

**Internal distribution code:**

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

**Datasheet for the decision  
of 19 May 2022**

**Case Number:** T 1343/18 - 3.2.06

**Application Number:** 14000703.0

**Publication Number:** 2772576

**IPC:** D04H3/009, D04H3/03, D04H3/16,  
D01D5/24, D01D5/253, D01F6/86,  
A47C27/12, B68G5/00

**Language of the proceedings:** EN

**Title of invention:**

Fibrous Network Structure Having Excellent Compression  
Durability

**Patent Proprietor:**

TOYOBO CO., LTD.

**Opponent:**

Strawman Limited

**Headword:**

**Relevant legal provisions:**

EPC Art. 56, 84  
RPBA Art. 12(4)  
RPBA 2020 Art. 13(2), 25(2)

**Keyword:**

Inventive step - main request (no)  
Late-filed auxiliary requests 1 and 3 - request should have  
been filed in first instance proceedings (yes) 4 to 7 -  
justification for late filing (no)  
Claims - clarity - auxiliary request 2 (no)

**Decisions cited:**

**Catchword:**



**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 1343/18 - 3.2.06**

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.06**  
**of 19 May 2022**

**Appellant:**

(Patent Proprietor)

TOYOBO CO., LTD.  
13-1, Umeda 1-chome,  
Kita-ku,  
Osaka-shi  
Osaka 5300001 (JP)

**Representative:**

Müller-Boré & Partner  
Patentanwälte PartG mbB  
Friedenheimer Brücke 21  
80639 München (DE)

**Respondent:**

(Opponent)

Strawman Limited  
Orchard Lea  
Horns Lane  
Combe, Witney  
Oxfordshire OX29 8NH (GB)

**Representative:**

Mewburn Ellis LLP  
Aurora Building  
Counterslip  
Bristol BS1 6BX (GB)

**Decision under appeal:**

**Decision of the Opposition Division of the  
European Patent Office posted on 15 March 2018  
revoking European patent No. 2772576 pursuant to  
Article 101(3) (b) EPC.**

**Composition of the Board:**

<b>Chairman</b>	M. Dorfstätter
<b>Members:</b>	P. Cipriano
	J. Hoppe

## Summary of Facts and Submissions

- I. The appellant (patent proprietor) filed an appeal against the decision of the opposition division to revoke European Patent No. 2 772 576.
- II. In its statement of grounds of appeal the appellant requested that the decision of the opposition division be set aside and the patent be maintained in amended form based on the main request or according to one of auxiliary requests 1 to 3, all filed with the grounds of appeal.
- III. The respondent (opponent) requested that the appeal be dismissed and the patent be revoked.
- IV. The following documents, referred to by the appellant in its grounds of appeal, are relevant for the present decision:  
D1 JP 2921638 B2 and its translation into English D1a  
D5 EP 2 083 100 A1
- V. The Board issued a summons to oral proceedings on 21 July 2021 and a subsequent communication containing its provisional opinion. It indicated *inter alia* that the subject-matter of claim 1 of the main request seemed to be obvious, that the Board was minded to exclude auxiliary requests 1 and 3 from the proceedings and that claim 1 of auxiliary request 2 seemed to be unclear.
- VI. With letter dated 19 April 2022 the appellant filed further auxiliary requests 4 to 7.

VII. Oral proceedings by videoconference were held before the Board on 19 May 2022.

The final requests of the parties were:

The appellant requested that the decision under appeal be set aside and the patent be maintained in amended form based on the main request, filed with the grounds of appeal

or as an auxiliary measure based on one of auxiliary requests 1 to 3, filed with the grounds of appeal, or based on one of auxiliary requests 4 to 7, filed with letter dated 19 April 2022.

The respondent requested that the appeal be dismissed.

VIII. Claim 1 of the main request reads as follows:

"A network structure comprising a three-dimensional random loop bonded structure obtained by forming random loops with curling treatment of a continuous linear structure including a polyester-based thermoplastic elastomer and having a fineness of not less than 100 decitex and not more than 60000 decitex, and by making each loop mutually contact in a molten state, wherein the network structure has an apparent density of 0.005 g/cm<sup>3</sup> to 0.20 g/cm<sup>3</sup>, a 50%-constant displacement repeated compression residual strain of not more than 15%, and a 50%-compression hardness retention of not less than 90% after 50%-constant displacement repeated compression."

IX. Claim 1 of auxiliary request 1 reads as claim 1 of the main request with the following feature appended:

"wherein the network structure has a hysteresis loss of not more than 28%."

- X. Claim 1 of auxiliary request 2 reads as claim 1 of auxiliary request 1 with the following features appended:

"wherein fusion of the continuous linear structures that form the network structure is made strong to increase the strength of contact points between the continuous linear structures by

- (i) providing a heat-retaining region below a nozzle when the polyester-based thermoplastic elastomer is spun, the length of said heat-retaining region being not less than 20 mm; or
- (ii) increasing the net surface temperature of a take-up conveyor net at or around the falling position of the continuous linear structures to a temperature of not less than 80°C; or
- (iii) increasing the temperature of cooling water in a cooling bath at or around the falling position of the continuous linear structures to a temperature of not less than 80°C."

- XI. Claim 1 of auxiliary request 3 reads as claim 1 of auxiliary request 1 with the additional feature that the three-dimensional random loop bonded structure is obtained "by being cooled in a cooling water at a temperature of not less than 80°C."

- XII. Claim 1 of auxiliary request 4 reads as claim 1 of auxiliary request 1 with the following features appended:

"wherein fusion of the continuous linear structures that form the network structure is made strong to

increase the strength of contact points between the continuous linear structures by providing a heat-retaining region downward from a position of not more than 20 mm below a nozzle when the polyester-based thermoplastic elastomer is spun, the length of said heat-retaining region being not less than 20 mm and not more than 70 mm."

- XIII. Claim 1 of auxiliary request 5 reads as claim 1 of auxiliary request 1 with the following features appended:

"wherein fusion of the continuous linear structures that form the network structure is made strong to increase the strength of contact points between the continuous linear structures by providing a heat-retaining region downward from a position of not more than 20 mm below a nozzle when the polyester-based thermoplastic elastomer is spun, the length of said heat-retaining region being not less than 20 mm and less than 50 mm."

- XIV. Claim 1 of auxiliary request 6 reads as claim 1 of auxiliary request 1 with the following features appended:

"wherein the network structure has a thickness of not less than 20 mm, and wherein fusion of the continuous linear structures that form the network structure is made strong to increase the strength of contact points between the continuous linear structures by providing a heat-retaining region downward from a position of not more than 20 mm below a nozzle when the polyester-based thermoplastic elastomer is spun, the

length of said heat-retaining region being not less than 20 mm and not more than 70 mm."

- XV. Claim 1 of auxiliary request 7 reads as claim 1 of auxiliary request 1 with the following features appended:

"wherein the network structure has a thickness of not less than 20 mm, and  
wherein fusion of the continuous linear structures that form the network structure is made strong to increase the strength of contact points between the continuous linear structures by  
providing a heat-retaining region downward from a position of not more than 20 mm below a nozzle when the polyester-based thermoplastic elastomer is spun,  
the length of said heat-retaining region being not less than 20 mm and not more than 50 mm."

- XVI. The appellant's arguments relevant to the decision may be summarised as follows:

*Main request - novelty and inventive step*

Example 4 of D1 did not disclose the feature "50%-compression hardness retention of not less than 90% after 50%-constant displacement repeated compression" (hereinafter called "feature (d)"), not even implicitly.

There was an inconsistency between table 2 and paragraph [0038] of the description regarding the discharge amount employed in Example 4. It was therefore not unambiguous which was the discharge amount of example 4 such that any comparison with the test values in the table of page 15 of the grounds of appeal was impossible.

During the oral proceedings before the Board the appellant further argued that there was a linear dependency of the fineness of the fibers and the discharge amount of the resin, such that the fineness of filament in Example 4, even if not explicitly given in paragraph [0034] of D1a, could be calculated. It could thus be estimated that the fineness of the fibers in Example 4 was outside the range defined in claim 1.

The objective problem underlying feature (d) was to prevent a bottoming feeling due to the decrease in hardness of the cushioning material with a long period of use.

D1 and D5 related to different technical fields and types of fibers.

D1 aimed at increasing the heat resistance and lacked the idea of increasing the strength of the contact points. It was not obvious for the skilled person to change the water temperature using their common general knowledge.

D5 related to crimping conjugate fibers, which was a different technical field employing a different process. In addition, the fibers used in D5 had a different fineness. D5 did not disclose a 50%-compression hardness retention of not less than 90% after 50%-constant displacement repeated compression.

In addition, the strength of contact points in the embodiments of document D1 was difficult to increase. Even if the temperature of the cooling bath of document D1 was raised to 80°C, the nozzle face-cooling water distance of document D1 was as large as 50 cm, which caused a long exposure time to ambient temperature and

a consequent decrease of the surface temperature of the network structure of D1.

The invention employed an HTR (high temperature retained) process whereas D1 did not. D1 necessarily included the process of cooling the resin to a temperature at which a crystal structure is formed before the resin was put into the cooling water.

*Auxiliary requests 1 and 3 - admittance*

Auxiliary requests 1 and 3 should not be excluded from the proceedings.

The main and first auxiliary request were filed during the opposition proceedings only with the purpose of overcoming the negative preliminary opinion of the opposition division regarding Article 100(b) EPC, which was the only ground the opposition division invoked against the maintenance of the patent at that time. Since the opposition division changed its opinion during the oral proceedings and considered that Articles 54 and 56 EPC prejudiced maintenance of the patent, the representative of the proprietor did not have enough time to react and consider its options together with its client during the oral proceedings.

Further, the parameter "hysteresis loss" was aimed at preventing a bottoming feeling and thus did not change the scope of the proceedings on novelty and inventive step.

*Auxiliary request 2 - Article 84 EPC*

Claim 1 of auxiliary request 2 was clear.

The expression "made strong to increase the strength of contact points" in claim 1 of auxiliary requests 2 was clear, since the claim clearly defined the specific means to achieve the strong bonding of the fibers at the contact points. The strong bonding then resulted in an improved repeated compression durability of the network structure (see paragraph [0036] of the published patent).

*Auxiliary requests 4 to 7 - admittance*

Auxiliary requests 4 to 6 were a direct response to the Board's negative preliminary opinion, specifically regarding auxiliary request 2.

- XVII. The respondent's arguments relevant to the decision may be summarised as follows:

*Main request - novelty and inventive step*

The experimental data on page 15 of the appellant's grounds of appeal disclosed that example 4 of D1 comprised a hardness retention of 90.4%, i.e. as defined by feature (d) of claim 1. Example 4 of D1 disclosed all features of claim 1.

Should example 4 of D1 not disclose feature (d), the objective problem was to prevent a bottoming feeling due to a decrease in hardness of a cushioning material with a long period of use. This was attested in paragraph [0027] of the patent.

Any teaching in the prior art that improved the strength of the contact points between continuous linear structures, for any purpose, implicitly taught towards feature (d).

The fact that the examples of D1 used a distance of 50 cm was irrelevant to the alleged difficulty of increasing the strength of the contact points by raising the cooling bath temperature. In addition, paragraphs [0026] and [0028] of D1 also indicated that this distance could be shortened. It was the time (and not the distance) between spinning at the nozzle and arrival at the surface of the cooling water that affected the strength of the bonding points.

The skilled person faced with the technical problem of preventing a bottoming feeling would consider D5. D1 and D5 related both to polymeric fibrous structures and to materials suitable for use as cushioning materials and both acknowledged existing art in the field of urethane foams as a starting point for improvement.

There was no reason as to why a difference in fineness between D1 and D5 would lead the skilled person away from considering the teaching of D5.

D5 taught that fiber connecting points were made and could be made firmer by heating (paragraph [0058]). In addition, it taught that such connecting points lead to improved hardness retention (paragraph [0065]) and that a better hardness retention improved durability (paragraphs [0063], [0064]).

*Auxiliary requests 1 and 3 - admittance*

Auxiliary requests 1 to 3 should be excluded from the proceedings.

The appellant filed a new main request and an auxiliary request 1 during the opposition proceedings. As

evidenced in the minutes of the oral proceedings, auxiliary request 1 had been filed to overcome the objections under Article 56 EPC and at the end of the oral proceedings the proprietor had no further requests.

There was thus no reason to file further amended requests in the appeal proceedings, which was primarily a review procedure.

The parameter hysteresis loss was not linked to the parameter hardness retention and required a whole new set of arguments.

*Auxiliary request 2 - clarity*

Claim 1 of auxiliary request 2 was not clear. The method steps introduced in claim 1 did not allow unambiguous identification of the technical features imparted to the product by the process by which it was defined. Further, it was possible to define the product by the parameters disclosed in the patent such that the use of method steps was not necessary.

*Auxiliary requests 4 to 7 - admittance*

Auxiliary requests 4 to 7 were late-filed. There were no exceptional circumstances that justified such a late filing. They should not be taken into account under Article 13(2) RPBA 2020.

## **Reasons for the Decision**

1. Main request - inventive step
- 1.1 The subject-matter of claim 1 of the main request does not involve an inventive step (Article 56 (EPC)).
- 1.2 The respondent argued that D1 also disclosed feature (d), i.e. "50%-compression hardness retention of not less than 90% after 50%-constant displacement repeated compression". It was not contested that D1 disclosed the other features of claim 1. The Board however finds that feature (d) is not anticipated by D1.
- 1.3 Firstly, it is not clear what the discharge amount of example 4 of D1 is, since Table 2 purports 1.5 g/min whereas paragraph [0038] refers to 7 g/min. Although it is clear that a discrepancy in the disclosure exists, it is not immediately clear which one of the two is the correct value.
- 1.4 Secondly, and assuming the correct discharge amount is 7 g/min, the experimental data filed on page 15 of the grounds of appeal (referred to as "Additional Example 4") tries to emulate example 4 of D1 and comprises a hardness retention of 90.4%, lying within the range defined by feature (d) of claim 1. However, the experiment has been carried out under different conditions, notably at a different discharge amount per single hole (3.4 g/min instead of the presumed 7 g/min of example 4 of D1).
- 1.5 Since there is an ambiguity regarding the discharge amount in Example 4 of D1, and the hardness retention

value for the possibly correct value of 7 g/min is also not known, the Board finds that feature (d) is not directly and unambiguously disclosed in D1. The Board arrives at this conclusion even if the argument of the appellant regarding fineness is not taken into account. There is thus no need to decide whether this argument, presented by the appellant for the first time during the oral proceedings before the Board, was an amendment to the appeal case and, if it were such an amendment, whether it should be considered.

- 1.6 The provision of a 50%-compression hardness retention of not less than 90% after 50%-constant displacement repeated compression provides the network structure with a stable hardness over a long period of time. The objective technical problem is thus to avoid a bottoming feeling over a long period of use (as confirmed also by paragraph [0032] of the published patent). That this was the objective problem to be solved by the invention was not contested by the parties.
- 1.7 The appellant argued that the skilled person would not combine D1 and D5 since they related to different types of fibers made of very different materials. D1 aimed at increasing heat resistance and disclosed random loops of elastic polymers preferably made of polyethylene terephthalate (PET), whilst D5 dealt with nonwovens and taught to avoid elastomers. Among several differences in the manufacturing processes, the appellant pointed out that D1 taught in paragraph [0036] that PET should be used whilst D5 taught in paragraphs [0080], [0087], [0088] and [0096] that using an elastomer instead of a high density polyethylene (HDPE) was disadvantageous. According to the appellant, the polymers of D5 should

not be used in a loop structure such as the one of D1 since the structure would lose elasticity.

The Board does not find these arguments persuasive. According to paragraph [0007] of D1, the aim of D1 is not only improving specifically the heat resistance (as the appellant argued) but also more generally the durability and the cushioning properties. In addition, example 7 is described in paragraph [0041] of D1 as not causing the "feeling with a floor", which the Board finds is synonymous with a bottoming feeling. The teaching of D1 is therefore not restricted to improving heat resistance, as the appellant argued.

The skilled person starting from the network structure of D1, trying to avoid a bottoming feeling over a long period of use and considering the teaching of D5 would realize that it is not necessary to replace the material of D1 with the one of D5. They would also understand that it is unnecessary to modify the whole manufacturing process of D1. In this context it is noted that the "50%-compression hardness retention after 50%-constant displacement repeated compression" is a physical property inherently present in the material of D1. It is only the value thereof which remains to be chosen by the skilled person.

The skilled person would derive from paragraph [0064] of D5 that a durable hardness retention of 90% or more is a suitable value used to avoid the perception of such a bottoming feeling by the user. This perception of the user is independent of the material used.

In addition, paragraphs [0058] and [0065] of D5 suggest achieving this hardness retention through a thermal

fusing treatment, i.e. melting fiber-connecting points of the entangled fibers.

The Board finds that the skilled person realizes that this teaching is applicable not only to nonwovens but also to other materials such as the loop structures of D1. The melting of fiber-connecting points is already suggested in the starting point D1, which in paragraph [0024] describes the need for all the filaments to be adhered and welded to each other in order to retain durability and retain the shape. Further, paragraph [0026] of D1 also indicates that the establishment of fiber-connecting points ("welding of contact parts of each filament") is influenced by the temperature of the filaments, which temperature can be adjusted to improve the welding.

D1 and D5 both describe several ways to adjust the temperature of the filaments. For example, paragraph [0026] of D1 describes adjusting the distance between a nozzle face and a take-up conveyor disposed over a cooling medium for solidification of the resin, and paragraph [0084] of D5 describes the use of a hot-air circulating heating machine. Claim 1 is not restricted to any particular method. The Board thus finds that the skilled person would, for example, adjust the temperature of the resin by any method suggested in paragraph [0026] of D1 and increase it until arriving at the suitable level of at least a 50%-compression hardness retention of not less than 90% after 50%-constant displacement repeated compression suggested in D5, which level they would choose in an obvious way.

- 1.8 The appellant also argued that even if the temperature of the cooling bath in D1 was raised to 80°C, the nozzle face-cooling water distance was as large as

50 cm. This caused a long exposure time to ambient temperature and a consequent decrease in surface temperature of the network structure of D1. According to the appellant, the invention employed an HTR (high temperature retained) process whereas D1 did not, and D1 necessarily included the process of cooling the resin to a temperature at which a crystal structure was formed before the resin was put into the cooling water.

The Board does not find this argument persuasive. As explained above, the skilled person knows that an increase in filament temperature allows for more bonding points and a better durability. Increasing the temperature to 80°C does lead to the expected effect of an increased hardness retention, if all the other process parameters (such as the nozzle face-cooling water distance) remain unchanged. Arriving at a suitable combination of cooling bath temperature and nozzle face-cooling water distance is a trial-and-error process that does not involve an inventive step.

In addition, the claims are directed to a network structure and do not define an HTR process nor do they include any temperature related process feature. The patent does not include such a definition either, nor did the appellant provide any further source from where such a definition could be derived. The Board thus finds that it is of no relevance whether D1 describes an HTR process or not.

- 1.9 The appellant argued that the polymer material of D5 could not be used in a loop structure such as D1 because such a changed structure would lose elasticity. The respondent objected that this argument was late-filed and requested that it should not be taken into account.

Even leaving the question of admittance aside, the Board does not find the argument persuasive. As discussed above, when adopting the teaching of D5, the skilled person would not substitute the material of D1 with the one of D5. They would instead retain the material used in D1 and apply the teaching of D5 thereon, thereby arriving at the subject-matter of claim 1 without exercising an inventive step.

- 1.10 Therefore, even if this argument were taken into account, the subject-matter of claim 1 would not involve an inventive step in view of D1 in combination with D5. The main request is thus not allowable.
2. Admittance of auxiliary request 1
  - 2.1 Auxiliary requests 1 to 3 were filed for the first time with the grounds of appeal. Claim 1 of auxiliary request 1 builds on claim 1 of the main request with the following feature appended to the claim:  
"wherein the network structure has a hysteresis loss of not more than 28%".
  - 2.2 Under Article 12(4) RPBA 2007 (applicable according to Article 25(2) RPBA 2020) the Board has the discretionary power to hold inadmissible facts, evidence and requests that should have been presented in the first instance proceedings.
  - 2.3 The appellant argued that the amended main and first auxiliary request filed during the opposition proceedings were filed only with the purpose of overcoming the negative preliminary opinion of the opposition division regarding Article 100(b) EPC, which was (in the preliminary opinion of the opposition

division) the only ground for opposition prejudicing the maintenance of the patent at the time. The preliminary opinion of the opposition division regarding Article 100(a) EPC had been positive but the opposition division changed its opinion during the oral proceedings. Faced with this surprising turn of events during the oral proceedings, the appellant argued that it did not have enough time to react and consider its options together with its client, which was situated overseas on the other side of the world. According to the appellant, the parameter "hysteresis loss" was also aimed at preventing a bottoming feeling and thus did not change the scope of the proceedings on novelty and inventive step.

2.3.1 The Board is not persuaded by these arguments. The objections discussed during the oral proceedings before the opposition division (notably novelty and inventive step starting from D1) were filed and developed during the written opposition proceedings. Although the preliminary opinion of the opposition division had been positive, the Board finds that the proprietor was well aware of the issues to be discussed (which is emphasized by the fact that the last written submission from the opponent was filed within the period under Rule 116 EPC one month before the oral proceedings). If the appellant had found it necessary to consult its client, it could have requested an interruption. The proprietor also had ample opportunity during the opposition proceedings to react to these objections, such that all the auxiliary requests aimed at overcoming these objections could and should have been submitted during the opposition proceedings.

2.3.2 Further, the proprietor stated during the oral proceedings before the opposition division (see the

minutes, item 6, first paragraph and item 7, fourth paragraph, respectively) that the first auxiliary request "had been filed in order to overcome objections under Article 56 EPC" and, at the end of the oral proceedings, had stated that it had no further requests. Thus, the previous request was not merely filed to overcome the ground for opposition under Article 100(b) EPC. Moreover, nothing indicates that the appellant was not given enough time to react or that it was denied the opportunity to request further time during the oral proceedings before the opposition division.

2.3.3 This finding is not changed regardless of whether the added feature is aimed at preventing a bottoming feeling or not. The Board notes however that, as seen from paragraph [0033] of the published patent, selecting the value of the parameter "hysteresis loss" in a certain range provides a network structure with sitting and sleeping comfort with a large force of repulsion, which is not the same effect as provided by the hardness retention parameter. Contrary to the argument of the appellant, this feature therefore changes the scope of the proceedings on novelty and inventive step and is thus contrary to the appeal proceedings' function of reviewing the impugned decision.

2.3.4 As already stated in the preliminary opinion of the Board, claim 1 of auxiliary request 1 therefore builds on the main request but comprises different subject-matter to the previous auxiliary request 1, i.e. it comprises a different feature and is outside the scope of the proceedings as defined in the opposition proceedings. It thus cannot be considered as a normal development to the non-allowability of the main and

previous auxiliary request 1 by the opposition division and therefore should have been filed during the opposition proceedings.

Therefore, the Board exercised its discretion to exclude auxiliary request 1 from the appeal proceedings.

3. Auxiliary request 2 - clarity

3.1 Claim 1 of auxiliary request 2 has been amended with regard to claim 1 of auxiliary request 1 to include *inter alia* the following features:

"wherein fusion of the continuous linear structures that form the network structure is made strong to increase the strength of contact points between the continuous linear structures by

- (i) providing a heat-retaining region below a nozzle when the polyester-based thermoplastic elastomer is spun, the length of said heat-retaining region being not less than 20 mm; or
- (ii) increasing the net surface temperature of a take-up conveyor net at or around the falling position of the continuous linear structures to a temperature of not less than 80°C; or
- (iii) increasing the temperature of cooling water in a cooling bath at or around the falling position of the continuous linear structures to a temperature of not less than 80°C."

3.2 The appellant argued that the expression "[the fusion of the continuous linear structures is] made strong to increase the strength of contact points" was clear and that the strength of the contact points was a property of the material that was linked to feature (d). In other words, the fusion made stronger contact points

which ensured that the hardness retention did not decrease.

The Board does not find this argument persuasive. The strength of the contact points is not a parameter defined in the patent in a way that it can be distinguished in the product. Although the patent describes a link between the strength of the contact points and feature (d) (see e.g. paragraphs [0031] and [0033]), the latter was already defined in claim 1 of the main request. The addition of the feature "increase in the strength of the contact points" by any of the three added process steps does thus not impart the claimed network structure with any further physical characteristic that could distinguish it from the network structures of the prior art.

In addition, the expression that the fusion of the continuous linear structures is made strong does not seem to be defined in the patent either, such that it is not clear for the skilled person how "strong" fusion should be understood.

3.3 The respondent also argued that auxiliary request 2 should be excluded from the proceedings. Since claim 1 does not fulfil the clarity requirement of Article 84 EPC, the question of admittance can be left unanswered by the Board. Auxiliary request 2 is not allowable.

4. Admittance of auxiliary request 3

4.1 Claim 1 of auxiliary request 3 builds on current claim 1 of auxiliary request 1, to which the feature "by being cooled in a cooling water at a temperature of not less than 80°C" is added.

- 4.2 With regard to claim 1 of auxiliary request 1, claim 1 of auxiliary request 3 comprises even further subject-matter outside the scope of the proceedings as defined in the opposition proceedings. It thus cannot be considered as a normal development to the non-allowability of the main and auxiliary request 1 as found by the opposition division. Thus, it could and should have been filed during the opposition proceedings for the same reasons as given above with respect to auxiliary request 1.
- 4.3 Therefore, the Board exercised its discretion to exclude auxiliary request 3 from the appeal proceedings.
5. Auxiliary requests 4 to 7 - admittance
- 5.1 Auxiliary requests 4 to 7 were filed after notification of the summons to oral proceedings by the Board.
- 5.2 Article 13(2) RPBA 2020 (applicable according to Article 25(1), (3) RPBA 2020) stipulates that any amendment to a party's appeal case made after notification of a summons to oral proceedings shall, in principle, not be taken into account unless there are exceptional circumstances, which have been justified with cogent reasons by the party concerned.
- 5.3 The appellant argued that auxiliary requests 4 to 7 constituted an attempt to overcome the issues to which the Board issued a negative preliminary opinion, specifically regarding auxiliary request 2.

The Board does not find this argument convincing. The negative preliminary opinion of the Board regarding the main request concerned objections that were on file and

found persuasive already during the opposition proceedings. Hence, no new aspects were raised in the communication. It should thus not have come as a complete surprise to the appellant that the Board gave a preliminary opinion concurring with these objections.

Auxiliary request 2 was filed with the grounds of appeal as an attempt by the appellant to address these objections already at that stage. As the reply to the grounds of appeal containing the objections regarding auxiliary request 2 (see page 20) was submitted in 2018, there has been more than ample time to react to these objections before the notification of the summons.

5.4 As set out in Article 12(3) RPBA 2020 and previously in Article 12(2) RPBA 2007, the parties are expected to present their complete case with the grounds of appeal and the reply thereto, respectively. For the appellant proprietor this implies the need, already in its grounds of appeal, to provide all those requests needed to defend its position rather than waiting until the Board sets out its preliminary opinion. In this case, the preliminary opinion of the Board pursuant to Article 15(1) RPBA 2020 preparing the parties for oral proceedings merely laid out matters which appeared of particular significance for the decision to be taken and which had already been known before. The Board's opinion is not an invitation for the parties to make amendments to their appeal cases (see e.g. Case Law of the Boards of Appeal, 9th edition, V.A.4.7).

5.5 The Board therefore finds that no exceptional circumstances justified by cogent reasons are present which would justify the filing of auxiliary requests 4 to 7 at such a late stage.

5.6 Accordingly, the Board used its discretion not to take auxiliary requests 4 to 7 into account (Article 13(2) RPBA 2020).

## Order

### For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



K. Boelicke

M. Dorfstätter

Decision electronically authenticated