DECISION
of 23 February 2000

Case Number: T 0218/99 - 3.2.6
Application Number: 94931861.2
Publication Number: 0726753
IPC: A61F 13/62

Language of the proceedings: EN

Title of invention:
Absorbent article with fastening system to prevent drooping

Applicant:
KIMBERLY-CLARK WORLDWIDE, INC.

Opponent:
-

Headword:
-

Relevant legal provisions:
EPC Art. 54, 56

Keyword:
"Novelty (yes) after amendment"
"Inventive step (yes) after amendment"

Decisions cited:
-

Catchword:
Case Number: T 0218/99 - 3.2.6

DECISION
of the Technical Board of Appeal 3.2.6
of 23 February 2000

Appellant: KIMBERLY-CLARK WORLDWIDE, INC.
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Neenah, Wisconsin 54956   (US)

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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 1 October 1998 refusing European patent application No. 94 931 861.2 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: P. Alting van Geusau
Members: T. K. H. Kriner
R. T. Menapace
Summary of Facts and Submissions

I. The appellant (applicant) lodged an appeal on 30 November 1998, against the decision of the Examining Division of 1 October 1998, refusing the European patent application No. 94 931 861.2. The fee for the appeal was paid simultaneously and the statement of grounds was received on 11 February 1999.

II. The Examining Division held that the application did not meet the requirements of Article 52(1) EPC in connection with Articles 54 and 56 EPC, having regard to the disclosure of the following documents:

D1: EP-A-0 528 282

III. In response to a communication of the Board dated 30 November 1999, with letters of 24 January 2000 and 31 January 2000 the appellant filed new claims 1 to 15 and adapted the description to these claims.

During a consultation by telephone on 15 February 2000, further minor amendments to these documents were agreed upon.

The appellant requested that the decision under appeal be set aside and a patent granted on the basis of the following documents:

Claims: 1 to 15 filed with letter of 31 January 2000.
Description: Pages 1a, 2, 15 filed with letter of 31 January 2000.
Pages 1, 3, 4, 8, 11, 13, 14, 17, 18 filed with letter of 24 January 2000.
Pages 5, 6, 7, 9, 10, 12, 16 as originally filed.

Drawings: Figures 1 to 5 as originally filed.

With the amendments in claims 1, 4, 5, 7, 8, 9 and in the description on pages 1, 1a, 2 as agreed upon on 15 February 2000.

V. Independent claims 1 and 5 read as follows:

"1. A disposable absorbent article (10), to be placed between the legs of a wearer and to be held in position around a wearer's body, said article defining a front portion (18), a rear portion (20) and a crotch portion (22) connecting the front (18) and rear (20) portions and having opposed longitudinal side edges (24), said article (10) comprising:

an outer cover (12);
a liquid-pervious body-side liner (14);
an absorbent material (16) located between said outer cover (12) and said body-side liner (14);
a pair of opposed ears (26) located on said front portion (18), said ears (26) being adapted, in use, to overlap with said rear portion (20) of said article (10);

attachment means (34; 36) for attaching said overlapped portions of said ears (26) to said rear portion (20) to form attachment points, said attachment points being located on a side of said article (10) behind a
transverse center plane (60) of said article (10); said attachment means (34; 36) comprising a first mechanical fastener (34) attached to said ears (26) and adapted to releasably engage with a second mechanical fastener (36) attached to said rear portion (20), said first mechanical fasteners (34) being hook members of a hook-and-loop fastener and said second mechanical fasteners (36) being loop members of a hook-and-loop fastener; leg elastic members (32) attached to said crotch portion (22) adjacent said opposed longitudinal side edges (24); and a waist elastic member (28, 30) attached to at least one of said front portion (18) or said rear portion (20); characterized in that said attachment points are located behind said transverse center plane (60) of said article (10) within 6.4 cm (2.5 inches) of said transverse plane (60), and in that said leg elastic members (32) abut or overlap with said loop members.

"5. A disposable absorbent article, to be placed between the legs of a wearer and to be held in position around a wearer's body, said article defining a front portion (18), a rear portion (20) and a crotch portion (22) connecting the front (18) and rear (20) portions and having opposed longitudinal side edges (24), said article (10) comprising:

an outer cover (12);
a liquid-pervious body side liner (14);
an absorbent material (16) located between said outer cover (12) and said body-side liner (14);
a pair of opposed ears (26) located on said rear portion (20), said ears (26) being adapted, in use, to overlap with said front portion (18) of said article
attachment means (34; 36) for attaching said overlapped portions of said ears (26) to said front portion (18) to form attachment points, said attachment points being located on a side of the article (10) behind a transverse center plane (60) of said article (10); said attachment means (34; 36) comprising a first mechanical fastener (34) attached to said ears (26) and adapted to releasably engage with a second mechanical fastener (36) attached to said front portion (18), said first mechanical fasteners (34) being hook members of a hook-and-loop fastener and said second mechanical fasteners (36) being loop members of a hook-and-loop fastener; leg elastic members (32) attached to said crotch portion (22) adjacent said opposed longitudinal side edges (24); and a waist elastic member (28, 30) attached to at least one of said front portion (18) or said rear portion (20); characterized in that said attachment points are located behind said transverse center plane (60) of said article (10) within 6.4 cm (2.5 inches) of said transverse plane (60), and in that said leg elastic members (32) abut or overlap with said loop members."

VI. In support of its request, the appellant relied essentially on the following submissions.

D1, a document which described an absorbent article according to the preambles of claim 1 and of claim 5, merely proposed to provide the attachment points of a diaper behind its transverse center plane. However, this document neither suggested to select a particular location within a specific distance from the transverse
center plane to avoid drooping, nor to arrange the leg elastic members such that they abut or overlap with the loop members.

As the corresponding arrangement of the attachment points and of the leg elastic members according to the characterising portions of claims 1 and 5 was also not known or suggested by the other cited prior art documents, the subject-matter claimed in the present application was not only novel but involved an inventive step.

**Reasons for the Decision**

1. The appeal is admissible

2. **Amendments**

Independent claim 1 comprises the features of originally filed claims 1, 3, 4, 6, 15 and independent claim 5 those of originally filed claims 15, 16, 18, 19, 21. The inclusion of the features of originally filed claim 15 in new claim 5 is supported by the disclosure on page 10, lines 1 to 9 of the originally filed description. Furthermore both claims have been clarified by the feature according to which the absorbent article is to be placed between the legs of a wearer and to be held in position around a wearer's body, as it is for example shown in originally filed figures 4 and 5.

Claims 2, 4, 6, 7, 10 correspond to originally filed
claims 2, 5, 17, 20, 24 respectively. Claim 8 includes the features of originally filed claims 7 and 22, and claim 9 those of originally filed claims 8 and 23. The subject-matter of claim 3 is shown in figures 1 and 2, and the subject-matter of claims 11 and 12 is disclosed in originally filed claims 25, 26 and in the originally filed description on page 10, lines 1 to 4. The subject-matter of claims 13 to 15 is supported by the disclosure on page 10, lines 24 to 32 of the originally filed description.

The description was amended to adapt it to the present claims.

In view of the above, the amendments to the application do not give rise to objections under Article 123(2) EPC.

3. Novelty

3.1 The most relevant state of the art is shown in D1. This document discloses (see particularly figures 6 and 12) a disposable absorbent article (12; 12'), to be placed between the legs of a wearer and to be held in position around a wearer's body, said article defining a front portion (24), a rear portion (20) and a crotch portion (22) connecting the front and rear portions and having opposed longitudinal side edges (30), said article comprising:

- an outer cover (18);
- a liquid-pervious body-side liner (58);
- an absorbent material (32) located between said outer cover and said body-side liner;
- a pair of opposed ears (48; 72) located on said front
portion or said rear portion, said ears being adapted, in use, to overlap with said rear portion or said front portion of said article;
attachment means (44, 50; 44', 74) for attaching said overlapped portions of said ears to said rear portion or to said front portion to form attachment points, said attachment points being located on a side of said article behind a transverse center plane (see figures 4 and 13) of said article; said attachment means comprising a first mechanical fastener (50; 74) attached to said ears and adapted to releasably engage with a second mechanical fastener (44, 44') attached to said rear portion or to said front portion, said first mechanical fasteners being hook members of a hook-and-loop fastener and said second mechanical fasteners being loop members of a hook-and-loop fastener (see column 6, lines 11 to 16),
leg elastic members (16) attached to said crotch portion adjacent said opposed longitudinal side edges, and
a waist elastic member (34, 36) attached to at least one of said front portion or said rear portion.

Hence, D1 discloses the articles with the alternative attachment means as described in the preambles of independent claims 1 and 5.

3.2 With respect to claims 1 and 5, D2 and the documents cited in the search report and the international preliminary examination report (IPER) for the present application are less relevant than D1.

In particular, none of the absorbent articles disclosed in these documents comprises attachment points which
are located on a side behind a transverse centerline when the article is in use, and all the leg elastic members shown in these documents are arranged in such a way that there is a clearance between the leg elastic members and the attachment means of the absorbent articles.

3.3 Since there is no document which discloses all features of claims 1 and 5, the subject-matter of these claims and of their dependent claims 2 to 4 and 6 to 15 is novel.

4. \textit{Inventive step}

4.1 Starting from D1, the object of the present application is to provide an absorbent article which helps prevent drooping and where a proper fit is achieved (see page 1a, paragraph 2 of the amended description).

4.2 This object is achieved by the provision of an absorbent article in accordance with the preamble of claims 1 and 5 in which the attachment points are located behind the transverse center plane of said article within 6.4 cm (2.5 inches) of said transverse plane, and where the leg elastic members abut or overlap with said loop members.

4.3 With respect to the position of the attachment points, D1 teaches arranging the first fastening devices (50; 74) so that they are attached to the second fastening devices (44; 44') at the back portion of the wearer (see column 6, lines 37 to 41). Since the back portion is defined as the portion from the centerline on one side of the wearer and around the back to a
similar point on the other side of the wearer (see column 3, lines 18 to 26), and since the position of the centerlines corresponds to the transverse centerplane according to the present application, D1 suggests locating the attachment points anywhere in the whole range behind the transverse centerplane of the absorbent article.

In comparison with this teaching, claims 1 and 5 require a selection of a particular sub-range of this known range for the location of the attachment points, in order to prevent drooping of the claimed article.

The additionally claimed arrangement of the leg elastic members such that they abut or overlap with the loop members results in a formation of a cup shaped rear portion of the claimed article (see page 11, lines 4 to 6). As a result of this cup shape, the loop members are located on the sides of a wearer when he or she is laid on the diaper, so that a simultaneous attachment of both pairs of hook-and-loop members is possible. Whilst a separate attachment of the pair of hook-and-loop members does not always result in a correct fit of a diaper and often necessitates a disengagement and a reattachment of one of the hook-and-loop members, a simultaneous attachment allows an immediate proper fit (see page 11, lines 11 to 26 of the description).

If the attachment points were not located adjacent to the transverse centerplane, the advantage of the cup shaped rear portion could not be used for the simultaneous attachment described above.

Therefore, the location of the attachment points in a
sub-range adjacent to the transverse center plane and
the claimed arrangement of the leg elastic members
cooperate to achieve the object mentioned above.

4.4 According to D1, the leg elastic members are joined to
the absorbent article before being stretched so that
they leave the lateral sides of the diaper relatively
non-gathered (see claim 1 and column 7, lines 23 to 28
of D1).

As this measure avoids a deformation of the diaper, it
leads away from the idea of arranging the leg elastic
members so that they form a cup shaped rear section.

Therefore, even if the skilled person selected the
claimed sub-range adjacent to the transverse centerline
for an article according to D1, no suggestion can be
derived for arranging the leg elastic members so that
the rear portion of this article forms a cup shape.

4.5 Furthermore, D2 as well as the documents cited in the
search report and the IPER cannot contribute to the
claimed combination, because they solely refer to
diapers having the attachment points in front of the
transverse centerline and having leg elastic members
which do not abut or overlap with any attachment means
on their rear section.

5. The Board therefore comes to the conclusion that the
subject-matter of claims 1 and 5 according to the
appellant's request cannot be derived in an obvious
manner from the available prior art and accordingly
involves an inventive step (Article 56 EPC). These
independent claims, together with their dependent
claims 2 to 4 and 6 to 15 and the amended description and drawings, therefore form a suitable basis for the grant of a patent.

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 grant a patent on the basis of the following documents:

   **Claims:** 1 to 15 filed with letter of 31 January 2000

   **Description:** Pages 1a, 2, 15 filed with letter of 31 January 2000,
   pages 1, 3, 4, 8, 11, 13, 14, 17, 18 filed with letter of 24 January 2000,
   pages 5, 6, 7, 9, 10, 12, 16 as originally filed.

   **Drawings:** Figures 1 to 5 as originally filed.
With the amendments in claims 1, 4, 5, 7, 8, 9 and in the description on pages 1, 1a, 2 as agreed upon on 15 February 2000.

The Registrar: 

M. Patin

The Chairman: 

P. Alting van Geusau