DECISION of 5 June 2002

Case Number: T 0310/00 - 3.2.6

Application Number: 89119741.0

Publication Number: 0366079

IPC: A61F 13/15

Language of the proceedings: EN

Title of invention: Absorbent structure having multiple canals

Patentee: McNEIL-PPC, INC.

Opponent: The Procter & Gamble Company

Headword: -

Relevant legal provisions: EPC Art. 52(1), 54, 56, 123(2)

Keyword: "Admissibility of amended claims - yes"
"Novelty, main request - no"
"Inventive step, first and second auxiliary request - no"

Decisions cited: -

Catchword: -
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DECISION

of the Technical Board of Appeal 3.2.6

of 5 June 2002

Appellant: McNEIL-PPC, INC.
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 5 January 2000 revoking European patent No. 0 366 079 pursuant to Article 102(1) EPC.

Composition of the Board:

Chairman: P. Alting van Geusau
Members: G. C. Kadner
M. J. Vogel
Summary of Facts and Submissions

I. The mention of the grant of European patent No. 0 366 079 in respect of European patent application No. 89 119 741.0 filed on 24 October 1989 and claiming a US-priority from 24 October 1988 was published on 26 February 1997. Claim 1 reads as follows:

"An absorbent structure having a body-facing side and a garment-facing side, which comprises:

a) a fluid permeable cover on said body-facing side;

b) at least two abutted absorbent chambers characterised in that said chambers are formed by fluid controlling walls extending generally along the longitudinal axis of the napkin, said chambers containing absorbent material such that the absorbent material in each of said chambers is substantially isolated from the absorbent material in adjacent chambers, and that the fluid flow is directed substantially along the longitudinal direction of the structure."

II. Notice of opposition was filed on 26 November 1997 on the grounds of Articles 100(a), (b) and (c) EPC.

III. By decision announced during oral proceedings on 23 September 1999 and posted on 5 January 2000 the Opposition Division revoked European patent 0 366 079.

The Opposition Division was of the opinion that claim 1 as granted and claim 1 according to an auxiliary request filed during opposition proceedings lacked novelty with respect to documents:

D1: EP-A-0 130 848
IV. On 29 February 2000 the Appellant (Patentee) lodged an appeal against the decision of the Opposition Division and paid the appeal fee on the same day. Together with the statement of grounds of appeal a new claim 1 in accordance with an auxiliary request was filed on 12 May 2000.

V. In the communication dated 18 January 2002 annexed to the summons to attend oral proceedings the Board of Appeal expressed the preliminary opinion that, when considering the main request no reason was seen to change the tenor of the decision under appeal. Reasons were given as to why claim 1 of the auxiliary request did not appear to be allowable under Article 123(3) EPC. Should the Appellant present an admissible claim 1, inventive step would have to be discussed with regard to the replacement of isolating zones of D6 by a polymeric film.

VI. Oral proceedings were held on 5 June 2002.

The Appellant requested that the decision under appeal be set aside and that the patent be maintained as granted (main request);

auxiliarily:

- maintenance of the patent in amended form on the basis of claim 1 filed with the letter dated 23 May 2002 (first auxiliary request)

- maintenance of the patent in amended form on the basis of claim 1 filed during the oral proceedings
Claim 1 of the first auxiliary request reads as follows:

"A sanitary napkin (100) having a centrally located absorbent element (110) having generally longitudinally extending edges (120, 125), transverse ends (130, 135), a body-facing side (107) and a garment-facing side (105), the absorbent element comprising:

a) a fluid permeable cover (170) on said body-facing side (107);

b) the centrally located absorbent element (110) having at least two abutted absorbent chambers (115) extending longitudinally from one transverse end (130) to an opposite transverse end (135), the absorbent chambers (115) containing absorbent material (160) and being formed by fluid controlling walls (140) extending generally along the longitudinal axis of the napkin, characterised in that

c) said fluid controlling walls (140) comprise a fluid repellant film such that the absorbent material (160) in each of said chambers (115) is substantially isolated from the absorbent material in adjacent chambers and that the fluid flow is directed substantially along the longitudinal direction of the napkin."

Claim 1 according to the second auxiliary request differs from that of the first auxiliary request in that the word "comprise" in the first line of feature c) is replaced by the term "are made of".

The Respondent requested that the appeal be dismissed.
VII. In support of its requests the Appellant essentially relied upon the following submissions:

The subject-matter of claim 1 as granted was novel and inventive with respect to the teachings of D6. Its problem to be solved was to avoid irritation of the skin of the wearer, and therefore the marginal portions of the product according to D6 should be free of hydrophobic impregnant and only absorb body moisture and no fluids. In contrast thereto the longitudinal arranged chambers of the claimed absorbent structure should allow controlled flow of fluids from one to another if one chamber was saturated. In view of Figures 2 and 5 (see also page 5, lines 22 to 24) of the patent controlled release of fluid from chamber to chamber was intended. The application of moisture impermeable films in the fluid controlling walls was no contradiction since they could be perforated or be microporous.

In respect of D1 the claimed invention according to the main and auxiliary requests was novel because according to the general teaching of D1 the absorption of fluid was intended in the whole area of the central absorbent region 12, and the folded flaps should be entirely free of fluid. Regarding the embodiments described on pages 10 to 11 of D1, and in case that the lines of juncture 26, 26' were formed in the same manner as the flexible axis 34, 34', no fluid barrier was provided because the topsheet 14, being connected to the backsheet 18 at the regions which were free of absorbent material, was fluid permeable. Moreover, D1 did not teach fluid flow in longitudinal direction, and no channels were provided to achieve that flow direction. Fluid should only be prevented from flowing
into the flaps which were isolated by the flexible axis 34, 34'.

VIII. The submissions of the Respondent are summarized as follows:

Since the new claim 1 according to the auxiliary requests was late filed it should not be accepted. Moreover, the term "comprise a fluid repellant polymeric film" was not disclosed in the application as originally filed in the now claimed relation thus violating Article 123(2) EPC.

Claim 1 of the patent in suit according to the main request as well as to the auxiliary requests had to be understood in the broadest interpretation of its scope of protection. The expression "substantially" was not suitable to clearly define what was exactly claimed.

The embodiment of D1 described on pages 10 to 11 would work in a comparable manner to the subject-matter claimed because evidently the fluid could only "substantially" flow in the longitudinal direction. When compared with Figure 5 of the patent in suit it was of a similar construction.

When starting from D6 it was obvious to the skilled person that the fluid was directed in longitudinal direction in order to keep the marginal portions free of bodily fluid. Thus the problem underlying the patent was already essentially solved. When considering the development in the industrial production of sanitary napkins the skilled person having the knowledge of application of polymeric films in that field would not hesitate to try such a well-known film in order to
replace the impregnated zones of the prior art according to D6 thus achieving a substantially similar result, particularly in view of the intention of saving space within the construction.

**Reasons for the Decision**

1. The appeal is admissible.

2. *Main request - novelty*

In accordance with the decision of the Opposition Division the Board is of the opinion that at least the absorbent product disclosed in D6 includes all features of claim 1. In this respect the Board follows the reasons for the decision dated 5 January 2000 in opposition proceedings, point 4.b, pages 7 to 8.

The Appellant's argument that the absorbent structure allowed controlled release of fluid from chamber to chamber cannot lead to a different conclusion. Since in respect of novelty the technical problem to be overcome is of no relevance merely the features of the subject-matter claimed in their specific combination have to be compared with the features disclosed in the prior art document. Since the impregnated zones 28 according to D6 clearly form "fluid controlling walls" which direct the fluid flow "substantially" along the longitudinal direction of the structure the features of claim 1 are present in D6. In particular, since no indication is given in the claim as to what "substantially" means in terms of quantity, that expression is understood by the skilled person as "fully" or "nearly completely" thus destroying novelty of the subject-matter according to
the scope of claim 1.

3. **Auxiliary requests - admissibility**

The Respondent doubted that the term "fluid repellant polymeric film" was disclosed in the claimed relation in the patent and in the application as originally filed. However, the Board is satisfied that the skilled person has no difficulties to derive that feature from the description.

Starting from page 3, line 28 of the patent specification (see page 4, line 21 of the application as filed) the fluid repellant areas are alternatively described as being "...formed of fluid repellant material such as ... polymeric films"... . In the understanding of the skilled person this text discloses unambiguously that the polymeric films used are fluid repellant. Further on starting from line 31 of the patent specification (see page 4, line 26 of the application) "The fluid repellant areas may include a relatively hydrophobic, or fluid repellant, cover or barrier material". Thus it is clear that the fluid repellant areas formed from polymeric films may additionally include other materials, and if they are constructed in that manner, they include a fluid repellant polymeric film besides these other materials.

Since the wording of the feature "fluid repellant polymeric film" in claim 1 according to the first and second auxiliary request is identical both claims are admissible under Article 123(2) EPC.

4. **First and second auxiliary request - novelty**
Novelty of the subject-matter of each claim 1 was not contested. The Board is satisfied that none of the prior art documents discloses all features of the subject-matters claimed. In the present case, a final opinion on this issue does not have to be taken in view of the conclusion concerning lack of inventive step (see point 5 below).

5. **First and second auxiliary request – inventive step**

5.1 The closest prior art is represented by D6. That document undisputedly discloses a sanitary napkin having the features of the precharacterising portion of each claim 1. Absorbent chambers 12, 19, 23 longitudinally extending from one transverse end to the opposite transverse end containing absorbent material are formed by fluid controlling walls 28 generally extending along the longitudinal axis of the napkin (column 4, lines 29 to 39; column 5, lines 10 to 15, lines 22 to 25; Figures 1 to 3).

5.2 The objectives underlying the patent in suit are to provide an absorbent product capable of controlling and directing flow of body fluid so as to prevent failure at the sides and/or ends of the absorbent product, which is capable of directing flow of body fluid in longitudinal directions while substantially impeding the flow in transverse directions, which prevents side failure, which may become largely saturated with body fluid without incurring side failure, which makes efficient use of the absorbent capacity of its absorbent element and which substantially maintains its structural integrity during use (page 2, line 59 to page 3, line 10 of the patent specification). Since these problems are already widely solved by the
chambered sanitary protection product disclosed in D6
the remaining objective consists in providing an
alternative, improved production of the known sanitary
napkin.

5.3 That problem is solved by the sanitary napkin according
to claim 1 of the first and second auxiliary request,
in particular having the features that the fluid
controlling walls comprise or are made of,
respectively, a fluid repellant film such that the
absorbent material in each of the chambers is
substantially isolated from the absorbent material in
adjacent chambers and that the fluid flow is directed
substantially along the longitudinal direction of the
napkin.

5.4 The appellant held that in view of the wording of each
claim 1 controlled flow of body fluid from one chamber
to another should be possible whereas D6 while
directing flow substantially along the longitudinal
direction of the napkin did not allow a controlled flow
from the central absorbent portion 12 to the marginal
portions 19, 23.

However, in order to be able to compare the teachings
of claims 1 according to the auxiliary requests with
that of D6 the terms "substantially isolated from the
absorbent material in adjacent chambers" and "fluid
flow is directed substantially along the longitudinal
direction of the napkin" which are functional features
have to be interpreted. Since there is no definition
given in the claims the meaning of "substantially" in
the understanding of the skilled person has to be
clarified. Generally it is to be noted that
"substantially" means "not completely", however in
cases near the limit it can also mean "nearly completely".

On the other hand, with regard to the teaching of D6, it is clear to the skilled person that the body fluid would overflow into the impregnated zones when the central absorbent element is fully wicked or, in other words, the central absorbent element is only "substantially isolated" from the marginal absorbent element. Therefore the Board is of the opinion that the teaching of D6 is insofar equivalent with the scope of the claims 1 in this respect.

Consequently the sanitary napkin according to claim 1 of the auxiliary requests differs from that disclosed in D6 in that the fluid controlling walls comprise or are made of, respectively, a fluid repellant polymeric film.

5.5 The skilled person in the present case is well aware of the development in the production during the years after publication year 1977 of D6, particularly in the application of new materials and acceleration of production processes. In view of the problem of providing an alternative improved production of a sanitary napkin he would also draw the document D1 published 1985 into consideration. That document discloses a sanitary napkin comprising a central elongated absorbent portion laterally adjacent flaps 24, 24'. The central portion has an absorbent core 16 and the flaps have absorbent cores 30, 30'. The flaps are flexible along axis 34, 34', and lines of juncture 26, 26' are formed where the flaps are joined with the longitudinal edge of the central portion 12 (Figures 1, 2). The lines of juncture 26, 26 can be of the same
length as the central absorbent pad and can be formed in the same manner as the flexible axis 34, 34' where the absorbent core can be eliminated such that the topsheet 14, 28, 28' is directly connected with the backsheet 32, 32' (page 10, lines 17 to 18; page 11, lines 15 to 20; Figure 2).

It follows that when looking for a solution to the underlying problem of the patent in suit, D1 shows an alternative manner of providing a number of longitudinal abutted absorbent chambers, simply by folding the topsheet down to the backsheet and making a connection between the two. Although the topsheet is liquid pervious, the flow of liquid at the lines of juncture 26, 26' is limited by the double layer of the topsheet when formed in the manner as described having in mind that the well-known materials usually applied as topsheet such as polymeric films themselves are hydrophobic and are made fluid pervious by perforations etc. Therefore, when applying the teaching of D1 to obtain a simpler, alternative production of the napkin known from D6, no difficulties arise to adjust the properties of the adjacent chamber walls so as to maintain the fluid barrier properties known from D6.

5.6 Consequently, when starting from the sanitary napkin known from D6 with the knowledge of the alternative manner of providing longitudinal chambers disclosed in D1 the skilled person arrives at a sanitary napkin having fluid controlling walls of a fluid repellant polymeric film. Such a construction of the sanitary napkin is identical to that shown in Figure 5 of the patent in suit.
teachings derivable from D6 and D1 immediately leads to a sanitary napkin in accordance with claim 1 of both of the first and second auxiliary request the subject-matter of claims 1 according to the auxiliary requests does not meet the requirement of inventive step and thus is not patentable (Articles 56, 52 (1) EPC).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman

M. Patin P. Alting van Geusau