

Candidate's Answer Paper
(Examination Paper C)

European Patent Office
D-80298 München
Federal Republic of Germany

European Patent EP-B-0479 476
(Appln. No. 91 308 707.8)
to FINNLANDIA PRODUCTS
Karbulantie, 31
SF-486 000 Karbula

PADDY NAPPY PLC
Blarney Lane
Cork (Eire)
herewith gives notice of

OPPOSITION

pursuant to Article 99 EPC against the grant of the European patent EP-B-0479476 to FINNLANDIA PRODUCTS titled "Absorbent structures".

The mention of the grant of the patent was published on 06.07.94 (note an error in the B1 publication) in the European Patent Bulletin 94/27.

The opposition is filed against the whole scope of all claims. Revocation of the patent in its entirety and for all designated contracting states is requested, since the grounds of Art. 100(a) and (c) prejudice the maintenance of the patent. Auxiliary, oral proceedings according to Art. 116 EPC are requested.

Please deduct the required opposition fee (DEM 1200) from my deposit account with the EPO No. 1234 5678.

On behalf of
PADDY NAPPY PLC

Mats Matsson

Mats Matsson
(Professional Representative)
Lilligatan 23
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Enclosures:

- statement of grounds
- copy of Annexes 2 to 5

Claim 1 of Annex 1 is not novel over Annex 2 for the designated contracting states BE, DE, FR, GB, IT, LU and SE.

Annex 2 claims the priority of the British patent application GB 90085597 of 30.04.90 and was published for the designated contracting states BE, DE, FR, GB, IT, LU, NL and SE on 30.10.91.

Annex 2 thus forms part of the state of the art under Article 54(3) EPC insofar it designates the same contracting states as Annex 1, i.e. BE, DE, FR, GB, IT, LU and SE (Art. 54(4) EPC).

Annex 2 describes an absorbent material comprising a porous matrix of hydrophilic fibres, such as wood pulp fibres, and a hydrogel. The hydrogel can be chosen from silica gel, polysaccharides and super-absorbent polymers (SAPs), the latter being especially preferred (cf. A2, p. 95/C/d,e,f/9, paragraphs 10 + 11). 5 to 8 wt.-% of hydrogel is mixed with the fibres (cf. p. 95/C/d,e,f/9, 7th paragraph.). From the figures it is evident that the composite has a back and a top face (even if they are identical). Thus, Annex 2 describes all features of claim 1 of Annex 1, which is not novel (Art. 54(3) + (4) EPC).

Note that novelty due to selection from the subject-matter of Annex 2 may not be argued, although Annex 2 describes two lists of substances suitable as fibres or as hydrogels. Annex 2 expressly mentions a marked preference for the SAPs of Annex 3 (e.g. cross-linked polyacrylic polymers, cf. A3, p. 95/C/d,e,f/12, 4th paragraph). Therefore, the skilled person is compelled to prefer such SAPs over the other hydrogels mentioned. The selection of the wood pulp fibres from amongst the other fibres mentioned in Annex 2 is thus a selection from only one list. According to the jurisprudence of the Boards of Appeal of EPO, such a selection from only one list does not constitute a novel selection (cf. T 12/81, Diastereomers).

The subject-matter of claim 1 of Annex 1 for the designated contracting states DK, ES and GR does not involve an inventive step.

Two different lines of argumentation are possible in this respect with regard to the "problem and solution approach":

A) Annex 3 as closest prior art:

Annex 3 describes an absorbent structure to be used in articles such as diapers, which comprises a matrix of cotton fibres coated with particles of a SAP hydrogel (cf. p. 95/C/d,e,f/9, l. 4-6 l. 11 and l. 14). As an example of such SAP cross-linked polyacrylic acid is mentioned (l. 15). The proportion of hydrogel in the absorbent structure is 50 wt.-% or less of the total dry weight. Since these structures must have a top and a back face if they are to be used as diapers, the only difference of present claim 1 over Annex 3 is that the fibres are wood pulp fibres.

There is no disclosure in the Annex 1 that could permit to assume that these wood pulp fibres are linked to any particular technical effect over Annex 3. Therefore, the technical problem to be solved by this distinguishing feature is merely to provide a further class of absorbable structure.

Cotton and wood pulp are both cellulosic fibres, and would be regarded as equivalent by the skilled person. Furthermore, both Annexes 4 and 5 disclose the use of wood pulp fibres in

absorbent structures similar to those of Annex 1 (cf. Annex 4, l. 4-5, and Annex 5, p. 95/C/d,e,f/16, 3rd paragraph, last sentence).

The subject-matter of claim 1 is thus not inventive (Art. 56 EPC).

B) Annex 5 as closest prior art:

Annex 5 discloses an absorbing article for absorbing body fluids which comprises a matrix made of fibre, such as wood pulp fibre, and a hydrogel, such as silica gel, polysaccharides and PAS, which are mentioned, but not used (cf. p. 95/C/d,e,f/16, 3rd paragraph, l. 1-2). The structure contains more than 50 wt.-% of hydrogel.

The subject-matter of claim 1 thus differs from Annex 5 in that 3 to 50 wt.-% of SAPs is used as the hydrogel.

The problem solved by this distinguishing feature is to provide an absorbent structure of increased absorbing capacity (cf. Annex 1, p. 95/C/e/5, 4th paragraph). This is, however, obvious in view of Annex 3, which discloses the use of up to 50 wt.-% of SAP.

The subject-matter of claim 1 does not involve an inventive step (Art. 56 EPC).

Claim 2 of Annex 1 contains subject-matter which extends beyond the content of the application as originally filed (Art. 100(c) and 123(2) EPC).

The feature "at least 60 wt.-%" was not disclosed in the original documents, but added during examination of the application. This was justified with the pretension that the feature was inferrable from the drawings. However, taking over of a feature from a drawing into the claims is only allowable if such feature is directly and unambiguously inferrable from the drawings (cf. T 523/88). The figures in Annex 1 do not include any quantitative disclosure of the distribution of the particles, but the information they give rise is of a mere qualitative nature. The feature of 60 wt.-% can thus not be directly and unambiguously inferred from the drawings.

Claim 2 could be amended so as to replace the feature "at least 60 wt.-%" by the original "most of", since the scope of protection conferred by claim 1 would still be broader than that conferred by such an amended claim 2 (Art. 123(2) and (3) EPC), but such an amendment would introduce lack of clarity, since it is undetermined what should be understood under "most of". Such an amendment would thus not be allowable under Art. 102(3) and 84 EPC. See also T 472/88.

Claim 2 does not involve an inventive step. Again, two different analyses are possible:

A) If Annex 3 is considered to represent the closest prior art, the subject-matter of claim 2 would be distinguished from Annex 3 by the wood pulp fibres and by the uneven distribution of the SAP particles. It has already been shown that the selection of wood pulp fibres does not involve an inventive step (Art. 56 EPC) if the teachings of Annex 4 or 5 are taken into account.

Annex 5 furthermore discloses the uneven distribution of hydrogel particles and teaches that at least 60 wt.-% of such particles should be placed in the back half of the article, if an improved absorption is desired (cf. Annex 5, p. 95/C/d,e,f/16, l. 3-6, 4th paragraph,

1. 2-4 and the claim). The subject-matter of claim 2 does not involve an inventive step over Annex 3 in combination with Annex 5 (Art. 56 EPC).

- B) If Annex 5 is considered to represent the closest prior art, claim 2 differs from the closest prior art only in the use of 3 to 50 wt.-% of SAP. The analysis of problem and solution is thus identical to that carried out for claim 1 and the conclusion is the same: the subject-matter of claim 2 is obvious over Annex 5 in view of Annex 3 (Art. 56 EPC).

Claim 3 depends on claim 2. Therefore, its subject-matter also extends beyond the content of the application as filed (Art. 123(2) and 100(c) EPC). For a detailed analysis, see above.

Note that claim 3 may not be amended as to be made dependent on claim 1, since the description does not mention the coating of the fibres. Such an amendment would introduce added subject-matter (Art. 123(2) EPC) and would not be supported by the description (Art. 84 EPC). It is thus not allowable under Art. 102(3) EPC.

The closest prior art to claim 3 is considered to be represented by Annex 3, which discloses coating of the particles of SAP with the fibres, in order to improve the retention of these particles within the fibre matrix (cf. Annex 3, l. 7-12).

Claim 3 differs from Annex 3 in the same aspects as claim 2, on which it depends. These differences have already been shown not to involve an inventive step (Art. 56 EPC).

Claim 3 also differs from Annex 3 in that the particles coat the fibres instead of being coated by the fibres as in Annex 3.

This distinguishing feature merely provides an alternative to the solution of the problem of retaining the particles within the composite proposed in Annex 3. The skilled person, in the absence of evidence for an unexpected effect, would consider equivalent to coat particles with fibres or fibres with particles, if the object to be achieved is to provide improved adhesion between fibres and particles, so that the particles are retained within the composite (cf. Annex 1, p. 95/C/e/5, 7th paragraph).

Claim 4, as claims 2 and 3 includes added subject-matter, since it depends on claim 2 via its dependency on claim 3 (Art. 123(2) and 100(c) EPC).

The closest prior art to claim 4 is considered to be represented by the process described in Annex 5, p. 95/C/d,e,f/16, 5th paragraph.

The subject-matter of claim 4 differs from this closest prior art in the following aspects:

- 3 to 50 wt.-% SAP
- hot air
- rotating drum

The existence of a nozzle in Annex 5 is implied by the reference to the use of compressed air. Since Annex 5 describes the same uneven distribution of particles as claim 4, the "required distribution" must also be achieved in the process of Annex 5.

The first distinguishing feature has already been shown not to involve an inventive step over Annex 3. Annex 3 also discloses heating (to 80°C) in a mixer in order to achieve adhesion of particles to fibres. The hot air and the rotating drum are more obvious means to obtain heating and mixing.

The subject-matter of claim 4 does not involve an inventive step over Annex 5 in view of Annex 3.

Claim 5 for the contracting states BE, DE, FR, GB, IT, LU and SE is not novel over Annex 2 (Art. 54(3) and (4) EPC), which describes an absorbent package made of the composite of claim 1 of Annex 1 placed between two insoluble sheets (cf. Annex 2, p. 95/C/d,e,f/9, last paragraph, 1st sentence, and the detailed discussion of Annex 2 above).

Claim 5 for the contracting states DK, ES and GR does not involve an inventive step (Art. 56 EPC). Annex 5 describes an absorbent package similar to that of claim 1 of Annex 1 placed between two sheets which necessarily must be insoluble in the liquid to be absorbed. The diaper is just an example of a such package and is attacked with claim 6. Thus, claim 5 does not contain more distinguishing features over Annex 5 than claim 1 and the analysis of inventive step of claim 1 on the basis of Annex 5 made above is also valid against claim 5. Claim 5 does not involve an inventive step over the teaching of Annex 5 in view of Annex 3 (Art. 56 EPC).

The mention of polypropylene in claim 6 constitutes added subject-matter (Art. 123(2) and 100(c) EPC). Polypropylene was introduced as a correction of an error under Rule 88 EPC during examination of the application. Such a correction was not allowable and, thus, offended against Art. 123(2) EPC. It was not obvious from the application documents that an error had been made, since both, polyethylene and polypropylene non-wovens could be used as pervious sheets for diapers (cf. Annex 4, 95/C/d,e,f/14, 4th paragraph, 1st sentence). The existence of an error and its solution could only be determined after having consulted the priority document, which was expressly forbidden in opinions G 3/89 and G 11/91.

The rest of the subject-matter of the claim is not inventive in view of Annex 5 and Annex 3 (Art. 56 EPC). Annex 5 describes a diaper or absorbent article made of an absorbent composite of wood pulp fibre and hydrogel particles placed between a liquid pervious insoluble top sheet and a liquid impervious insoluble back sheet (cf. Annex 5, p. 95/C/d,e,f/16, 3rd paragraph, 1st sentence).

Claim 6 differs from Annex 5 in that it contains 3 to 50 wt.-% of SAP as the hydrogel, which has already been shown not to involve an inventive step over Annex 3, and in that the impervious sheet is said to be made of polymeric material, which is common general knowledge and cannot justify an inventive step (Art. 56 EPC).

The non-woven polypropylene fabric should not be taken into consideration for the evaluation of inventive step, since it constitutes added subject-matter and is merely a preferred, non-limiting feature. In any case, that feature is obvious over Annex 4 (cf. 95/C/d,e,f/14, 4th paragraph, l. 1-2).

Our request for revocation of the patent has herewith been substantiated.

To Paddy Nappy PLC
Blarney Lane
Cork (Eire)

Dear Sirs/Madams,

An opposition has been filed with the EPO against the whole scope (all claims and all contracting states) of Annex 1. All grounds mentioned in your letter have been used, since it is not allowable under the EPC to late-file grounds for opposition (Rule 55(c) EPC and G 10/91 and G 9/91).

However, I have not made use of the information concerning the invention which you got from the proprietor during the exhibition in Cork. Since you got such information under secrecy agreement, you cannot be considered to form part of the "public" under the EPC (cf. T 300/86). The exhibition of the product was not such that the public could become aware of its structure, since you said that it was exhibited inside a case and, logically, not available for detailed inspection of its inner structure, even less of the chemical nature of the SAPs (cf. G 1/92, which requires that the object in question can (even if it is not analyzed, the possibility must exist; this possibility did not exist at the exhibition in Cork) be analyzed in order to be made available to the public.

Your confidentiality agreement expired after the filing date of the Annex 1, which means that when you became "part of the public" under the meaning of Art. 54 EPC, a patent application had already been filed and your knowledge of the invention could not be used against its subject-matter, even if it did not claim priority.

Be sure that if your company is taken over by another company, the new company will be able to continue the opposition as successor in title of the acquired business unit, to which the opposition belongs (cf. G 4/88).

Yours faithfully

Mats Matsson

Notes to the examiner

All Annexes and possible lines of attack have been used against all claims, as far as possible taking into account possible future amendments to the claims of the opposed patent.

No use has been made of the information concerning the exhibition in Cork for the reasons given in the letter to Paddy Nappy PLC.

The "problem and solution" approach has only been used in detail against claim 1 for reasons of economy of time. It should be understood that all objections based on Art. 56 EPC should be construed as including:

- identification of closest prior art
- identification of distinguishing features
- formulation of problem solved by such features
- analysis of obviousness of such a solution in view of other available documents.