Case Number: T 0928/98 - 3.2.6
Application Number: 90200418.3
Publication Number: 0386815
IPC: A61F 13/15

Language of the proceedings: EN

Title of invention: Disposable absorbent article having improved leg cuffs

Patentee: THE PROCTER & GAMBLE COMPANY

Opponent: SCA Hygiene Poducts AB

Headword: Leg cuff elastic member/PROCTER & GAMBLE

Relevant legal provisions: EPC Art. 54, 56, 69

Keyword: "Request for inclusion of statements regarding extent of protection in the minutes - rejected"
"Identification of the subject-matter of a claim"
"Novelty - yes"
"Inventive step - yes"

Decisions cited: T 0506/95, T 0212/97

Catchword: Request for inclusion of a party's statements in the minutes
Case Number: T 0928/98 - 3.2.6

DECISION of the Technical Board of Appeal 3.2.6 of 8 November 2000

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

Representative: Harrison, Michael Charles
Albihns GmbH
Grasserstrasse 10
D-80339 München (DE)

Respondent: The Procter & Gamble Company
(Proprietor of the patent) One Procter & Gamble Plaza
Cincinnati
Ohio 45202 (US)

Representative: Samuels, Lucy Alice
Gill Jennings & Every
Broadgate House
7 Eldon Street
London EC2M 7LH (GB)

Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 14 July 1998 rejecting the opposition filed against European patent No. 0 386 815 pursuant to Article 102(2) EPC.

Composition of the Board:
Chairman: P. Alting van Geusau
Members: H. Meinders
M.-B. Tardo-Dino
Summary of Facts and Submissions

I. The opposition against European patent No. 0 386 815, granted in respect of application No. 90 200 418.3, was rejected by decision of the Opposition Division announced on 23 June 1998 and posted 14 July 1998.

II. The following documents considered in the opposition proceedings also played a role in the present appeal proceedings:


D3: Encyclopedia of polymer science, Volume 6, 1986, page 748


D5: WO-A-8 000 676.

III. Against this decision an appeal was filed by the Appellant (Opponent), simultaneously paying the appeal fee, on 16 September 1998. The statement of grounds of appeal was filed 18 November 1998.

IV. Oral proceedings were held on 8 November 2000.

The Appellant requested that the decision under appeal be set aside and the patent revoked. It further requested that the respondent's admission in the oral proceedings before the Board, that the term "laminate" in claim 1 did not cover a laminate formed by the connection of a single layer elastic member joined to the upper or lower covering sheet materials of a leg-cuff, be entered in the minutes of the oral
proceedings.

The Respondent requested that the appeal be dismissed, subsidiarily that the patent be maintained in amended form according to one of four auxiliary requests filed by facsimile on 5 October 2000. It further requested that inclusion of the above-mentioned statement in the minutes of the oral proceedings not be allowed.

V. Claim 1 of the patent as granted reads:

"A disposable absorbent article (10) having two transverse waist portions (42,44) and two longitudinal marginal portions (50), said article comprising:

a) a liquid impervious backsheet (16);
b) a liquid pervious topsheet (12) at least partially peripherally joined to said backsheet (16);
c) an absorbent core (18) intermediate said topsheet (12) and said backsheet (16);
d) at least one leg cuff (56,62) disposed in each longitudinal marginal portion (50), each said leg cuffs (56,62) having at least one elastic member (60,77) defining a cumulative width; and
e) wherein said leg cuff (56,62) is elastically extensible in at least one direction, characterized in that

[f] said elastic members (60,77) of the leg cuffs (56,62) are formed by a laminate (13) having at least two laminae (13a,13b,13c), one lamina being elastically extensible and one lamina being relatively inelastic;

[g] said leg cuff (56,62) requiring a force less than about 270 grams per centimeter cumulative width to elongate said leg cuff throughout the range of from about 50 % to about 350 %;

[h] said leg cuff having a differential force of less
than 14 grams per centimeter of said cumulative width per 50 \% increment of elongation."

(the additions in square brackets [ ] have been added by the Board for easier reference).

VI. The Appellant argued essentially as follows:

Claim 1 embraced an embodiment in which the elastic band was a laminate consisting of the upper and lower covering sheets of the leg cuff and a single elastic adhesive layer directly attached to one or both of these sheets. Since D2 also disclosed such a laminate, formed by the elastic member 20 between the backing layer 30 and the facing layer 32, the subject-matter of claim 1 lacked novelty.

Furthermore, the apertured elastic member disclosed in D2 could also be considered a laminate having at least two laminae, one lamina consisting of the elastic elements 21 and the other of the non-elastic transversely connecting members 24. When carrying out the invention as disclosed in D2 the skilled person would seriously contemplate choosing from the values and ranges disclosed in D2 values which fulfilled the claimed requirements of ultimate contact force and differential force. The subject-matter of claim 1 therefore lacked novelty also.

The subject-matter of claim 1 of the patent as granted also lacked inventive step starting from D4 as closest prior art. The only difference between the subject-matter of claim 1 and D4 was the differential force value as claimed. However, it was obvious to apply the teachings of D2 in that respect, which resulted in a
combination of features covering all those of claim 1.

VII. The Respondent countered with essentially the following arguments:

Claim 1 required the elastic member to be a laminate with at least two laminae, which thus excluded the backsheet and/or the topsheet of the absorbent article from being one or both of the laminae, because the backsheet and the topsheet were part of the leg cuff, not of the elastic member. The mention in the description of the patent in suit of the elastic member possibly consisting of only one lamina 13c (column 24, line 45) was merely an inconsistency between the description and the claim. Inconsistencies fell under Article 84 EPC, which was not a ground for opposition.

The article according to claim 1 clearly distinguished itself from the article disclosed in D2 in that the laminae did not involve the topsheet or the backsheet. Further, the apertured elastic member 20 disclosed in D2 could not be considered a laminate with two laminae, as the non elastic transversal members 24 were not a layer on top of the elastic elements 21.

If, for the discussion of inventive step, D4 were taken as the starting point, the main differences with the subject-matter of claim 1 were the features of one of the laminae in the laminate being relatively inelastic, the differential force of the leg cuff and the requirements as to the elastic extensibility of the leg cuff. The latter had to be seen as being limited by the definition of "elastically extensible" in the description (column 17, lines 22 to 33). D2 did not provide any suggestion to adapt the laminate of D4 to
have at least one lamina which was relatively inelastic, as it was directed to using a single layer apertured member, not a laminate with at least two laminae. Further there was no direct disclosure in D2 of the differential force nor of the said elastic extensibility.

D2 was considered to be the proper starting point for the discussion of inventive step as it concerned the same problem, preventing over-pressure on the skin and the resulting irritation. The application of the teachings of D4 could not lead to the subject-matter of claim 1, as D4 suggested a laminate with two elastic laminae, not one elastic and the other relatively inelastic.

Reasons for the Decision

1. The appeal is admissible

2. Identification of the subject-matter of claim 1

2.1 In the wording of claim 1 as granted a clear technical distinction is made between the leg cuffs and the elastic members: ".... said leg cuffs having at least one elastic member..." (feature (d)), ".. said elastic members of the leg cuffs are formed by a laminate..." (feature [f]). The functional requirements in features [g] and [h] further relate to the leg cuff and are as such distinguished in the claim from the physical characteristics of the elastic member in feature [f].

The interpretation of claim 1 by the Appellant would have the result that the upper and lower covering
sheets of the leg cuff had to be considered as laminae in the laminate forming the elastic member. This means that the leg cuffs would be identical with the elastic members, which is at odds with the explicit wording of the claim, distinguishing clearly between the leg cuffs and the elastic members as two technical entities, the leg cuffs comprising the elastic members, but not exclusively consisting of them.

2.2 In column 21, lines 9 to 17 it is stated that the elastic members constitute a laminate 13. In column 24, lines 45 to 49 of the description it is stated that this laminate 13 can consist of only one lamina 13c being a pressure sensitive elastomeric adhesive. The passages in column 9, lines 1 to 7 and column 12, lines 51 to 56 refer to the elastic members being directly joined to the gasketing flaps and the barrier cuff respectively. According to the Appellant this meant that the elastic member as claimed was formed by a laminate consisting of the combination of three laminae: the upper covering sheet and the lower covering sheet of the leg cuff and the elastomeric adhesive directly attached to both the upper and the lower covering sheet. The upper and lower covering sheets normally used in disposable absorbent articles were generally relatively inelastic, compared to elastomeric adhesives.

2.3 It is clear that the indication in the description (column 24, lines 45 to 49) that the elastic member could also consist of one single lamina 13c is inconsistent with the wording of claim 1, which requires the laminate of the elastic members to have at least two laminae. Such a deficiency falls under Article 84 EPC, which is, indeed, not a ground for
opposition.

However, in case of an inconsistency the Board will have to establish what actually is the subject-matter for which protection is sought, such that substantive examination of the claim is possible. It is generally accepted in the case law of the Boards of Appeal that for such an assessment recourse may be had to the description and the drawings of the patent.

2.4 The Board is of the opinion that in general, if a claim is amended by the applicant in the examination proceedings, the wording finally chosen for the main claim should be considered as reflecting the intention of the applicant, unless there is reason to believe otherwise. The wording of the claim is namely the primary basis for discussion with the Examining Division, the adaptation of the description usually being deferred until agreement has been reached on the wording of the claims.

The wording of the claim finally chosen should thus normally have precedence over the description in cases of inconsistency.

2.5 The main claim of the original application was not directed to the elastic member being a laminate with at least two laminae; that feature appeared only in dependent claim 5. From the prosecution history of the examination file it can be derived that the passage in column 24, lines 38 to 49 (the paragraph bridging pages 31 and 32 of the original application) was amended in the examination proceedings to be consistent with the amended main claim now involving a laminate having at least two laminae. The sentence: "If desired,
either or both outboard laminae 13a and 13b may be omitted from the laminate 13." was amended to: "If desired, one of the outboard laminae 13a and 13b may be omitted from the laminate 13.". The following sentence: "The resulting laminate 13 has one lamina 13c, or two laminae 13a and 13c, with the central lamina 13c being of pressure sensitive elastomeric adhesive and the outboard lamina 13a being of relatively inextensible substrate materials." was, however, not amended accordingly.

In view of the express amendment of the first sentence, which is in line with the amended wording of claim 1 as granted involving the laminate having at least two laminae, it can only be considered an oversight that the following sentence was not amended so as also to correspond with the wording of the claim, according to which the laminate has at least two laminae.

2.6 The Board therefore comes to the conclusion that the elastic member laminate as mentioned in claim 1 is not one which involves only one elastic lamina, the upper and the lower covering sheet of the leg cuff forming the other laminae.

3. **Novelty (Article 54 EPC)**

3.1 The Appellant argued that if the elastic member 20 disclosed in D2 was to be considered as consisting of only a single lamina as was done by the Respondent, the backing layer 30 and the facing layer 32 provided the other laminae in the laminate, with the result that the combination of the three laminae formed an elastic member which was identical to the elastic member according to claim 1.
In view of the assessment made in point 2.6 above the Board considers that D2, when applying the terminology of claim 1, discloses a leg cuff consisting of a laminate having at least three laminae, but not an elastic member being such a laminate. The single lamina elastic member disclosed in D2 is not identical with the elastic member with at least two laminae as claimed and therefore the claimed feature of the elastic member cannot be considered as disclosed in D2. Already in this respect the subject-matter of claim 1 presents novelty over D2.

3.2 The Appellant subsidiarily argued that there was also another reason why D2 was relevant for the question of novelty of the subject-matter of claim 1, namely the elastic member 20 could itself be considered a laminate having at least two laminae, one being the longitudinally extending elastic elements 21, the other being the transversely connecting non-elastic members 24. The sentence in D2 following the indication that the transversely connecting members 24 could be non-elastic (see column 5, lines 7 to 9) as opposed to the elastic elements stated that the elastic members were, "however, ..... preferably made from a single component". From this the Appellant derived that the elastic member 20 disclosed in D2 having the elastic elements 21 and the non-elastic transverse members 24 was a two-component article, which could only be achieved if the transverse inelastic members 24 were narrow strips laminated on top of the longitudinally extending elastic elements 21.

3.3 D2 does not contain any explanation as to how to provide the non-elastic transverse members between the elastic elements. The reference to two US-patents
(US-A-3 881 381 and US-A-3 632 269) for the methods of producing the elastic member does not provide any further information either. These two documents relate to the production of reticulate film material and plastic netting respectively, without any mention of achieving a difference in elasticity between the "filaments" in the film or the netting. Moreover, they relate to passing a single ply film material between a forming roll and a back-up roll, which means that the transverse members are integral with the elastic elements and are not laminated onto them. This is even specifically mentioned in US-A-3 881 381, e.g. column 1, lines 58 to 60.

3.4 The Appellant argued that the skilled person, using his common general knowledge in determining how the elastic member disclosed in D2 was produced, would inevitably come up with the laying of non-elastic film strips 24 transversely over the elastic elements 21. Butt-joining of non-elastic members to elastic elements was in its opinion not feasible.

However, lamination is not the only method available to the skilled person to bring about the non-elastic properties of the transverse members 24. In particular, the mention in D2 (column 7, lines 3 to 14) of the unvulcanised thermoplastic compositions for the material of the elastic members indicates another possibility. By different vulcanization treatment of the elastic elements 21 and the transverse members 24 it is for instance possible to achieve a difference in elasticity, whereby the transverse members are non-elastic.

Thus the skilled person would not inevitably be
directed to laminating non-elastic strips over elastic elements to achieve the elastic member 20 disclosed in D2.

The Board therefore comes to the conclusion that D2 does not disclose an elastic member formed by a laminate having at least two laminae. Already for that reason the subject-matter of claim 1 is novel over D2.

4. **Inventive step (Article 56 EPC)**

4.1 It is the established case law of the Boards of Appeal (see e.g. T 506/95, not published in the OJ) that the closest prior art for assessing inventive step is that which is directed to a similar use as the invention under consideration, requiring the minimum of structural and functional modifications to arrive at the subject-matter of the invention.

The Board considers D4 to be the closest prior art in this respect, as it is also concerned with proper fitting of an absorbent article around the wearer's leg and preventing leakage (see column 1, lines 17 to 21) as does the patent in suit (see column 1, lines 35 to 42). It further discloses an elastic member in the form of a laminate having at least two laminae (see Figure 3A), thus requiring a minimum of structural changes to arrive at the subject-matter of claim 1. Both laminae in the elastic member disclosed in D4 are however elastic, one of them having been fixed in a prestretched state onto the other, the latter not having been stretched (zero-tension). This influences wearer comfort when the elastic member is stretched beyond the prestretching of the prestretched lamina, by which the second lamina starts stretching as well.
The object of the patent in suit is therefore to maintain the snug fit around the wearer's legs and at the same time increase comfort for the wearer, preventing red markings and the associated irritation (see column 1, lines 35 to 42) of the patent in suit.

4.2 The Appellant argued that the statement in claim 1 that one lamina was relatively inelastic did not necessarily mean that the material of that lamina was relatively inelastic. It could just as well be that the lamina was not elastically tensioned. In D4 there was mention of the lamina 21 being non-tensioned as opposed to the lamina 20 (column 4, lines 35 and 44) which was applied thereto in a stretched state. Under the normal working conditions of a leg cuff as disclosed in D4 the second lamina 21 was not going to be stretched elastically, but was always in a condition of zero tension. The elastic stretching would only occur when the lamina 20 was going to be stretched beyond its prestretched state. In that sense lamina 21 was not behaving elastically, i.e. it was "relatively inelastic".

The Board considers, however, that there is no basis for such an interpretation in claim 1 nor in the remainder of the patent in suit. The relatively inelastic lamina is cited in the claim as "being relatively inelastic", which clearly relates to its material properties. In the patent in suit the discussion of the laminae of the elastic member also centers on the elastic properties of the materials used, see column 21, line 9 - column 22, line 16. In contrast thereto the reference in D4 to the lamina 21 being non-tensioned does not say anything about the material properties of the lamina, only about the state it is in.
Therefore the subject-matter of claim 1 can be distinguished from the disclosure in D4 at least by the feature of one of the laminae in the laminate of the elastic member being relatively inelastic. In view of what follows in this decision there is no need for the Board to go into the question whether further features distinguish the subject-matter of claim 1 from D4.

4.3 D4 on its own does not contain any further information or indications in the direction of replacing the non-tensioned lamina 21 of self-adhering elastic material by a relatively inelastic material as claimed in claim 1.

4.4 The contention of the Appellant that D2 discloses an elastic member having two laminae has already been dismissed by the Board in points 3.2 and 3.3. The elastic member disclosed in D2 is a single apertured layer of elastic material. This document therefore cannot be offering the skilled person suggestions to include a relatively inelastic lamina in the 2-layer laminate of the elastic member as disclosed in D4.

4.5 The Appellant further argued that starting from D2 as closest prior art, the subject-matter of claim 1 would also not involve an inventive step in view of the teachings of the general technical knowledge of the skilled person or when regarding D3 in combination with D2.

However, this argumentation was based on the assumption that D2 disclosed the elastic member as being a laminate having at least two laminae (page 4, point 2.3 of the Notice of Opposition), the distinguishing feature then only being the force requirements in the
features [g] and [h]. The Board having already established that D2 does not contain a disclosure of an elastic member being a laminate having at least two laminae, this argument needs no further discussion.

4.6 The Appellant also held that the subject-matter of claim 1 lacked inventive step over the combination of teachings of D2 with D4 or D5, again when starting from D2.

4.6.1 It is true that D4 teaches the use of an elastic member in the form of a laminate having at least two laminae. However, as already discussed in point 4.2, both laminae in that elastic member are consistently discussed as being of an elastic material. Therefore D4 can at most offer the skilled person the information to replace the single layer apertured structure as disclosed in D2 by a two laminae elastic member with both layers being of elastic material, but not of additionally replacing one of those laminae by a relatively inelastic material.

4.6.2 In D5 the production of elastic gathers in disposable diapers is disclosed in the form of an extruded pressure-sensitive adhesive tape between two substrates. However, the inelastic ("non-elastomeric") substrates 22 and 32 as disclosed in D5 are the topsheet and the bottom sheet of the diaper and not separate laminae in an elastic band laminate which can be used as such.

D5 therefore presents only an alternative arrangement of an elastic band between the topsheet and the backsheet as in D2.
4.6.3 The other available documents also do not contain suggestions for the skilled person to replace the elastic apertured layer of the diaper disclosed in D2 by anything resembling the elastic member laminate having two laminae of which one is relatively inelastic as claimed in claim 1.

4.7 In view of the above the Board has come to the conclusion that the subject-matter of claim 1 of the patent in suit presents an inventive step.

The subject-matter of the dependent claims 2 to 10 of the patent in suit represent preferred embodiments of the absorbent article of claim 1 and therefore also fulfil the requirements of novelty and inventive step.

5. Request for incorporation of statements made by the Respondent during the oral proceedings in the minutes thereof

5.1 The Appellant requested mention in the minutes of the oral proceedings before the Board of an admission it considered had been made by the Respondent in said oral proceedings, the admission being that the terminology \"laminate\" in claim 1 did not cover a laminate formed by the connection of a single layer elastic member joined to the upper or lower covering sheet material of a leg cuff.

5.2 According to Rule 76 EPC minutes of oral proceedings shall be drawn up containing the essentials of the oral proceedings and the relevant statements of the parties. What is particularly relevant are the specific requests and statements with an impact on the definition of the subject-matter, such as statements of surrender or
abandonment of subject-matter. Those should be entered in the minutes (see T 212/97, not foreseen for publication).

The oral submissions of the Respondent during the oral proceedings before the Board merely concern an interpretation of the subject-matter claimed and therefore cannot be considered such a statement of abandonment or surrender of subject-matter.

5.3 The Board wishes to emphasize that it is not the task of any of the departments of the EPO to determine the extent of protection conferred by the patent in suit in respect of possibly infringing absorbent articles. This issue is the exclusive jurisdiction of the national courts pursuant to Article 138(1)(d) EPC in conjunction with Article 69 EPC and the Protocol on the interpretation of Article 69 EPC.

5.4 A different issue is the inconsistency between the description and the wording of the claims as established in point 2.3. In such a case it is important that the Board identifies the subject-matter of the claims in order to be able to carry out substantive examination.

The result of that identification by the Board is presented in points 2.1 to 2.6 above. No further considerations in respect of the extent of protection conferred by the patent are necessary, all the more so because the requirements of Article 123(3) EPC are not at issue, the patent not having been amended.

5.5 Therefore the Board does not see any requirement or necessity to incorporate the requested statement in the
minutes of the oral proceedings held before the Board.

Order

For these reasons it is decided that:

1. The Appellant's request concerning the incorporation of the Respondent's statement in the minutes of the oral proceedings before the Board is rejected.

2. The appeal is dismissed.

The Registrar:  The Chairman:

M. Patin  P. Alting van Geusau