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Datasheet for the decision of 25 June 2026

Case Number: T 0861/24 - 3.3.05

Application Number: 17726662.4

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Language of the proceedings: EN

Title of invention:
METHOD OF PRODUCING A FIBROUS WEB CONTAINING NATURAL AND SYNTHETIC FIBRES

Patent Proprietor:
Paptic Ltd

Opponent:
Ahlstrom Oyj

Headword:
Paptic/METHOD OF PRODUCING A FIBROUS WEB

Relevant legal provisions:
EPC Art. 56
RPBA 2020 Art. 12(6)

Keyword:
Inventive step - (no)
Late-filed request - should have been submitted in first-instance proceedings (yes)

Decisions cited:
T 0197/86

Catchword:

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Beschwerdekammern

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Case Number: T 0861/24 - 3.3.05

D E C I S I O N
of Technical Board of Appeal 3.3.05
of 25 June 2026

Appellant: (Patent Proprietor)	Paptic Ltd Tekniikantie 2 D 02150 Espoo (FI)
Representative:	Grünecker Patent- und Rechtsanwälte PartG mbB Leopoldstraße 4 80802 München (DE)
Appellant: (Opponent)	Ahlstrom Oyj Alvar Aallon katu 3 C 00100 Helsinki (FI)
Representative:	Hoffmann Eitle Patent- und Rechtsanwälte PartmbB Arabellastraße 30 81925 München (DE)
Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted/ electronically transmitted on 25 April 2024 concerning maintenance of the European Patent No. 3433421 in amended form.**

Composition of the Board:

Chair	R. Winkelhofer
Members:	R. Elsässer
	G. Glod

Summary of Facts and Submissions

I. Both the opponent and the patent proprietor lodged appeals against the decision of the opposition division to maintain European patent No. EP 3 433 421 B1 in amended form, based on the request then pending as auxiliary request 5. In the following, the documents (D) are identified by the same numbers as those used in the contested decision.

II. Claim 1 of the request found allowable reads as follows (with features grouped as in the decision and with amendments compared with granted claim 1 shown).

M1 A method of manufacturing a fibre web
M2 which comprises a fibre matrix formed by natural fibres and ~~possibly~~ synthetic fibres, according to which method
M3 a water-containing, planar fibre layer is provided from natural fibres and ~~possibly~~ synthetic fibres, which layer comprises an aqueous phase and a fibrous phase, and
M4 this fibre layer is dried in order to remove the aqueous phase, whereby the natural fibres and ~~possible~~ synthetic fibres together form a fibre matrix, characterized by that
M5 applying onto the water-containing, planar fibre layer a binder, which is allowed to penetrate via the aqueous phase at least partially in between the fibres before hydrogen bonds are formed between the fibres,
M6 wherein the penetration of the binder into the fibre web, during the application or immediately thereafter, is facilitated by directing suction

to the binder from the opposite side of the fibre web, ~~and~~

M7 *wherein the fibre web is formed by using foam forming, and*

M8 *wherein the fibre matrix is provided from the natural fibres and the synthetic fibres and the percentage of the natural fibres is 70-90 part by weight and of the synthetic fibres 10-30 parts by weight.*

III. The opponent argued, *inter alia*, that the subject-matter of claim 1 of all of the requests was rendered obvious by **D1** (US 2009/0223644 A1).

The proprietor argued, *inter alia*, that D1 did not render obvious a method combining the use of natural fibres with the application of a binder, as claimed.

IV. In the communication pursuant to Article 15(1) RPBA, the board set out its preliminary opinion that none of the requests on file was inventive over D1, including auxiliary request 8, which corresponds to the request found allowable by the opposition division.

V. At the oral proceedings before the board, the proprietor provided arguments only with regard to auxiliary request 8 and referred to their written submissions with regard to all other requests.

VI. The parties' final requests are as follows.

The proprietor requests that the decision under appeal be set aside and amended such that the opposition be rejected, or that the patent be maintained in amended form based on auxiliary requests 1 to 7, filed with the grounds of appeal, or based on auxiliary requests 8 to

12, filed with the reply to the opponent's appeal.

The opponent requests that the decision under appeal be set aside and amended such that the patent be revoked.

Reasons for the Decision

1. Main request

The main request is the patent as granted.

1.1 Given that the board's conclusion in the communication pursuant to Article 15(1) RPBA was only challenged by the proprietor with regard to auxiliary request 8 during the oral proceedings, there is no reason to deviate from this conclusion with regard to the other requests, including the main request.

1.1.1 In particular, the opposition division's conclusion that claim 1 of the patent as granted lacks an inventive step over document D1 is correct.

1.1.2 D1 discloses a foam-forming process of a web (features M1, M3, M4, M7, see paragraphs [0047] to [0051] and claim 4 of D1). The web comprises, *inter alia,* reinforcing fibres which can be natural fibres (feature M2, see paragraph [0027]). As an option, the document teaches applying a binder to the still wet web while suctioning air through it (features M5, M6; see paragraph [0053]). In view of the disclosure of paragraph [0019] of the patent, it must be concluded that hydrogen bonds are not yet formed under these conditions, and therefore D1 discloses feature M5.

1.1.3 The proprietor did not contest that D1 discloses these features individually but argued that they were not

disclosed in combination. In particular, D1 neither disclosed nor hinted at combining natural fibres with a binder. Starting from the embodiment of the process with binder application disclosed in paragraph [0053] of D1, there would have been no incentive to turn to natural fibres. Instead, D1 encouraged using carbon fibres.

1.1.4 This is not convincing, however, since D1 explicitly teaches in paragraph [0027] that organic fibres, such as natural fibres like hemp fibres, can alternatively be used. Moreover, D1 teaches that using these fibres has the advantage that the final product can be burned without leaving residues. This is an advantage that not all of the mentioned fibres have and therefore this teaching constitutes a clear pointer towards using organic fibres, including natural fibres.

1.1.5 The proprietor further pointed out that the patent (paragraph [0003]) aimed at webs having "plastic-like" properties and referred to the properties of the webs of the example. These properties were not discussed in D1. In other words, these "plastic-like" properties were a technical effect that resulted from combining natural fibres and the binder treatment, and that the problem to be solved should be formulated accordingly. As a consequence, D1 did not render obvious the claimed subject-matter, since this effect was not mentioned in D1, let alone linked to the use of natural fibres.

1.1.6 Yet this is not convincing either. The term "plastic-like" is defined in paragraph [0004] of the patent and exemplary properties are given in paragraph [0018], such as a certain degree of stretchability, which is also exhibited by the webs of the example of the patent (see paragraphs [0072] to [0075]). Notwithstanding the

question of whether such properties are present across the entire scope of the claim, there is at least no evidence on file showing that these "plastic-like" properties would result from using natural fibres, i.e. from the distinguishing feature, see point 1.1.3 above.

On the contrary, it can be concluded from paragraph [0016] of the patent that these properties result from the way the binder is applied to the wet web, i.e. from a feature that is already present in D1, see above. Therefore, the comparative example is not representative of the relevant embodiment of D1. As a consequence, the example does not allow the conclusion to be drawn that an effect is achieved in comparison with D1.

It is established jurisprudence that in the case where comparative tests are chosen to demonstrate an inventive step with an improved effect, the nature of the comparison with the closest prior art must be such that the effect is shown to have its origin in the distinguishing feature of the invention (T 197/86, Reasons 6.1.3).

As no effect has been shown to result from the selection of natural fibres, the problem to be solved is to provide an alternative method.

1.1.7 Claim 1 proposes solving this problem (in the alternative without the optional synthetic fibres) by providing a web formed from natural fibres.

This solution is obvious, however. Starting from the method disclosed in paragraph [0053] of the patent, which is open in terms of the fibres to be used, the skilled person would refer to paragraph [0027] of D1,

where suitable fibres are disclosed, including natural fibres like hemp and the like. It is further disclosed that these fibres can be used alone or in combination. In view of the problem to be solved, see above, the selection of either fibre type disclosed in said passage, including hemp fibres, which are natural fibres, is an obvious measure.

It follows that the main request is not allowable.

2. Auxiliary requests 1, 2 and 3

2.1 Compared with claim 1 as granted, claim 1 of auxiliary request 1 has been limited by the incorporation of the following features.

a) *wherein the fibre matrix is provided from the* natural fibres; or
b) *wherein the fibre matrix is provided from the natural fibres and the synthetic fibres and the percentage of the natural fibres is 60-95 parts by weight and of the synthetic fibres 5-40 parts by weight.*

2.2 Compared with claim 1 as granted, claim 1 of auxiliary request 2 has been limited by the incorporation of the following features.

a) *wherein the fibre matrix is provided from the* natural fibres; or
b) *wherein the fibre matrix is provided from the natural fibres and the synthetic fibres and the percentage of the natural fibres is 70-90 parts by weight and of the synthetic fibres 10-30 parts by weight.*

2.3 Compared with claim 1 as granted, claim 1 of auxiliary request 3 has been limited by the incorporation of the following features.

a) *wherein the fibre matrix is provided from the* natural fibres; or
b) *wherein the fibre matrix is provided from the natural fibres and the synthetic fibres and the percentage of the natural fibres is 60-95 parts by weight and of the synthetic fibres 5-40 parts by weight and the grammage of the fibre web is approximately 20-200 g/m^2.*

2.4 Alternative (a) corresponds to the embodiment discussed in the context of the main request. As this embodiment lacks an inventive step for the reasons set out above, the same applies to auxiliary requests 1 to 3.

3. Auxiliary requests 4 to 6

3.1 In its communication under Article 15(1) RPBA, the board had also set out its reasons why auxiliary requests 4 to 6 should not be considered pursuant to Article 12(6) RPBA. Since this conclusion has not been challenged by the proprietor, there is no reason to deviate from it here.

3.1.1 Auxiliary requests 4 to 6 were filed for the first time with the grounds of appeal. They correspond to auxiliary requests 1 to 3 discussed above, but with the additional limitation in alternative (a) to natural fibres which are *"essentially unrefined cellulose or lignocellulose fibres"*.

3.1.2 The proprietor argued that these requests should be considered since they had been filed in direct reaction

to the opponent's inventive-step objection based on D1, which had only been made on 12 January 2024, i.e. on the final date for filing written submissions under Rule 116 EPC. Furthermore, according to the proprietor, there had not been a "legal opportunity" for submitting the requests between said final date and the date of the oral proceedings before the opposition division, and therefore the first possible opportunity would have been at the oral proceedings. However it was questionable whether the opposition division would have admitted further auxiliary requests filed at the oral proceedings under these circumstances. For these reasons, the proprietor concluded that the grounds of appeal were the first opportunity for filing its auxiliary requests.

3.1.3 This is not convincing. Rule 116 EPC is not a legal bar to the submission of new requests, in particular if they are filed in reaction to a change in the subject of the proceedings, such as a new objection. Therefore, the proprietor could and should have submitted their requests in reaction to the new inventive-step objection as early as possible, but definitively at the latest at the oral proceedings, after the opposition division had stated that alternative a) of auxiliary requests 1 to 3 did not involve an inventive step.

As an aside, it should be noted that the request found allowable by the opposition division *was* filed during the oral proceedings, and was admitted.

The fact that a request might not be admitted by the opposition division due to late filing is not a valid justification for filing the request even later, namely for the first time in the appeal proceedings.

Had the proprietor submitted auxiliary requests 4 to 6 in the opposition proceedings, in particular instead of or before the requests then pending as auxiliary requests 4 and 5, the opposition division would have had to take a decision on these requests, either in substance or at least with regard to their admittance, which the proprietor could then have challenged in their appeal. Instead, they chose to discuss, directly, the more limited requests then pending as auxiliary requests 4 and 5 (now auxiliary requests 7 and 8), in which alternative a) is deleted. Considering the present auxiliary requests 4 to 6 for the first time on appeal goes against the primary object of the appeal proceedings, which is to review the decision under appeal in a judicial manner (Article 12(2) RPBA).

Finally, the proprietor also stressed in this context that the amendment as such could not have surprised the opponent since it had already been present in auxiliary request 7 as filed with the reply to the opposition, which has since been abandoned. Moreover, the amendment did not change the subject of the proceedings; it merely limited an embodiment that had already been discussed in the context of the higher-ranking requests.

Yet these arguments are not convincing either. What matters is that, as set out above, the proprietor conducted the proceedings in such a way that prevented the opposition division from taking a decision on the merits of auxiliary requests 4 to 6.

4. Auxiliary request 7

4.1 Claim 1 of auxiliary request 7 corresponds to claim 1 of the request held allowable by the opposition division, i.e. the request then pending as auxiliary request 5 (see point II. above), but with the exception that the percentage of natural fibres is broader and limited to 60-95 parts by weight (instead of 70-90 parts by weight) and the percentage of the synthetic fibres is broader and limited to 5-40 parts by weight (instead of 10-30 parts by weight).

4.2 Claim 1 of auxiliary request 7 lacks an inventive step for the same reasons as those set out with respect to the main request and auxiliary requests 1 to 3. There is no evidence of a technical effect resulting from using the fibre composition now claimed. A more restricted mixture is used in the example of the patent (paragraph [0065]). More importantly, as mentioned above, the comparative example is not representative of the method of D1 because the binder is applied to the dry web. In the absence of a technical effect, the problem to be solved is the provision of an alternative method.

The solution proposed in claim 1 is obvious in view of paragraph [0027] of D1, which makes reference to various fibres that can be used in the context of the invention, among them natural fibres like hemp fibres and synthetic fibres like polyester fibres. It is also disclosed that these fibres can be used alone or in a combination of two or more. In view of this teaching and in the absence of a technical effect, any mixture of natural fibres and synthetic fibres is an arbitrary selection from the broader teaching of D1, which does not involve an inventive step.

Moreover, the benefit regarding thermal recycling that

is mentioned in paragraph [0027] of D1 applies to organic fibres in general and therefore also to mixtures of natural and synthetic fibres.

5. Auxiliary request 8

5.1 This request corresponds to the request held allowable by the opposition division, i.e. the request then pending as auxiliary request 5 (see point II. above). While the opposition division acknowledged that no experimental comparison with other fibre compositions was available, it nevertheless came to the conclusion that the combination of features present in claim 1 of this request led to a product with improved plastic-like properties, and formulated the problem accordingly, namely as the manufacture of a fibrous web with improved plastic-like properties. Since neither D1 nor any other document in the proceedings taught that improved plastic-like properties could be achieved with the claimed fibre mixture, the subject-matter of claim 1 of this request was considered inventive.

5.2 At the oral proceedings before the board, the proprietor relied in essence on the same reasoning, emphasising again that D1 did not mention plastic-like properties at all, let alone plastic-like webs made by combining the fibre matrix specified in the claim with a binder. Instead, D1 focused on carbon fibre webs without a binder application, as shown in the examples of the document. Therefore, D1 did not render obvious the claimed subject-matter, even if the problem was formulated less ambitiously as providing an alternative.

5.3 This is not convincing, however. As set out above in the context of the higher-ranking requests, no

experimental evidence is available to show that the selection of the fibre mixture now claimed results in a technical effect such as the formation of a web having plastic-like properties. In contrast, the contested patent teaches clearly that these properties result from the way in which the binder is applied and therefore from a feature that is already present in D1. The vague, unsubstantiated statements in the description of the patent to which the opposition division referred (see point 6.3.1.2 of the decision) are not suitable for proving a technical effect. Without evidence of such an effect, the problem must still be formulated as providing an alternative method. The solution proposed in claim 1 lacks an inventive step since it is again only an arbitrary selection from the broad disclosure concerning the fibre mixture in D1. The fact that the examples of D1 show binderless carbon fibre webs does not detract from the fact that webs comprising natural fibres, alone or blended with other fibres such as synthetic fibres, are also disclosed. Moreover, the use of organic fibres is disclosed as resulting in a beneficial effect, see above. With regard to the percentages specified in the claim, the reasoning set out in the context of auxiliary request 7 also applies here.

5.4 For these reasons, auxiliary request 8 does not involve an inventive step either.

6. Auxiliary request 9

6.1 Claim 1 of auxiliary request 9 corresponds to claim 1 of auxiliary request 7 but with the additional limitation of the grammage of the fibre web being approximately 20-200 g/m^2.

6.2 This claim lacks an inventive step for the same reasons as those set out with respect to auxiliary request 7. There is no evidence of any effect resulting from the claimed grammage, be it alone or in combination with the fibre composition. The range claimed is therefore arbitrary, in particular in view of the fact that the most preferred grammage range disclosed in paragraph [0043] of D1 (100-500 g/m^2) overlaps with the range now claimed.

7. Auxiliary request 10

7.1 Claim 1 of auxiliary request 10 corresponds to auxiliary request 3 but with the additional limitation that the natural fibres are essentially unrefined cellulose or lignocellulose fibres.

7.2 This request is not inventive either, since no unexpected effects result from the newly incorporated feature.

Paragraph [0052] of the patent discloses that unrefined ("unground") fibres have a high freeness and a correspondingly low Schopper-Riegler number. This teaching does not go beyond basic common general knowledge in the field. In wet-laying paper or nonwoven webs, both unrefined and more or less refined fibres are routinely used and the skilled person knows the effects that refining has on the production process and on the product. There is no evidence on file that would show that the effect of using essentially unrefined fibres is different in the context of the invention from the effect that the skilled person would expect from using these fibres. The teaching of D1 that "natural fibres of hemp or the like" should be used encompasses the use of refined as well as essentially

unrefined fibres. Without a surprising technical effect, the selection of either option is arbitrary.

8. Auxiliary request 11

This request is based on auxiliary request 3 but with alternative (b) being deleted and alternative (a) being unchanged. Therefore, the request lacks an inventive step for the same reasons as those set out with respect to auxiliary request 3.

9. Auxiliary request 12

This request is based on auxiliary request 10 but with alternative b) being deleted. This request lacks an inventive step for the same reasons as those set out with respect to auxiliary request 10.

10. As none of the requests on file is admissible or allowable, the patent is to be revoked.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: The Chair:

C. Vodz R. Winkelhofer

Decision electronically authenticated