DECISION
of 26 April 2006

Case Number: T 0553/04 - 3.2.06
Application Number: 95941525.8
Publication Number: 0796068
IPC: A61F 13/15
Language of the proceedings: EN

Title of invention:
Process for forming laminated absorbent structures having reduced delamination tendencies

Patentee: McNEIL-PPC, INC.

Opponent: The Procter & Gamble Company
Kimberly-Clark Corporation

Headword: -

Relevant legal provisions:
EPC Art. 123(2)(3), 100(c)

Keyword:
"Main request, extension of subject-matter"
"Auxiliary request XV (amendments - added subject-matter, yes)"
"Auxiliary requests IX and XII (amendments - extension of the scope of the claim)"

Decisions cited:
T 0169/83

Catchword: -
Case Number: T 0553/04 - 3.2.06

DECISION
of the Technical Board of Appeal 3.2.06
of 26 April 2006

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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 8 March 2004 revoking European patent No. 0796068 pursuant to Article 102(1) EPC.

Composition of the Board:

Chairman: P. Alting van Geusau
Members: G. de Crignis
K. Garnett
Summary of Facts and Submissions

I. European Patent Nr. 0 796 068, granted on application Nr. 95941525.8, was revoked by the opposition division by a decision posted on 8 March 2004. The revocation was based on the finding that the subject-matter of claim 1 of the main request, as well as that of claim 1 of the first to eighth, tenth and eleventh auxiliary requests (I to VIII, X, XI), did not meet the requirements of Article 123(2) EPC, and that the subject-matter of claim 1 of the ninth and twelfth auxiliary requests (IX and XII) did not meet the requirements of Article 123(3) EPC.

II. The appellant (patentee) filed a notice of appeal against this decision on 22 April 2004 and simultaneously paid the appeal fee. On 8 July 2004 the statement of grounds of appeal was filed, accompanied by additional sets of claims in accordance with auxiliary requests XIII to XV.

III. With a communication dated 28 October 2005, accompanying the summons to oral proceedings, the Board indicated that it would first discuss whether the feature according to which "an absorbent material in particle form which is distributed in different depths within the fibrous substrate" in claim 1 of the main request and in claim 1 of the auxiliary requests I to VIII, X, XI, XIII and XV was supported by the originally filed patent application. In the event that the requirements of Article 123(2) EPC were fulfilled, remittal to the opposition division appeared appropriate.
IV. Oral proceedings were held on 26 April 2006.

The appellant requested that the decision under appeal be set aside and that the patent be maintained as granted or, in the alternative, on the basis of auxiliary request IX filed with letter dated 29 December 2003, or on the basis of auxiliary request XII filed during the oral proceedings before the opposition division on 29 January 2004, or on the basis of auxiliary request XV as filed with the letter dated 8 July 2004.

The respondents (opponents OI and OII) requested that the appeal be dismissed.

Claim 1 according to the main request reads as follows:

"A laminated absorbent structure having reduced delamination tendencies comprising:
   a) a fibrous substrate (108, 208) having a first major surface and a second major surface, opposite the first, the second major surface defined by a cover layer (106, 206);
   b) an adhesive composition (110, 210) adhered to at least a portion of the first major surface of the fibrous substrate (108, 208); and
   c) an absorbent material (102, 202) in particle-form which is distributed in different depths within the fibrous substrate (108, 208) and at least partially immobilized by the adhesive composition (110, 210) and which is disposed in a pattern of form at least discrete absorbent material-containing zone which occupies less than 100% of the first major surface of
the fibrous substrate (108, 208) and at least one absorbent material-free zone (122, 222), wherein the absorbent material (102, 202) is contained within the absorbent structure (104, 204) by at least the cover layer (106, 206)."

Claim 1 according to auxiliary request IX differs from claim 1 of the main request in that the wording "in different depths" is deleted.

Claim 1 according to auxiliary request XII reads:

"A continuous process for forming a laminated absorbent structure having reduced delamination tendencies comprising the steps of:

a) providing a moving fibrous substrate (10, 108, 208) having lateral sides (45), a longitudinal axis, a first major surface, and a second major surface, opposite the first, the second major surface defined by a cover layer (106, 206);

b) applying an adhesive composition (110, 210) to at least a portion of the first major surface of the fibrous substrate (108, 208);

c) providing a pressure differential across the moving fibrous substrate (10, 108, 208) wherein fluid pressure acting on the first major surface is greater than the fluid pressure acting on the second major surface, thereby drawing air through the fibrous substrate (10, 108, 208);

d) masking at least a portion of the second major surface to air flow;

e) providing a metered amount of an absorbent material in particle form (102, 202) to the first major surface in a pattern corresponding to the unmasked
portion of the second major surface, and distributing the absorbent material (102, 202) within the fibrous substrate (10, 108, 208).

Claim 1 according to auxiliary request XV corresponds to claim 1 of auxiliary request XII but the last part of feature e)
"distributing the absorbent material (102, 202) within the fibrous substrate (10, 108, 208)."

is replaced by
"distributing the absorbent material (102, 202) in different depths within the fibrous substrate (10, 108, 208), wherein the absorbent material (102, 202) comprises powdered superabsorbent material, the process further comprises the step of:
f) densifying at least a portion of the fibrous substrate (10, 108, 208) corresponding to the masked portion to laterally contain the absorbent material (102, 202) within the resulting absorbent structure."

V. In support of its requests the appellant essentially relied upon the following submissions:

With respect to the objection under Article 123(2) EPC to claim 1 of the main request, the feature according to which the "absorbent material (102, 202) in particle form which is distributed in different depths within the fibrous substrate (108, 208)" was clearly derivable from the application as originally filed. Figures 6 and 8 showed the claimed absorbent structure with the absorbent material being distributed in different depths within the fibrous substrate. Furthermore, the process as described on page 3, lines 5 - 7 and 26, page 5, lines 27 to 29, page 7, lines 1 - 10, page 9,
lines 32 to 34, and page 12, lines 19 to 21, read in the context of the object of the invention set out on page 2, lines 27 to 34, could only lead to an absorbent fibrous substrate with an open structure and particulate absorbent material inevitably being distributed in different depths of that fibrous substrate.

In claim 1 of auxiliary requests IX and XII, "at different depths" was deleted in an attempt to overcome the objection raised under Article 123(2) EPC. However, the scope of the claim was not broadened by the deletion because the claimed process steps in reality rendered it impossible to arrive at a fibrous substrate within which all the absorbent material was located at the same depth. In fact, location of absorbent material at different depths was an inevitable consequence and there was no necessity to mention this feature in the wording of the claim. The requirements of Article 123(3) EPC were therefore fulfilled.

The subject-matter of claim 1 of auxiliary request XV was restricted to the particulate absorbent material being superabsorbent powder. Due to the manufacturing process, disclosed in the originally filed patent application starting on page 10, it was an inevitable consequence that the powdered absorbent material would be distributed within different depths of the fibrous substrate. Therefore, the subject-matter of claim 1 of this request met the requirements of Article 123(2) EPC.
VI. The submissions of the respondents are summarized as follows:

Regarding the requirements of Article 123(2) EPC, the subject-matter of claim 1 of the main request and auxiliary request XV lacked a sufficient basis in the application as filed.

The illustrations shown in Figures 6 and 8 were mere schematic representations of the product resulting from the process disclosed in the description. Although particles were shown at different depths, only a distribution of the particulate absorbent material "onto" the surface was disclosed consistently in the specification. Accordingly, a distribution on or very close to the surface was obtained and nothing more was intended to be illustrated by the schematic drawings. Even taking into account that the absorbent particles were inevitably partly submerged due to the uneven fibrous surface and due to spaces in the fibrous surface, such a distribution on and close to the surface was no basis for claiming an intended distribution of all particles of all particle sizes in different depths as now claimed. Accordingly, claim 1 of each of these requests should be rejected.

With respect to claim 1 of auxiliary request IX, the term "an absorbent material (102, 202) in particle form which is distributed within the fibrous substrate" was neither literally supported by the originally filed application according to Article 123(2) EPC nor was its meaning sufficiently clear as required by Article 84 EPC, particularly in view of what was shown in Figure 8 of the patent in suit. In any event, the deletion of
the wording "in different depths" amounted to a violation of Article 123(3) EPC. The same arguments applied with respect to claim 1 of auxiliary request XII.

The limitation of the subject-matter of claim 1 of auxiliary request XV to particulate absorbent material being superabsorbent powder did not overcome the objection under Article 123(2) EPC. It was neither made clear nor was there support in the description for how a powder was to be distinguished from particles (Article 84 EPC) nor was there any support in the originally filed application for this special embodiment in combination with the general distribution of the superabsorbent powder in "different depths".

**Reasons for the Decision**

1. The appeal is admissible.

2. **Main Request**

   2.1 In claim 1 the absorbent material is *inter alia* specified as being "distributed in different depths in the fibrous substrate". This feature was objected to under Article 123(2) EPC.

   2.2 It is not in dispute 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 structure, in a direct and unambiguous manner, from the application as originally filed. It should be
noted that this property was relied upon by the appellant as the major difference when comparing the claimed laminated absorbent structure with that of the prior art (see paragraph 0004 of the patent in suit).

2.3 The appellant contended that the skilled person would derive the feature in question from the following parts of the originally filed description: page 2, lines 27 to 34; page 3, lines 5 to 7, 26; page 5, lines 27 to 29; page 7, lines 1 to 10; page 9, lines 32 to 34; page 12, lines 19 to 21 and Figures 1, 6 and 8.

2.4 The passage on page 2, lines 27 to 34, discloses in general terms the object of the invention. The wording "to provide a process for smoothly depositing absorbent materials in a discrete pattern of fill and void areas onto a moving substrate" cannot be understood as encompassing a distribution in different depths in the fibrous substrate. By masking certain areas, other surface areas are left open for the deposition of the particulate absorbent material onto a moving substrate. Hence this wording refers to the areas within which the particulate absorbent material should be distributed onto the surface of the structure.

The passage on page 3, lines 5 to 7 reads: "Air flowing through the open areas of the masking belt carries the entrained material into the fibrous web. The fibrous web acts as a filter to separate the entrained material from the air stream."

The term "into" in this passage is strongly relied on by the appellant to support the argument that a distribution in different depths occurs. However,
reading this paragraph as a whole, there is nothing to suggest that the entrained material is carried into different depths within the fibrous substrate. This passage, read objectively, only refers to the fact that an air flow is used and that the particulate material can collect on or within the fibrous web, depending on the nature of the fibrous structure, the particle size of the particulate material and the strength of the applied air flow. There is no suggestion that these independent parameters should be varied in such a way so as to obtain a penetration of the particulate material into different depths of the substrate. This reading of the paragraph is also in line with the interpretation of the drawings given by the respondent, which the Board accepts, that a submersion of the particulate absorbent material - to a certain depth dependent on the nature of the fibrous structure and the particle size of the absorbent material - is inevitable. Hence, a submersion of the particulate absorbent material close to the surface of the fibrous web is supported by this passage. However, no support for claiming in general a distribution of particulate absorbent material in "different depths" can be found in this passage.

Page 3, line 26 discloses the particulate absorbent material being provided to the first major surface in a pattern. Such a surface pattern corresponds to the windows of the applied mask and does not influence the vertical distribution.

The detailed description of the preferred embodiment starts on page 5, line 24. The disclosure on page 5, lines 27 to 29, is consistent with the wording of
page 3, lines 5 to 7. Hence, the comments given above for this latter passage apply to this passage, too.

Page 7, lines 1 to 10, refers to a recycling system being superfluous. This fact is related to the patterned (lateral) distribution of the absorbent material. Hence, this fact is not related to the feature in question.

According to the disclosure on page 9, lines 32 – 34, the absorbent material 102 is fully contained within the absorbent product 100 by the cover layer 106. This is not disputed but is not related to the issue in question.

Page 12, lines 19 – 21, refers to Figures 7 and 8 which illustrate a laminated absorbent product 200 having an absorbent material 202 distributed therein. Neither from this wording nor from these figures can there be deduced a distribution in "different depths" of the absorbent structure.

Figures 6 and 8 illustrate two embodiments of the invention by schematic drawings. The absorbent material is shown by black dots with reference number 102 (Figure 6) or 202 (Figure 8). Both figures show these black dots in one or two rows on or quite close to the layer depicting the construction adhesive.

Figure 6 represents an embodiment with a folded fibrous web. Figure 8 represents another embodiment of a laminated absorbent structure. With respect to the particulate absorbent material, if indeed any distribution can be deduced from the drawings, then it
is a distribution consistent with the disclosure on pages 3 and 5, on or close to the surface of the fibrous web.

Figure 1 is a schematic drawing of the manufacturing process and therefore cannot form the basis for detailed information which is neither further described nor otherwise derivable by the skilled person.

T 169/83 (OJ 1985, 193) was cited by the appellant to indicate that under certain conditions features could be taken from the drawings. However, not only should the features be shown sufficiently clearly in the drawing, but also the technical function achieved should be derivable. As to the latter, any information is lacking in the patent in suit.

2.5 Thus, there is no clear and unambiguous disclosure to be found in the application as filed for a distribution in different depths within the fibrous substrate. Therefore, the subject-matter of claim 1 of the main request does not meet the requirements of Article 100(c) EPC.

3. **Auxiliary Request IX - Article 123(3) EPC**

3.1 Claim 1 of auxiliary request IX is identical to claim 1 as granted with the exception that the feature in question ("in different depths") is deleted.

3.2 The appellant submitted that by deleting the feature "in different depths" the scope of protection of the claim was not enlarged.
3.3 The appellant's argument that a distribution in different depths is inevitable for such a fibrous web structure, so that it would not be necessary to specify it anyhow, is not correct. The feature "in different depths" can only be read as an intentional reference to different depths and as such it has a technical meaning limiting the scope of the granted claim 1. Deletion of this feature necessarily amounts to a violation of the requirements of Article 123(3) EPC.

4. Auxiliary Request XII - Article 123(3) EPC

4.1 Claim 1 of auxiliary request XII is identical to claim 4 as granted with the exception that the feature in question ("in different depths") is deleted. The sole independent claim 1 refers to a continuous process for forming a laminated absorbent structure.

4.2 The appellant submitted that the deletion of this feature did not lead to a change in the scope of the claimed subject-matter since it was impossible that all the particulate absorbent material in such a process would remain in one layer.

4.3 However, the arguments put forward for claim 1 of the auxiliary request IX above apply for both the manufacturing process of the absorbent structure and the structure itself. Moreover, the process steps claimed in claim 1 of this request are not linked to each other and thus the distributing step is not necessarily connected to the air flow step mentioned earlier in the decision. Hence, it is not required that the air flow supports the distribution in a certain depth of the fibrous substrate. The deletion of the
feature "in different depths" thus extends the claimed subject-matter to any distribution of the absorbent material in any depth of the substrate.

4.4 Consistent with the finding regarding claim 1 of auxiliary request IX, the deletion of this feature in claim 1 of auxiliary request XII amounts to a violation of the requirements of Article 123(3) EPC.

5. Auxiliary Request XV - Article 123(2) EPC

5.1 In auxiliary request XV the sole independent claim 1 refers to a continuous process for forming a laminated absorbent structure. This claim is based upon claims 4 and 5 as granted with the additional feature that the particulate absorbent material comprises powdered superabsorbent material. This latter feature is supported by paragraph 0040 of the patent in suit, which corresponds to page 11, lines 3 to 8 of the WO-publication. Step (e) of this claim also contains the feature: "distributed within different depths within the fibrous substrate" and, therefore, the objections set out here above for the main request apply as well.

5.2 The appellant argued that due to the nature of the particulate absorbent material, which is now specified as comprising powdered superabsorbent material, a distribution in different depths within the fibrous substrate would be inevitable and thus there is no violation of Article 123(2) EPC. Page 10, lines 5 to 22, and page 10, line 23, to page 11, line 14, of the WO-publication were cited to demonstrate that the process could only result in such a distribution.
5.3 However, the additional wording relating to the particulate absorbent material comprising powdered superabsorbent material does not overcome the objection. The cited passages do not refer to a vertical distribution within the fibrous structure. Powdered superabsorbent material is within the scope of claim 1 of the main request since the description refers to this as a preferred form of particulate absorbent material. No distinction between powdered superabsorbent material and particulate absorbent material is defined in the specification. Therefore, it is not clear to what extent a restriction of the claim is thereby effected (Article 84 EPC). Furthermore, the absorbent material "comprises" powdered superabsorbent material, which does not exclude the possibility of using other particulate absorbent material simultaneously. Hence, the conclusions drawn for the main request under point 2 above still apply and the subject-matter of claim 1 of auxiliary request XV does not meet the requirements of Article 123(2) EPC.

6. In conclusion, the subject-matter of claim 1 of the main request and of auxiliary request XV does not meet the requirements of Article 123(2) EPC and the subject-matter of claim 1 of auxiliary requests IX and XII does not meet the requirements of Article 123(3) EPC.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

M. Patin P. Alting van Geusau