

Internal distribution code:

- (A) [-] Publication in OJ
- (B) [-] To Chairmen and Members
- (C) [-] To Chairmen
- (D) [X] No distribution

**Datasheet for the decision
of 29 September 2023**

Case Number: T 0915/19 - 3.3.03

Application Number: 05737712.9

Publication Number: 1747306

IPC: D01D5/42, D01F8/06, E01C13/08

Language of the proceedings: EN

Title of invention:

METHOD FOR PRODUCING A SYNTHETIC FIBRE FOR USE IN AN
ARTIFICIAL GRASS SPORTS FIELD AND SUCH A SYNTHETIC FIBRE

Patent Proprietor:

Ten Cate Thiolon B.V.

Opponent:

Oerlikon Textile GmbH & Co. KG

Relevant legal provisions:

EPC Art. 100(c), 54, 123(2), 56

Keyword:

Grounds for opposition - subject-matter extends beyond content of earlier application - Main request (yes)

Novelty - First auxiliary request (no) - Second auxiliary request (yes)

Amendments - extension beyond the content of the application as filed - Second auxiliary request (no)

Inventive step - Second auxiliary request (yes)

Decisions cited:

G 0002/10



Beschwerdekammern

Boards of Appeal

Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 0915/19 - 3.3.03

D E C I S I O N
of Technical Board of Appeal 3.3.03
of 29 September 2023

Appellant: Ten Cate Thiolon B.V.
(Patent Proprietor) G. van der Muelenweg 2
7443 RE Nijverdal (NL)

Representative: Nederlandsch Octrooibureau
P.O. Box 29720
2502 LS The Hague (NL)

Appellant: Oerlikon Textile GmbH & Co. KG
(Opponent) Postfach 110240
42862 Remscheid (DE)

Representative: Keenway Patentanwälte Neumann Heine Taruttis
PartG mbB
Postfach 10 33 63
40024 Düsseldorf (DE)

Decision under appeal: **Interlocutory decision of the Opposition**
Division of the European Patent Office posted on
30 January 2019 concerning maintenance of the
European Patent No. 1747306 in amended form.

Composition of the Board:

Chairman D. Semino
Members: D. Marquis
A. Bacchin

Summary of Facts and Submissions

- I. The appeal lies against the decision of an opposition division concerning maintenance of European patent No. 1 747 306 in amended form on the basis of claims 1 to 15 of the second auxiliary request filed at the oral proceedings before the opposition division on 11 January 2019 and a description adapted thereto.
- II. The decision was based on the granted claims as main request and on the set of claims of the first and second auxiliary requests filed at the above mentioned oral proceedings.
- III. Granted claims 1 and 15 read as follows:
- "1. A method for producing a synthetic fibre (10, 20, 30, 40) for use in an artificial grass sports field using a co-extrusion process, comprising the steps of:
- (i) supplying a first synthetic material;
 - (ii) supplying at least a second synthetic material;
 - (iii) composing by co-extrusion a layer of synthetic material consisting of at least a layer of first synthetic material (11, 21, 31, 41) and a layer of said second synthetic material (12, 22, 32, 42), wherein the layer of synthetic material is composed of an inner layer of said first synthetic material and one or more outer layers, each layer consisting of a different synthetic material
 - (iv) obtaining the synthetic fibre from the layer of synthetic material,

characterized in that after step iii) the layer of synthetic material is stretched".

"15. A method according to any one or more of the claims 1-14, characterized in that step ii) comprises the step of supplying a further bonding layer between the inner layer and each of said outer layers".

Claim 1 of the first auxiliary request corresponded to granted claim 1.

Claim 1 of the second auxiliary corresponded to granted claim 1 in which step (iv) read "obtaining the synthetic fibre as a monofilament, from the layer of synthetic material, characterized in that after step iv) the layer of synthetic material in the form of a monofilament is stretched".

Claim 2 of the second auxiliary request read as follows:

"2. A method according to claim 1, characterized in that during step iii) the layers are composed having different thicknesses".

Claims 12 and 13 of the second auxiliary request read:

"12. A synthetic fibre obtained by using the method according to any one or more of the preceding claims, said synthetic fibre being composed of a layer of synthetic material, wherein said layer is composed of an inner layer of a first synthetic material and one or more outer layers, each layer consisting of a different synthetic material".

"13. An artificial lawn suitable for sports fields, provided with synthetic fibres according to claim 12".

IV. The decision under appeal was based, *inter alia*, on the following documents:

D1: EP 0 301 843 A1

D2: WO 99/04074

D3: WO 2004/106601 A1

D5: EP 0 259 940 A2

V. In the decision under appeal the opposition division concluded *inter alia* that granted claim 15 did not find a basis in the application as originally filed. Claim 1 of the first auxiliary request filed at the oral proceedings lacked novelty over D1. The claims of the second auxiliary request were novel over D3. Moreover, their subject-matter involved an inventive step starting from either D2 or D5 as the closest prior art.

VI. Both the patent proprietor and the opponent lodged an appeal against the decision of the opposition division.

VII. The patent proprietor based their statement of grounds of appeal on the three set of claims on which the decision was based and filed the third to ninth auxiliary requests with their rejoinder to the statement of grounds of appeal of the opponent.

VIII. Document D6 (Article "Man-made fibre" from Britannica Online Encyclopedia) was provided by the opponent with their statement of grounds of appeal (page 8, second paragraph).

IX. The parties were summoned to oral proceedings and a communication pursuant to Article 15(1) RPBA 2020

indicating specific issues to be discussed at the oral proceedings was then sent to the parties. In view of the preliminary opinion of the Board expressed therein, the parties were informed that both appeals were likely to be rejected (point 12.7 of the communication).

- X. With letter of 25 September 2023 the opponent withdrew their request for oral proceedings.

- XI. With letter of 26 September 2023 the patent proprietor withdrew their request for oral proceedings in the event that the Board intended to dismiss their appeal but maintained their request for oral proceedings to the extent that the Board would uphold the appeal of the opponent or otherwise refuse the second auxiliary request.

- XII. In view of these letters the Board cancelled oral proceedings, which were scheduled to take place on 29 September 2023.

- XIII. The final requests of the parties, as resulting from the written submissions, were as follows:

The patent proprietor requested that the decision of the opposition division be set aside and that the patent be maintained on the basis of the granted claims (main request), alternatively on the basis of the first auxiliary request or the second auxiliary request both filed during the oral proceedings of 11 January 2019 or on the basis of the third to ninth auxiliary requests filed with their rejoinder to the statement of grounds of appeal of the opponent.

The opponent requested that the decision of the opposition division be set aside and that the patent be

revoked.

XIV. The patent proprietor's arguments, in so far as they are pertinent to the present decision, may be derived from the reasons for the decision below. They are essentially as follows:

- Granted claim 15 found a basis in the application as filed.
- The subject-matter of claim 1 of the first auxiliary request was novel over D1.
- Claim 1 of the second auxiliary request found a basis in the application as filed. An objection of lack of basis for claim 2 had not been raised before the opposition division and should not be admitted. In any case claim 2 of the second auxiliary request found a basis in the application as filed. The subject-matter of claims 1, 12 and 13 was novel over D3 and involved an inventive step starting from D2 or D5 as the closest prior art.

XV. The opponent's arguments, in so far as they are pertinent to the present decision, may be derived from the reasons for the decision below. They are essentially as follows:

- Granted claim 15 did not find a basis in the application as filed.
- The subject-matter of claim 1 of the first auxiliary request lacked novelty over D1.
- Claims 1 and 2 of the second auxiliary request did not find a basis in the application as filed. The

subject-matter of claims 1, 12 and 13 lacked novelty over D3 and did not involve an inventive step starting from D2 or D5 as the closest prior art.

Reasons for the Decision

1. Decision in written proceedings
 - 1.1 The present decision is taken in written proceedings without holding oral proceedings.
 - 1.2 Both the opponent and the proprietor have withdrawn their request for oral proceedings. The proprietor has done so based on the Board's preliminary opinion to dismiss both appeals and to maintain the patent on the basis of the claims of the second auxiliary request. In its preliminary assessment of the case, which had been communicated to the parties, the Board has fully taken into account the parties' submissions. Since the Board, following its preliminary assessment, dismisses both appeals thereby maintaining the proprietor's second auxiliary request, the principle of the right to be heard according to Article 113(1) EPC has been observed (see Case Law of the Boards of Appeal, 10th edition, 2022, in the following "Case Law", III.B.2.7.3).
 - 1.3 In view of the fact that the case is ready for decision on the basis of the parties' extensive written submissions, the Board issues this decision in written proceedings in accordance with Article 12(8) RPBA and Article 15(3) RPBA 2020.

Main Request (claims as granted)

2. Added subject-matter of granted claim 15

- 2.1 The opposition division concluded in the impugned decision that granted claim 15 did not find a basis in the application as filed because the bonding layer mentioned in granted claim 15 was disclosed on page 8, lines 22 to 27 of the description only in a specific embodiment comprising at least 5 layers and in combination with a hydrophilic layer whereas these further features were not part of granted claim 15.
- 2.2 The patent proprietor considered (page 2 of their statement setting out the grounds of appeal) that granted claim 15 found a basis in claim 8 as originally filed or alternatively on page 3, lines 17-21 or in more general terms on page 6, lines 11-15 of the description. Also, the choice to refer to intermediate layers as "bonding layers" in granted claim 15 was fully justified in that it implied nothing more than a designation of what the skilled person would understand to be the case.
- 2.3 According to Article 100(c) EPC an opposition may be filed on the ground that a European patent was amended in such a way that it contains subject-matter which extends beyond the content of the application as filed. In order to assess whether an amendment results in subject-matter extending beyond the content of the application as filed, the "gold standard" approach is used.
- 2.4 The "gold standard" (G 2/10, OJ 2012, 376) for assessing compliance with Article 123(2) EPC is the following: any amendment to the parts of a European patent application or of a European patent relating to the disclosure (the description, claims and drawings) is subject to the mandatory prohibition on extension laid down in Article 123(2) EPC and can therefore,

irrespective of the context of the amendment made, only be made within the limits of what a skilled person would derive directly and unambiguously, using common general knowledge, and seen objectively and relative to the date of filing, from the whole of these documents as filed (Case Law, II.E.1.1).

- 2.5 Granted claim 15 sets out that "step ii) comprises the step of supplying a further bonding layer between the inner layer and each of said outer layers". Granted claim 15 of the patent in suit is dependent *inter alia* on granted claim 1. The question was thus whether the subject-matter of granted claim 15 in combination with that of granted claim 1 found a basis in the application as filed.
- 2.6 Claim 8 as originally filed was cited by the patent proprietor as providing a basis for granted claim 15 corresponds to the passage on page 3, lines 17-21 of the description. Claim 8 as originally filed pertains to a method for producing a synthetic fibre "characterized in that the layer of synthetic material is composed of a core layer of a first synthetic material, which core layer is surrounded on both sides by any one or more outer layers, each consisting of a different synthetic material".
- 2.7 The subject matter of claim 8 as originally filed therefore is limited to a core layer made of a first synthetic material **surrounded on both sides by one or several outer layers** (emphasis added by the Board). Neither granted claim 1 nor its dependent claim 15 contains that limitation. Claim 8 as originally filed and the passage on page 3, lines 17-21 of the description therefore do not provide a basis for

granted claim 15.

- 2.8 The patent proprietor also mentioned the passage on page 6, lines 11-15 of the description. However, that passage or Figure 1D which is also referred therein do not mention the provision of a "bonding layer" between the inner layer and each of the outer layers that are defined in granted claim 1. The passage on page 6 does therefore not provide a basis for granted claim 15.
- 2.9 In addition, claim 8 as originally filed and the passages on page 3 and 6 refer to a core layer and outer layers without reference to a "bonding layer" while the subject matter of granted claim 15 is about the provision of a bonding layer. While a bonding layer may be seen as a core layer or an outer layer in specific situations, this is not necessarily the case if the layer is not disclosed as possessing bonding properties.
- 2.10 The Board therefore does not see any reason to overturn the decision of the opposition division that the ground under Article 100(c) EPC prejudices the maintenance of the patent in suit as granted.

First auxiliary request

The set of claims of the first auxiliary request differs from those of the main request only in that claim 15 has been deleted.

3. Novelty of claim 1 over D1

- 3.1 The opposition division concluded that claim 1 of the first auxiliary request lacked novelty over example 2 of D1. That conclusion was contested by the patent

proprietor.

3.2 The patent proprietor considered that claim 1 of the main request was novel over D1 (statement of grounds of appeal, page 2). While the novelty argument formally concerned claim 1 of the main request, it is, however, immediately apparent that it equally applies to claim 1 of the first auxiliary request since these two claims 1 are identical.

3.3 It was not in dispute that example 2 of D1 disclosed a method for producing a synthetic fiber for use in an artificial grass sports field using a co-extrusion process, nor that the steps (i) to (iv) defined in operative claim 1 were disclosed in example 2 of D1. The argument of the patent proprietor was that the opposition division relied on the fact that a pigment added as a masterbatch to one portion of polypropylene in a two layer system in example 2 of D1 (column 2, lines 41-43) would cause it to become a different synthetic material, which in the opinion of the patent proprietor was not the case.

3.4 Claim 1 of the first auxiliary request refers to the presence of a first and second synthetic materials used in the steps (i) to (iv) of the process for producing a synthetic fibre. The first and second synthetic materials are, however, not defined any further in the claim. It can therefore not be inferred from claim 1 in how far the first and second synthetic materials have to differ from one another.

3.5 The Board does not find it unreasonable to consider that the modification of the composition of the first synthetic material (100% polypropylene) by the addition of even 5% by weight of a black pigment masterbatch is

such as to produce a different synthetic material. Even the patent proprietor seems to acknowledge that the second material could differ from the first one only in its mechanical properties (statement of grounds of appeal, page 2, last two paragraphs), which ultimately corresponds to saying that the two materials can differ from one another in any arbitrary manner. Without any further limitation or specification in the claim the Board therefore finds that the modification of the composition of the first synthetic material (100% polypropylene) referred to in column 2, line 41 of D1 by the addition of 5% by weight of a black pigment masterbatch as disclosed in line 42 and 43 of the same column is such that the process of example 2 of D1 can be seen as disclosing the use of a "first" and a "second" synthetic material in the sense of claim 1 of the first auxiliary request.

- 3.6 The Board does therefore not find any reason to overturn the decision of the opposition division on novelty over D1.

Second auxiliary request

The claims of the second auxiliary request correspond to the claims found to comply with the requirements of the EPC by the opposition division.

4. Added subject-matter

- 4.1 The statement setting out the grounds of appeal contains a section "1. Art. 100 c) EPÜ" starting on page 2 and dealing with an objection of lack of basis of claims 1 and 2 of the second auxiliary request. The arguments provided set out that these claims do not find a basis in the patent as granted. Since the

conclusion on both objections (which are new in appeal) is that the claims do not find a basis in the application as filed, the Board assumes that the objections were initially meant to refer to a lack of basis of claims 1 and 2 in the application as filed, according to Article 123(2) EPC.

- 4.2 The argumentation of the opponent, however, cannot be followed since it relies on a discussion of the basis in the granted claims which is not relevant in the present case as the granted claims do not correspond to the claims as filed. The parties were made aware of this in the Board's preliminary assessment indicated in the communication under Article 15(1) RPBA 2020. The opponent, however, did not provide further arguments on that point, particularly references to the application as originally filed from which the objection raised in the statement of grounds of appeal could be followed. The Board cannot therefore conclude that the requirements of Article 123(2) EPC are not met for claims 1 and 2 of the second auxiliary request on the basis of the objections of the opponent.

5. Novelty over D3

- 5.1 Claim 1 of the second auxiliary request concerns a method for producing a synthetic fibre whereby a layer of synthetic material is composed by co-extrusion of layers of a first and second synthetic material. In step (iv) of the method, a synthetic fibre is obtained as a monofilament from the layer of synthetic material, and after step (iv) the layer of synthetic material in the form of a monofilament is stretched.
- 5.2 The opponent disputes novelty of claims 1, 12 and 13 of the second auxiliary request only with respect to

document D3 in appeal (statement of grounds of appeal, page 6, section 2.a). It has not been disputed that D3 is a prior art document according to Article 54(3) EPC for the present patent as ascertained by the opposition division (decision, last line of page 8).

5.3 D3 relates to a yarn for an artificial turf ground cover, to an artificial turf ground cover including such a yarn and to a playing field including such a yarn and to a method for producing such a yarn (page 1, lines 2-4). The opponent argued that D3 disclosed in claims 13 to 15 the manufacture of a multi-layer yarn comprising a first layer (core layer) of a first synthetic material (polyester or polyolefins) and outer layers of a second synthetic material (high density polyethylene), the first layer being between the outer layers (claim 13). It was argued that the fibres were produced by co-extrusion (claim 14) and stretched (claim 15). Also, claims 13 to 15 were directed to the manufacture of monofilaments, since the yarn is not manufactured by several filaments joined together to form a multifilament.

5.4 Claim 15 of D3 however sets out that "the material is stretched in longitudinal direction at a stretching ratio of at least 1:3". The only material referred to in claims 13-15 of D3 is the polyester or polyolefin material of the core layer defined in claim 13. This means that the material stretched according to claim 15 is that of the core layer only, a conclusion confirmed in the passage on page 3, lines 24-31 of D3. According to claims 13-15 of D3 therefore the core layer (without the outer layers) is stretched.

5.5 By contrast, in claim 1 of the second auxiliary request, the co-extruded first and second layers

obtained in step (iii) must be stretched together since the stretching step is performed after co-extrusion. The stretching step disclosed in claims 13-15 of D3 does not correspond therefore to step (iii) defined in claim 1 of the second auxiliary request.

5.6 Claim 12 of the second auxiliary request concerns a synthetic fibre obtained by using the method according to any one or more of the preceding claims, therefore including claim 1. Step (iii) of the method for producing a synthetic fibre in operative claim 1 sets out that two layers (the first and second layers) are stretched together after co-extrusion. The result constitutes a structural difference in the synthetic fibre over the one disclosed in claims 13-15 of D3 in which only the core layer is stretched. It follows therefore that claim 12 of the second auxiliary request is novel over D3 as well. Claim 13 of the second auxiliary request pertaining to an artificial lawn suitable for sports fields, provided with synthetic fibres according to claim 12, is novel over D3 for the same reasons as claim 12.

5.7 The Board therefore finds that the subject-matter of claims 1, 12 and 13 of the second auxiliary request is novel over D3.

6. Inventive step over D2 and D5

6.1 The opponent considered that claims 1, 12 and 13 lacked an inventive step over D2 or D5 taken as the closest prior art (statement of grounds of appeal, starting on page 6, section 2.b and on page 9, section 2.c).

6.2 Document D2

- 6.2.1 Document D2 is seen as the closest prior art both in the impugned decision (page 10) and in the arguments of the parties. In the statement setting out the grounds of appeal (page 6, last paragraph) the opponent considered that the passage on page 3, lines 27-33 was the relevant starting point within D2. That passage of D2 discloses the use of co-extrusion in manufacturing a yarn whereby the core is made of a polyolefin and the cladding is made of polyamide.
- 6.2.2 The parties acknowledged in appeal that claim 1 of the second auxiliary request differed from that disclosure in D2 in the stretching of monofilament fibres (statement of grounds of appeal of the opponent, page 7, fourth paragraph; rejoinder of the patent proprietor, page 4, second paragraph). This means that it is also acknowledged by the parties that the core and cladding in the passage cited from D2 refer to layers of material that are co-extruded to form a layer of synthetic material. The Board has no reason to take a different view.
- 6.2.3 The opponent formulated the problem solved by that distinguishing feature as the provision of a synthetic fibre with improved strength (statement setting out the grounds of appeal, page 8, first paragraph). The patent proprietor contested that formulation of the problem by the opponent (rejoinder, page 4, third and fourth paragraphs) without providing, however, a formulation of the problem on their own. The effect of stretching the fibre after the co-extrusion process is mentioned in paragraph 10 of the patent in suit as improving the playing properties. By contrast, the use of monofilaments as synthetic fibre is not disclosed to have an effect in the patent in suit. On the basis of the effect disclosed in paragraph 10 of the patent in

suit, which is not disputed by the opponent, the Board comes to the conclusion that the problem in view of D2 was the provision of synthetic fibres with improved playing properties.

- 6.2.4 A stretching step is disclosed in D2 albeit only in the specific methods of the examples. The stretching is performed on separate monofilaments of materials (produced by extrusion) in order to obtain bands that are then processed to form yarns. The method on page 3 of D2 chosen as the starting point, however, starts from layers (core and cladding) of different materials (obtained by co-extrusion). Since yarns are produced from these layers, there was no motivation for the skilled person to consider producing monofilaments from these layers and stretch these monofilaments.
- 6.2.5 Document D6 was cited as common general knowledge by the opponent in appeal in order to show that stretching would improve the strength of fibres. The Board had indicated in the communication providing a preliminary opinion on the case that it had not been established in how far the skilled person starting from D2 would have considered the teaching of D6. D6 in fact does not mention monofilaments obtained from co-extruded layers and it is not explained in the passage cited by the opponent in D6 whether the teaching of D6 concerning the stretching of spun filaments would have been applied to an embodiment as the one of D2. That point of the Board was left unaddressed by the opponent. In view of this, the Board does not see how the skilled person would have stretched monofilaments fibres obtained by co-extrusion in order to solve the problem posed. The Board therefore concludes that it has not been established that claim 1 of the second auxiliary request lacks an inventive step over D2 as the closest

prior art. The same conclusion applies to claim 12 pertaining to the synthetic fibre obtained from the process of claim 1 and to claim 13 pertaining to an artificial lawn provided with the synthetic fibres of claim 12 for which no separate arguments were presented by the opponent.

6.3 Document D5

6.3.1 Document D5 was also considered as a starting point for the assessment of inventive step both in the decision (page 10) and by the parties in appeal (statement of grounds of appeal of the opponent, page 9, section 2.c; rejoinder of the patent proprietor, page 5). The passage in column 2, lines 9-20 of D5 was cited by the opponent as a relevant passage disclosing the preparation of a laminate structure of three co-extruded films with at least two different compositions to produce threads. Claim 11 of D5 essentially contained the same disclosure.

6.3.2 It was undisputed that D5 did not disclose the production of monofilaments as well as their stretching. The problem solved over D5 would thus remain the same as that formulated starting from D2, that is the provision of synthetic fibres with improved playing properties.

6.3.3 The opponent also cited D6 as common general knowledge in the production of threads disclosed in D5 in the light of D2 disclosing monofilaments. As established in section 6.2.3 above the use of monofilaments as synthetic fibre is not disclosed to have an effect in the patent in suit. But even if it could be accepted that the skilled person would have considered the use of the monofilaments obtained from the co-extrusion of

different synthetic materials disclosed in D2 in the closest prior art D5, the same considerations as detailed in section 6.2.5 above in view of D6 still apply, thus leading the Board to the conclusion that it has not been established that claim 1 of the second auxiliary request lacks an inventive step over D5 as the closest prior art. The same conclusion applies to claim 12 pertaining to the synthetic fibre obtained from the process of claim 1 and to claim 13 pertaining to an artificial lawn provided with the synthetic fibres of claim 12 for which no separate arguments were presented by the opponent.

- 6.4 None of the objections of lack of inventive step being successful, the Board concludes that the claims of the second auxiliary request satisfy the requirements of Article 56 EPC.

7. Since the Board, as the opposition division, has come to the conclusion that the main request and the first auxiliary request are not allowable, while none of the objections against the second auxiliary request are successful, both the appeal of the patent proprietor and the one of the opponent are to be dismissed.

Order

For these reasons it is decided that:

The appeals are dismissed.

The Registrar:

The Chairman:



D. Hampe

D. Semino

Decision electronically authenticated