Decision of 10 October 2001

Case Number: T 0065/00 - 3.3.7

Application Number: 90117192.6

Publication Number: 0416620

IPC: B32B 5/26

Language of the proceedings: EN

Title of invention: Nonwoven fabric laminates

Patentee: KIMBERLY-CLARK WORLDWIDE, INC.

Opponent: Fiberweb North America, Inc

Headword: 

Relevant legal provisions: EPC Art. 83
EPC R. 55(c)

Keyword: "Opposition grounds (sufficient)"
"Disclosure - sufficiency (yes)"

Decisions cited: G 0010/91, T 0212/97

Catchword: 

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DECISION
de the Technical Board of Appeal 3.3.7
of 10 October 2001

Appellant: KIMBERLY-CLARK WORLDWIDE, INC.
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Wisconsin 54956  (US)

Representative: Grünecker, Kinkeldey,
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Maximilianstrasse 58
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Respondent: Fiberweb North America, Inc
(Opponent) 840 S.E. Main Street
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Representative: Shanks, Andrew
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Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 17 November 1999
revoking European patent No. 0 416 620 pursuant
to Article 102(1) EPC.

Composition of the Board:
Chairman: R. E. Teschemacher
Members: B. L. ter Laan
G. Santavicca
Summary of Facts and Submissions

I. Mention of the grant of European patent No. 0 416 620 in respect of European patent application No. 90 117 192.6, filed on 6 September 1990, claiming priority from two earlier applications in the U.S.A. (404804 of 8 September 1989 and 501202 of 29 March 1990), was published on 4 June 1997 (Bulletin 1997/23) on the basis of 19 claims, the independent claims being:

"1. A nonwoven fabric laminate comprising a first layer of thermoplastic filaments formed from a first thermoplastic polymer and a second layer of discrete thermoplastic fibres formed from a second thermoplastic polymer, wherein the layers are positioned in laminar surface-to-surface relationship, wherein the layers are heat bonded in discrete areas, and wherein the thermoplastic polymer in at least said first layer is an olefin copolymer having a crystallinity of less than 45%.

"5. A nonwoven fabric laminate comprising a first layer of thermoplastic filaments formed from a first thermoplastic polymer and a second layer of discrete thermoplastic fibres formed from a second thermoplastic polymer, wherein the layers are positioned in laminar surface-to-surface relationship, wherein the layers are heat bonded in discrete areas, and wherein the thermoplastic polymer in at least said first layers is an olefin terpolymer having a crystallinity of less than 45%.

II. On 4 March 1998 a Notice of Opposition against the granted patent was filed, in which the revocation of
the patent in its entirety was requested on the grounds set out in Articles 100(a), 100(b) and 100(c) EPC.

In the notice of opposition numerous documents were cited under the heading "Article 100(a) EPC", without however any argument being given. The objection pursuant to Article 100(b) EPC was based on a lack of disclosure of the methods of measurement of the crystallinity. No arguments were mentioned regarding Article 100(c) EPC.

III. By a decision taken on 4 November 1999 and issued in writing on 17 November 1999 the Opposition Division revoked the patent. That decision was based on the claims as granted as the main request and two additional sets of 15 claims each, filed during the oral proceedings on 4 November 1999, as auxiliary requests.

The Opposition Division held that the requirements of Article 83 EPC were not met. In particular, the patent in suit lacked any description of how the required crystallinity was to be measured. Crystallinity being an essential technical feature of the invention, the lack of information regarding its measurement method rendered the disclosure insufficient. The skilled person was not able to carry out the claimed subject-matter because an essential technical feature was defined by a property which the skilled person was unable to determine.

Apart from the above, without being decisive, it was noted

- that it was not clear whether the crystallinity of
the polymer as such or that of the fibres in the
garment were meant and

- that a precise measurement of the crystallinity,
of which the claimed limits were apparently
adjacent to known values, was essential for the
determination of novelty.

IV. On 20 January 2000 the Proprietor (Appellant) lodged an
appeal against the above decision and paid the
prescribed fee simultaneously. With the Statement of
Grounds of Appeal, which was filed on 27 March 2000,
the Appellant submitted five new sets of claims as
auxiliary requests, which were, however, withdrawn
during the oral proceedings held on 10 October 2001.

The Appellant, in writing and orally, argued that

(a) The opposition was not admissible for lack of
substantiation. Any lack of disclosure of the
measuring method would concern Article 84 EPC,
which was not a ground for opposition.

(b) From the wording of Claims 1 and 5, supported by
the information of the patent specification, it
was clear that the crystallinity of the polymer
starting material from which the fibres were spun
should be measured, not that of the fibres in the
layers. Regarding the measuring method, it was not
contested that different methods leading to
different results existed, but the skilled person,
working in the laminate fabric industry and
familiar with polymers, would, on the basis of his
general knowledge and the information contained in
the patent in suit, have known how to determine
the crystallinity, in particular, to use the Differential Scanning Calorimetry (DSC) method, which was indicated in the patent in suit and which was the standard method for measuring the crystallinity of polymers. The opponent had failed to show that the skilled person would not be able to manufacture the claimed laminates.

V. The Respondent's written and oral arguments can be summarized as follows:

(a) The opposition based on Article 100(b) had been found admissible by the Opposition Division. Since key information was missing from the patent, as had already been argued in the notice of opposition, there was no reason to declare the opposition inadmissible now.

(b) According to the wording of Claim 1, it was the crystallinity of the polymer in the layer of thermoplastic filaments that should be less than 45%. However, the description indicated that the crystallinity of the polymer starting material was measured. Therefore, the skilled person was at a loss as to which crystallinity should be measured. Moreover, the patent in suit did not provide any definition or measuring method for the crystallinity value. Various known methods led to different results. If the polymer in the layer was to be measured, the thermal history of the sample also played a role in the crystallinity value. Nothing in the patent in suit indicated DSC as the method of choice or how to calculate the crystallinity from any measurements, nor was DSC the standard method for the determination of
crystallinity at the priority date of the patent in suit. The skilled person was familiar with the use of polymer layers in producing laminates and in garments made out of such laminates, but he was not a polymer specialist. Therefore he would not recognize that DSC was the crystallinity measuring method actually used in the patent, which only indicated melt temperature ranges and not how to measure or calculate crystallinity. Since the crystallinity was an essential feature of the claims, the public should be able to ascertain whether a product fell within the scope of the claims. In view of the wide variety of possible results, such was not the case. Therefore, the skilled person could not carry out the claimed subject-matter.

VI. The Appellant requested that the decision under appeal be set aside and that the patent be maintained as granted. He further requested to reject the opposition as inadmissible and to remit the case to the first instance for further prosecution. The request for refund of the appeal fee was withdrawn.

The Respondent requested that the appeal be dismissed and, if it were allowed, to remit the case to the first instance.

Reasons for the Decision

1. The appeal is admissible.

Admissibility of the opposition
2. The Appellant argued that the opposition was inadmissible for lack of substantiation, which argument refers to the requirements according to Rule 55(c) EPC.

2.1 Therefore, the question arises whether an indication of the facts, evidence and arguments has been presented in support of the grounds on which the opposition is based.

2.1.1 The term "indication" in Rule 55(c) EPC means that the Proprietor and the Opposition Division should be able to understand, without undue burden, the case that is being made against the opposed patent in the Notice of Opposition. This requirement does not exclude the possibility that the Proprietor and the Opposition Division might have to undertake a certain amount of interpretation. Furthermore, the requirements under Rule 55(c) EPC must be distinguished from the strength of the Opponent's case, i.e. whether the case presented in the Notice of Opposition is sufficient to have the patent revoked. This means that also unconvincing or even incorrect arguments may suffice to render an opposition admissible. The merit of such arguments will however be taken into account during the opposition proceedings and thus be reflected in the final decision. This is in agreement with established case law (Case law of the Boards of Appeal of the European Patent office, 3rd edition 1998, VII.C.8.5).

2.1.2 In the second paragraph of the statement of grounds of opposition ("Facts and arguments") under the heading "Article 102(b) EPC", the Respondent stated: "The patent opposed does not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art." Then a
detailed analysis of Claim 1, the patent specification and the examples is given and the conclusion is drawn that (i) there is no disclosure of the crystallinity of the filaments in the examples, so that it is not possible to judge whether the various laminate examples fall within the scope of Claims 1 and 5, (ii) that no explanation is given regarding the crystallinity measuring method, so that it is not possible to determine whether or not a particular product meets the requirements of Claims 1 and 5, iii) that the crystallinity of only one copolymer used in the examples has been indicated, which is no indication for the crystallinity of filaments or fabric laminates formed from it.

2.1.3 So the statement of grounds for the opposition contains both a specific legal reason (insufficiency of disclosure; Article 100(b) EPC) as well as an argumentation based on facts and evidence related thereto (the analysis of Claim 1, the patent specification and the examples and the conclusions drawn from that).

Whether the relevance of the arguments brought forward or their correctness are sufficient to revoke the patent is of no importance. In this case, it is therefore irrelevant whether the arguments brought forward by the Opponent refer to Article 84 EPC or Article 83 EPC. For admissibility of the appeal, it is sufficient that the arguments are such that an arguable case is established.

In this light, in the Board's view, there can be no doubt that the case made against the patent on the ground of lack of sufficient disclosure is, without
undue burden, understandable. Therefore, the statement of grounds for the opposition is sufficient to render the opposition admissible in so far as Article 100(b) is concerned.

2.2 In respect of the latter, however, nowhere in the EPC is there any basis for the concept of partial admissibility of oppositions. Oppositions are either admissible or they are not. Therefore, the arguments which rendered the opposition based on Article 100(b) EPC admissible, render the opposition as a whole admissible (T 212/97 of 8 June 1999, not published in OJ EPO, Reasons, point 3.1). Whether other grounds, arguments and evidence are admitted into the proceedings at a later stage, is left to the discretion of the Opposition Division (Article 114(1) and 114(2) EPC) and Board (Article 111(1) EPC) and will depend on the facts of the case (G 10/91, OJ EPO 1993, 420, Reasons point 16).

**Article 83 EPC**

3. According to Article 83 EPC, the European patent application must disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art. In the present case, the claimed subject-matter concerns a nonwoven fabric laminate comprising a number of layers having a certain composition. In order to comply with Article 83 EPC, the skilled person should therefore be able to produce such a laminate, starting from the materials as defined in the claims and described in more detail in the patent specification. In this respect, the Board agrees with the Respondent that the skilled person in this case is someone familiar with the production of
laminates, but not necessarily accustomed to the
details of polymer preparation.

The Respondent's arguments regarding lack of disclosure
basically concern two points: (i) which material is the
subject of the crystallinity measurement (is it the
polymer before processing into filaments, or the
polymer in the laminate layer?) and (ii) no method for
measuring crystallinity is indicated, nor is there any
description of a calculation based on any measurement
data. It is clear that both points do not concern the
process steps for the production of the laminate, but
rather refer to the starting material from which the
layers of the laminate are made. However, since the
person skilled in the art of making laminates would not
be involved in producing the polymer starting
materials, the question is not whether that person
would be able to produce the required polymer, but
whether he would be able to obtain it; in other words,
whether the starting materials were actually available,
so as to enable the skilled person to produce the
laminates.

3.1 The starting materials in the present case are two
thermoplastic polymers at least one of which is an
olefin copolymer having a crystallinity of less than
45%.

3.1.1 The patent specification, in all instances where
crystallinity is mentioned, consistently refers to the
crystallinity of the polymer from which the laminate
layer is formed (page 2, lines 1 to 2, 18 to 22, 49 to
page 3, line 5, 13 to 16; page 4, line 48 to page 5,
line 7). Since a possible lack of disclosure should be
assessed in the light of the information contained in

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the patent in suit as a whole and not only in the claims, even if Claim 1 were not clear as regards the material of which the crystallinity should be measured, the patent specification is consistent in that the copolymer from which the laminate layer is formed should have the required crystallinity, that is, before it has been processed into the laminate layer. Therefore, the skilled person was in a position to recognize which material was subject to the crystallinity measurement. Hence, to assess the compliance with Article 83 EPC, the question to be answered is whether the skilled person would be able to obtain a polymer of the required crystallinity.

3.1.2 According to Examples 1 and 2 of the patent in suit, "a copolymer manufactured by Shell Oil Company and designated "Shell® WRS 6-144 3% ethylene" was used for forming the laminate layers according to the invention, instead of the usual unmodified polypropylene, indicated as "Exxon® PD3125" and "Exxon® PD3214". The copolymer is said to be produced by copolymerizing propylene with 3% by weight of ethylene and to have a broadened melt temperature range compared to unmodified polypropylene, resulting in a lower bonding temperature of between 135-138°C (Example 1). This information leads to the conclusion that the copolymer, although its crystallinity has not been explicitly disclosed, falls within the terms of Claim 1 and that it is a commercial product that the skilled person can simply buy. As regards the other polymers mentioned in the patent specification and those used in Examples 3 and 4, the information is consistent in that a certain amount of ethylene should be incorporated in order to arrive at the required crystallinity of the polymer, which has a broadened melt temperature range compared
to unmodified polypropylene (page 2, line 48 to page 3, line 5, 15 to 16; page 4, line 52 to page 5, line 3). The latter is demonstrated in Figures 3 and 4, which show measurements of the exothermal heat flow, expressed in mW, as a function of the temperature, of the propylene copolymer used in the invention (Figure 4) as compared to a prior art polypropylene with higher crystallinity (Figure 3), respectively. As to the measurement underlying these figures, the Respondent argued that the person skilled in producing fabric laminates would not be able to recognize it, nor would he know how to calculate the polymer's crystallinity out of the data so obtained. However, as pointed out above, it was not necessary for the skilled person to produce the polymer himself. He could buy the commercially available product, as the commercial product used in Examples 1 and 2 of the patent in suit uncontestedly shows, or he could otherwise obtain the appropriate starting material from a polymer supplier, who is capable of producing a polymer of the required crystallinity. Therefore, the information contained in the patent in suit is sufficient for the skilled person to obtain the polymer starting material from which the layers for the laminates now claimed can be produced.

3.1.3 Since it has never been denied that the skilled person could actually prepare the claimed laminates once the starting material was available, the Board is satisfied that the invention is sufficiently disclosed for it to be carried out by the skilled person, so that the requirements of Article 83 are met.

4. The patent had been revoked on the ground of lack of sufficient disclosure (Article 100(b) EPC). The other points raised by the opponent (Articles 100(a) and
100(c) EPC) have not been considered by the first instance, so that the Board considers it appropriate to remit the case for further prosecution, in agreement with the subsidiary requests of both parties.

Order

For these reasons it is decided that:

1. The decision under appeal set aside.

2. The case is remitted to the department of first instance for further prosecution.

The Registrar: The Chairman:

C. Eickhoff R. E. Teschemacher