure and therefore that the subject matter of claim 1 does not meet the requirements of Article 123(2) EPC.

2. First auxiliary request

The first matter to be decided is whether D1 forms an appropriate starting point for assessing inventive step. In this regard, it is noted that the device of D1 operates in the same general manner as the device of claim 1 (see D1, column 3, lines 18 to 43). Here it is explained that the entire device, with the exception only of the extremities of the ends, is enclosed by the labia and that the device tends to spring outwardly to its normal initially flat condition, and that it will engage the inner walls of the labia. Moreover, in lines 39 to 43 it is added that the tampon stays in place by the engagement of the device with the inner walls of the vulva, engagement being between the topsheet and the labia. This corresponds to the
function of the device of claim 1, as explained in the contested patent in paragraph [0051] and in the last four lines of claim 1.

The appellant argued that D1 should be ruled out due to its age. The Board disagrees. Although D1 was filed in 1952, i.e. some 45 years before the contested patent's filing date, age of a document by itself is no reason to exclude a document as representing the closest prior art starting point. The citation of decisions T 334/92, T 964/92 and T 1077/92 does not assist the appellant's position further, since in each of these decisions there are different reasons why the relatively old documents were excluded. In the underlying decision T 334/92 for example, the skilled person was not in a position to realise particular advantages of the prior art, as opposed to the present case where the advantages and function of the device in D1 are specified expressly and are the same as those of the device according to claim 1 of this request. Similar reasoning applies to T 964/92 and T 1077/92. In the present case, an objective approach to inventive step leads the skilled person to look at interlabial pads which are concerned with at least some of the same problems as those which the invention seeks to overcome. This reason alone is sufficient for the skilled person to consider D1 as a relevant starting point for assessing inventive step. In the present case, not least due to the fact that the basic structure of the D1 device together with its described function also has so much in common with the claimed device structure and function, the Board finds no doubt that the skilled person would immediately consider D1 as very relevant prior art. To the extent that modern
materials might be required in D1, D1 discloses in column 2, lines 41 to 45, that the selection of the materials or treatment thereof may be varied as desired. Thus, a skilled person presented with a requirement to produce an interlabial pad for complete insertion and having beneficial characteristics, would immediately realise that D1 was a most relevant starting point, irrespective of its age.

The appellant's argument that documents D6 to D11 show different solutions and thus a different trend of technology is also not convincing. There are many reasons why devices may have been developed differently over the years, not least the perceived preference of consumers for a different type of device. No evidence has been provided by the appellant which would show this not to be the case. Thus, the Board concludes that merely because other solutions existed in the form of D6 to D11, this would not detract the skilled person from considering D1 as being the most relevant starting point, particularly if the market for completely insertable interlabial pads had become financially more interesting for manufacturers.

D1 is further regarded as being an enabling disclosure by the Board and thus is not excluded on this basis. Regarding the argument made by the appellant in this regard, it is noted by the Board that in column 3, lines 1 to 4, it is stated that the twisting of the ends of the covering binds the pad tightly in place, which holds it against its tendency to unfold. Such a tight binding causes the topsheet/core/backsheet structure to act essentially unitarily, whereby folding of same (see Figures 3 and 4 of D1) does not prevent
the covering staying essentially bound against the liner sheet and thus keeping the liner in the groove. Moreover, in column 2, lines 48 to 52 it is explicitly stated that the covering 20 by itself is sufficient to "affix the liner 22 to the pad 12 within the groove 18" but that "joinder" may be used if desired. Thus, the fact that the covering 20 is "highly flexible" (D1, column 2, line 21) does not technically prevent it from fulfilling its function of holding the liner 22 within the groove.

With D1 as a suitable starting point, the appellant argued that D1 had no "backsheet" as understood by a skilled person sensibly interpreting the claim, that the dimensions of the device were not such that it could be "inserted completely into the interlabial space" and that its thickness was unknown but clearly far greater than 6mm. Additionally, the appellant had construed claim 1 as implying that the device was planar, contrary to D1 which was a pre-folded device. The Board however concludes that the device in D1 does have a backsheet in the form of liner 22 (see e.g. column 1, lines 24 to 29 and column 2, lines 25 to 48 and the Figures). No evidence has been provided that the term "backsheet" only refers to the very outermost surface of an absorbent device and indeed the function of a backsheet described in the patent in paragraphs [0038], [0039] and [0056] is the same as that in D1 (see e.g. column 1, lines 27 to 29, column 2, lines 31 to 40 and lines 45 to 48). Thus, the fact that in D1 the topsheet ("covering" 20) extends around and covers the backsheet liner 22, does not alter the function and position of the backsheet itself. Indeed, while the liner 22 does not form the outermost surface as seen
over all of its surface, it certainly constitutes a part of the outermost surface as this surface is accessible directly through the foraminae in the covering 20, and it is positioned at the back part of the absorbent device. The Board thus sees no convincing argument as to why liner 22 cannot be termed a "backsheet".

As regard the device having features making it "completely insertable into the interlabial space of a female wearer", the device in D1 fits into the interlabial space of the female wearer shown in Fig. 1 with the exception of the outermost extremities of the twisted end portions (see also column 3, lines 18 to 26). With a larger wearer, the extremities of the twisted end portions would, with a very high degree of certainty, become completely "inserted". However, it is important to note that the claim only requires that the device be completely "insertable" (i.e. not that it is inserted completely) and it is self-evident that the end extremities beyond portions 26 are highly flexible and can thus be folded against the device and thus inserted into the interlabial space if desired.

Finally, the absorbent "device", which is that part which needs to be completely insertable, refers to the combined structure of the topsheet, core and backsheet rather than to other portions of the device which are intended for removal of the device. This interpretation is also borne out by the fact that paragraph [0074] includes the possibility of extraction devices such as a "string or loop" which are not part of the main absorbent device to be inserted, even if they are part of the device as such. Thus, taking into account the intended meaning as understood in accordance with the
contested patent, and the functional definition of the device provided by the claim, this feature is regarded as known from D1.

The feature of claim 1 according to which the thickness dimension is "less than 6mm" cannot be concluded unambiguously as being present in D1. This is also not contested by the respondent. However, the Board is of the opinion that the device shown in Figure 1 and Figure 4 represents a relatively thin device, due to the dimensions of the female anatomy which provides limitations on the maximum thickness of such a device which is inserted as shown. Additionally, whilst it cannot be concluded how much the device shown in Fig. 1 would be compressed when subject to the load of 1.7kPa according to page 5, line 6 of the patent (i.e. during the thickness test measurement), the fact that the core material in D1 is "highly absorbent cotton cellulosic material or other suitable loosely packed substance", is indicative of a material which would be relatively easily compressed.

The appellant's argument that claim 1 implied that the absorbent device was planar is not convincing. The wording of claim 1 "said absorbent device comprises an axis of preferred bending along the longitudinal centreline, such that when said absorbent device is folded along said axis and inserted into the wearer's interlabial space..." does not state that the device is planar. The feature of planar structure appears first in granted claim 8. Moreover, a device which is held in a pre-folded configuration and then flexes further for insertion also fulfils the defined functional characteristics. Precisely this functional
characteristic is present in D1 (see column 3, lines 32 to 39) where it is disclosed that the pad tends to spring outwardly to its normal condition (its pre-folded state) along the preferred line of bending formed by the fold 16 (see column 2, lines 13 to 25).

Thus only one difference exists between claim 1 and D1, namely that claim 1 defines a thickness of "less than 6mm". With this in mind, the problem over D1 can be objectively formulated as being to routinely and suitably implement the device disclosed in D1 using techniques available at the time of filing of the contested patent, with due consideration given to the general desire for producing lighter and smaller products. The Board thus concludes that a thickness dimension of "less than 6mm" is nothing more than the result of a normal implementation of the device of D1, not requiring any inventive skill, when taking account of the general desire to produce lighter and smaller products and the skilled person's general knowledge. With the common use of superabsorbent materials in absorbent pads, at a time after the filing of D1, the absorbent capacity of such interlabial pads could be vastly increased while allowing a very thin structure to be obtained, reducing thereby packaging volumes and costs as well as making such devices more comfortable for example by being lighter. Constructing the device disclosed in D1 in such a manner is thus simply following the normal course of technology and the basic requirements of D1. This does not involve an inventive step.
The appellant's argument that no-one had arrived at the idea even though D1 had been available since 1954 does not change the Board's conclusion, since there may be many different reasons as to why completely insertable interlabial pads had not met a need for further development since 1952, not least purely financial reasons. Such secondary reasons do not however anyway outweigh the skilled person's knowledge that previously known products are readily adaptable, when required, by using widely-used and well-known modern assembly techniques.

When referring to the problems stated in the patent in paragraphs [0006] and [0053], to the extent that these are solved by the features of claim 1, these problems are also solved by D1 (see e.g. column 3, lines 18 to 43).

The evidence in the form of documents D6 to D11 merely shows that other types of device were being developed after D1, but such evidence does not undermine the application of an objective problem/solution approach starting from D1. Moreover, merely because other devices were being developed for complete or partial interlabial use, does not mean that an older device should not be used and manufactured, taking modern design considerations (including available materials) into account.

The subject matter of claim 1 therefore does not involve an inventive step and consequently fails to meet the requirements of Article 56 EPC.
3. **Second auxiliary request**

The expression "and the backsheet provides protection for the wearer's fingers as the device is removed with the fingers" introduced into claim 1 is a functional definition which is also fulfilled by the backsheet of D1. Since the backsheet of D1 is "impervious to the passage of liquid collected by the highly absorbent pad itself" (see D1, column 1, lines 27 to 29), it is evident that the liner stops liquid immediately passing through the lower part of the pad. If the user's fingers grip the device at this point when removing it, this will protect the wearer's fingers. It is irrelevant that the covering material of D1 may cause some wicking of fluids around the outer side of the backsheet, e.g. in a situation where the pad is somewhat saturated, since protection against downward escape of liquids contained within the pad is still provided. The addition of this expression to claim 1 therefore does not immediately alter the conclusion reached as regard lack of inventive step of the first auxiliary request.

Concerning clarity of the claim, the appellant argued that the introduced expression was clear for a "mind willing to understand". However, the Board does not agree. It cannot be determined which structural features of the backsheet are implied by this expression, going beyond those previously defined (i.e. "a liquid impervious backsheet"), which should allow the wearer's fingers to be protected.

Since the second auxiliary request was late-filed, arriving first during the oral proceedings, and since
it is not immediately allowable, the request is not admitted into proceedings in accordance with Article 114(2) EPC.

4. Third auxiliary request

In terms of the respondent's objection under Article 123(2) EPC, due to the alleged presence of an intermediate generalisation, the Board concludes that the particular definition of the topsheet/backsheet sealed connection is not a generalisation of the content of the originally filed application. Whilst it is correct that Figures 1 to 3 do represent a preferred embodiment, it is clear from the second paragraph on page 13 of the filed application that Figures 1 to 3 represent only a "preferred" embodiment of one way of assembling the topsheet, backsheet and core. In fact this is the only way which is clearly and unambiguously disclosed. Thus, due to the wording of the first two sentences in said paragraph, the skilled person will immediately realise that the specific topsheet/backsheet sealed configuration as shown in the Figures is generally applicable also to other aspects of the invention and is not limited only to the set of features shown in Figures 1 to 3. In this regard, although a removal tab and a specific oval planar shape of the device are also present in these Figures, these elements are not inextricably linked to the topsheet/backsheet sealed configuration, as also confirmed by the description on page 11, third paragraph and page 17, third paragraph, which categorize these features as optional. Thus the skilled person understands unambiguously that these features are not part of the topsheet/backsheet structure, and
The topsheet/backsheet structure as specifically indicated in the Figures and as defined in claim 1 of this request is consequently applicable generally to the invention as defined by the other features in claim 1. Therefore, the requirements of Article 123(2) EPC are met.

In respect of inventive step and starting from the analysis already provided with regard to the first auxiliary request, the further difference is present that, instead of the topsheet extending around the backsheet as in D1, claim 1 is limited to the backsheet and topsheet each extending beyond the core and being peripherally joined by a seam around the entire periphery. This produces a sandwich structure and has the advantage of preventing fluids stored in the absorbent core or present on the topsheet being wicked to the outwardly-facing side of the backsheet.

A skilled person starting from D1 and having regard to the differences defined in claim 1, is presented with the objective problem of finding an alternative method of manufacture of the device which will have the advantage of preventing fluids from being wicked around the periphery. The skilled person finds in D3, column 12, lines 35 to 38, an easily producible pad. The pad is also an interlabial pad despite having an anterior extension for external placement (see e.g. Figure 1, column 1, lines 39 to 42 and column 1, line 67 to column 2, line 18 and column 3, line 51 to 56). As further disclosed in column 13, lines 35 to 52 and Figure 9, the sealing of the topsheet to the backsheet ("shield") about the respective perimetral
edges of same allows bodily fluid (which cannot directly enter the device) to move along the topsheet and be absorbed by the absorbent core through the topsheet up to its border with the backsheet. Since the topsheet does not overlap around the backsheet, no wicking of fluids due to the topsheet itself will occur beyond this edge.

Thus, the skilled person searching for a solution to the problem of finding a suitable alternative method of producing the device of D1 will thus incorporate this information from D3 without requiring any inventive skill.

It is correct that a sandwich structure as in D3 when applied to D1 will mean a loss of the twisted end portions in D1, the end extremities of which assist in its removal. However, in D3 the peripheral seal ("border" - see column 13, lines 38 to 40) may be used to similar effect, as the border width may be varied. Thus, the resulting omission of the end tabs in D1 when using the D3 assembly method would not deter the skilled person from using such a method, particularly in view of the advantages obtained by the topsheet/backsheet sealed arrangement.

The subject matter of claim 1 thus lacks an inventive step and fails to meet the requirements of Article 56 EPC.
5. **Fourth auxiliary request**

Although the respondent maintained its objection under Article 123(2) EPC regarding an alleged intermediate generalisation, the additional features introduced into claim 1 compared to those present in the third auxiliary request are taken from claim 8 as granted. For the same reasons as apply to the third auxiliary request, the subject matter of claim 1 of the fourth auxiliary request does not involve a generalisation of the original disclosure and thus the requirements of Article 123(2) EPC are met.

Concerning inventive step, claim 1 is limited to a planar device, i.e. a device which is to be folded from a planar state in order to perform its desired function as specified in the final clause of claim 1. The device of D1 is however initially pre-folded (see column 2, lines 20 to 25) and nothing indicates that this could or should assume a planar shape when finally formed. Whilst the device of D3 (see column 4, line 60 to column 5, line 8) discloses a device which may have an unrecognisable projection prior to use and may also be ovate (column 5, lines 42 to 46), this ovate form is not intended for, or apparently suitable for, assisting sealing when inserted completely into an interlabial space. The pad according to D3 is namely intended to be only partially inserted and the width of the anterior region is therefore made larger than the posterior width. No disclosure exists in D3 allowing the conclusion to be drawn that the anterior width of the pad should be adapted to have a width between 25 mm and 40 mm. Dimensions of the target zone "B" in D3 at the posterior end of the pad would also indicate a
significantly larger width at the anterior end. The ovoid planar shape now defined, in particular with a width dimension of between 25 mm and 40 mm (i.e. the measurement at the axis of maximum width of the device) will allow complete fitting into the interlabial space in a manner which allows improved sealing to be achieved when the planar shape is folded along its preferred axis of bending and then inserted. Such a combination of features as now defined in claim 1 can therefore not be deduced without inventive skill by combining the different elements known from D1 and D3. Additionally, none of the other prior art in proceedings provides an incentive for a skilled person to arrive at the subject matter of claim 1 without using an inventive step. Thus, the subject matter of claim 1 is considered to involve an inventive step. Since claims 2 to 9 are dependent on claim 1, the subject matter of all claims thus meets the requirements of Article 56 EPC with respect to the cited prior art.
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 with the order to maintain the patent based on the following documents:

   Claims 1 to 9 of auxiliary request IV filed during the oral proceedings on 17 November 2006;

   Description pages 2 and 15 filed as auxiliary request IV during the oral proceedings, description pages 3 to 5 and page 7 filed with auxiliary request III during the oral proceedings, description page 6 (annex 3 to the minutes), and description pages 8 to 14 as granted;

   Figures 1 to 11 as granted.

The Registrar:      The Chairman:

D. Sauter            W. Sekretaruk