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**Datasheet for the decision  
of 6 May 2022**

**Case Number:** T 1899/19 - 3.3.03

**Application Number:** 11829790.2

**Publication Number:** 2621696

**IPC:** B27N3/10, B27N1/02, C08L97/02,  
C08L75/04

**Language of the proceedings:** EN

**Title of invention:**

COLD-PRESSED MATS OF LIGNOCELLULOSIC MATERIAL HAVING IMPROVED  
COLD TACK AND A PROCESS FOR THEIR PRODUCTION

**Patent Proprietor:**

Covestro LLC

**Opponent:**

BASF SE

**Relevant legal provisions:**

RPBA Art. 12(4)  
EPC Art. 83, 100(b)

**Keyword:**

Late-filed evidence - admitted (no)  
Sufficiency of disclosure - (no)



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Case Number: T 1899/19 - 3.3.03

**D E C I S I O N**  
**of Technical Board of Appeal 3.3.03**  
**of 6 May 2022**

**Appellant:** BASF SE  
(Opponent) Carl-Bosch-Str. 38  
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**Representative:** Eisenführ Speiser  
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**Respondent:** Covestro LLC  
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**Representative:** Levpat  
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**Decision under appeal:** **Decision of the Opposition Division of the  
European Patent Office posted on 9 May 2019  
rejecting the opposition filed against European  
patent No. 2621696 pursuant to Article 101(2)  
EPC.**

**Composition of the Board:**

**Chairman** D. Semino  
**Members:** M. Barrère  
A. Bacchin

## Summary of Facts and Submissions

I. The appeal of the opponent lies against the decision of the opposition division rejecting the opposition against European Patent number 2 621 696.

II. The following document was *inter alia* cited in the opposition division's decision:

E6: R.J. Leichti, et al., J. Adhesion, 1988, Vol. 25, pages 31-44

III. In that decision the opposition division held, among others, that the parameter relating to the "Push Off Test" did not lead to a lack of sufficiency of disclosure.

IV. The opponent (appellant) filed an appeal against said decision.

The following documents were filed by the appellant:

E8: experimental evidence (filed with the statement of grounds of appeal)

E9: experimental evidence (filed with letter of 20 December 2019)

V. With the rejoinder to the statement of grounds of appeal, the patent proprietor (respondent) filed two sets of claims as first and second auxiliary requests.

VI. Oral proceedings were held before the Board on 6 May 2022.

VII. The appellant requested that the decision under appeal be set aside and the patent be revoked.

The respondent requested that the appeal be dismissed and the patent be maintained as granted or, in the alternative, that the decision under appeal be set aside and the patent be maintained in amended form on the basis of one of the first and second auxiliary requests filed with the rejoinder to the statement of grounds of appeal.

VIII. Claim 1 as granted (main request of the respondent) reads as follows:

"1. A process for the production of a cold-pressed mat of a lignocellulosic material having a Push Off Test extension equal to at least 85% of that of a mat made with the same lignocellulosic material and a urea-formaldehyde resin comprising:

(a) separately adding each component of a binder system comprising:

(i) at least one polyfunctional isocyanate and

(ii) at least one aqueous dispersion of a material having adhesive or tackifying characteristics when contacted with lignocellulosic material to the lignocellulosic material;

(b) blending each of the components of the binder system and the lignocellulosic material until the lignocellulosic material is sufficiently coated

with the binder system components that the lignocellulosic material can be formed into a mat;

(c) forming the coated lignocellulosic material into a mat; and

(d) applying sufficient pressure to the mat at ambient temperature to form a mat having a desired thickness." (emphasis added by the Board)

Claim 1 of the first auxiliary request differs from granted claim 1 in that component (i) is defined as "at least one polyfunctional isocyanate as such".

Claim 1 of the second auxiliary request differs from granted claim 1 in that the following feature was added at the end of the claim:

"in which the components of the binder system are simultaneously added to the lignocellulosic material."

The remaining claims of these requests are not relevant to this decision.

IX. The appellant's submissions, in so far as they are pertinent to the present decision, may be derived from the reasons for the decision below. They were essentially as follows:

(a) Admittance of E8 and E9

E8 and E9 were filed in reaction to the decision according to which the argumentation of lack of disclosure and lack of inventive step was not sufficiently substantiated.

(b) Sufficiency of disclosure

The opposed patent did not teach how to reliably obtain a cold-pressed mat of a lignocellulosic material having a Push Off Test extension of at least 85%. The invention was therefore insufficiently disclosed to be carried out by a person skilled in the art over the whole scope of granted claim 1.

The arguments put forward for the main request applied *mutatis mutatis* to the first and second auxiliary requests.

- X. The respondent's submissions, in so far as they are pertinent to the present decision, may be derived from the reasons for the decision below. They were essentially as follows:

(a) Admittance of E8 and E9

E8 and E9 should have been filed during first instance proceedings. These documents should therefore not be admitted into the appeal proceedings.

(b) Sufficiency of disclosure

The method for carrying out the "Push Off Test" was sufficiently described. Furthermore, the opposed patent included numerous examples showing how the invention could be put into practice. Thus the invention was sufficiently disclosed to be carried out by a person skilled in the art over the whole scope of granted claim 1.

The arguments put forward for the main request applied *mutatis mutatis* to the first and second auxiliary requests.

## **Reasons for the Decision**

1. Admittance of documents E8 and E9
  - 1.1 Documents E8 and E9 were filed by the appellant respectively with the statement of grounds of appeal and with letter of 20 December 2019 (i.e. after the filing of the statement of grounds, but before the reply of the respondent). The admission to the proceedings of E8 is subject to the discretionary power of the Board in accordance with Article 12(4) RPBA 2007 which applies in view of the transitional provisions in Article 25(2) RPBA 2020. To the benefit of the appellant (which can be accorded by following the appellant's argument that E9 was not filed with the statement of grounds of appeal because of a serious illness of the Senior Principle Scientist in charge of the relevant experiments) it is considered that the admission of E9 is also subject to the discretionary power of the Board in accordance with Article 12(4) RPBA 2007.
  - 1.2 The admittance of E8 and E9 is contested by the respondent for the following reasons (see rejoinder, points 2.a and 3.a and letter of 4 March 2022, pages 2-4, point C.I.):

E8 and E9 should have been filed during opposition proceedings,

E8 does not represent the examples of E1 and

E9 does do not reproduce patent examples in a sufficiently accurate manner.

- 1.3 E8 is directed to establishing that the material of example 3 of E1 is characterised by a Push Off Test extension of at least 85% (see statement of the grounds of appeal, page 7, table). E9 was submitted to provide evidence that the choice of the urea formaldehyde resin has an influence on the percentage of extension measured according to the Push Off Test (see letter of 20 December 2019). With letter of 31 March 2020 (see page 2, third paragraph), the appellant argued that E8 and E9 were filed in reaction to the decision according to which the argumentation of lack of disclosure and lack of inventive step was not sufficiently substantiated.
- 1.4 The Board notes that, contrary to the appellant's submissions, the lack of evidence to support the objection of insufficiency was already pointed out in the opposition division's preliminary opinion (see summons of 28 August 2018, item 9). Furthermore, in view of the assessment of inventive step, the preliminary opinion of the opposition division was in line with the conclusion in the contested decision.
- 1.5 The Board is therefore of the opinion that E8 and E9 should have been filed during opposition proceedings, at the latest in reply to the summons. Under these circumstances, the Board finds it appropriate to exercise its discretion under Article 12(4) RPBA 2007 by not admitting documents E8 and E9 into the proceedings.
2. Main request (patent as granted)



2.1 Sufficiency of disclosure

2.1.1 Granted claim 1 is directed to a process for the production of a cold-pressed mat characterised by:

"a Push Off Test extension equal to at least 85% of that of a mat made with the same lignocellulosic material and a urea-formaldehyde resin".

2.1.2 According to the appellant, the opposed patent is not disclosed in a sufficient manner for it to be carried out over the whole scope of claim 1. In particular, the opposed patent would not teach how to reliably obtain a cold-pressed mat having a Push Off Test extension of at least 85%. In the absence of any selection rule in the opposed patent, the skilled person would have to perform trial-and-error experimentation on arbitrarily selected binder systems to establish whether the claimed property is obtained. Furthermore, the opposed patent would not define which urea formaldehyde (UF) material is to be used as reference for the "Push Off Test".

2.1.3 The respondent submitted that the appellant's objection should be considered as an objection of lack of clarity rather than of insufficient disclosure and should therefore not be dealt with in opposition proceedings. According to the respondent, the "Push Off Test" is sufficiently detailed in the description of the contested patent, in particular in paragraphs [0033], [0034] and [0037] as well as in E6, which is referenced in paragraph [0033] of the contested patent. Furthermore, the opposed patent includes numerous examples showing how the invention can be put into practice.

2.1.4 For the Board, the question to be answered is whether the skilled person can obtain any cold-pressed mat according to claim 1 without their own research or undue experimentation (see Case Law of the Boards of Appeal, 9th edition 2019, II.C.6.6.7).

(a) The opposed patent includes several examples implementing steps (a) to (d) as defined in claim 1. However, among said examples, three do not lead to a mat with the expected property (see table 4, examples 23-24 and 27). It is thus not sufficient to follow steps (a) to (d) of claim 1 in order to obtain a material with the required cold tack (measured using the Push Off Test).

Contrary to the respondent's view, the Board does not consider that the non working examples 23-24 and 27 may be considered as occasional failures. Indeed, it can be derived from the group of examples 23-25 that, for a specific binder system E (corresponding to a binder system as defined in present claim 1), the cold tack is insufficient in two of three experiments. Moreover, also with binder G, which is according to claim 1 as well, one example is not successful. Hence, these examples show that there is a range of binder compositions that do not achieve the desired property.

Furthermore, the description of the opposed patent does not provide any guidance to turn the non working experiments into a success. Instead, the person skilled in the art wishing to carry out the invention over the whole scope of claim 1 will have to establish by trial and error whether any new

combination of binder system and lignocellulosic material will provide a satisfactory result.

- (b) While it is accepted that a reasonable amount of trial and error is permissible when it comes to sufficiency of disclosure, the present situation is complicated by the fact that the Push Off Test Extension, which is a test for measuring cold tack (see paragraph [0033] in the patent), is expressed by reference to

"a mat made with the same lignocellulosic material and a urea-formaldehyde resin".

The opposed patent is however silent about the exact nature of the urea-formaldehyde resin (UF resin). For the Board, it is notorious that the structure of the UF resin has an impact on the tackifying properties of the resin. As a matter of example, document E6 teaches that reducing the formaldehyde:urea ratio increases the tack (see E6, table 1). Thus depending on the choice of the UF resin, the cold tack of the reference mat will change.

The knowledge of the UF resin is therefore essential to be able to determine whether the required cold tack is achieved or not. In the absence of the UF resin to be used as a reference, the person skilled in the art is not able to determine whether, when obtaining a cold-pressed mat which does not meet the condition in claim 1, they have to change the binder composition or the reference composition (or both of them) and in which way.

During oral proceedings, the respondent took the view that the skilled person could take any UF resin.

The Board cannot follow this argument because it contradicts the teaching of the opposed patent. Indeed, the examples of the patent disclose cold-pressed mats having specific percentages of Push Off Test extension. It is thus implicit that said percentages must have been measured by reference to a specific (but unknown) UF resin.

Consequently, the skilled person wishing to carry out the process over the whole scope of claim 1 not only has to adjust the binder system to achieve a certain property with no clear guidance on how to do that, but also said property is a moving target. Claim 1 is therefore not repeatable without undue burden over the entire breadth of the claim with the consequence that the requirement of sufficiency of disclosure is not met.

3. First and second auxiliary requests

Both parties in appeal had no additional and separate arguments on sufficiency of disclosure for the first and second auxiliary requests, thereby accepting that any conclusion reached for the main request equally applied to these requests. The Board has no reason to come to a different conclusion (see point 2.1 of the decision and the fact that claim 1 of said requests are directed to a process of a cold-pressed mat of a lignocellulosic material having a Push Off Test extension equal to at least 85%).

Therefore the claimed invention is insufficiently disclosed for it to be carried out by the person skilled in the art over the whole scope of claim 1 of the first and second auxiliary requests.

4. Since, due to lack of sufficiency of disclosure, none of the requests of the respondent is allowable, there is no need to deal with any other ground for opposition raised by the appellant and 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 Chairman:



A. Pinna

D. Semino

Decision electronically authenticated