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**Datasheet for the decision  
of 11 February 2016**

**Case Number:** T 0288/12 - 3.3.09

**Application Number:** 04075149.7

**Publication Number:** 1443071

**IPC:** C08J9/36, A47C27/14

**Language of the proceedings:** EN

**Title of invention:**

Method of manufacturing a laminated foam article, foam article  
thus obtained and the use thereof

**Patent Proprietor:**

Schraven Holding B.V.

**Opponents:**

BASF SE  
Polyex Paint Industrial B.V.  
Sika Technology AG  
ETABLISSEMENTEN VRIJDAGHS

**Headword:**

**Relevant legal provisions:**

EPC Art. 100(b)  
EPC R. 103(1)(a), 111(2)

**Keyword:**

Grounds for opposition - insufficiency of disclosure (yes)  
Reimbursement of appeal fee -  
equitable by reason of a substantial procedural violation

**Decisions cited:**

T 0763/04

**Catchword:**



**Beschwerdekammern  
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Chambres de recours**

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Case Number: T 0288/12 - 3.3.09

**D E C I S I O N  
of Technical Board of Appeal 3.3.09  
of 11 February 2016**

**Appellant 1:**  
(Opponent 1)

BASF SE  
67056 Ludwigshafen (DE)

**Representative:**

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(Opponent 2)

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**Appellant 3:**  
(Opponent 3)

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(Patent Proprietor)

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**Decision under appeal:** **Interlocutory decision of the Opposition  
Division of the European Patent Office posted on  
31 January 2012 concerning maintenance of the  
European Patent No. 1443071 in amended form.**

**Composition of the Board:**

**Chairman** W. Sieber  
**Members:** M. O. Müller  
F. Blumer

## Summary of Facts and Submissions

I. This decision concerns the appeals filed by opponents 1 to 3 against the decision of the opposition division that European patent No. 1 443 071 as amended met the requirements of the EPC.

II. With their notices of opposition, opponents 1 to 4 had requested revocation of the patent in its entirety on the grounds under Article 100(a) (lack of novelty and inventive step) and (b) EPC.

The documents submitted during the opposition proceedings included:

D1: US 6,406,780 B1.

III. The decision of the opposition division was based on a sole request filed during the oral proceedings on 22 November 2011. This request contained an independent process and an independent product claim which read as follows:

- "1. A method of manufacturing a laminated foam article, characterized in that the method comprises the following steps:

i) the provision of a foam substrate,

ii) the application of a thermoplastic film to the foam substrate,

characterized in that step iv) and step v) are carried out, which comprise:

iv) the application of a layer of a plastic dispersion to the thermoplastic film as obtained in step ii), and

v) the application of the elastomeric coating to the layer of a plastic dispersion as obtained in step iv),

wherein the thermoplastic film is applied in a thickness of 2-8  $\mu\text{m}$  and the elastomeric coating is applied in a thickness of 10-50  $\mu\text{m}$ , wherein

a polyurethane-based foam is used as the foam substrate,

the thermoplastic film is a polyurethane-based thermoplastic film,

a polyurethane-based, 2-component elastomer composition is used as the elastomeric coating and

one or more of the steps ii), iv) and v) are carried out by spraying."

- "6. A laminated foam article built up of, successively, a foam substrate, a thermoplastic film and an elastomeric coating, characterised in that a layer of a plastic dispersion is present between said thermoplastic film and said elastomeric coating, wherein said thermoplastic film has a layer thickness of 2-8  $\mu\text{m}$  and said elastomeric coating has a layer thickness of 10-50  $\mu\text{m}$ , wherein

a polyurethane-based foam is used as the foam substrate,

the thermoplastic film is a polyurethane-based thermoplastic film,

a polyurethane-based, 2-component elastomer composition is used as the elastomeric coating."

IV. The opposition division's decision can be summarised as follows:

The claims of the (sole) request met the requirements of Article 123(2) and (3) EPC, and were novel and inventive over D1.

Furthermore, the invention as defined in this request was sufficiently disclosed. Before giving its opinion on this point, the opposition division summarised the opponents' arguments, and also referred to the opponents' objection that it was impossible to apply a polyurethane-based thermoplastic film with a thickness of 2-8  $\mu\text{m}$  as required by claims 1 and 6 (second and third paragraph on page 12 of the decision, see also the item "Discussion on Article 83 EPC" on page 2 of the minutes). The opposition division did not however issue a reasoned decision on this objection. After reciting the parties' arguments on sufficiency of disclosure, the opposition division gave its opinion (top of page 13 of the decision) that the opponents' arguments on sufficiency of disclosure in fact related to clarity (Article 84 rather than Article 83 EPC). The reasons given subsequently exclusively concerned a claimed feature other than the thermoplastic film with a thickness of 2-8  $\mu\text{m}$  (namely, the "layer of a plastic dispersion", see second paragraph on page 13 of the decision).

V. On 22 March 2012, 26 March 2012 and 28 March 2012, opponents 1 to 3 (hereinafter: appellants 1 to 3) filed appeals. The statements of grounds of appeal were filed on 29 May 2012 (appellant 1) and 31 May 2012 (appellants 2 and 3) and contained

D18: Experimental report from Mr A. Lutz, signed 29 May 2012 (from appellant 1);

D19: Experimental report from Mr R. Richner, dated 30 May 2012 (from appellant 3);

D20: "Technische Information" SikaSense<sup>®</sup>-3560/01 (from appellant 3);

D21: A. Goldschmidt, H.-J. Streitberger, "BASF Handbuch Lackiertechnik", Vincentz Verlag 2002, pages 12 and 747 (from appellant 3); and

D22: "Paints, Coatings and Solvents", D. Stoye, W. Freitag (ed.), 2nd edition, 1998, pages 63 to 68 (from appellant 3).

VI. The appellants' requests and arguments can be summarised as follows:

- All appellants requested that the decision under appeal be set aside and that the patent be revoked.
  
- The appellants argued that the invention as defined in the claims was insufficiently disclosed. As shown in the experimental evidence D18 and D19, it was not possible to prepare a laminated foam article with a polyurethane-based



thermoplastic film of SikaSense<sup>®</sup>-3560/01 having the required thickness of 2-8 µm. Without any further information in the patent, the skilled person was not put in a position to prepare a laminated foam with a thermoplastic film having the required thickness.

A further insufficiency objection was raised with regard to the feature of "a layer of a plastic dispersion".

- Lastly, the appellants argued that the subject-matter defined in claim 1 lacked inventive step in view of the closest prior-art document D1.
  
- All appellants additionally requested that the appeal fee be reimbursed, since the opposition division's decision was based on claims which had not been the object of the opposition proceedings; the division had thus committed a substantial procedural violation.

VII. The proprietor has not filed any reply or made any request.

### **Reasons for the Decision**

1. The claimed subject-matter

The claim request relevant to the present decision is the request annexed to the opposition division's decision (sole request). Claim 6 of this request relates to a laminated foam article and claim 1 to a method of manufacturing it (for the wording of these claims, see point III above). The laminated foam article can be visualised as follows:

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polyurethane-based two-component elastomeric coating  
with a thickness of 10-50  $\mu\text{m}$   
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layer of a plastic dispersion  
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polyurethane-based thermoplastic film with a thickness  
of 2-8  $\mu\text{m}$   
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polyurethane-based foam substrate  
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2. Sufficiency of disclosure (Article 100(b) EPC)
  - 2.1 All three appellants argued that it was not possible to prepare a laminated foam article as required in independent claims 1 and 6 with a polyurethane-based thermoplastic film having the specified thickness, namely 2 to 8  $\mu\text{m}$ .
  - 2.2 Appellants 1 and 3 relied in this respect on D18 and D19. These documents were filed at the earliest possible time during the appeal proceedings, namely with appellant 1's and 3's statements of grounds of appeal, and are used to pursue a sufficiency attack already put forward during the opposition proceedings

(see point IV above). Furthermore, as will be shown below, they are *prima facie* relevant. In view of this, and in the absence of any request from the respondent to the contrary, these documents are admitted into the proceedings.

- 2.3 The experimental report D19 of appellant 3 describes four experiments in which films of the polyurethane SikaSense<sup>®</sup>-3560/01, corresponding to the polyurethane-based thermoplastic film in claims 1 and 6, were provided on polyurethane foam substrates ("PU-Schaum" in photograph 1 of D19), corresponding to the polyurethane-based foam substrate of claims 1 and 6. The films were formed by coating the foam substrates with four different coating weights of SikaSense<sup>®</sup>-3560/01, namely 30 g/m<sup>2</sup>, 60 g/m<sup>2</sup>, 150 g/m<sup>2</sup> and 230 g/m<sup>2</sup>. The resulting samples 1 to 4 were observed through an optical microscope and the average thicknesses of the films were determined. Photographs of the samples are shown on pages 4 and 5 and the thickness values are provided in table 1 of D19. As can be seen in this table, the average thickness of the films increases with the coating weight applied and already the lowest value of 43.4 µm obtained with the sample with the lowest coating weight (sample 1) is far above the claimed upper limit of 8 µm. In fact, in samples 1 and 2 (samples with the lowest and second lowest coating weights), it is highly doubtful that any film is present at all, since the corresponding photographs show only some spots of coating material rather than a film. The first sample where a film is clearly present is sample 3, in which the average thickness is as high as 98.8 µm, i.e. even further above the claimed upper limit.

A similar result was obtained by appellant 1 in D18, where a film of SikaSense<sup>®</sup>-3560/01 was provided on a polyurethane foam substrate by coating the foam substrate with three different coating weights of SikaSense<sup>®</sup>-3560/01, namely a "low" ("WS--"), "normal" ("WS") and "high" ("WS++") amount. The resulting samples were analysed with scanning electron microscopy. It was found that the SikaSense<sup>®</sup>-3560/01 forms a network of fibres on top of the polyurethane foam. The higher the amount of SikaSense<sup>®</sup>-3560/01, the denser the network and the more these fibres start to coalesce to form a layer with holes and finally a continuous film. The thickness of the fibres was found to range from about 4 µm to about 26 µm and the film thickness obtained with the normal amount of SikaSense<sup>®</sup>-3560/01 (WS) was between 30 µm and up to more than 100 µm and for the high amount (W++) 55 µm to more than 100 µm. Hence, also in D18, the film thickness is far above the claimed upper limit.

D18 and D19 thus prove that with the thermoplastic polyurethane SikaSense<sup>®</sup>-3560/01, no thermoplastic film with the thickness required by claims 1 and 6 can be obtained. From this, it can be concluded that at the very least not all thermoplastic polyurethanes allow the formation of thermoplastic films with the thickness required by claims 1 and 6.

- 2.4 The patent does not provide any guidance as to which polyurethane-based thermoplastic material has to be chosen and/or how it has to be applied in order to obtain the required thickness. In fact, the patent does not give a single example of a polyurethane-based thermoplastic material. Therefore, the patent does not put the skilled person in a position to obtain polyurethane-based thermoplastic films with the

- thickness required by claims 1 and 6. Thus for this reason alone, sufficiency of disclosure has to be denied.
3. In view of the above, there is no need to address the appellants' further insufficiency objection in relation to the feature of "a layer of a plastic dispersion". There is furthermore no need to deal with the appellants' inventive-step attack.
  4. Reimbursement of the appeal fee (Rule 103(1) (a) EPC)
    - 4.1 As set out above (point IV), during the opposition proceedings the opponents already objected that it was impossible to apply a polyurethane-based thermoplastic film with the thickness of 2-8  $\mu\text{m}$  required by claims 1 and 6. Nevertheless, the opposition division did not issue a reasoned decision on this objection (see point IV above), so in this respect its decision is not reasoned as required by Rule 111(2) EPC. This amounts to a substantial procedural violation (see e.g. T 763/04, point 4.4). In view of the fact that on the basis of this objection the board in the present decision comes to the conclusion that sufficiency has to be denied, it is equitable to order the reimbursement of the appeal fees.
    - 4.2 In view of this, there is no need to decide on the appellants' request that the appeal fees be reimbursed for another reason, namely because the opposition division's decision was not based on the ultimately valid claims. Thus, the opposition division referred in point 7 ii) of its decision to the thickness of the plastic dispersion layer of 20 to 100  $\mu\text{m}$  as a distinguishing feature over D1. The independent claims of the main request (sole request) annexed to the

decision did however not contain this feature. In fact the only claim request submitted during the opposition proceedings that contained this feature in the independent claims appears to have been the main request filed with letter dated 29 April 2010.

However, the various requests filed during the opposition proceedings were in the end replaced by the sole request filed during the oral proceedings before the opposition division, i.e. the main request annexed to the decision of the opposition division, which were the ultimately valid claims in these proceedings.

## Order

### For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.
3. The appeal fees are reimbursed.

The Registrar:

The Chairman:



M. Cañueto Carbajo

W. Sieber

Decision electronically authenticated