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D ECISION
of 12 October 2005

| Case Number: | T 0522/03-3.2.06 |
| :--- | :--- |
| Application Number: | 95102144.3 |
| Publication Number: | 0721770 |
| IPC: | A61F $13 / 62$ |

Language of the proceedings: EN
Title of invention:
Disposable absorbent article having an elastically extensible landing member for engaging with a hook-type fastening member

## Patentee:

The Procter \& Gamble Company

## Opponent:

Paul HARTMANN AG

## Headword:

Relevant legal provisions:
EPC Art. 123(2), 84, 83,
EPC R. 57a
Keyword:
"MAIN REQUEST: Extension of subject-matter (yes)"
"AUXILIARY REQUEST: Admissible (yes), sufficiency (no)"
Decisions cited:
T 0252/02, T 0225/93, T 0182/89

## Catchword:

| Europäisches | European |
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| Patentamt | Patent Offic |

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Case Number: T 0522/03 - 3.2.06
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                            D E C I S I ON
of the Technical Board of Appeal 3.2.06
of 12 October 2005
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| Appellant: | THE PROCTER \& GAMBLE COMPANY |
| :--- | :--- |
| (Proprietor of the patent) | One Procter \& Gamble Plaza <br> Cincinnati, Ohio 45202 |

## Representative

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| Decision under appeal: |  |
|  | Interlocutory decision of the Opposition <br> Division of the European Patent Office posted <br> l4 April 2003 concerning maintenance of <br> European patent No. 0721770 in amended form. |

Composition of the Board:
Chairman: P. Alting van Geusau
Members: G. de Crignis
J. van Moer

## Summary of Facts and Submissions

I. European patent No. 0721770 granted on application No. 95102144.3 was maintained in amended form by decision of the opposition division posted on 14 April 2003.

The opposition division was of the opinion that the subject-matter of claim 1 in accordance with the patent proprietor's third auxiliary request complied with the requirements of the EPC. In particular, it considered that the subject-matter of claim 1 was disclosed in a manner sufficiently clear and complete for it to be carried out by a skilled person (Article 83 EPC), that it was novel (Article 54 EPC) and involved an inventive step (Article 56 EPC).
II. The appellant (patent proprietor) filed on 28 April 2003 a notice of appeal against the decision of the Opposition Division and simultaneously paid the appeal fee. With the statement setting out the grounds of appeal, received on 18 August 2003, the appellant requested to set aside the interlocutory decision and to maintain the patent as granted.

In an annex to the summons to oral proceedings pursuant to Article 11(1) of the Rules of Procedure of the Boards of Appeal dated 12 May 2005 the Board expressed its preliminary opinion that in respect of sufficiency the Board did not share the opposition division's opinion and that it had to be discussed whether the disclosure of the patent in suit was sufficient to enable the skilled person to determine reliably the
extensibility of at least $5 \%$ of the landing member forming the front waist elastic element.
III. In response to the Board's preliminary opinion, the appellant (patent proprietor) filed with letter received on 12 September 2005 a first auxiliary request together with a Declaration of Mr. Mark Kline, dated 9 September 2005 .
IV. Oral proceedings were held on 12 October 2005.

The appellant requested that the decision under appeal be set aside and that the European patent be maintained on the basis of the main request filed at the oral proceedings or, in the alternative, on the basis of the auxiliary request also filed at the oral proceedings. The respondent (opponent) requested that the appeal be dismissed.

Claim 1 of the main request reads:
" Absorbent article (20) comprising:

- a backsheet (30) having two longitudinal sides (40), a front transverse edge (42'), a front waist region (94) located along the front transverse edge (42'), a back transverse edge (42), a back waist region (98) located along the back transverse edge (42),
- a front waist elastic element (89) located in the front waist region (94), and
- a mechanical fastening system (24) comprising:
- at least two hook-type fastening members (58) located in the back waist region (98) and extending transversely beyond each longitudinal side (40), and
- a loop-type landing member (64) located in the front waist region (94) for mechanically engaging with the hook-type fastening members (58), wherein the landing member (64) is extensible by at least $5 \%$, preferably at least $15 \%$ at a force between 30 grams per inch and 280 grams per inch in the direction of the front transverse edge, characterized in that the landing member (64) forms the front waist elastic element (89)."

Claim 1 according to the auxiliary request reads as follows:
" A diaper (20) comprising:

- a backsheet (30) having two longitudinal sides (40), a front transverse edge (42'), a front waist region (94) located along the front transverse edge (42'), a back transverse edge (42), a back waist region (98) located along the back transverse edge (42),
- a front waist elastic element (89) located in the front waist region (94), and
- a mechanical fastening system (24) comprising:
- at least two hook-type fastening members (58) located in the back waist region (98) and extending
transversely beyond each longitudinal side (40), and - a loop-type landing member (64) located in the front waist region (94) for mechanically engaging with the hook-type fastening members (58), wherein the landing member (64) is extensible by at least $5 \%$ preferably at least 15 \% in the direction of the front transverse edge,
and the front waist element (89) extends between $5 \%$ and $60 \%$ at a force of between 11.8 and $110.2 \mathrm{~g} / \mathrm{cm}(30$ and $280 \mathrm{~g} /$ inch) and contracts the front waist region
(94) in gathers to provide an elasticated fit of the front waist region (94) against the waist of a wearer wherein the landing member (64) forms the front waist elastic element (89)."
V. In support of its request the appellant essentially relied upon the following submissions:

Basis for the features added to claim 1 as granted according to the main request and according to the auxiliary request could be found in the application as originally filed in claim 2 and on page 3, lines 15 to 21. Both passages referred to an extension of between $5 \%$ and 60 \% at a given force and thus an extension of at least 5 \% was implicitly present. The landing member formed the front waist elastic element and the landing member comprised an elastic loop-type material, this correspondence should be taken into account when interpreting the features concerned. The requirements of Article 123(2) EPC were, therefore, met.

The auxiliary request was based on the first auxiliary request filed on 12 September 2005 and the minor modifications in reply to the objections presented at the oral proceedings could have been expected by the respondent (opponent). Therefore, it should be admitted into the proceedings.

In respect of the objection of lack of sufficient disclosure (Article 83 EPC) it should be taken into account that extensibility was a usual parameter and the determination methods and the required instruments were known by the skilled person as proven by the declaration of Mr. Kline. Standard methods were
available. It had not been proven that the results differed between the different methods, the respective burden of proof lay solely with the opponent. The hysteresis of elastic materials did not influence the result since for a diaper it would be sufficient to take one measurement in one determination cycle. In opposition proceedings the burden of proof lay with the opponent who had not provided any tangible evidence. In the absence of such evidence there was no reason to question whether the invention was disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.
VI. The submissions of the respondent can be summarized as follows:

The subject-matter claimed in claim 1 of the main request lacked a sufficient basis in the application as originally filed. Claim 2 as originally filed referred to a landing member comprising an elastic loop-type material which was elastically extensible by between $5 \%$ and $60 \%$ at a force of between 30 and $280 \mathrm{~g} / \mathrm{in}$. The wording of claim 2 as well as the corresponding part in the description made it clear that the two ranges claimed were linked to each other i.e. the elastic extensibility of $60 \%$ was achieved at a force of $\max 280 \mathrm{~g} / \mathrm{in}$. The present claim lacking any upper limit of the extension was thus amended to include subjectmatter not disclosed in the application as filed. Therefore, the combination now claimed was not originally disclosed and thus contravened Article 123(2) EPC.

The auxiliary request should be rejected as being filed late and not prima facie formally acceptable. The subject-matter which was inserted into claim 1 was not clear (Article 84 EPC), since with respect to "landing member", "front waist elastic element ", "front waist region", "loop-type landing member" different materials could be considered to be present. Hence, the wording was confusing and the combination now claimed was not prima facie clear which would be necessary at such a late stage of the proceedings. The term "diaper" also could be interpreted in a very wide manner and was not clear either. The contraction of the front waist region in gathers had not been within the scope of the claims as granted and thus the requirements of Article 123(3) EPC were not met either.

The requirement of sufficiency of the disclosure was not fulfilled in view of the different determination methods applicable for extensibility measurements. The evidence in this respect provided by Mr. Kline did not refer to the subject-matter claimed but to the general possibility to determine elastic extensibility which was not contested. However, the standard methods known to the skilled person (EDANA, ASTM, US-A-5,196,000) for determining this property differed in view of the sample to be taken, the applied test velocity and the temperature/humidity condition. A reproducible and reliable result could not be obtained without specifying one of these methods or all relevant circumstances directly. For polymeric materials the hysteresis curves had also to be taken into account. In this respect it would have been necessary to define the determination point with respect to the number of the test cycle (first or higher) and to specify whether the
determination of the relevant value should be performed in the unload or the load cycle. The declaration of Mr. Kline not being relevant to the point at issue, no proof for reproducible and reliable results was present. In its earlier decision $T 252 / 02$ the Board 3.2.06 (in another composition) had already decided that the burden of proof was shifted to the patentee in cases of such serious doubts expressed at various stages of the proceedings.

## Reasons for the Decision

1. The appeal is admissible.
2. Main Request - Article 123(2) EPC

Claim 1 of the main request is based on the granted claim 1 with the addition of the feature "at a force of between 30 grams per inch and 280 grams per inch". For support of the newly claimed subject-matter the appellant essentially relied on claim 2 and page 15, lines 5 to 11 of the originally filed patent application.

However, claim 2 as originally filed refers to a landing member comprising an elastic loop-type material which is elastically extensible by between $5 \%$ and $60 \%$ at a force of between 30 and $280 \mathrm{~g} / \mathrm{in}$.

Also the disclosure on page 15, lines 5 to 11 is limited to these two interrelated ranges. By no means is there a clear and unambiguous disclosure that the value of $280 \mathrm{~g} / i n$ is also applicable for extensions of
more than $60 \%$ which because of the open range ("at least 5 \%") is now subject-matter falling within the scope of claim 1.

Therefore, claim 1 of the main request does not meet the requirements of Article 123(2) EPC and therefore the main request is rejected.
3. Auxiliary Request
3.1 Admissibility

Filing of amended claims in opposition-appeal proceedings is governed by Article 123 EPC and Rule 57a EPC, which do not specify a time limit for submission of amendments. Therefore, a Board has discretion to accept amended claims at any stage of the proceedings. The Boards have laid down criteria for limiting the admissibility of amended requests. In general, the time of the filing of the amended claims, the difficulty in examination, fairness vis-à-vis the opponent, to give sufficient opportunity to respond, and the reason for the late filing, are all important criteria for deciding on the admissibility of amended claims.

Claim 1 of the auxiliary request is based on the first auxiliary request filed on 12 September 2005 by the appellant in reply to the communication of the Board of Appeal dated 12 Mai 2005. The further amendments carried out to this claim 1 represent a genuine attempt to overcome the objection under Article 123(2) EPC against the main request raised during the oral proceedings, and a limitation of the absorbent article to a diaper. Diapers always represented the preferred
embodiment and therefore, such a limitation cannot lead to surprise or to difficulties in examination or preparation of the respondent's response either.

In view of these circumstances, the Board does not see a valid reason for objecting to the admissibility of amended claim 1.
3.2 Article 123(2) EPC - Basis for the amendments

Claim 1 has been limited to "a diaper" and to all further features emanating from the application as originally filed on page 15, lines 5 to 11 (equivalent to paragraph 0052 of the patent specification) which refers to "The diaper comprises a front waist elastic element 89, which in figure 1 is formed by the elastic landing member 64. The front waist elastic element preferably extends between $5 \%$ and $60 \%$ at a force of between 30 and 280 g per inch and contracts the front waist region in gathers to provide an elasticated fit of the waist region against the waist of a wearer." The requirements of Article 123(2) EPC are met.

Since the scope of granted claim 1 was further restricted by limiting the claim to diapers and limiting the extensibility of the front waist elastic element to a contraction in gathers in the front waist region, the requirements of Article 123(3) EPC are equally fulfilled.

## 3.3 <br> Sufficiency

3.3.1 The opposition division was of the opinion that the requirements of Article 83 EPC were met considering
that an extensibility of at least $5 \%$ should be immediately recognizable by a skilled person without a special test simply by considering that a minimal extensibility would meet this requirement. Nevertheless, the opposition division noted that a test method for the extensibility of the landing member was not disclosed and that questions remained about the size of the sample, hysteresis or not, the way in which to apply the force to the test sample, the test velocity etc..
3.3.2 As set out under point III. above, the Board expressed in the annex to the summons to oral proceedings that it did not share this opinion of the opposition division. The question to be answered is not whether an extensibility of "at least $5 \%$ is recognizable but whether the range of extensibility of at least $5 \%$ representing a feature of the invention, is sufficiently clear and complete to allow the skilled person to determine this range with sufficient certainty i.e. to enable him to distinguish between the product of the invention and that of the prior art. The claimed range of an extensibility of "at least $5 \%$ " concerns the front waist elastic element. Claim 1 does not specify polymeric materials for the front waist elastic element or for the landing member. However, the skilled person can only reach the conclusion, that in view of the article and the technical area, polymeric materials are concerned. This conclusion is supported by the specification of the patent in suit in $\S 0094$ and § 0095 disclosing landing members made of an elastic loop-type material comprising for example nonwoven material or made of a laminate of an elastomeric film and a non-elastic loop-type material. In its
argumentation the appellant also only relied on properties specific to elastomeric material.
3.3.3 The claimed range of an extensibility of "at least $5 \%$ " presupposes that such a range can be reliably and reproducibly established via a determination method or is otherwise unambiguously identifiable. If no determination method is prescribed in the specification, it has to be established whether an appropriate determination method was available to the skilled person.
3.3.4 The appellant and the respondent agreed that standard methods for measuring extensibility had been available. EDANA and ASTM - standard methods were cited. Furthermore, the appellant and the respondent referred to the method disclosed in US-A-5,196,000.
3.3.5 However, when agreeing that different methods exist for determining extensibility, the question arises whether such different methods always lead to the same result so as to define this feature of the claimed invention in a sufficiently clear and complete manner as required by Art. 83 EPC. The case law of the Board of Appeal states that where there are different measuring methods which do not always lead to the same result, this may indeed amount to an undue burden (T 225/93).
3.3.6 The appellant argued that the burden of proof rests with an opponent (T 182/89) and that no evidence of insufficient disclosure has been provided by the opponent. In this respect, however, the respondentopponent explained in detail the factors to be taken into account when determining extensibility.

In particular, the cited determination methods for extensibility of polymeric materials differed in view of the choices for the conditions

- strain-hysteresis loop; (load or unload curve)
- number of test cycles; (first or higher)
- cross-head speed; (EDANA: $100 \mathrm{~mm} / \mathrm{min}$, ASTM: $300 \mathrm{~mm} / \mathrm{min}, \mathrm{US}-\mathrm{A}-5,196,000: 500 \mathrm{~mm} / \mathrm{min})$
- temperature/humidity: (EDANA: $23^{\circ} \mathrm{C} / 50 \%$ or $20^{\circ} \mathrm{C} / 65 \%$; US-A-5,196,000: $22,8^{\circ} \mathrm{C} / 50 \%$ )
- sample and test size and the load to be applied (US-A-5,196,000: full scale at 500 gf ).
- a correlation of the results for the three methods is not available
- the extension can only be determined for a given force/sample length. This latter statement is confirmed by the affidavit of Mr. Kline (see third paragraph, last line) on behalf of the appellant.
- The differences of measurement between the three known methods therefore excluded a direct comparison of the respective results.
3.3.7 The appellant's response that the method disclosed in US-A-5,196,000 and its suitability for the determination of extensibility was evidenced by the declaration of Mr . Kline does not put the respondent's evidence and arguments in doubt.
- the method disclosed in US-A-5,196,000 is only one of various possible determination methods for extensibility. The standard methods available from EDANA and from ASTM represent well-known standard methods and could also be used by the skilled person.
- also, in US-A-5,196,000, with respect to the extension force test of the elasticized waistband (col. 55, l. 15 to 57) not only the sample size and the test size are specified, but further the crosshead speed, the chart speed, the full scale at 500 gf and that a graph of extension force versus extension is to be generated for a total of 10 samples. In col. 45, l. 3 to 27, the necessity to consider the hysteresis loop of force in the stressstrain property of elastomeric materials is emphasized. It further points to the fact that the load and unload curve are different and that the hysteresis loss should be present only to a certain extent. Furthermore, it highlights the elastic creep which should be kept at a minimum in order to ensure a certain stability of the material. In col. 51, l. 15 to 45, values for the force/extension characteristics for elasticized waistbands in diapers are given. Two test cycles of a flexure bending test and an edge compression stiffness test are demonstrated by figures 12 and 15, respectively, which prove the fact that the values for the two test cycles differ and that the load and unload sections of the test cycles lead to significantly different results. (Such correlating figures were demonstrated on the flip chart during the oral proceedings by the respondent in order to emphasize that these considerations significantly influence the result of the extension force test as well.) Therefore, even applying the method disclosed in US-A-5,196,000 it would have been necessary to define further details.
- the appellant's submission that the creep and the hysteresis loss were irrelevant for the determination of the percentage of extensibility and that only the first cycle was to be considered lacks a basis in the patent in suit and also in US-A-5, 196, 000 .

As regards the point at issue i.e. whether the choice of the test method, which involves some arbitrary choices, always leads to the same results in a reliable manner, the declaration of Mr. Kline is silent. It addresses the fact that from the data obtained with an Instron tensile tester according to the instructions given in $U S-A-5,196,000$ the extension of a material for a given force/sample length (25 mm length and 100 mm sample width) with a cross-head speed of $500 \mathrm{~mm} / \mathrm{min}$ and at $22,8{ }^{\circ} \mathrm{C} / 50$ \% can be determined. However, this is not contested and also does not prove the point.
3.3.8 Therefore, in the absence of any indication in the patent in suit which method (EDANA, ASTM or US-A-5,196,000) and which conditions (sample and test size, load, temperature/humidity, test cycle) should be used and the results of the applied determination method depend from arbitrary choices, the skilled person is not capable to choose a front waist elastic element with the unambiguously and clearly defined extension correlated to the limit of "at least $5 \%$ " defined in claim 1 of the patent in suit. Accordingly, this feature of the product claimed, represents a parameter not defined in a sufficiently clear and complete manner within the meaning of Article 83 EPC and leads to the conclusion that the product as such is also deficient under Article 83 EPC.

## Order

## For these reasons it is decided that:

The appeal is dismissed.

The Registrar:
The Chairman:
M. Patin
P. Alting van Geusau

