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D E C I S I O N
of 13 June 2002

Case Number: T 0713/00 - 3.2.6

Application Number: 91118360.6

Publication Number: 0483730

IPC: A61F 13/15

Language of the proceedings: EN

Title of invention:
Comformable structure, absorbent article and process for manufacturing an absorbent article

Applicant:
McNEIL-PPC, INC.

Opponent:
-

Headword:
-

Relevant legal provisions:
EPC Art. 54, 56

Keyword:
"Main request -novelty (no)"
"First auxiliary request - filed late (not admissible)"
"Second auxiliary request - inventive step (no)"
"Third auxiliary request - novelty and inventive step (yes)

Decisions cited:
T 0026/85

Catchword:
-

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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0713/00 - 3.2.6

D E C I S I O N
of the Technical Board of Appeal 3.2.6
of 13 June 2002

Appellant: McNEIL-PPC, INC.
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Decision under appeal: **Decision of the Examining Division of the European Patent Office posted 22 February 2000 refusing European patent application No. 91 118 360.6 pursuant to Article 97(1) EPC.**

Composition of the Board:

Chairman: P. Alting van Geusau
Members: H. Meinders
M. J. Vogel

Summary of Facts and Submissions

I. European patent application 91 118 360.6 was refused by the Examining Division by decision posted 22 February 2000.

II. The reason given for the refusal was that the subject-matter of claim 1 filed with letter of 11 October 1999 was not novel, nor did it involve inventive step, over the teaching disclosed in:

D2: US-Re-32957.

III. On 3 May 2000 the Appellant (Applicant) lodged an appeal against this decision and paid the prescribed appeal fee that same day. On 1 July 2000 a statement of grounds of appeal was filed.

IV. With the summons to oral proceedings the Board expressed its provisional opinion that no convincing reasons were submitted to set aside the decision under appeal. It further referred to:

D5: US-A-4381782,

for illustrating general technical knowledge as regards the particle size of the hydrocolloid material disclosed in the invention of D2 (see further point VI below).

V. Oral proceedings were held on 13 June 2002, in which the Appellant requested grant of a patent according to a main or one of four auxiliary requests.

Claim 1 according to the **main request** filed with letter of 13 May 2002 reads as follows:

"A catamenial pad for feminine hygiene comprising:

a fluid permeable facing sheet (1;3), an absorbent core (4;5;6;7) and a fluid impermeable backing sheet (2);

at least one conformable structure made up of individual elements (4;5) having a substantially spherical, rounded or ovaloid shape such that each of the said elements (4;5) can move with respect to other elements while at the same time permitting the existence of voids between individual elements, even when the said elements are subject to mechanical constraint;

said elements being essentially resistant to collapse of their individual spacial shape, both due to a mechanical constraint and due to contact with humidity and

said individual elements (4;5) are confined inside a physical envelope (7) being substantially permeable to liquids;

the individual elements (4,5) having either hydrophobic properties and comprising material selected from the group consisting of synthetic polymer, glass, bakelite, rubber, silica, ceramics, or having hydrophilic properties and comprising material selected from wood, cellulose agglomerations, vermiculite, and vegetable seeds;

characterised in that

the individual elements, when being rounded or ovaloid, have maximum dimensions less than 10 mm and

the individual elements, when being substantially spherical, have diameters between 0.1 and 5.0 mm."

Claim 1 of the **first auxiliary request** filed in the oral proceedings differs from claim 1 of the main request in that the characterising portion read as follows:

"the individual elements, when being substantially spherical, have diameters between 0.1 and 5.0 mm."

Claim 1 of the **second auxiliary request** filed in the oral proceedings differs from claim 1 of the first auxiliary request in that the characterising portion reads as follows:

"the individual elements, when being substantially spherical, have diameters between 0.3 and 1.0 mm."

Claim 1 of the **third auxiliary request** filed in the oral proceedings reads as follows:

"A catamenial pad for feminine hygiene comprising:

a fluid permeable facing sheet (1;3), an absorbent core (6) and a fluid impermeable backing sheet (2);

at least one conformable structure made up of individual elements (4;5) having a substantially spherical, rounded or ovaloid shape such that each of

the said elements (4;5) can move with respect to other such elements while at the same time permitting the existence of voids between individual such elements, even when the said elements are subject to mechanical constraint;

said elements being essentially resistant to collapse of their individual spacial shape, both due to a mechanical constraint and due to contact with humidity and

said individual elements (4;5) are confined inside a physical envelope (9) being substantially permeable to liquids;

the individual elements (4,5) having either hydrophobic properties and comprising material selected from the group consisting of synthetic polymer, glass, bakelite, rubber, silica, ceramics, or having hydrophilic properties and comprising material selected from wood, cellulose agglomerations, vermiculite, and vegetable seeds;

characterised in that

the individual elements, when being substantially spherical, have diameters between 0.1 and 5.0 mm,

the individual elements have been treated to have as further function an activity of neutralization or masking of body odor and/or ion absorption and or microorganism attack and/or neutralization of ammonia and/or blood coagulation and/or lubrication."

The documents for the **third auxiliary request** as filed in the oral proceedings consist of the following:

claims 1 to 10,

description pages 1, 1a, 1b, 2 to 19,

Figures 1 to 8B,

all as filed during the oral proceedings.

The wording of claim 1 of the **fourth auxiliary request** filed with the grounds of appeal is of no relevance to the present decision.

VI. In its preliminary opinion accompanying the summons to oral proceedings the Board argued that it was well known in the art of hydrocolloid materials, as illustrated e.g. by D5, that "Permasorb 10" (disclosed in D2 as the most preferable material) was available in particle sizes between 0.01 and 1.0 mm. D2 stated that the introfying particles should have a size not larger than the hydrocolloid particles, thus the same size range applied to the introfying particles. The materials for the introfying particles preferred in D2 (Celite FC and perlite) formed part of the group of material claimed in claim 1 for the elements when these were hydrophobic. The skilled person would seriously contemplate a choice for the introfying particle size in the range of overlap (0.01 to 1.0 mm) with the claimed range of less than 10 mm (first alternative) or in the range of overlap of 0.1 to 1.0 mm with the claimed range of 0.1 to 5.0 mm (second alternative). Thus, in application of the established case law of the Boards of Appeal (see e.g. T 26/85, OJ EPO 1990, 22),

novelty of the subject-matter of claim 1 was at stake.

VII. The arguments of the Appellant can be summarised as follows:

Main request:

The teaching of D2 was that the elements in the form of introfying particles should have a size not larger than the hydrocolloid particles. As the latter should be as small as possible to provide a large receiving surface for the liquids, i.e. powder, the elements in the form of introfying particles would also be in the form of powder, thus not fulfilling the requirement of being as large as 10 mm to maintain mobility between the grains without clumping due to surface tension.

In respect of the preliminary opinion of the Board it submitted that the disclosures in D2 of Permasorb 10 as the hydrocolloid material, of Celite FC as the introfying material and the information that the introfying particles should not be larger in size than the hydrocolloid particles belonged to different specific embodiments disclosed in D2, the combination of which was not permissible for arguing lack of novelty.

First auxiliary request:

Filing this request as late as the oral proceedings was admissible as it was a reply to the objections made by the Board. Further, the subject-matter of claim 1 was novel in that the skilled person applying the teaching of D2 would choose a powder for the hydrocolloid particles, so as to have a liquid receiving surface

which was as large as possible. Thus also for the elements in the form of introfying particles he would choose a powder. The particle size for a powder, however, fell outside of the range claimed, which started at a larger diameter, being 0.1 mm.

Second auxiliary request:

In claim 1 of this request the diameter of the substantially spherical elements was further reduced, namely to a range of 0.3 to 1.0 mm. A skilled person applying the teaching of D2 would not contemplate such a range for the introfying particles. These should not be larger than the hydrocolloid particles and the latter would have insufficient liquid receiving surface if they had a particle size in the range claimed.

Third auxiliary request:

D2 nor the other documents suggested the treatment of the elements to have as a further function any of the activities now mentioned in claim 1. Therefore the subject-matter of this claim was novel and involved inventive step.

Reasons for the Decision

1. The appeal is admissible.

2. *Main request*

2.1 In the decision under appeal the Examining Division considered that all features of the catamenial pad as claimed in the preamble of claim 1 then on file were

disclosed in D2. The first alternative in the characterising portion of that claim, involving individual elements in the conformable structure being rounded or ovaloid and having maximum dimensions less than 10 mm, was considered inherently disclosed in D2, as a dimension exceeding 10 mm would be out of the scope of what could comfortably be used in a catamenial pad for feminine hygiene. The second alternative, referring to the elements as being substantially spherical and having diameters between 0.1 and 5.0 mm, was considered obvious to the skilled person, when taking account of the teaching of D2.

2.2 Claim 1 according to the main request is in essence identical to claim 1 examined by the Examining Division, but has been clarified and limited in respect of the choice of the materials for the hydrophobic and hydrophilic elements. The Board agrees with the Examining Division that the subject-matter of this claim is not novel over D2.

D2 discloses a catamenial pad for feminine hygiene comprising a fluid permeable facing sheet, an absorbent core and a fluid impermeable backing sheet (column 1, lines 62 to 64); at least one conformable structure made up of individual elements ("introfying particles") having a substantially spherical, rounded or ovaloid shape (see Figures 3A, 6 and 8) such that each of the said elements can move with respect to other elements while at the same time permitting the existence of voids between individual elements, even when the said elements are subject to mechanical constraint; said elements being essentially resistant to collapse of their individual spacial shape, both due to a mechanical constraint and due to contact with humidity,

said individual elements being confined inside a physical envelope being substantially permeable to liquids (see column 1, line 65 to column 2, line 4 and column 3, lines 23 to 30); the individual elements have hydrophobic properties and are made of e.g. "Celite FC", which is a diatomaceous earth, i.e. a silica, or "perlite" which is glass (glass and silica form part of the claimed group of materials from which can be chosen for the hydrophobic elements) (see column 3, lines 31 and 32 and column 6, lines 22 and 32).

2.3 According to D2 the individual elements (introfying particles) should have a particle size not greater than that of the hydrocolloid particles (column 5, line 67 to column 6, line 1). It is general knowledge in this technical field as e.g. illustrated by D5 (see column 6, lines 1 and 2) that the particle size of hydrocolloid particles such as "Permasorb 10", suggested in D2 as the preferred hydrocolloid material, lies in the range of 0.01 to 1.0 mm. The introfying particles as discussed in D2 thus should have a particle size not exceeding this range. Thus, whatever choice is made within this range for the particle size, it is always less than 10 mm.

2.4 Thus, all features of the first alternative of claim 1 of the main request are known from D2. The subject-matter of claim 1 of the main request therefore lacks novelty (Article 54 EPC).

2.5 The argument of the Appellant, that the disclosures in D2 of Permasorb 10 as the hydrocolloid material, of Celite FC as the introfying material and the information that the introfying particles should not be larger in size than the hydrocolloid particles belonged

to different specific embodiments disclosed in D2, the combination of which was not permissible for arguing lack of novelty, cannot convince the Board of the contrary. These disclosures do not relate to different unrelated embodiments, but to that embodiment which incorporates the most preferred choice of materials.

3. *First auxiliary request*

3.1 Claim 1 according to this request only differs from claim 1 of the main request in that the alternative of the individual elements being rounded or ovaloid and having maximum dimensions less than 10 mm has been deleted. Remains the single characterising feature of the individual elements being substantially spherical and having diameters between 0.1 and 5.0 mm.

3.2 In the decision under appeal the Examining Division had considered this feature as being derivable from D2 as well or that it at least did not involve inventive step to incorporate this feature in the catamenial pad known from D2. In its annex accompanying the summons to oral proceedings the Board had discussed this particular feature, see point VI above, coming to the conclusion that this alternative claimed in claim 1 lacked novelty over D2.

3.3 Only at the oral proceedings the Appellant filed this request. Exercising the discretion of the Examining Division pursuant to Rule 86(3) EPC itself by virtue of Article 111(1) EPC, the Board does not admit this request, the Appellant having been aware of the Board's negative assessment in respect of the now claimed subject-matter well in advance of the oral proceedings. The request is neither conducive to the proceedings,

nor has there been a change in the subject of the proceedings during the oral proceedings warranting such late filing.

4. *Second auxiliary request*

4.1 Claim 1 according to this request states in its characterising portion that the individual elements being substantially spherical have diameters between 0.3 and 1.0 mm.

This specific range is not disclosed as such in D2, thus the subject-matter of claim 1 of the second auxiliary request is novel (Article 54 EPC).

However, in applying the teaching of D2 the skilled person will have to choose a particle size for the introfying particles, which on the one hand is linked to the particle size of the hydrocolloid particles (the introfying particles should not be larger than the hydrocolloid particles, i.e. not larger than 1.0 mm) and on the other hand the function should be that of a separator between the hydrocolloid particles to enhance the impregnation of these particles with liquid, as well as being crush resistant. In view of the latter requirements the particle size of the introfying material should not be chosen too small. For the former requirement the hydrocolloid particles (and thus the introfying particles) should be sufficiently small to result in as large a liquid receiving surface as possible.

From the particles shown in the drawings of D2 it is in any case clear, contrary to what the Appellant argues, that they should not be powder.

The Board concludes that in trying to fulfil the above mentioned requirements the skilled person will of necessity come to choice of particle size larger than 0.3 and smaller than 1.0 mm.

The subject-matter of claim 1 of the second auxiliary request thus lacks inventive step (Article 56 EPC).

5. *Third auxiliary request - Amendments (Article 123 EPC)*

5.1 The features of claim 1 according to the third auxiliary request are derivable as follows from the application documents as originally filed:

fluid permeable facing sheet, absorbent core, fluid impermeable backing sheet: page 1, lines 17 to 20;

conformable structure: claims 1, 4 and 6;

elements being confined in a physical envelope: page 8, lines 18 to 25.

hydrophobic or hydrophilic character of the elements and the choice of material for these elements: page 12, lines 9 to 20;

size ranges for the elements: page 11, lines 24 to 34;

additional treatment of the elements: page 12, line 25 to page 13, line 5.

5.2 The dependent claims 2 to 10 correspond to claims 9 to 11, 13 (now further limited by the deletion of superabsorbent materials), 17 to 19, 25 and 26 as originally filed.

The amendments to the description are for complying with the requirements of Rule 27(1)(b) EPC (acknowledgement of prior art D2) and Article 84 EPC (consistency between the description and the claims now limited to a catamenial pad having an absorbent core as well as a conformable structure made up of individual elements). They do not have the result in the subject-matter of the application to be extended over that of the application as filed.

6. *Third auxiliary request - Novelty and inventive step (Articles 54 and 56 EPC)*

6.1 The subject-matter of claim 1 differs from the catamenial pad disclosed in D2 by its characterising features, thus is novel (Article 54 EPC).

6.2 The question to be answered is whether the second characterising feature, which involves the treatment of the individual elements so that they have a further function of neutralizing or masking of body odor and/or ion absorption and/or microorganism attack and/or neutralization of ammonia and/or blood coagulation and/or lubrication, is obvious to the skilled person.

6.3 The only disclosure of something similar to neutralizing microorganism attack can be found in US-A-4433972 (D4), which, however, directs away from the solution chosen in the present invention, as it suggests the impregnation of an additional polyurethane pad on the absorbent core of the catamenial pad with a germicide or a bactericide.

Treating the individual elements, as does the invention, such that they have the further function of

neutralizing microorganism attack provides a much larger active surface, thus improving this further function considerably.

The other state of the art as revealed during the search does not suggest to treat individual elements within a conformable structure such that they have **any** of the additional functions as claimed.

Therefore the subject-matter of claim 1 of the third auxiliary request involves inventive step as well (Article 56 EPC).

6.4 The subject-matter of dependent claims 2-10 is for preferred embodiments of the catamenial pad claimed in claim 1 (Rule 29(3) EPC), thus also fulfils the requirements as to novelty and inventive step.

7. *Fourth auxiliary request*

As the higher ranking third auxiliary request could be allowed, there is no necessity to discuss the fourth auxiliary request.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance with the order to grant a patent in the following version:

Claims:
1 to 10 as filed for the third auxiliary request during the oral proceedings

Description:
Pages 1, 1a, 1b, 2-19 as filed during the oral proceedings

Drawings:
Sheet 1/3-3/3 as filed during the oral proceedings

The Registrar: The Chairman:

R. Schumacher P. Alting van Geusau