DECISION
of 11 January 2000

Case Number: T 0411/98 - 3.2.4
Application Number: 88121147.8
Publication Number: 0320989
IPC: A41B 13/04
Language of the proceedings: EN
Title of invention:
Method and apparatus for making a disposable incontinence garment or training pant
Patentee:
KIMBERLY-CLARK CORPORATION
Opponent:
Mölnlycke AB
Headword:
-
Relevant legal provisions:
EPC Art. 54, 56, 113, 123
EPC R. 68(2)
Keyword:
"Novelty (yes)"
"Inventive step (yes)"
Decisions cited:
T 0056/87
Catchword:
-
Case Number: T 0411/98 - 3.2.4

DECISION
of the Technical Board of Appeal 3.2.4
of 11 January 2000

Appellant: Mölnlycke AB
(Opponent)
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Respondent: KIMBERLY-CLARK CORPORATION
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 5 February 1998 rejecting the opposition filed against European patent No. 0 320 989 pursuant to Article 102(2) EPC.

Composition of the Board:
Chairman: C. A. J. Andries
Members: R. E. Gryc
C. Holtz
Summary of Facts and Submissions

I. The appellant (opponent) lodged an appeal (received at the EPO on 3 April 1998) against the decision of the Opposition Division (dispatched on 5 February 1998) on the rejection of the opposition against the European patent No. 0 320 989. The appeal fee was paid simultaneously and the statement setting out the grounds of appeal was received at the EPO on 3 June 1998.

II. The opposition was filed against the patent as a whole on the grounds of Article 100(a) and (b) EPC mainly in view of the following prior art documents:

D1: EP-A-0 187 728,
D2: US-A-4 205 679,
D11: GB-A-1 520 740 and

The Opposition Division held that the grounds for opposition did not prejudice the maintenance of the patent unamended and rejected the opposition.

III. In his statement of the grounds of appeal, the appellant contended that all the features of the method and apparatus according to the opposed patent were per se known or self evident for a man skilled in the art. According to the appellant, the method used for manufacturing the assembly shown in Figure 17 of D2 differs from the method of Claim 1 in the opposed patent only in that untensioned leg elastics are
applied on gathered leg openings instead of applying tensioned leg elastics on un gathers leg openings. In his opinion, the results obtained were equivalent and interchangeable and since the step of attaching elastic elements in tensioned condition was within the knowledge of the averaged skilled man, the abovementioned difference could not render the method according to Claim 1 novel over the disclosure of D2.

The appellant also pointed out that the materials used in D2 must have a tendency to resume its original shape after extension in order to improve the fit of the panty and that, since the elastic members only assist in recovery of the fabric after extension, the fabric must have a tendency of its own to recover after extension. The appellant was therefore of the opinion that the method of Claim 1 was not novel over D2.

As regards inventive step the appellant argued also that a skilled man trying to solve the general problem of improving a disposable garment would study D1, would learn therefrom a way of manufacturing such garments and would be incited to also study garments having absorbent inserts such as the garment of D11. Therefore, an article having all the features of an article produced by the method according to the opposed patent could be arrived at by an obvious combination of D1 and D11.

Moreover, the appellant contended that, in the opposition proceedings, he put forward a combination of prior art which was totally neglected by the Opposition division in its decision. Considering that the negligence of the Opposition Division constituted a substantial procedural violation the appellant
requested the reimbursement of the appeal fee.

In reply, the respondent (proprietor of the patent) contradicted the appellant's argumentation and, with his letter of 13 December 1999, he filed a new main request and four auxiliary requests.

IV. Oral proceedings took place on 11 January 2000.

Nobody was present on behalf of the duly summoned appellant. In accordance with the provisions of Rule 71(2) EPC, the proceedings were continued without the appellant.

The respondent explained that, in the framework of the patent, the meanings of the terms "elastic" and "stretchable" were the same and that the word "joining" should be interpreted as signifying implicitly: "assembling separate parts".

He pointed out that, if the side panels were integrally formed with the absorbent assembly, the manufacturing method should not have a joining step.

According to the respondent, the subject-matter of the independent claims of the patent was new over D2 and inventive over a combination of the teachings of D1 and D2 or D11.

V. At the end of the oral proceedings, the following requests were taken into consideration:

A - For the appellant: the written request made in his letter of 9 December 1999 namely that the decision under appeal be set aside, the European patent be
revoked and the appeal fee be reimbursed.

B - For the respondent: the request that the decision under appeal be set aside and the patent be maintained on the basis of the following documents:

- Claims 1 to 60 filed (as main request) with letter of 13 December 1999,

- Description, columns 1 to 4 as filed with letter of 13 December 1999, the remainder of the description as granted,

- Drawings, Figures 1 to 21 as granted.

VI. The independent Claims 1, 20, 36 and 50 read as follows:

Claim 1:
"A method for making a disposable training pant for a child (2) for absorbing human discharge, comprising the steps of: providing an absorbent assembly comprising a liquid-impervious outer cover (90), a liquid pervious liner (88), and an absorbent medium (92) therebetween, attaching stretchable members while in a stretched condition along at least portions of the respective leg openings, and characterized by the further steps of joining elastic stretchable side panels (6,8) to each one of the side edges of the absorbent assembly, joining the elastic stretchable side panels to form a waist opening and two leg openings with the stretchable side panels and the absorbent assembly, relaxing the attached stretchable members, and gathering at least the portions of the leg openings."
Claim 20:
"An apparatus for making a disposable training pant for a child (2) for absorbing human discharge, comprising means (140, 142, 144, 146) adapted for providing an absorbent assembly comprising a liquid-impervious outer cover (90), a liquid-pervious liner (88), and an absorbent medium (92) therebetween; the absorbent assembly having generally opposite side edges (50, 62; 56, 68) and generally opposite end edges (52, 58; 64, 70), and being characterized by comprising furthermore means (154, 156) adapted for joining elastic stretchable side panels (6, 8) to each one of the side edges, means (164, 166, 162) adapted for forming a waist opening (10) and two leg openings (12, 14) with the elastic stretchable side panels (6, 8) and the absorbent assembly, and means adapted for attaching stretchable members (46) while in a stretched condition along at least portions of the respective leg openings (12, 14)."

Claim 36:
"A method of making a disposable training pant for a child for absorbing human discharge, comprising the step of: providing an absorbent assembly comprising a liquid impervious outer cover, a liquid pervious liner, and an absorbent medium therebetween, and characterized by the further steps of: joining elastic stretchable side panels to respective sides of the absorbent assembly, peripherally positioning an intermediate portion of each elastic stretchable side panel generally along a crotch portion of a respective leg opening, in order to have leg openings completely formed in the elastic stretchable side panels, and forming a waist opening and two leg openings with the elastic stretchable side panels and the absorbent
assembly."

Claim 50:
"An apparatus for making a disposable training pant for a child (2) for absorbing human discharge, comprising: means (140, 142, 144, 146) adapted for providing an absorbent assembly including a liquid impervious outer cover (90), a liquid pervious liner (88) and an absorbent medium (92) therebetween, and being characterized by comprising furthermore: means (154, 156) adapted for joining elastic stretchable side panels (6,8) to respective sides of the absorbent assembly, means adapted for peripherally disposing an intermediate portion of each elastic stretchable side panel generally along a crotch portion of a respective leg opening (12,14) in order to have leg openings completely formed in the stretchable side panels and means (164, 166, 162) adapted for forming a waist opening (10) and two leg openings (12, 14) with the elastic stretchable side panels (6,8) and the absorbent assembly." 

**Reasons for the Decision**

1. Admissibility of the appeal.

The appeal is admissible.

2. Modifications of the independent claims and of the description.

In comparison with the independent Claims 1, 20, 36 and 50 as granted, the new corresponding claims have been modified as follows:
2.1 The general designation: "pant-like garment" used in all the granted independent claims (see the patent respectively column 17, lines 13 to 14; column 19, lines 15 to 16; column 20, lines 47 to 48 and column 22, lines 17 to 18) and also in the description (see column 2, lines 38 and 53 to 54) has been replaced by the following more specific designation: "training pant for a child".

Moreover, in the introduction of the description (see column 1, lines 5 to 6), the phrase: "adult incontinence garment, baby diaper and the like." has been deleted.

In the application as originally filed (see page 1, first paragraph), the invention is described as pertaining more particularly to methods and apparatuses for making an absorbent garment for use as a child's training pant, adult incontinence garment, baby diaper and the like. The proposed modification results thus in a restriction of the scope of the invention and of the protection conferred by the patent. Therefore it complies with the requirements of Article 123(2) and (3) EPC and is allowable.

2.2 In all the independent claims and also in the description (see the patent: column 2, lines 43 and 47 and column 3, lines 1 and 6) the expression: "stretchable side panels" has been replaced by: "elastic stretchable side panels". Although, in the framework of the patent, the terms "elastic" and "stretchable" mean the same (see in particular column 4, lines 47 to 53 of the patent) and although it appears thus to be redundant to use both terms together, the Board has allowed said modification in
order to avoid a possible ambiguity and any further discussion on this point.

3. Interpretation of the independent claims

3.1 "disposable" training pant (see column 17, line 13; column 19, line 15; column 20, line 47 and column 22, line 17) : This expression designates a pant specially designed to be used once and then thrown away.

3.2 "joining" (see column 17, lines 24 and 27; column 19, line 28; column 20, line 55 and column 22, line 27): According to the description (see for example column 4, lines 30 to 46 and column 5, lines 3 to 27 and also column 8, line 37 to 52 and column 9, lines 51 to 58) and to the drawings (in particular Figures 1, 2, 5 and 11 to 13), this term should be interpreted as meaning not only explicitly, that a binding exists between the side panels and the absorbent assembly (also referred to in the description as the "waste containment section"), but also implicitly, that the side panels are made first separate from anyone of the components of the absorbent assembly (i.e. bodyside liner 88, absorbent medium 92 or outer cover 90) and afterwards, attached, border to border, to at least one of these components by a permanent link, the step of joining the panels meaning implicitly that they are separate parts.

4. Novelty (Article 54 EPC)

4.1 A claimed subject-matter would lack novelty only if it were derivable as a whole directly and unambiguously from a prior art disclosure and if a "clear and unmistakable teaching" of the combination of all claimed features (and not only the essential ones)
could be found in said disclosure.

4.2 The abovementioned conditions are not fulfilled by D1 since the ear portions of the disclosed pant corresponding to the side panels of the training pant according to the invention are neither "elastic stretchable" nor made separate and joined to the side edges of the absorbent assembly but are formed integrally with the bodyside liner and the outer cover, with an absorbent batt sandwiched therebetween (see for example D1: from page 13, line 33 to page 15, line 15 and Figures 1 to 3 and 5, 6, 9 and 12). Moreover D1 does not describe an apparatus for making a disposable training pant.

4.3 Also D2 cannot anticipate the invention since this document reveals manufacturing a disposable training panty by cutting an outer or backing layer into a blank (see for example column 2, lines 44 to 53), said layer having side panels resulting from the cutting of the blank. Consequently, D2 teaches to make the side panels integral with the backing layer of the absorbent assembly (see also the Figures of D2) instead of, according to the invention, making them separately (as meant implicitly in Claim 1 - see above section 3.2) and afterwards joining them to a component of the absorbent assembly. Moreover, the non-woven web used to make the backing layer and the contoured side panels of the pants of D2 (see for example column 2, lines 27 to 32 and from column 4, line 40 to column 5, line 17) cannot be considered as "elastic stretchable" in the meaning of the invention since, even if a compressively shrunk or micropleated fabric may retract a little when the tensive forces are no longer applied, it would certainly not be able to recover its original
dimensions after having been submitted to the forces resulting from the movements of the body of a young child wearing the pant. Also D2 does not describe an apparatus for making a training pant.

4.4 D11 does not describe a child's training pant but sanitary garments for incontinent persons, particularly geriatric and other invalids who are more or less immobile (see page 1, left-hand column, lines 9 to 12) i.e. garments for wearers who are exactly the opposite to the normal users of training pants who are very young and continuously moving. Moreover, the stretchable side panels of the sanitary garment of D11 are not attached to the side edges of the absorbent assembly as according to the method of the invention since, in D11, the absorbent pad is detachable from the sanitary garment itself (see page 2, lines 100 to 128). As regards an apparatus for making the pant, none is disclosed in D11.

4.5 D12 is not concerned with a training pant for children but with a catamenial or incontinence device having side portions which are described solely as being stretchable (see for example: column 2, lines 43 to 45) but not "elastic stretchable" in the meaning of the invention. Also there is no description of an apparatus for making the disclosed pant.

4.6 Therefore, the board acknowledges that the cited documents, considered separately, disclose neither a method nor an apparatus comprising in combination all the features cited in one of the independent Claims 1, 20, 36 and 50 of the opposed patent and that the subject-matter of each of said claims is therefore new within the meaning of Article 54 EPC.
5. The state of the art closest to the method of Claim 1.

5.1 In general, a disposable training pant for a child usually distinguishes from other garments not only by its small size but also by its form which must be adapted to the anatomy and the behaviour of the normal wearers who have a large stomach and narrow hips and are particularly active. The conception of such a pant is also influenced not only by the fact that it is a disposable item, but also by its specific training function so that, for example, the pant easily can be pulled up and down by a very young child, but on wearing still be able to function without leakage of not only fluid exudates but also of solid wastes, which implies improved containment and support capacities. Therefore, the Board is of the opinion that solely the prior art disclosed by documents specialized in child's training pants (i.e. D1 and D2) can be taken as a proper starting basis for the assessment of inventive step of the subject-matter of Claim 1 and, more particularly, the method for making either the embodiment represented in Figures 1 to 6 of D1 or the embodiment represented in Figure 17 of D2.

5.2 If the manufacturing method of the embodiment represented in Figures 1 to 6 of D1 is considered as the prior art closest to the method of Claim 1, the subject-matter of Claim 1 differs essentially from said method by all the features of the characterising portion of the claim and by the fact that the stretchable members are attached "while in a stretched condition".

5.3 If the closest prior art is considered to be the manufacturing method of the embodiment represented in
Figure 17 of D2, the method of Claim 1 appears to differ from said known method:

- in that the side panels are not solely "stretchable" but "elastic stretchable" and, if the said assembly is considered to be composed with the facing layer 300, the blank 302 forming the backing layer and an absorbent panel sandwiched therebetween – see D2: column 9, lines 27 to 30 and Figure 17),

- in that the side panels are made separately from the absorbent assembly and joined to the side edges of said assembly whereas the stretchable side panels of the pant of Figure 17 are integrally made with the micropleated backing layer (blank 312) contoured to have a hour glass shape.

6. **Problem and solution**

Starting from the state of the art described either in D1 or in relation to the embodiment of Figure 17 of D2 and taking into account the above-mentioned corresponding differences, the problem appears to be to improve the method of making the known embodiment (see the opposed patent: column 2, lines 26 to 28) so as to improve the functioning of the embodiment itself.

Prima facie, the Board has no reason to doubt that the invention as claimed in Claim 1 effectively brings a solution to this problem.

7. **Inventive step (Article 56 EPC)**
7.1 In D1, the skilled person would not learn anything about manufacturing the outer cover of the training pant in several separate parts and about connecting discrete side panels to the side edges of the absorbent assembly. In D1, he would also find no information about the advantage of having elastic side panels in a disposable training pant, let alone side panels comprising elastic side members attached while in a stretched condition along the leg openings.

7.2 As regards D2, the side panels of the disposable training panty shown on Figure 17 are cut integrally with the micropleated backing layer of the absorbent assembly so as to provide a hour-glass shape and there is no indication in this document that suggests to the skilled person to conceive the outer layer of the garment in three portions (i.e. a central backing layer for the absorbent assembly and two side portions attached to said layer). Without any hint, the skilled person would not be inclined to adopt spontaneously such a construction, which looks more complicated than the one adopted in D2. Regarding the improvement of the capability to contain the body’s wastes of the garment known from D2, the skilled person would be reluctant to consider a solution consisting in replacing a relatively economic micropleated material by a more expensive elastic material in the manufacture of a disposable article.

7.3 Therefore, the skilled person starting from the method for making a training pant according to either D1 or D2 and wishing to improve it would not be led to the method of Claim 1 by the teachings of these two documents taken alone or in combination.
7.4 As regards D11, the Board has some doubt that, at the priority date and in order to improve the disposable training pant for a child according to either D1 or D2, the skilled person would consult such a document as D11, which relates to garments of a different conception (i.e. for the use as an adult cloth underpant instead of as a training pant for a young child), of different natures (i.e. reusable instead of disposable) and sizes (i.e. for adults instead of for very young children), and intended for a completely different type of wearers (see D11: page 1, lines 9 to 12 - i.e. "geriatric and other invalids who are more or less immobile" instead of very young and boisterous children) and for a different function (i.e. a pure sanitary function instead of a training function).

If, nevertheless, it is assumed that, starting from the method known from either D1 or D2, the skilled person would have consulted D11 and learned therefrom the advantages obtained by using elastic side panels which provide a snug fit on the body of the wearer, the skilled person should have considered the teaching of D11 in its entirety (see decision T 56/87, OJ EPO 1990, 188) and would have joined the side pieces to a central piece distinct from the absorbent pad itself. The skilled person would have a priori no reason to join the elastic stretchable side pieces known from D11 directly to the side edges of the absorbent pad, let alone to the side edges of an absorbent assembly according to the method of Claim 1 since no such assembly exists per se, as an entity, either in the garment of D1 or in the garment of D2. Therefore, the skilled person would still not arrive at a method for making a training pant similar to the one according to the invention.
7.5 If the skilled person starting from D1 or D2 would have consulted D12, although this document is concerned with garments for adults and intended for a different type of wearers (i.e. women instead of babies) and for a different function (i.e. sanitary instead of training), he would have learn that the garment may be constructed by assembling together an impervious backing to form the center portion with two separate stretchable side pieces and by sandwiching an absorbent pad between the impervious backing and a permeable layer sealed to said backing (see D12: column 4, lines 23 to 33 and Figures 1 and 2). However, neither from D1 and D2 nor from D12 would the skilled person learn or even be incited to use stretchable side panels made of elastic material. Therefore, even if the skilled person would apply the teaching of D12 to the methods of D1 or D2, he would still not arrive at the method of Claim 1

8. Method Claim 36 and apparatus Claims 20 and 50

The manufacturing step of joining the elastic stretchable side panels to each one of the side edges of the absorbent assembly being common to Claim 1 and to the independent Claims 20, 36, and 50, and said feature not being disclosed in the cited prior art documents D1, D2, D11 and D12, the arguments in sections 5 to 7 above in relation to the subject-matter of Claim 1 remain valid as regards the subject-matter of these other independent claims.

9. Conclusion

Consequently, the Board considers that to modify the method for making a disposable child's training pant known from either D1 or D2 in order to arrive at the
claimed invention does not follow plainly and logically from the state of the art disclosed in the documents D11 and D12 cited during the proceedings and thus that such a modification implies an inventive step within the meaning of Article 56 EPC. Therefore the invention meets the requirements of the EPC and the patent can be maintained in the amended version filed as main request with letter of 13 December 1999 (see above section V).

10. Alleged procedural violation and reimbursement of the appeal fee requested by the appellant

In his statement setting out the grounds of appeal, the appellant complained (see the last page of the written statement) that, in the appealed decision, the first instance totally neglected a combination of prior art that he put forward, which in his opinion made the method of the opposed patent obvious to a man skilled in the art. For the appellant, such a negligence of the opposition division constituted a substantial procedural violation.

It should be recalled that, in their decisions, the instances of the Office have no obligation to consider in detail the argumentations of the parties and to give an opinion on every combination of prior art referred to during the proceedings. The requirements of Article 113 and Rule 68(2) EPC relating to the decisions of the EPO are fulfilled as soon as the said decisions are "based on grounds or evidence on which the parties concerned have had an opportunity to present their comments" and are "reasoned" and "accompanied by a written communication of the possibility of appeal".
These essential conditions being satisfied in the appealed decision, the sole fact that each argument put forward by the appellant was not specifically discussed by the opposition division cannot be considered as a substantial procedural violation and the appeal fee has not to be reimbursed.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The request for reimbursement of the appeal fee is refused.

3. The case is remitted to the first instance with the order to maintain the patent in accordance with the respondent's request (see above section V).

The Registrar: 
C. Andries

The Chairman: 
G. Magouliotis