Datasheet for the decision of 29 June 2011

Case Number: T 2029/09 - 3.2.06
Application Number: 02258490.8
Publication Number: 1319380
IPC: A61F 13/56

Language of the proceedings: EN

Title of invention: Disposable diaper

Patentee: UNI-CHARM CORPORATION

Opponent: The Procter & Gamble Company

Headword: -

Relevant legal provisions:
EPC Art. 123(2)
RPBA Art. 13(1)

Relevant legal provisions (EPC 1973):
EPC Art. 84

Keyword: "Main request - claim 1 - functional feature - inconsistent in itself" "Auxiliary requests - lated-filed - not admitted"

Decisions cited: -

Catchword: -
Case Number: T 2029/09 - 3.2.06

DECISION
of the Technical Board of Appeal 3.2.06
of 29 June 2011

Appellant: UNI-CHARM CORPORATION
(Patent Proprietor)
182 Shimobun
Kinsei-cho
Shikokuchuo-shi
Ehime-ken (JP)

Representative: Parry, Christopher Stephen
Saunders & Dolleymore LLP
9 Rickmansworth Road
Watford WD18 0JU (GB)

Respondent: The Procter & Gamble Company
(Opponent)
One Procter & Gamble Plaza
Cincinnati, OHIO 45202 (US)

Representative: Anderson, James Edward George
Elkington and fife LLP
Prospect House
8 Pembroke Road
Sevenokas, Kent TN13 1XR (GB)

Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 16 June 2009 revoking European patent No. 1319380 pursuant to Article 101(2) EPC.

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

I. European patent No. 1 319 380 was revoked by the opposition division by way of its decision posted on 16 June 2009.

II. The opposition division held that the subject-matter of claim 1 according to the main request lacked novelty at least with respect to D1: WO-A-96/21412,

and that the subject-matter of claim 1 of the first and second auxiliary requests did not meet the requirement of Article 123(2) EPC. The wording added to the subject-matter of claim 1 of the third auxiliary request was considered as being inconsistent and unclear and hence, as not meeting the requirements of Articles 83 and 84 EPC.

III. On 8 August 2009 the appellant (patent proprietor) filed an appeal against this decision and paid the appeal fee. A statement setting out the grounds of appeal was received at the European Patent Office on 13 October 2009 together with a main request and first to seventh auxiliary requests.

IV. With its communication of 22 March 2011 annexed to a summons to oral proceedings, the Board indicated inter alia that the requirements of Article 84 EPC 1973 and Article 123(2) EPC did not appear to be met by various requests.
V. With its letter of 27 May 2011, the appellant submitted as its main request a request which was identical to the previously filed first auxiliary request, together with thirteen auxiliary requests.

VI. Oral proceedings were held on 29 June 2011. The appellant requested that the decision under appeal be set aside and that the patent be maintained on the basis of the main request or one of the first to third, fifth to tenth, twelfth or thirteenth auxiliary requests, all filed with the letter of 27 May 2011, or on the basis of the fourth auxiliary request filed during the oral proceedings (corresponding to former auxiliary request eleven, with the wording "and the low stretchability section (28) being non-stretchable outward in said transverse direction" being deleted).

The respondent requested that the appeal be dismissed.

VII. Claim 1 of the main request reads:

"An open-type disposable diaper (1) having a transverse direction (A) and a longitudinal direction (B), said diaper being composed, in said longitudinal direction, of a crotch region (8), a front waist region (6) extending in front of said crotch region and a rear waist region (7) extending behind said crotch region, one of said front and rear waist regions being provided on its transversely opposite side edges with wings (22) and lobes (26) extending outward from these wings in said transverse direction, said lobes being provided on inner surfaces thereof with fasteners (29) adapted to be detachably anchored on an outer surface of the other of said front and rear waist regions, said open-type
The disposable diaper is characterised in each of said lobes extending outward from said wings in the transverse direction being divided in two sections, one high stretchability section (27) placed aside toward an outer end and the other, a low stretchability section (28), placed aside toward an inner end as viewed in said longitudinal direction, said high stretchability section (27) adapted to be easily elastically stretchable in the transverse direction and the low stretchability section (28) adapted to be less easily stretched in the transverse direction than the high stretchability section (27), said high stretchability section (27) placed aside toward the outer end being provided with the fastener, such that when the high stretchability section (27) is pulled outward in the transverse direction with the fastener held by fingers, the free stretchability of the high stretchability section (27) tending to stretch elastically is restricted by the low stretchability section (28) positioned below the high stretchability section (27), and the high stretchability section (27) stretches in an oblique direction (P) downwards.

Claim 1 of auxiliary request 1 differs from claim 1 of the main request in that the low stretchability section (28) is further defined as "being hard stretchable or non-stretchable outward in said transverse direction".

Claim 1 of auxiliary request 2 differs from claim 1 of the main request in that the low stretchability section (28) is further defined as "being non-stretchable outward in said transverse direction".
Claim 1 of auxiliary request 3 differs from claim 1 of the main request in that
- the high stretchability section (27) is further defined as being "made of a sheet material having elastic stretchability";
- the low stretchability section (28) is defined as being "made of a sheet material having no stretchability or an elasticity higher than that of the sheet material forming the high stretchability section"; and as
"being hard stretchable or non-stretchable outward in said transverse direction";
additionally, the following is defined:
"said sheet materials being joined together along an overlapping zone (40) of these two sections".
Lastly, the functional feature "such that when the high stretchability section (27) is pulled outward in the transverse direction with the fastener held by fingers, the free stretchability of the high stretchability section (27) tending to stretch elastically is restricted by the low stretchability section (28) positioned below the high stretchability section (27), and the high stretchability section (27) stretches in an oblique direction (P) downwards" at the end of claim 1 of the main request has been deleted.

Claim 1 of auxiliary request 4 reads as follows:
"An open-type disposable diaper (1) having a transverse direction (A) and a longitudinal direction (B), said diaper being composed, in said longitudinal direction, of a crotch region (8), a front waist region (6) extending in front of said crotch region and a rear waist region (7) extending behind said crotch region,
one of said front and rear waist regions being provided on its transversely opposite side edges with wings (22) and lobes (26) extending outward from these wings in said transverse direction, each of the lobes overlapping with an outer end section (33) of the associated wing, which comprises a topsheet and a backsheet, and being joined to the wing along this overlapping zone (35), said lobes being provided on inner surfaces thereof with fasteners (29), which are non-stretchable in the transverse direction and comprise tapes with fastening zones on their inner surfaces, and which are adapted to be detachably anchored on an outer surface of the other of said front and rear waist regions, said open-type disposable diaper being characterised in each of said lobes extending outward from said wings in the transverse direction being divided in two sections, one high stretchability section (27), made of a sheet material having elastic stretchability, placed aside toward an outer end and the other, a low stretchability section (28), made of a sheet material having no stretchability, placed aside toward an inner end as viewed in said longitudinal direction, said sheet materials being joined together along an overlapping zone (40) of these two sections, said high stretchability section (27) adapted to be easily elastically stretchable in the transverse direction, said high stretchability section (27) placed aside toward the outer end being provided with the fastener."

Claim 1 of each of auxiliary requests 5, 7, 9, 12 and 13 includes inter alia the functional feature according to claim 1 of the main request (which has been deleted in claim 1 of auxiliary request 3). Claim 1 of each of
auxiliary requests 6, 7, 8, 9, 10, 12 and 13 includes inter alia the feature that the low stretchability section is "hard stretchable". Further amendments are also present, but require no recitation here, as will be apparent from the Reasons for the decision infra.

VIII. The arguments of the appellant may be summarised as follows:

The subject-matter of claim 1 of the main request was clear and disclosed in the originally filed application. The additional wording compared to claim 1 as granted clarified the function of the stretchability of the two sections and was disclosed using wording in the originally filed application. Although this wording was only included in the description of the first embodiment shown in Figures 1 to 3, the skilled person would understand that high and low stretchability sections having such functionality were not limited to this embodiment. Hence, no subject matter was being added by introduction of this functional feature. Nor was any lack of clarity generated by the insertion of this feature since the skilled person understood that the transverse stretching of the high stretchability section caused the high stretchability section to stretch in an oblique direction downwards due to the forces induced. It was also clear that by using fingers to stretch the high stretchability section, the force generated by the fingers would not be sufficient to prevent movements downward whereby stretching would occur obliquely downwards. Although not explicitly stated, the skilled person would deduce implicitly that the oblique stretching would apply to all embodiments.
With regard to claim 1 of auxiliary request 3, such a claim had already been presented and discussed before the opposition division, formed part of the appealed decision and had also been submitted together with the grounds of appeal. Its re-submission in slightly amended form could have been expected. Therefore, the request should be admitted into the appeal proceedings.

The term "hard stretchable" was clear in the given context and was essentially a synonym for the feature that the low stretchability section was less easily stretched in the transverse direction than the high stretchability section. Concerning the claimed characteristic of the sheet material of the low stretchability section having an elasticity higher than that of the sheet material forming the high stretchability section, it should be understood that elasticity and stretchability were to be considered independently from one another. Hence, this relative terminology did not introduce a lack of clarity. Elasticity related to the return force caused upon release of a stretched section, such that a higher elasticity caused a higher return force; "hard stretchable" thus meant the same as "highly elastic". Concerning the terminology "overlapping zone", this zone was defined by the sheet materials of the two sections and did not need to be defined further; it did not define a further "section". Consistent with this definition, Figure 3 showed such an overlapping zone. Hence, this wording did not lead to any lack of clarity.

Claim 1 of auxiliary request 4 overcame the objections raised with respect to the previous requests. Its subject-matter included all the features which were
necessary to clarify the stretchability, by incorporating features concerning the design of the fastener and the lobes and wings in relation to the functioning of the article. No further features of the embodiment of Figure 3 were required so that the requirements of Article 123(2) EPC were met. Additionally, the claim was limited to a low stretchability section having no stretchability at all.

The remaining requests either included the term "hard-stretchable" or the final functional features of claim 1 of the main request. Hence, further arguments would not be expedient.

IX. The arguments of the respondent may be summarised as follows:

In regard to the main request, the functional wording added at the end of the claim compared to granted claim 1 led to an objection concerning lack of clarity and lack of disclosure. The fact that the high stretchability section should be pulled outward in the transverse direction with the fasteners held by fingers was incompatible with the feature that at the same time the same section should stretch in an oblique direction downwards (Article 84 EPC). Moreover, the added feature was disclosed only in relation to the specific embodiment shown in Figure 3, which however included further features not specified in the claim contrary to Article 123(2) EPC. Further contrary to Article 123(2) EPC, the expression "hard stretchable or non-stretchable" in claim 1 as filed had been replaced in the main request by the expression "less easily stretched...than the high stretchability section".

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However, no basis existed for removing the original terminology and the replacement terminology was a relative term and had an entirely different meaning.

Claim 1 of the first, second, fifth, seventh, ninth, twelfth and thirteenth auxiliary requests included the same functional feature and thus the same arguments applied.

Concerning claim 1 of the third auxiliary request, no meaningful interpretation was possible concerning how a hard stretchable or non-stretchable section could at the same time be "made of a sheet material having no stretchability or an elasticity higher than that of the sheet material forming the high stretchability section" and be "less easily stretched in the transverse direction than the high stretchability section (27)". The term "less easily stretched" was inconsistent with a non-stretchable section. Hence the confusing mixture of the terms "low stretchability section", "hard stretchable", "non-stretchable" and "less easily stretched" was not clear as required by Article 84 EPC. The term "hard stretchable" was also unclear per se, since it had no defined limits. This late-filed request should not be admitted.

Auxiliary request 4 should also not be admitted into the proceedings. It was late-filed and did not a priori overcome the raised objections. Contrary to the appellant's submission, its subject matter did not include all essential features of the claimed embodiment. The position of the fasteners was claimed as being provided on the inner surface of the lobes, but when considering the embodiment shown in Figure 3
and the intended purpose, only a position on the side edges of the high stretchability section of the lobes in proximity to the low stretchability section was disclosed, which position was essential for the intended purpose. The amendment thus constituted an unallowable intermediate generalisation of the original disclosure (Article 123(2) EPC).

The subject-matter of claim 1 of the remaining auxiliary requests included on or more of the expressions discussed previously and the same arguments applied. In view of their late filing these requests should also not be admitted.

Reasons for the Decision

1. The appeal is admissible.

2. Main request

2.1 Claim 1 is a combination of granted claim 1, corrected so as to amend the term "less stretchability section" to "low stretchability section", together with additional wording based on page 7, lines 9 - 18 of the originally filed description, which concerns the embodiment of Figure 3.

2.2 The additional wording defines, in a functional manner, first that the high stretchability section is pulled outward in the transverse direction with the fastener held by fingers, whereby the high stretchability section stretches elastically. Providing transversely directed forces via the fingers thus produces
stretching of the elastic section transversely, since forces are only applied in this direction. However this functional feature further requires that the high stretchability section should stretch in an oblique direction downwards. These two definitions are found by the Board to be contradictory and accordingly the claim lacks clarity contrary to the requirements of Article 84 EPC 1973.

The appellant argued that when applying such transverse forces, the fingers only exerted a small force and would thus not resist an alleged obliquely downwardly directed movement due to forces generated obliquely.

However, the claim does not define how much force is applied by the fingers in a transverse direction, let alone how tightly the fasteners may be held, nor indeed even where the fasteners are placed on the high stretchability section. Thus, whilst it can be appreciated that, with particular (but undefined) positions of the fasteners on each high stretchability section, obliquely directed forces would be developed in the high stretchability sections, the claim however defines something different, namely "stretching" in a particular direction, which effect is anyway dependent on a specific, yet undefined, arrangement.

2.3 The embodiment shown in Figure 3 also includes further features such as an overlapping zone of the high and low stretchability sections, an overlapping zone of the wing and lobe portions and a particular position of the fastener on the side edge of the lobe in close proximity to the overlapping zone of the high and low stretchability sections. The functional feature
concerning the pulling action in the transverse
direction is disclosed specifically with regard to such
a design, which is necessary in view of the intended
purpose. A different position of the fastener such as
for example at the upper (outer) end of the lobe or at
an inner position within the lobe would not lead to the
desired result. Hence at least these further features
are related to the claimed functional feature and its
purpose. Thus, an unambiguous disclosure is only
present of an embodiment having such a combination of
features. Their omission, at least in part, amounts to
an unallowable intermediate generalisation of the
claimed subject-matter and is thus not in accordance
with the requirements of Article 123(2) EPC.

The appellant's argument in this regard that other
arrangements are possible and that the features defined
in claim 1 relating to the Figure 3 embodiment also
extended to other embodiments, does not countermand the
aforementioned reasoning. As stated in the foregoing
only a particular arrangement of the various elements
and particular holding and extending forces might lead
to oblique forces being generated, and such arrangement
is not defined. Further, the text relating to the
functional feature added to claim 1 is disclosed in the
context of Figure 3 on page 7, line 9 as relating to
"the rear wings formed in such a manner", whereby it
should be noted that the formation of the rear wings is
different in the other embodiments. Thus there is also
no unambiguous disclosure that the functional feature
was intended to apply generally to all embodiments and
not only to the specific arrangement in Figure 3.
Accordingly, the requirements of Articles 84 EPC 1973 and 123(2) EPC are not met and the main request is therefore not allowable.

3. Auxiliary requests 1, 2, 5, 7, 9, 12 and 13

Admittance

All of these auxiliary requests were filed with the appellant's letter of 27 May 2011, hence after the communication of the Board sent with the summons to oral proceedings and thus, at a very late stage in the proceedings. According to Article 13(1) of the Rules of Procedure of the Boards of Appeal (RPBA), it lies within the discretion of the Board to allow an appellant to amend its case after filing the grounds of appeal and thus to admit such requests into proceedings. This discretion is to be exercised in view of inter alia the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy.

The subject-matter of claim 1 of all these requests however includes the functional feature discussed above with respect to the main request and hence, the foregoing objections concerning Article 84 EPC 1973 and Article 123(2) EPC apply equally. It should also be noted that other amendments in these requests did not alter the factual situation as regards this particular feature, nor did the appellant argue that this was the case. Since these late-filed requests did not overcome the raised objections, the Board exercised its discretion not to admit these requests into the proceedings.
4. Auxiliary request 3

4.1 Claim 1 is based on originally filed claim 1 combined with the subject-matter disclosed on page 6, lines 13/14 and page 6, line 19 to page 7, line 2 of the originally filed description.

4.2 Claim 1 includes the limitation of the low stretchability section as:
(i) being made of a sheet having no stretchability or an elasticity higher than that of the sheet material forming the high stretchability section;
(ii) being hard stretchable or non-stretchable outward in said transverse direction.

4.3 The feature (i) is originally disclosed on page 6, lines 19 to 22 in relation to the embodiment shown in Figure 3; the feature (ii) is originally disclosed in claim 1 as filed only. Feature (i) refers to an elasticity higher than that of the sheet material forming the high stretchability section, which already causes a lack of clarity. For the high and low stretchability sections, the patent in suit specifies sheet materials such as nonwoven fabric or plastic film as being appropriate. It is however not clear, not least having regard to the disclosed materials, how a low stretchability section can be constituted by a sheet of material having higher elasticity than the high stretchability section (which is itself relatively easily elastically stretchable).

The appellant argued that because "elasticity" is the property of elastic force causing a return to the
unstretched length, a higher elasticity should mean a higher return force upon elastic stretching. However such a definition is not the skilled person's normal understanding of a material having a higher elasticity, even less so in relation to the nonwoven or film materials with which the product defined in claim 1 might reasonably be made. Indeed, a sheet material which is highly elastic is understood as being one which can be stretched elastically using a lower force than a material with relatively lower elasticity.

It may also be mentioned that no material has been specified either in the patent in suit itself or in the submissions of the appellant which could be identified as forming the low stretchability section which might at the same time have such an elastic stretching property in comparison to the high stretchability section (which is itself defined in the claim as being made of a sheet having elastic stretchability and being easily stretched in comparison to the low stretchability section).

4.4 Further, the term "hard stretchable" as introduced into claim 1 of this request, is unsuitable for clearly defining the stretchability of a material, as it has no clearly distinguishable or recognised limits. The terminology is also not clear when defining the stretchability of one material compared to another. This applies in the manner used in the claim, where the wording "hard stretchable" is used to further define a property of the low stretchability section, whereby it is defined as being "so that it is less easily stretched in the transverse direction than the high stretchability section", which implies that it may
indeed be highly stretchable as long as it is merely less than the stretchability of the high stretchability section. This lack of clarity is compounded further, when considering that this hard stretchable section may be made from a material having a higher elasticity than that of the high stretchability section.

4.5 Hence, the subject-matter of claim 1 is not clear as required by Article 84 EPC 1973 for at least these reasons. Since this request was also filed first with the submission of 27 May 2011, the Board exercised its discretion not to admit this request into the proceedings.

5. Auxiliary request 4

5.1 Claim 1 of auxiliary request 4 was filed as claim 1 of auxiliary request 11 on 27 May 2011 and was renumbered so as to replace auxiliary request 4 (filed 27 May 2011) during the oral proceedings. Additionally the wording "and the low stretchability section (28) being non-stretchable outward in said transverse direction" was deleted which feature was already considered present in the wording of the claim via the wording: "the low stretchability section (28), made of a sheet material having no stretchability".

5.2 The subject-matter of claim 1 is limited to an embodiment where the low stretchability section has no stretchability at all. Accordingly, any stretchability represents a stretchability higher than none and the Board thus finds that there can now be no doubt about the relative stretchabilities of the high and low stretchability sections.
5.3 This claim is further amended in comparison to claim 1 of auxiliary request 3 in that the following features have been inserted:

- "each of the lobes overlapping with an outer end section (33) of the associated wing, which comprises a topsheet and a backsheets, and being joined to the wing along this overlapping zone (35)";

- [with fasteners (29)], "which are non-stretchable in the transverse direction and comprise tapes with fastening zones on their inner surfaces";

and in that the following features have been deleted:

- that the sheet material having no stretchability has "an elasticity higher than that of the sheet material forming the high stretchability section";

- that the low stretchability section is "hard-stretchable".

5.4 The appellant stated that the introduced amendments limited the invention to the definition of those elements necessary for consistency with the embodiment described with regard to Figure 3 since the amended features (overlapping lobe and wing, overlapping high and low stretchability sections, non-stretchable low stretchability section) are disclosed in this embodiment. The appellant referred in this regard to page 6, line 2 to page 8, line 8 of the originally filed description.

5.5 However, the Board concludes that the embodiment disclosed with regard to Figure 3 discloses further features in combination with those features now included in the claim. These features concern in
particular the fastener and its positional relationship with respect to the further components of the lobe. In particular, the attachment of the fastener tab is found to be functionally linked to the intended purpose of transversely stretching the high stretchability section of the lobe in order to obtain a close fitting of the thigh when fitting the diaper to a baby for avoiding leakage (see e.g. page 7, line 18 to page 8, line 1). The attachment of the fastening member is thus disclosed in Figure 3 as being effected close to the outer side edge of the high stretchability section of the lobe just above the overlap zone of the two sections. No other position of the fastener is unambiguously disclosed for such an embodiment, whereas the wording of claim 1 includes the possibility that the fastener could be provided on any position on the inner surface of the high stretchability section (e.g. at its upper edge or at its inner edge close to the wing/lobe overlap, or arguably even in the zone of either overlap) which are not disclosed in the patent in suit for this embodiment. Hence, since at least the additional features of the embodiment of Figure 3 relating to the specific positional relationship of the fasteners with respect to the high stretchability section are not defined in claim 1, the claimed subject-matter extends beyond the content of the application as filed, contrary to Article 123(2) EPC.

Although the appellant argued that the specific location of the fastener element would be understood by a skilled person as not being limited to the location shown in Figure 3 on the basis that other locations would also produce the same effects to a greater or lesser extent, the appellant was however unable to
indicate a disclosure to this effect nor any evidence for this allegation. Moreover, as stated supra, certain arrangements of the fastener on the lobe would not produce the stated intended technical effect as disclosed with respect to Figure 3.

5.6 Accordingly, this claim is clearly not allowable and - in accordance with the aforegoing reasoning (see e.g. point 3 above) - this request is also not admitted into the proceedings.

6. Auxiliary requests 6, 8 and 10

6.1 Claim 1 of auxiliary requests 6 and 10 includes the feature referring to a sheet material for the low stretchability section "having ... an elasticity higher than that of the sheet material forming the high stretchability section". Claim 1 of auxiliary requests 6, 8 and 10 also refers to the low stretchability section as being "hard stretchable". Both of these features have already been found as lacking clarity (see point 4 above).

No further arguments were provided by the appellant in support of these particular requests.

6.2 Hence, all these late-filed requests would clearly not overcome the raised objections, so the Board exercised its discretion not to admit these late-filed requests into the proceedings.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar                              The Chairman

M. Patin                                    M. Harrison