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D E C I S I O N
of 13 March 2006

Case Number: T 0535/04 - 3.2.06

Application Number: 97909581.7

Publication Number: 0934044

IPC: A61F 13/15

Language of the proceedings: EN

Title of invention:
Absorbent article

Patentee:
KAO CORPORATION

Opponent:
SCA Hygiene Products AB

Headword:

-

Relevant legal provisions:
EPC Art. 123(2), 84, 54, 56

Keyword:
"Amendments - unacceptable broadening of claim (yes - main request, auxiliary requests 1 to 6, 8) (no - auxiliary request 7)"
"Novelty (yes - auxiliary request 7)"
"Inventive step (no - auxiliary request 7)"

Decisions cited:

-

Catchword:

-



Case Number: T 0535/04 - 3.2.06

D E C I S I O N
of the Technical Board of Appeal 3.2.06
of 13 March 2006

Appellant: KAO CORPORATION
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Respondent: SCA Hygiene Products AB
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Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 24 February 2004
revoking European patent No. 0934044 pursuant
to Article 102(1) EPC.

Composition of the Board:

Chairman: P. Alting Van Geusau
Members: G. L. De Crignis
J. Van Moer

Summary of Facts and Submissions

I. European Patent Nr. 0 934 044, granted on application Nr. 97 909 581.7, was revoked by the opposition division by decision posted on 24 February 2004. It based the revocation on the finding that the subject-matter of claim 1 of the main request, as well as that of claim 1 of the fifth auxiliary request was not novel (Article 54 EPC), in view of the prior art disclosed in

D3 GB-A-2 135 892

and the subject-matter of claim 1 of the first, second, third and fourth auxiliary request did not involve an inventive step (Article 56 EPC), in view of the prior art disclosed in D3 and common general knowledge.

II. The appellant (patentee) filed a notice of appeal against this decision on 30 April 2004 and paid the appeal fee on 23 April 2004. On 5 July 2004 the statement of grounds of appeal was filed, accompanied by new sets of claims in accordance with a main request and three auxiliary requests.

III. With a communication dated 29 September 2005, accompanying the summons to oral proceedings, the Board set out its preliminary opinion.

In claim 1 of all requests the amended subject-matter was based on a paragraph of the description of the patent in suit referring to sanitary napkins and not to absorbent articles in general. A violation of the requirements of Article 123(2) EPC therefore appeared to be present. Novelty of the subject-matter of claim 1

of the main request was to be acknowledged in view of the fact that neither D3 nor

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disclosed the features relating to the thickness of the absorbent sheet which now was inserted into each claim 1.

IV. Oral proceedings were held on 13 March 2006.

The appellant requested to set aside the decision under appeal and to maintain the patent on the basis of the claims filed as main to fifth auxiliary requests with letter dated 13 February 2006, the claims filed as auxiliary requests 6 and 7 during the oral proceedings or the claims according to the auxiliary request 8 filed as auxiliary request 6 with letter dated 13 February 2006.

The respondent (opponent) requested that the appeal be dismissed.

Claim 1 according to the main request reads as follows:

"A sanitary napkin (1,2,3,5,6,3') comprising a liquid-permeable top layer (10), a liquid-impermeable back layer (20), and a liquid retentive absorbent member (30), interposed between said top layer (10) and said back layer (20), wherein said absorbent member (30) includes an absorbent sheet (31,32) having a thickness of 0.3 mm to 5 mm;
wherein said absorbent member is arranged to form (a) an opposing pair of barrier cuffs (40) which are within

longitudinal edges of said top layer (10) and extend along the longitudinal edges, and (b) a pocket portion (50, 51) formed between said pair of barrier cuffs (40), wherein said absorbent member (30) is further located outside said barrier cuffs (40); wherein said absorbent sheet is formed by bending a sheet which comprises a central portion (31a) and a pair of side portions (31b) each connected to each opposing side of the central portion, said side portions being arranged opposite and away from each other, wherein said side portions correspond to the barrier cuffs (40) and the central portion corresponds to the pocket portion (50, 51)."

Claim 1 according to auxiliary requests 1 and 2 is identical to claim 1 of the main request. The requests differ in respect of the further claims.

Claim 1 according to auxiliary requests 3 to 5 corresponds to claim 1 of the main request and additionally contains the wording "said central portion (31a) being positioned lower than said side portions (31b)" in the last paragraph of claim 1 before the wording "wherein said side portions correspond to the barrier cuffs (40)".

Auxiliary requests 3 to 5 correspond to the main request and auxiliary requests 1 and 2 with respect to the further claims.

Claim 1 according to the auxiliary request 6 reads as follows:

"A sanitary napkin (1,2,3,5,6,3') comprising a liquid-permeable top layer (10), a liquid-impermeable back layer (20), and a liquid retentive absorbent member (30), interposed between said top layer (10) and said back layer (20), wherein said absorbent member (30) includes an absorbent sheet (31,32) having a thickness of 0.3 mm to 5 mm; wherein said absorbent member is arranged to form (a) an opposing pair of barrier cuffs (40) which are within longitudinal edges of said top layer (10) and extend along the longitudinal edges, and (b) a central pocket portion (50, 51) formed between said pair of barrier cuffs (40), wherein said absorbent member (30) is further located outside said barrier cuffs (40); said absorbent sheet (31,32) of said barrier cuffs (40) is folded in an overlapping serpentine configuration."

Claim 1 according to the auxiliary request 7 corresponds to claim 1 of auxiliary request 6 with the only exception of the term "central" for the feature (b) of the pocket portion being deleted.

Claim 1 according to the auxiliary request 8 reads as follows:

"An absorbent article (2) comprising a liquid-permeable top layer (10, 10'), a liquid-impermeable back layer (20), a liquid retentive absorbent member (30, 30') interposed between said liquid permeable top layer (10, 10') and said liquid impermeable back layer (20);

said liquid retentive absorbent member (30, 30') including an opposing pair of barrier cuffs (40') which are within longitudinal edges of said liquid-permeable top layer (10, 10') and extend along the longitudinal edges of said liquid-permeable top layer (10, 10'), and a pocket portion (50') formed between said pair of barrier cuffs (40), characterised by a first and a second liquid-permeable top layer (10, 10'); and a first and a second liquid retentive absorbent member (30, 30'), said first liquid retentive absorbent member (30) being interposed between said first liquid-permeable top layer (10) and said liquid impermeable back layer (20); said second liquid retentive absorbent member (30') being interposed between said second liquid-permeable top layer (10') and said first liquid-permeable top layer (10); said second liquid retentive absorbent member (30') including said opposing pair of barrier cuffs (40') which are within longitudinal edges of said first liquid-retentive top layer (10) and extend along longitudinal edges of said first liquid-permeable top layer (10), said first liquid retentive absorbent member (30) extending outward from said barrier cuffs (40'), wherein said barrier cuffs (40) are arranged away from each other and elastic members (70) are provided inward side edges of said barrier cuffs (40) located along the longitudinal direction of said barrier cuffs (40) such that said barrier cuffs (40) are shrunk along the longitudinal direction of said barrier cuffs (40) over a prescribed length, and wherein said back layer (20) is applied at its outer surface with a viscous agent which adheres to a clothing when the absorbent article is worn."

Claim 2 according to the auxiliary request 8 reads as follows:

"An absorbent article (2) comprising
a liquid-permeable top layer (10, 10'),
a liquid-impermeable back layer (20),
a liquid retentive absorbent member (30, 30')
interposed between said liquid permeable top layer (10,
10') and said liquid impermeable back layer (20);
said liquid retentive absorbent member (30, 30')
including an opposing pair of barrier cuffs (40') which
are within longitudinal edges of said liquid-permeable
top layer (10, 10') and extend along the longitudinal
edges of said liquid-permeable top layer (10, 10'), and
a pocket portion (50') formed between said pair of
barrier cuffs (40),
characterised by a first and a second liquid-permeable
top layer (10, 10'); and a first and a second liquid
retentive absorbent member (30, 30'),
said second liquid retentive absorbent member (30')
being enclosed by said second liquid-permeable top
layer (10'),
said second liquid retentive absorbent member (30')
including said opposing pair of barrier cuffs (40)
which are within longitudinal edges of said first
liquid-retentive top layer (10) and extend along
longitudinal edges of said first liquid-permeable top
layer (10) and means (91) for securing said second
liquid-permeable top layer (10') to said first liquid-
permeable top layer (10),
said first liquid retentive absorbent member (30)
extending outward from said barrier cuffs (40'),

wherein said barrier cuffs (40) are arranged away from each other and elastic members (70) are provided inward side edges of said barrier cuffs (40) located along the longitudinal direction of said barrier cuffs (40) such that said barrier cuffs (40) are shrunk along the longitudinal direction of said barrier cuffs (40) over a prescribed length, and wherein said back layer (20) is applied at its outer surface with a viscous agent which adheres to a clothing when the absorbent article is worn."

- 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 the main request and auxiliary requests 1 to 5, the amended subject-matter of claim 1 was based on the description of paragraph 0014. The skilled person had no difficulty in realizing that the bending of the absorbent sheet resulted in an overlapping serpentine configuration of the sheet. The figures provided further evidence for this configuration and also for the position and design of the pocket portion in relation to the barrier cuffs. The chosen wording was also clear since the skilled person was aware of the consistency of the wording of paragraph 0014 with the figures particularly with respect to the pocket portion, the side portions and the barrier cuffs.

Auxiliary requests 6 and 7 submitted during oral proceedings were filed at a late stage of the proceedings but the wording of claim 1 of these requests was based on a combination of claims 1 and 6 as granted. Hence, all features were already introduced

into the proceedings and as these requests were filed in reaction to the observations made during the oral proceedings their introduction should also be allowed.

Auxiliary request 6 was amended additionally by the term "central pocket portion" which did not appear literally in the originally filed description. Nevertheless, the requirements of Article 123(2) EPC were also met since from the description, paragraphs 0013, 0014 and 0051 as well as from the figures, it was clear that the pocket portion was formed in the central portion of the article.

The subject-matter of claim 1 of the auxiliary request 7 was novel. None of the cited documents disclosed a feature relating to the range of thickness of the absorbent sheet as claimed. The subject-matter of claim 1 of auxiliary request 7 also involved an inventive step. Besides the feature relating to the thickness of the absorbent sheet, D3 did not disclose a pocket portion between the barrier cuffs which extended from one side portion to the other side portion but disclosed a raised central area. Furthermore, D3 did not disclose an overlapping serpentine configuration of the barrier cuffs since in the description on page 2, line 31 it was clearly expressed that the absorbent layer should not be folded.

The subject-matter of claims 1 and 2 of auxiliary request 8 was supported by Figures 12 and 14 and the respective description in paragraphs 0094 and 0096. The description of these figures referred to the description of the previous embodiments at the end of paragraph 0094 and in paragraph 0096. Therefore, the

description of the elastic members in relation to figure 4 in paragraph 0048 and the description of the viscous agent in paragraph 0017 as well as all the previous figures could be relied upon. Hence, the requirements of Article 123(2) EPC were met.

VI. The submissions of the respondent are summarized as follows:

Considering the requirements of Article 123(2) EPC, the subject-matter of claims 1 of the main request and auxiliary requests 1 to 5 represented a generalisation of one embodiment. The embodiment specified in paragraph 0014 related to a combination of features which was not correctly reflected in claim 1 of all these requests.

Auxiliary requests 6 and 7 filed during oral proceedings were late filed and should not be allowed.

With respect to claim 1 of auxiliary request 6, the term "central pocket portion" was neither literally supported by the originally filed description according to Article 123(2) EPC nor clear according to Article 84 EPC, particularly in view of what was shown in figure 8 of the patent in suit.

The subject-matter of claim 1 of auxiliary request 7 was novel with respect to the feature relating to the thickness of the absorbent sheet. However, it did not involve an inventive step over the embodiment shown in Figure 3 of D3 which disclosed all other features. Figure 3 of D3 clearly showed an overlapping serpentine

configuration of the absorbent sheet as well as a pocket portion between the barrier cuffs.

The subject-matter of independent claims 1 and 2 of auxiliary request 8 did not meet the requirements of Article 123(2) EPC. The additional wording with respect to the granted claims 19 and 20, which formed the basis of these claims, was not supported in the original description for absorbent articles in general but only for sanitary napkins. Furthermore, the elastic members specified in these claims are only referred to in paragraph 0048 with the condition "so that the sanitary napkin is bent" and the viscous agent is disclosed in the figures as well as in the description in paragraph 0017 only in relation to two viscous portions in the longitudinal direction. All these specific features were missing in claims 1 and 2. Furthermore, with respect to the feature of the elastic members being provided "inward side edges of said barrier cuffs", the description referred in paragraph 0094 to the elastic members being "located outward the absorbent sheet" and in paragraph 0040 to the elastic members being "provided inside side edges of the barrier cuffs". The figures were not consistent in this respect. This different wording rendered the description unclear and the wording of the claims "inward side edges of the barrier cuffs" should not be allowed. Hence, the subject-matter of claims 1 and 2 of auxiliary request 8 also did not meet the requirements of Article 84 EPC.

Reasons for the Decision

1. The appeal is admissible.

2. *Late filed requests*

Auxiliary requests 6 and 7 submitted during oral proceedings were filed in reaction to the observations made during the oral proceedings. Claim 1 is based on a combination of granted claims 1 and 6, therefore all features were already within the scope of the proceedings and no undue burden for the respondent could be recognized. Therefore, these requests were admitted for consideration in the appeal proceedings.

3. *Formal acceptability of the main and first to seventh auxiliary requests*

3.1 Main Request and Auxiliary Requests 1 and 2

Claim 1 of these requests has been amended with respect to claim 1 as granted by introduction of the feature "wherein said absorbent sheet is formed by bending a sheet which comprises a central portion (31a) and a pair of side portions (31b) each connected to each opposing side of the central portion, said side portions being arranged opposite and away from each other, wherein said side portions correspond to the barrier cuffs (40) and the central portion corresponds to the pocket portion (50, 51)."

The appellant relied on the disclosure in the WO-publication on page 4, line 16 to page 5, line 4 which corresponds to the description of the patent in

suit in paragraph 0014. In this paragraph the sanitary napkin of Figures 1 and 2 is specified. Considering this paragraph in more detail, it specifies in relation to this embodiment further features as for example:

- The side portions 31b, 31b are folded back to the back layer 20 side at the opposing sides of the central portion 31 and then further folded back so as to be overlaid upon the back layer 20.
- Free edge portions of the side portions 31b, 31b are each arranged in the vicinity of each of the left and right opposing side edges of the back layer 20.
- The absorbent sheet of the barrier cuffs 40, 40 is folded in an overlapping, serpentine configuration.
- The folding portions of the absorbent sheet 31 are located along the longitudinal direction of the sanitary napkin 1 and overlaid in multiple layers at prescribed distant locations from the left and right opposing side edges of the top layer 10.

These features not being specified in claim 1 of any of these requests, these claims 1 introduce a generalisation of the embodiment disclosed in paragraph 0014. No basis for such a generalised subject-matter is present and consequently the requirement of Article 123(2) EPC is not complied with.

3.2 Auxiliary Requests 3 to 5

Claim 1 of these requests has been further amended with respect to claim 1 as granted by introduction of the feature

"wherein said absorbent sheet is formed by bending a sheet which comprises a central portion (31a) and a pair of side portions (31b) each connected to each opposing side of the central portion, said side portions being arranged opposite and away from each other, said central portion (31a) being positioned lower than said side portions (31b), wherein said side portions correspond to the barrier cuffs (40) and the central portion corresponds to the pocket portion (50, 51)."

This feature corresponds to the amended feature of claim 1 of the main request and of auxiliary requests 1 and 2 discussed above with the additional wording "said central portion (31a) being positioned lower than said side portions (31b)". The reasons and the conclusion set out above apply here as well. Hence, no basis for such amended claims 1 is present and the requirements of Article 123(2) EPC are not complied with.

3.3 Auxiliary request 6

Claim 1 of this request has been amended with respect to claim 1 as granted by addition of the feature "a central pocket portion" in line 8 of claim 1.

No literal basis for a "central pocket portion" is disclosed but rather two pockets similar to those of Figure 3 of D3. The alleged support in paragraphs 0013,

0014 and 0051 does not refer to a central pocket portion but to a central portion and its relation to a pocket portion. Particularly in Figure 8 whose maintenance in the specification was explicitly confirmed, does not show such "central pocket portion". Subject-matter added to the claim should be based upon a clear and unambiguous disclosure of the newly defined combination. This not being the case and the term "central pocket portion" not being literally originally disclosed, the requirements of Article 123(2) EPC as well as those of Article 84 EPC are not met.

3.4 Auxiliary request 7

Claim 1 of this request has been further amended with respect to claim 1 as granted by addition of the feature

"said absorbent sheet (31,32) of said barrier cuffs (40) is folded in an overlapping serpentine configuration".

This feature represented subject-matter already claimed in dependent claim 6 as granted and dependent claim 6 of the WO-publication. Accordingly, the combination disclosed by this claim 1 does not contain subject-matter extending beyond the content of the application as filed and the requirements of Article 123(2) EPC are met.

4. *Novelty (Article 54 EPC) of the subject-matter of claim 1 of auxiliary request 7*

4.1 D3 discloses a sanitary napkin in Figures 3 and 4 having an absorbent layer 11 wrapped by a nonwoven thermoplastic wrap 10 and folded back along itself to

form absorbent layers L1 to L4. The sanitary napkin has a fluid impermeable backsheet 14 with a release liner coupled to the backsheet via three longitudinal lines of adhesive. D3 does not mention the thickness of the absorbent member.

4.2 Therefore the subject-matter of claim 1 is distinguished from the known sanitary napkin by the absorbent member including an absorbent sheet having a thickness ranging specifically from 0.3 mm to 5 mm. Therefore the subject-matter of claim 1 is novel.

5. *Inventive step (Article 56 EPC) of the subject-matter of claim 1 of auxiliary request 7*

5.1 For the discussion of inventive step the Board considers with both parties that D3 constitutes the closest prior art. Undisputedly, the feature not present in D3 is the following:
"said absorbent member (30) includes an absorbent sheet (31,32) having a thickness of 0.3 mm to 5 mm".

5.2 The Appellant was of the opinion, that additionally the feature relating to an absorbent sheet being folded in an overlapping serpentine configuration as required by claim 1 was not disclosed in D3 either. The appellant referred to the description of Figure 3 of D3 on page 2, lines 31 to 32 which stated that the absorbent layers are "not being folded".

However, Figure 3 as well as Figure 4 of D3 show clearly bent absorbent layers in overlapping serpentine configuration. Furthermore, the disclosure of the description relied upon by the Appellant only specifies

that four absorbent layers are present with layer L1 and L4 not being folded. It is clear from the drawing that L1 and L4 are not folded themselves but are part of a unitary absorbent layer which is folded in serpentine manner to establish the required configuration.

Furthermore, the appellant was of the opinion, that the feature relating to the "absorbent member (30) is arranged to form (b) a pocket portion (50,50') formed between said pair of barrier cuffs (40)" was also not disclosed in D3.

Regarding Figure 3 of D3, the loop portions of the parts of the absorbent sheet denominated with L2a/b and L1 are forming the barrier cuffs. Each sealing line 13 provides a pocket portion. These pocket portions are formed inside of the loop portions and thus between the pair of barrier cuffs. The raised portion of the absorbent sheet in the centre part of the sanitary napkin contributes to the pocket portions being formed. Therefore, the absorbent member of D3 forms pocket portions on the right and left central portions and within the barrier cuffs.

Hence, the Board shares the position taken by the Opposition Division that the only feature not present in D3 is an explicit disclosure about the specific thickness of the absorbent sheet.

5.3 Starting from the sanitary napkin shown in Figure 3 of D3, the objective problem underlying the patent in suit is to choose an appropriate conformation of the

absorbent sheet. This problem is solved by choosing the range claimed for the thickness of the absorbent member.

The use of the article only allows a limited overall thickness. Accordingly, an absorbent sheet folded in an overlapping serpentine configuration within the article has to allow such a limited overall thickness of the sanitary napkin. No evidence whatsoever is present in support of a thickness of the absorbent sheet in a range of 0.3 mm to 5 mm as providing an unexpected result or surprising properties. In paragraph 0018 which refers to the claimed range it is explained that if the thickness is less than 0.3 mm, it is difficult to provide barrier cuffs capable of sufficiently exhibiting the effect of improved fitting and increased capacity for absorbing body fluid and the sheet might tend to become twisted when folded and if the thickness is more than 5 mm, the rigidity of the absorbent sheet is overly increased which spoils the fitting. These considerations apply generally to absorbent sheets suitable for sanitary napkins and only summarise well-known characteristics. These considerations apply particularly to sanitary napkins using folded absorbent sheets in a design as the one of D3.

Therefore, the skilled person would, when executing the teaching of D3 and employing absorbent sheets for a sanitary napkin as shown in Figure 3 of D3, only take suitable absorbent sheets in view of their dimensions and thus directly arrive at the subject-matter of claim 1, which therefore lacks an inventive step (Article 56 EPC).

The Opposition Division came to the same conclusion since claim 1 of this request is identical to claim 1 of the first auxiliary request filed in the opposition proceedings.

6. *Formal acceptability of the eighth auxiliary request*

6.1 Both independent claims 1 and 2 of auxiliary request 8 have been amended with respect to claims 19 and 20 as granted by addition of the feature

"wherein said barrier cuffs (40) are arranged away from each other and elastic members (70) are provided inward side edges of said barrier cuffs (40) located along the longitudinal direction of said barrier cuffs (40) such that said barrier cuffs (40) are shrunk along the longitudinal direction of said barrier cuffs (40) over a prescribed length, and wherein said back layer (20) is applied at its outer surface with a viscous agent which adheres to a clothing when the absorbent article is worn."

6.2 The appellant referred with respect to support of this feature to the embodiment shown in Figures 12 and 14 and the respective description in paragraph 0094 as well as to the embodiment shown in Figure 4 and the respective description in paragraph 0048. Emphasis was further put on the references in paragraphs 0094 and 0096 to previous embodiments.

6.3 These arguments are not convincing for the following reasons:

- Figures 12 and 14 - as well as all other figures in the specification - depict sanitary napkins.

The description of the figures also only refers to sanitary napkins. Therefore, the generalisation extending to absorbent articles amounts to a violation of Article 123(2) EPC.

- The viscous agent is only mentioned in paragraph 0017 in relation to two viscous portions 25, 25 in the longitudinal direction of the back layer 20. All the figures show two viscous portions in such a design. Again, the generalisation extending to viscous agents in any design amounts to a violation of Article 123(2) EPC.

- The wording "such that said barrier cuffs (40) are shrunk along the longitudinal direction of said barrier cuffs (40) over a prescribed length" is not to be found in relation to Figure 12 or 14 but only in paragraph 0048 relating to the embodiment of Figure 4. However, in this context it is additionally required that "the absorbent sheet 31 is shrunk by the elastic member..., so that the sanitary napkin 2 is bent" [emphasis added]. No such requirement is present in claims 1 or 2 of the auxiliary request 8.

- The wording "elastic members (70) are provided inward side edges of said barrier cuffs (40)" is not consistent with the wording in paragraph 0094 which states that "elastic members (70,70) are each located outward the absorbent sheet (31')". With respect to Figures 3 and 4, paragraph 0040 states that "elastic members 70,70 are provided inside side edges of the barrier cuffs 40,40". However, the embodiment of Figure 4 differs from

the embodiment of Figure 14 in that in Figure 14 the absorbent sheet is not bent and thus a location inside the loop as shown in Figures 4 and 12 is not possible. This wording thus appears not to be clear as required by Article 84 EPC.

Therefore, no support for such a combination of features could be identified and the requirements of Article 123(2) EPC and of Article 84 EPC are not met.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

P. Cremona

P. Alting van Geusau