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Datasheet for the decision of 28 January 2008

Case Number: T 1131/06 - 3.2.06

Application Number: 98956683.1

Publication Number: 1030633

IPC: A61F 13/15

Language of the proceedings: EN

Title of invention:
Highly efficient absorbent article for use with menstrual pant

Patentee:
THE PROCTER & GAMBLE COMPANY

Opponent:
SCA Hygiene Products AB

Headword:
-

Relevant legal provisions:
EPC Art. 56, 83

Relevant legal provisions (EPC 1973):
RPBA Art. 10a/b

Keyword:
"Sufficiency (yes)"
"Inventive step (no)"
"Remittal (no)"

Decisions cited:
-

Catchword:
-

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Case Number: T 1131/06 **-** 3.2.06

D E C I S I O N
of the Technical Board of Appeal 3.2.06
of 28 January 2008

Appellant: (Opponent)
SCA Hygiene Products AB
SE-405 03 Göteborg (SE)

Representative:
Flink Ekwall, Britt Ingela Elisabeth
SCA Hygiene Products AB
Patent Department
S-405 03 Göteborg (SE)

Respondent: (Patent Proprietor)
THE PROCTER & GAMBLE COMPANY
One Procter & Gamble Plaza
Cincinnati
Ohio 45202 (US)

Representative:
Veronese, Pancrazio
Procter & Gamble Italia S.p.A.
Italian Research Center
Via Aterno 128/130
I-66020 Sambuceto di San Giovanni Teatino
(Chieti) (IT)

Decision under appeal:
Interlocutory decision of the Opposition Division of the European Patent Office posted 18 May 2006 concerning maintenance of European patent No. 1030633 in amended form.

Composition of the Board:

Chairman: P. Alting Van Geusau
Members: G. de Crignis
K. Garnett

Summary of Facts and Submissions

I. European Patent No. 1 030 633, granted on application Nr. 98 956 683.1, was maintained in amended form by decision of the opposition division posted on 18 May 2006.

II. The opposition division held that the late-filed objection concerning the requirements of Article 83 EPC was *prima facie* not relevant and therefore was disregarded pursuant to Article 114(2) EPC. The subject-matter of claim 1 in accordance with the patent proprietor's main request was considered to be novel (Article 54 EPC) and to involve an inventive step (Article 56 EPC) with regard to the state of the art disclosed in

D1 EP-A-0 162 451
D2 EP-A-0 336 578 and
D4 EP-A-0 302 523

in particular as no document disclosed or hinted at the claimed range of the limiting value of the flexure resistance.

III. The Appellant (opponent) filed a notice of appeal against this decision on 20 July 2006, and paid the appeal fee simultaneously. On 28 September 2006 the statement of grounds of appeal was filed. The Appellant maintained the objections with regard to Article 100(b) EPC and 56 EPC.

IV. In a communication dated 26 July 2007 accompanying the summons to oral proceedings, the Board indicated its

interpretation of the claims and commented on sufficiency as well as on novelty and inventive step.

With a letter of 8 October 2007 the Respondent (patent proprietor) submitted revised requests (new main and 1st to 4th auxiliary requests).

Claim 1 according to the main request reads:

"An absorbent article for wearing in a supporting garment, said absorbent article comprising.
a liquid pervious side;
a liquid impervious side opposite said liquid pervious side, and
an absorbent component between said liquid pervious side and said liquid impervious side, wherein said liquid pervious side and said liquid impervious side are arranged to form a unitary structure,
characterized in that
said absorbent article has a flexure resistance of less than or equal to 100 grams and is capable of substantially maintaining sustained contact with and covering at least a portion of the inside surfaces of the wearer's labia, at least a portion of the exterior surfaces of the wearer's labia, and at least a portion of the supporting garment,
and that said absorbent article is of a size and configuration to only cover a female wearer's vaginal pudendal region and perineum, and does not extend forward beyond the wearer's mons pubis or rearward to the wearer's anus wherein said flexure resistance is measured according to the Flexure Resistance Test Method described herein."

The subject-matter of claim 1 of the first auxiliary request additionally comprises:
"and wherein said absorbent article has a surface area of less than or equal to 20 in^2 (130 cm^2)."

The subject-matter of claim 1 of the second auxiliary request additionally comprises:
"and wherein said article has a ratio of total capacity to surface area of greater than or equal to 2 g/in^2 (0.3 g/cm^2), said total capacity measured according to the Capacity Test Method described herein."

The subject-matter of claim 1 of the third auxiliary request additionally comprises:
"and wherein said absorbent article has an overall length when measured in its curved configuration of less than or equal to 15 cm, and a width of less than or equal to 7.6 cm."

The subject-matter of claim 1 of the fourth auxiliary request additionally comprises:
"and wherein said absorbent article has an overall length when measured in its curved configuration of less than or equal to 12.7 cm, and a width of less than or equal to 7.6 cm."

V. Oral proceedings were held on 28 January 2008. The Appellant requested that the decision under appeal be set aside and that the patent be revoked. The Respondent requested that the decision under appeal be set aside and that the European patent be maintained on the basis of the main request filed with letter dated 8 October 2007 or alternatively on the basis, in the following order, of the second, third, fourth or first

auxiliary requests filed with letter dated 8 October 2007 or the fifth auxiliary request filed during the oral proceedings and, in the event that the main request was refused, remittal to the opposition division for continuation of the opposition proceedings.

The subject-matter of claim 1 of the fifth auxiliary request comprises, additionally to the features of claim 1 of the second auxiliary request:
"said absorbent article being less than or equal to 7 inches (18 cm) in length."

VI. The Appellant essentially relied upon the following submissions:

There was no sufficient disclosure present for the skilled person to obtain the claimed absorbent article (Article 83 EPC) nor was it clear how to measure in particular the flexibility of an absorbent article having a hump-forming element or a raised portion on the body-facing side (Article 84 EPC).

The Flexure Resistance Test Method was not suitable to be performed on claimed articles having a hump/raised portion as there was not enough material available on such articles to obtain a test specimen for the assessment of the flexure resistance value.

Maintaining sustained contact between the absorbent article and a wearer's labia could only be achieved when combining the article with a specially designed supporting garment, which was not claimed.

With regard to the subject-matter of claim 1 of the main request, the range claimed for flexure resistance overlapped to a great extent with the preferred range for flexure resistance disclosed in D2. Therefore, even novelty was in issue.

When compared to D2, the subject-matter of claim 1 specified a flexure resistance of less than or equal to 100 g. However, D2 referred to the same problem, and when trying to improve the conformability the skilled person would lower the flexure resistance because clearly conformability was dependent upon flexure resistance. Therefore, no inventive step was present when defining an otherwise arbitrary reduced upper limit for the flexure resistance (Article 56 EPC).

The subject-matter of claim 1 of the second auxiliary request was not inventive either. The additional feature referring to the ratio of total capacity to surface area related to the usual ratio of such articles. Such a ratio could be obtained when calculating the corresponding values for the articles disclosed in D2. D4 was evidence for the general common knowledge of the skilled person with regard to usual values for length and width of interlabial pads. No inventive step could be seen in the mere desired result of a small article with high capacity by virtue of the choice of this ratio.

With regard to the subject-matter of claim 1 of the third and fourth auxiliary requests, the additional feature referring to a length measured in its curved configuration was not clear (Article 84 EPC). It was neither clear how to measure it (inside or outside?)

nor clear in which curved configuration (preformed or in-use?) it should be determined.

The subject-matter of claim 1 of the first auxiliary request did not involve an inventive step. The surface area specified in claim 1 represented merely the surface area of commonly well-known interlabial pads, as evidenced by the disclosure in D2, col. 4, l. 33 - 36 when read in combination with D4, page 6, l. 35 - 39.

The fifth auxiliary request was very late-filed and should not be admitted as it was not immediately clearly allowable.

VII. In support of its requests the Respondent essentially relied upon the following submissions:

The patent in suit was sufficiently disclosed. Particularly with regard to the test method for the flexure resistance, the test specimen could be obtained from any article irrespective of a hump or a tube. Where raised portions were present, the test specimens having such portions should be tested and the average of five specimens gave the relevant peak bending stiffness. Small articles having stiffer regions (hump, tube, raised portion) having an average flexure resistance above the claimed value would simply not fall within the scope of the claim.

The subject-matter of claim 1 was directed to the technical features of an absorbent article as such. A specially designed supporting garment was not claimed.

The subject-matter of claim 1 was novel with regard to D2 as this document did not specify clearly and unambiguously a flexure resistance of less than or equal to 100 grams.

D2 referred to a different problem. The external disposition was only incidentally referred to and no emphasis was placed on a small flexure resistance. D1 related to a different field as it disclosed thick, stand-alone articles, which obviously did not imply flexibility in the claimed range.

The combination of features as claimed in the auxiliary requests has not been discussed in the previous proceedings. In order to have the opportunity of a hearing at two levels, the case should be sent back to the opposition division for the discussion of these requests.

Anyhow, the subject-matter of claim 1 of the second auxiliary request involved an inventive step. The claimed ratio was not disclosed in any document. The length of the absorbent core in D2 was 22 cm, which corresponded to a substantially longer absorbent article than the one claimed. Therefore, the claimed range of ratio of total capacity to surface area could not be arrived at. The approach of calculating the size and capacity requirements disclosed in D2 and/or D4 was too complex as there were too many arbitrary selections needed in order to arrive at the claimed subject-matter.

The subject-matter of claim 1 of the third and fourth auxiliary requests was clear. The skilled person obviously would take the mean of the inner and outer

values of the length when measured in any curved configuration.

With respect to the subject-matter of claim 1 of the first auxiliary request, the same arguments as set out for claim 1 of the second auxiliary request applied.

The fifth auxiliary request should be admitted into the proceedings. The subject-matter of its claim 1 was very similar to what was already under discussion. It would create no extra burden to consider the corresponding arguments.

Reasons for the Decision

1. The appeal is admissible.

2. *Sufficiency*

2.1 Flexure resistance

The test method for determining the flexure resistance is disclosed in paragraphs [0138] to [0146] of the patent in suit. The flexure resistance parameter of claim 1 is limited to that of this disclosed test method. According to this test method the flexure resistance of an absorbent article is measured by peak bending stiffness and the test is based upon the procedure set out in ASTM D 4032.82, but considerably modified. The procedure gives a force value related to flexure-resistance and simultaneously averages stiffness in all directions. For performing the test, a number of different specimens of size 37.5 x 37.5 mm

have to be tested from each of five absorbent articles and the results should be averaged.

In view of claim 1 having in its scope planar articles as well as articles with raised portions, hump forming elements and cup-shaped configurations (see claims 4 to 9, 29) of limited size, the test specimen have to be chosen including any such portions. These portions represent the significant absorbent portions of the absorbent article.

With reference to this test method, it is possible according to the respondent's submission to determine the peak bending stiffness of raised portions, as the bottom of the plunger should be set well above the top of the orifice plate (column 39, l. 28/29) and the skilled person would have no difficulty in doing so. No evidence to the contrary being present, this submission is accepted by the Board. Hence, the requirements of Article 83 EPC are met.

2.2 Sustained contact of the body portions

The subject-matter of claim 1 is directed to an absorbent article. This article is defined in terms of its own technical features. With regard to the question of the absorbent article being "capable of substantially maintaining sustained contact with" the body portions of the wearer, the indication of "capable of ..." merely serves the purpose of defining a capability of the claimed article, without imparting any limitation on the actual use of the article claimed thus also independent of its use with a supporting

garment. Hence, also in this respect the requirements of Article 83 EPC are met.

3. *Novelty - Main Request*

D2 undisputedly discloses an absorbent article according to the preamble of claim 1. It further meets the size requirements and capabilities set out in the characterising portion of claim 1. Accordingly, the only feature of claim 1 not disclosed in D2 is the claimed range of flexure resistance. Also none of the further cited documents discloses *expresses verbis* the feature of an absorbent article having "a flexure resistance of less than or equal to 100 grams".

D2, col. 13, l. 13 - 22, indicates preferred ranges of flexure resistance. The napkins are to have a flexure resistance of less than 300 g, more preferably less than 250 g, and still more preferably less than 175 g and most preferably less than 130 g. The corresponding test procedure is identical to the test procedure set out in the patent in suit.

The question is thus whether the claimed range is considered as a selected sub-range which is narrow and sufficiently far removed from the one disclosed in D2, particularly as no example is given, and also whether it represents a purposive selection having regard to the fact that no surprising effects are shown.

The sub-ranges chosen in D2 are considered by the Board to be well above the chosen sub-range. A sub-range of less than 100 g is much smaller than a sub-range of less than 130 g and thus is considered to be narrow and

to be far removed from the one disclosed in D2. Therefore, the subject-matter of claim 1 is novel. The further question relating to a purposive selection remains to be dealt with in the context of inventive step.

4. *Inventive Step - Main Request*

The only difference between the subject-matter of claim 1 and the disclosure in D2 is the range of flexure resistance.

The problem therefore can be objectively formulated in accordance with that disclosed in paragraphs [0005] to [0009] of the patent, namely as improving the absorbent article's conformity to the wearer's body and its fit in relation to the flexibility of the absorbent article. This problem is also addressed in D2, see col. 2, l. 42 - 55.

The argument of the Respondent that D2 related to a different problem and did not emphasize the ranges of flexure resistance is not correct. D2 (col. 13, l. 12 - 22) refers in particular to sanitary napkins which conform extremely well to the various shapes of the urogenital region and specifies preferred ranges of flexure resistance. It discloses such ranges starting with a preferred range of flexure resistance of less than 300 g, continues with further and most preferred ranges of flexure resistance of less than 250 g, less than 175 g and less than 130 g. It would inevitably be brought home to the skilled person that the value should be as low as possible. The most preferred range coincides with the range disclosed in paragraph [0005]

of the patent in suit as being known as an upper limit for the flexure resistance of thin, flexible absorbent articles.

Hence, it appears that when starting from D2 and trying to provide an even more comfortable and flexible article, the choice of an absorbent article having a lower flexure resistance represents a straight-forward approach for the skilled person. The chosen range is only a purposive selection of a sub-range, which inevitably would be chosen when desiring a further improvement in the flexibility of the article of D2. No example is given disclosing any surprising effects for the chosen sub-range. Therefore, no inventive step can be seen in such a selection and the subject-matter of claim 1 does not meet the requirements of Article 56 EPC. Hence, the main request is not allowable.

5. *Request for remittal of the auxiliary requests to the opposition division*

This request was late-filed during the oral proceedings. The opposition division had already dealt with all objections raised during the proceedings (Article 83, 54, 56 EPC) and no new documents have been cited in the appeal.

According to the Rules of Procedure of the Boards of Appeal, the reply to the statement of grounds of appeal should contain the respondent's complete case (Art. 10a(2) RPBA). Any amendment and thus any request filed later may be admitted and considered at the Board's discretion (Art. 10b(1) RPBA). In the present case, the auxiliary requests were filed with the reply

to the statement of grounds of appeal and all parties had sufficient time to provide their arguments. A further delay of the proceedings thus is not appropriate and the request for remittal is refused.

6. *Inventive Step - Second auxiliary Request*

6.1 In claim 1 of the second auxiliary request, the additional feature referring to the ratio of total capacity to surface area is included. The problem to be solved by this feature is related to improving the absorbent capacity of an article which is reduced in size (paragraph [0009]). In order to assess inventive step, the usual surface area and absorbent capacity of such an article have to be taken as a basis. The article best representing the claimed subject-matter in view of this problem is an interlabial pad as also set out in paragraph [0009].

6.2 With regard to the surface area, the consideration has to start from the usual length and width dimensions of such an article. Claim 1 does not specify any such dimensions. According to the description of the patent in suit, the length should be preferably less than or equal to about 15 cm to 18 cm and the width should be less than or equal to about 7.6 cm (paragraphs [0014] and [0027]). As such values are disclosed as preferred values but no surprising effect is related to these values, it needs to be further assessed whether these values represent usual and commonly known or alternatively surprising dimensions of such an article.

6.3 D2, cited as closest prior art when assessing inventive step, specifies generally that interlabial devices

which reside partially within and partially external to the wearer's vestibule are within the scope of its invention (column 4, l. 33 - 36), but does not disclose suitable dimensions. D2 merely discloses a sanitary napkin (col. 5, l. 29 - 34) with an absorbent core of length 22 cm. According to the Respondent's submission, such an absorbent core would be recognized as too long when considering a small interlabial pad.

D4, when referring to interlabial pads (page 6, l. 35 - 40), indicates that generally such pads have a length of between 17.8 and 30.5 cm, and the preferred length of discreet articles would generally be between 17.8 and 20.3 cm. In view of the intention to provide an article of reduced size, only this latter range needs to be considered. Hence, a length value of about 18 cm represents an obvious choice out of this small range, and accordingly would have been chosen when aiming to reduce the size of known articles further.

With regard to the width of the absorbent core of a sanitary napkin, D2 refers to a value of 7 cm across its mid-portion and 8 cm across its widest portion. This width range is consistent with the width values disclosed in D4 for an interlabial pad, namely that it should generally be equal to between 5.1 and about 10.2 cm. Therefore, a mean value of 7.5 cm can be chosen, which is also consistent with the teaching of the patent in suit, which refers to a preferred width of 7.6 cm (column 4, l. 31).

Hence, an interlabial pad having a length of 18 cm and a width of 7.5 cm represents an obvious choice for the claimed article. Such an article accordingly has a

surface area of approximately 135 mm. As the aim would be to reduce the size of such an article further, this surface area would specify an upper limit.

6.4 With regard to the total capacity of the article, it should be taken into account that in order to manufacture thin, flexible absorbent pads, superabsorbent polymers would commonly be added to the absorbent structure of such pads.

In line with this common general knowledge, D2 discloses the general use of superabsorbent polymers in order to enhance the absorbent capacity (col. 6, l. 10 - 19). Consistent therewith, the patent in suit discloses the use of superabsorbent polymers in addition to fibrous material as being generally known (paragraph [0044]).

The gel volume of such superabsorbent polymers ranges from 20 to 60 g of synthetic urine per gram of polymeric gelling agent (D2, col. 8, l. 2 - 9). The superabsorbent polymer is usually distributed in a range of up to 0.009 g/cm^2 (D2, col. 8, l. 27/28). Accordingly, when applying such a distribution to an area of at least 100 cm^2, which according to D2 is the most preferred area, a preferred distribution of at least 0.9 g superabsorbent polymer, corresponding to a capacity of up to (0.9 g x 60) 54 g of synthetic urine, is available per article (D2, col. 8, l. 23 - 28).

Calculating the ratio of total capacity to surface area with the known upper limiting surface area of 135 cm^2 and the available capacity value of 54 g results in a ratio of 0.4 g/cm^2, which is well above the limiting

ratio of 0.3 g/cm^2 claimed. Therefore, the skilled person following the instructions given in D2 with the aim of providing a small article of high capacity inevitably obtains the claimed article. It should be noted that in this calculation the contribution to the absorbent capacity of any fibrous or other absorbent material in the article is not even taken into account.

6.5 The Respondent argued that this analysis presented too many steps and was far too complex for the skilled person to be followed in an obvious manner. However, considering the line of arguments presented above, nothing more is needed than the desire to provide a small article having a high capacity, which is a common goal in this field of technique. As shown above when following this idea, the subsequent conclusions are only direct logical consequences.

6.6 The subject-matter of claim 1 of the second auxiliary request therefore lacks an inventive step over D2 and thus fails to meet the requirements of Article 56 EPC.

7. *Third and Fourth auxiliary requests*

7.1 The subject-matter of claim 1 of these requests comprises additionally the feature specifying the length and width of the absorbent article. However, the length is specified in relation to "when measured in its curved configuration".

7.2 Usually the length of absorbent articles is measured in a flat laid-out condition. Therefore, when specifying that it should be measured "in its curved configuration", a length different from the flat laid-

out length is intended. For this reason the respondent's view that the mean value of the lengths measured on the inside and outside of the curved article is intended cannot be accepted because this would be the same as the flat laid-out length and logically a different length is implied by the determination in curved configuration. The claims refer to a pre-formed cup-shaped configuration (claim 9), to pre-formed articles having a raised portion (claims 5 - 7), to flat articles (claim 4) and to articles having a certain configuration during use (claim 1 - 3). In particular with regard to these different configurations, it is neither clear to what extent the article should be bent and thus what configuration shall be the basis for determining the length of the article nor where the measurement should be taken. Hence, the subject-matter of claim 1 of the third and fourth auxiliary requests does not meet the requirements of Article 84 EPC.

8. *First auxiliary request*

The subject-matter of claim 1 of the first auxiliary request is included in the subject-matter of the second auxiliary request, as the calculation of the ratio is based upon a surface area of 135 mm as set out under point 6.3 above. This surface area is calculated using a width of 7.5 cm as a mean width, taken from the range of 5.1 to 10.2 cm disclosed in D4. However, D4 also discloses a preferred with of 6.3 cm (page 6, l. 39). When considering this smaller width, the claimed value for the surface area of 130 cm^2 specified in claim 1 represents merely the surface area of known interlabial pads. Hence, the subject-matter of claim 1 of the first

auxiliary request at the very least does not involve an inventive step (Article 56 EPC).

9. *Fifth auxiliary request*

The subject-matter of claim 1 of the late-filed fifth auxiliary request comprises the subject-matter of the second auxiliary request and specifies additionally that the article is "less than or equal to 7 inches (18 cm) in length".

The assessment of the subject-matter of this claim thus cannot differ from that already considered when calculating the ratio claimed in the assessment of inventive step for the second auxiliary request; see in particular point 6.3 above. Thus the subject-matter of claim 1 of the fifth auxiliary request is not clearly and unambiguously allowable because it cannot overcome the objection in respect of inventive step developed in relation to the second auxiliary request. Therefore, the late-filed fifth auxiliary request is not admitted into the proceedings.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar The Chairman

M. Patin P. Alting van Geusau