Case Number: T 1143/01 - 3.2.6
Application Number: 95905284.6
Publication Number: 0737055
IPC: A61F 13/15

Language of the proceedings: EN

Title of invention: ABSORBENT BODY IN AN ABSORBENT PRODUCT

Patentee: SCA Hygiene Products AB

Opponents: The Procter & Gamble Company
Paul Hartmann AG
Kimberly-Clark Corporation

Headword: -

Relevant legal provisions: EPC Art. 123(2), 84

Keyword: "Amendments - added, subject-matter (yes)"

Decisions cited: -

Catchword: -
Case Number: T 1143/01 - 3.2.6

**DECISION**

of the Technical Board of Appeal 3.2.6
of 24 June 2004

**Appellant 01:**

SCA Hygiene Products AB  
(Proprietor of the patent)  
S-405 03 Göteborg  (SE)

**Representative:**  
Harrison, Michael Charles  
Albihns GmbH  
Bayerstrasse 83  
D-80335 München  (DE)

**Appellant 02:**

Paul Hartmann AG  
(Opponent OII)  
Paul-Hartmann-Strasse 12  
D-89522 Heidenheim  (DE)

**Representative:**  
Friz, Oliver  
Patentanwälte  
Dreiss, Fuhlendorf, Steimle & Becker  
Gerokstrasse 1  
D-70188 Stuttgart  (DE)

**Respondent:**

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

**Representative:**  
Mather, Peter Geoffrey  
Procter & Gamble  
European Service GmbH  
D-65823 Schwalbach/Taunus  (DE)
Respondent: Kimberly-Clark Corporation
(Opponent OIII)
401 North Lake Street Neenah
Wisconsin 54956-0349   (US)

Representative: Dixon, Philip Matthew
Frank B. Dehn & Co.
Holzstrasse 26
D-80469 München   (DE)

Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted
17 August 2001 concerning maintenance of
European patent No. 0737055 in amended form.

Composition of the Board:
Chairman: P. Alting van Geusau
Members: G. L. de Crignis
R. T. Menapace
Summary of Facts and Submissions

I. European Patent No. 0 737 055, granted on application No. 95 905 284.5 was maintained in amended form by the opposition division in its decision posted on 17 August 2001, in which it held that the subject-matter of claim 1 of the third auxiliary request had not been amended such that it contained subject-matter extending beyond the content of the application as originally filed (Article 123(2) EPC) and that the subject-matter of claim 1 was novel (Article 54 EPC) and involved an inventive step (Article 56 EPC). In respect of the issues of novelty and inventive step it referred mainly to the following documents:

<table>
<thead>
<tr>
<th>Document</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>US-A-4 531 945</td>
</tr>
<tr>
<td>D2</td>
<td>US-A-4 397 644</td>
</tr>
<tr>
<td>D4</td>
<td>EP-A-0 254 476</td>
</tr>
<tr>
<td>D6</td>
<td>WO-A- 93/15702</td>
</tr>
</tbody>
</table>

II. The appellant 01 (patent proprietor) filed a notice of appeal against this decision and paid the appeal fee on 17 October 2001. In the grounds of appeal filed on 18 December 2001 the appellant 01 requested maintenance of the patent as granted or maintenance in amended form on the basis of claims in accordance with a first and second auxiliary request.

III. The appellant 02 (opponent OII) filed a notice of appeal against said decision and paid the appeal fee on 17 October 2001. On 5 December 2001 he filed the grounds of appeal in which further prior art documents were cited, namely:
D20  US-A-4 259 958  
D22  US-A-4 223 677  

IV. In a communication dated 30 December 2003 and accompanying the summons to oral proceedings, the board expressed doubts as to whether the claims according to the request of appellant 01 met the requirements of Article 123(2) EPC.

V. Oral proceedings were held on 24 June 2004 at the end of which the chairman announced the decision to set aside the decision under appeal and to revoke the patent in suit on the basis of the following final requests of the parties:

Appellant 02 (opponent OII) and both respondents (OI and OIII) requested that the decision under appeal be set aside and that the patent be revoked.

Appellant 01 (patent proprietor) requested to dismiss the appeal and to maintain the patent on the basis of claim 1 of the main request as filed during the oral proceedings.

VI. Claim 1 according to the final (sole) request of appellant 01 (patent proprietor) reads:

"Absorbent body in an absorbent diaper or incontinence pad, said absorbent body consisting of a wicking layer, a liquid acquisition portion (11, 13) and a liquid storage portion (12) adjacent thereto, a first absorbent structure, which has a first effective mean pore size, being arranged in the liquid storage portion
(12), and one second absorbent structure, having a larger effective mean pore size than the first mean pore size, being arranged in the liquid acquisition portion (11, 13),
wherein said liquid acquisition portion comprises at least one well (13) located at the assumed wetting area of the absorbent body, said well extending depth-wise into and through the underlying liquid storage portion (12), as well as a cover layer (11) which covers at least substantial portions of the liquid storage portion (12), said second absorbent structure being arranged in said well(s) (13) and said cover layer (11), and wherein said at least one well of the liquid acquisition portion (11, 13) extends entirely through the liquid storage portion (12) and is in direct contact with, and is in liquid communication with, said wicking layer (14) underlying both said at least one well (13) and said liquid storage portion (12), wherein said wicking layer (14) has a smaller effective mean pore size than said cover layer and said well forming said liquid acquisition portion."

VII. In respect of the formal acceptability of that claim 1, appellant 02 and the respondents argued essentially as follows:

Although it appeared that there was a basis in the application as filed for a portion or structure of the liquid storage portion having a mean effective pore size which was smaller than a mean pore size of a second absorbent structure in the liquid acquisition portion, the feature in the granted claim according to which "one or more second absorbent structures, each one having a larger effective pore size than the first
mean pore size, being arranged in the liquid acquisition portion (11, 13)' was different and in this form not unambiguously disclosed. In the amended claim 1 "one or more second absorbent structures, each one" was now replaced by "one second absorbent structure". However, considering the different terms "portion" and "structure" used in the claim for which there was no further limiting definition given in the original specification, the "one single second absorbent structure" could still have different portions with different mean pore sizes, as was for example shown in the embodiment according to figure 3. In this embodiment the different parts of the acquisition portion did not necessarily themselves have a larger effective mean pore size than the storage portion. In so far the claim was still objectionable under Article 123(2) EPC.

Furthermore, appellant 01 had also failed to indicate a clear basis in the application as filed for the feature according to which "said wicking layer (14) has a smaller effective pore size than said cover layer and said well forming said liquid acquisition portion". As far as this relative property of the wicking layer was concerned the application as filed specified on page 8, last paragraph, that there was a difference in pore size between the liquid acquisition portion on one hand and the storage layer 12 and the wicking layer 14 on the other hand. Even when allowing an interpretation that the wicking layer should have the same pore size property as the storage layer, which was not unambiguously derivable from this paragraph because of the comparison in relation to the liquid acquisition portion only, no disclosure was present in the
application as filed that both the cover layer and well(s) necessarily had a larger mean effective pore size than that of the wicking layer.

The same features as objected to under Article 123(2) EPC gave rise to lack of clarity and support in the description (Article 84 EPC). Not only was there no support for these features in the description, it was also not clear to the skilled person how to construct the layers in a manner to obtain the required result, particularly in view of the mean pore size (Articles 83 and 84 EPC).

VIII. In reply to the formal objections made to (amended) claim 1, appellant 01 (patent proprietor) essentially argued as follows:

Claim 1 was based on the granted claims 1, 16 and 17, with further limitations essentially based on the disclosures on page 4, first paragraph, page 6, last paragraph and page 8, last paragraph of the application as filed.

By the limitation of the absorbent body to "consisting of" a clear three layer structure, namely a wicking layer, a liquid acquisition portion and a liquid storage portion was defined. Therefore, the first objection under Article 123 (2) EPC was not founded.

By the addition of the feature that "the wicking layer (14) has a smaller effective mean pore size than said cover layer and the well forming the liquid acquisition portion" it was expressed that the cover layer and the well in fact formed the whole liquid acquisition
portion. The relation of the entire liquid acquisition portion to the wicking layer was actually disclosed namely that the effective mean pore size of the whole liquid acquisition portion had to be larger than that of the liquid storage portion.

With respect to the objection under Article 84 EPC, the term "effective mean pore size" were clear as demonstrated by further test methods submitted in the written proceedings. The skilled person could use all the cited materials provided that the mean pore size criteria was met. Therefore, also the requirements of Article 83 EPC were met.

**Reasons for the Decision**

1. The appeal is admissible.

2. **Amendments**

   The sole claim still maintained by appellant 01 contains *inter alia* the addition "said wicking layer (14) has a smaller effective mean pore size than said cover layer and said well forming said liquid acquisition portion".

   This feature, and the further amendments concerning the second absorbent structure, were objected to under Article 123(2) EPC by appellant 02 and the respondents.

   2.1 It is undisputed that the feature in question is not expressly mentioned in the application as filed. The issue is therefore whether the skilled person would
nevertheless derive this property of the claimed absorbent body, in a direct and unambiguous manner, from the application as originally filed, which property was relied upon by the appellant as the major difference when comparing the claimed absorbent structure with that of the prior art.

2.2 Appellant 01 contended, that the skilled person would understand the feature in question from three parts of the originally filed description

- page 4, lines 1 to 14 ("Section A")
- page 6, lines 27 to 37 ("Section B")
- page 8, lines 31 to 37 ("Section C")

2.3 Considering Section A it is to be noted that the term "first" in the original application became "second" in the granted patent whereas "second" became "first". Reworded accordingly, Section A of the originally filed description in the terms of the claim under consideration has to be read as: "The liquid acquisition portion comprises at least one well located at the assumed wetting area of the absorbent body and extending depth wise into and through the liquid storage portion and is in liquid communication with a wicking layer arranged under the liquid storage layer, and in that in the liquid acquisition portion, there is arranged a second absorbent structure, which has a second effective mean pore size, and that in the liquid storage portion, there is arranged a first absorbent structure which has a first effective mean pore size which is less than the second mean pore size."
Thus in accordance with this disclosure there is "a second absorbent structure" in the liquid acquisition portion which second absorbent structure has a second effective mean pore size which is larger than the effective mean pore size of a first absorbent structure in the liquid storage portion".

However, which part of the liquid acquisition portion should be considered to form this "second absorbent structure having a second effective mean pore size" is not derivable from this text. Furthermore it is not apparent that the "first mean effective pore size of the liquid storage portion" is necessarily the same as the mean effective pore size of the wicking layer, referred to in the feature under consideration.

2.4 As to the latter relation appellant 01 pointed out that from Section C of the description, which reads: "The difference in pore size between the liquid acquisition portion 11, 13, on one hand, and the storage layer 12 and the wicking layer 14, on the other hand, can be achieved by a difference in density between the layers, but even at the same density, but with different types of fibre materials, the desired pore size difference can be achieved." it could be derived that the storage layer and the wicking layer should have a similar mean pore size.

However, as argued convincingly by respondent 01, the information given in Section C could also have the meaning that the difference in pore size between the liquid acquisition portion and the storage portion on the one hand is not the same as that between the liquid acquisition portion and the wicking layer. Also the
function of the absorbent core as disclosed in the application as filed does not require a mean effective pore size of the wicking layer that is equal to that of the storage layer in that the desired transport of liquid from the liquid acquisition portion to the storage layer could be achieved by a mean effective pore size of the wicking layer smaller than that of the liquid acquisition portion, but larger than that of the storage portion.

Therefore, what could be derived from the disclosures in Section A and C of the description is that the wicking layer has a smaller effective mean pore size than that of the liquid acquisition portion 11, 13. What part of the liquid acquisition portion should be considered the "second absorbent structure" remains to be determined.

2.5 In Section B of the originally filed description it is said that in the example shown in figures 3 and 5, a cover layer 11, which together with the well 13 forms the liquid acquisition portion of the absorbent body, is arranged on top of the storage layer 12.

Appellant 01 argued that this showed that "the second structure" mentioned in Section A consisted of these two parts only, if the liquid acquisition portion consisted of the cover layer 11 and well 13. Having regard to the further information provided in Section B according to which the material of cover layer 11 and well 13 could be the same and should have a relatively large pore size, the feature "second absorbent structure" could be replaced by "cover layer and well forming the liquid acquisition portion", as now defined.
in the amended claim 1, without adding new subject-matter.

However, as the embodiment shown in figure 3 demonstrates, cover layer 11 is not necessarily a single homogeneous material, but may have different portions 11a and 11b with different properties as regards pore size. Therefore there is no basis found in Section B, nor elsewhere in the description, for replacing the feature "second absorbent structure having a second mean effective pore size" in Section A by "said cover layer and said well forming said liquid acquisition portion" in the context of the feature in dispute, i.e. the claimed relation of the mean effective pore size of the cover layer and the well as compared to that of the wicking layer. It is evident that in the embodiment of figure 3 the mean effective pore size of the cover layer 11 including the portions 11a and 11b is not necessarily larger than that of the wicking layer, such embodiment falling within the scope of the amended claim 1.

2.6 Summing up, although there is support for the relation according to which "a second absorbent structure" in the liquid acquisition portion has a larger mean effective pore size than the wicking layer, there is no clear and unambiguous disclosure to be found in the application as filed that the "cover layer and well" should necessarily be such specific "second absorbent structure". Therefore, the sole claim, because it contains the feature discussed above, does not meet the requirements of Article 123(2) EPC with the consequence, that no acceptable claim is available and the patent has to be revoked for that reason.

2005.D
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: The Chairman:

M. Patin P. Alting van Geusau