# BESCHWERDEKAMMERN PATENTAMTS

# BOARDS OF APPEAL OF OFFICE

CHAMBRES DE RECOURS DES EUROPÄISCHEN THE EUROPEAN PATENT DE L'OFFICE EUROPÉEN DES BREVETS

#### Internal distribution code:

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

# Datasheet for the decision of 14 September 2022

Case Number: T 0555/18 - 3.3.06

Application Number: 08724899.3

Publication Number: 2117839

B32B27/34, B65D65/40, IPC:

C08L77/02, C08L77/06

Language of the proceedings: ΕN

#### Title of invention:

SHRINK FILM CONTAINING SEMI-CRYSTALLINE POLYAMIDE, ARTICLES MADE THEREFROM, AND PROCESS FOR MAKING AND USING SAME

# Patent Proprietor:

Cryovac, Inc.

#### Opponent:

isarpatent - Patentanwälte Behnisch Barth Charles Hassa Peckmann und Partner mbB

#### Headword:

Shrink Film/Cryovac

## Relevant legal provisions:

RPBA Art. 12(4) EPC Art. 56

#### Keyword:

Late-filed evidence - admitted (no)

Late-filed request - admitted (no)

Inventive step - (no) - obvious modification - Unusual parameter and burden of proof

#### Decisions cited:

T 0740/01, T 0131/03, T 1764/06, T 1920/09, T 1995/15

#### Catchword:

If the only feature that distinguishes a claim from the closest prior art is a range of an unusual parameter and it is concluded that it would be obvious for the skilled person to solve the underlying technical problem in ways that can be presumed to inherently lead to values within or close to the claimed range, it is the proprietor who should bear the burden of proof to demonstrate that implementing such solutions would not lead to the claimed parametrical range.



# 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 0555/18 - 3.3.06

D E C I S I O N

of Technical Board of Appeal 3.3.06

of 14 September 2022

Appellant: isarpatent - Patentanwälte Behnisch Barth Charles

(Opponent) Hassa Peckmann und Partner mbB

Friedrichstrasse 31 80801 München (DE)

Representative: Isarpatent

Patent- und Rechtsanwälte Barth Charles Hassa Peckmann & Partner mbB

Friedrichstrasse 31 80801 München (DE)

Respondent: Cryovac, Inc.

(Patent Proprietor) 100 Rogers Bridge Rd. Post Office Box 464

Duncan, South Carolina 29334 (US)

Representative: Uexküll & Stolberg

Partnerschaft von

Patent- und Rechtsanwälten mbB

Beselerstraße 4 22607 Hamburg (DE)

Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted on 22 December 2017 rejecting the opposition filed against European patent No. 2117839 pursuant to Article

101(2) EPC.

# Composition of the Board:

Chairman J.-M. Schwaller

Members: S. Arrojo

C. Heath

- 1 - T 0555/18

# Summary of Facts and Submissions

- I. The opponent filed an appeal against the decision of the opposition division to reject the opposition against European patent No. 2 117 839.
- II. With its statement of grounds of appeal, the appellant requested that the patent be revoked on the grounds of insufficiency of disclosure, extension beyond the content of the application as filed, lack of novelty in view of documents D1 (J. Stobie, "Producing coextruded high barrier heat-shrinkable packaging films", Paper, Film & Foil Converter, 2003), **D3** (WO 2005/092611 A2), **D4** (US 2005/0118374 A1), **D7** (GB 1 486 489), **D8** (DE 197 28 522 A1), D12 ("Producing Co-extruded High Barrier Heat Shrinkable Packaging Films", TAPPI 9th European Place Conf., 2003) or D13 ("Triple bubble film lines for manufacturing 7-layer co-extruded films", Proc. 9th Worldwide Flexible Packaging Conf., 2000), and lack of inventive step in view of document D3 combined with D1, D12 or D13. It also filed a test report D15 in support of the novelty objections.
- III. With its reply dated 17 September 2018, the proprietor (and respondent) filed auxiliary requests 1 to 10 and requested not to admit document D15 into the appeal proceedings.
- IV. Claim 1 as granted (main request) reads:
  - "1. A multilayer, heat-shrinkable film comprising a layer containing at least one semi-crystalline polyamide selected from the group consisting of polyamide 6/12 having a melting point of at least

- 2 - T 0555/18

125°C, polyamide 6, polyamide 66, and polyamide 6/66, and exhibiting upon conditioning at 48.9°C (120°F) and at least 80 percent relative humidity for 24 hours an FTIR Transmission Absorbance Ratio:

$$\frac{A_{1199}}{A_{1170}} \leq 1.65 ,$$

wherein  $A_{1199}$  is determined by integrating a peak area between 1223.6 cm<sup>-1</sup> and 1186.0 cm<sup>-1</sup> with a baseline made by connecting points on the curve at 1223.6 cm<sup>-1</sup> and 1186.0 cm<sup>-1</sup> with a straight line, and wherein  $A_{1170}$  is determined by integrating a peak area between 1186.0 cm<sup>-1</sup> and 1152.5 cm<sup>-1</sup> with a baseline made by connecting points on the curve at 1186.0 cm<sup>-1</sup> and 1152.5 cm<sup>-1</sup> with a straight line, with the multilayer film comprising a total semi-crystalline polyamide content of at least 35 volume percent based on total film volume, the multilayer film having a total free shrink at 85°C (185°F) of at least 35 percent as measured using ASTM D-2732."

Claim 1 of auxiliary request 1 corresponds to that of the main request with the additional feature:
"... wherein the film has been annealed".

Claim 1 of auxiliary request 2 corresponds to that of the main request with the additional feature:

"... wherein the film has a first layer that is an outer layer and that comprises polyolefin and a second layer comprising at least one semi-crystalline polyamide, with the first outer layer serving as a barrier to the transmission of atmospheric moisture therethrough."

Claim 1 of auxiliary request 3 corresponds to that of auxiliary request 2 with the additional feature:

- 3 - T 0555/18

"..., and the film further comprises a third layer that is a second outer film layer, the third layer comprising polyolefin, the third layer also serving as a barrier to the transmission of atmospheric moisture therethrough, so that the second layer has a moisture barrier layer on each side thereof."

Claim 1 of auxiliary request 4 corresponds to that of the main request with the additional feature:

"... wherein the layer containing at least one semicrystalline polyamide comprises a blend of a primary component present and a secondary component, the primary component making up from 60 to 99 weight percent of the blend and the secondary component making up from 1 to 40 weight percent of the blend, the secondary component comprising at least one member selected from the group consisting of polyamide 6/69, polyamide MXD6, polyamide MXD1, polyamide 66/610, amorphous polyamide, polyether block amide copolymer, polyester, EVOH, polystyrene, polyolefin, and ionomer resin."

Claim 1 of auxiliary requests 5 to 9 corresponds to that of the main request.

- V. In its preliminary opinion the board concluded that none of the requests on file appeared to be inventive in view of the disclosure of document D3 taken alone or in combination with the teaching of D4. The board also indicated that the admittance of late filed auxiliary request 10 would have to be discussed at the oral proceedings.
- VI. At the oral proceedings, which took place on 14 September 2022, the parties maintained their original requests, namely:

- 4 - T 0555/18

The appellant requested that the decision of the opposition division be set aside and the patent be revoked in its entirety.

The respondent requested that the appeal be dismissed and the patent be maintained as granted (main request), or alternatively, on the basis of one of auxiliary requests 1 to 10 filed with the reply dated 17 September 2018.

## Reasons for the Decision

1. Main request - Inventive step

The board came to the conclusion that the ground for opposition under Article 100(a) EPC in combination with Article 56 EPC prejudices the maintenance of the patent as granted for the following reasons:

1.1 The invention relates to a semi-crystalline polyamidecontaining heat-shrinkable film to be used in food packaging (par. [0001] of the patent). Known films can provide high impact strength but are difficult to produce because of the challenges of carrying out the necessary solid-state orientation to impart the desired degree of low-temperature heat-shrinkability. The socalled "Kuhne" process provides an alternative to carry out the solid-state orientation but results in poor optical properties, namely high haze and low transparency. The invention proposes a solution in providing a multilayer heat-shrinkable polyamide film containing relatively high amounts of semi-crystalline polyamide while maintaining good optical properties (paras. [0002] to [0007] of the patent).

- 5 - T 0555/18

- There is agreement that D3 represents the closest prior art, as this document discloses multilayer heat shrinkable films for food packaging having many features in common with the subject-matter of claim 1. In particular, D3 discloses a film (table I on page 12) including 40 vol.% of polycaprolactam (i.e. polyamide 6 or nylon 6) and having a preferred total free shrink at 85°C of 15% to 80%, more preferably 25% to 60%, more preferably 30% to 50% (page 3, lines 1-2 and claim 2). Thus, contrary to the opposition division's conclusions (point 7.2 of the decision), D3 anticipates the type and amount of polyamide in the film and also refers to preferred total free shrink values at 85°C higher than 35 percent.
- 1.3 Consequently, the only feature differentiating claim 1 from this document is that the FTIR Transmission Absorbance Ratio (from now on "FTIR ratio") is 1.65 or lower.
- 1.4 Problem solved by the invention
- 1.4.1 According to the opposed patent (par. [0011]), the invention solves the problem of providing a multilayer heat-shrinkable film that (i) contains a relatively high amount of semi-crystalline polyamide, (ii) has relatively high total free shrink at a relatively low temperature, (iii) has a polyolefin-based heat seal layer so that the multilayer film can easily be converted to packaging articles such as bags, and (iv) has improved optical properties over corresponding commercially available heat-shrinkable polyamide-based films.
- 1.4.2 The board notes that since the film of table I in the closest prior art D3 exhibits both a large polyamide

- 6 - T 0555/18

content (40 vol.%) and a high free total shrink (the preferred values in D3 are said to be up to 50, 60 or even 80% at 85°C), there is no basis to conclude that the invention in claim 1 would solve the problem of providing a film with a high polyamide amount and high total shrink with respect to D3 (i.e. effects (i) and (ii) above). Furthermore, since the film defined in claim 1 does not include a polyolefin-based heat seal layer, the effect (iii) is also not provided.

- 1.4.3 Concerning the alleged effect (iv), the proprietor argued that the improved optical properties would result from the application of the quenching/ orientation steps according to the invention, which were represented by the FTIR ratio range defined in claim 1. This was apparent from the fact that, as indicated in par. [0227] of the patent, the exemplary films 4 to 25 (all having an FTIR ratio falling within the claimed range) exhibited good optical properties. While the film according to example 2 did not exhibit good optical properties, its FTIR ratio was not disclosed, so it could not be discarded that its poor optical properties were related to an FTIR ratio falling outside the claimed range.
- 1.4.4 The board is not convinced that working within the FTIR ratio range defined in claim 1 would reliably give rise to the effect of achieving improved optical properties, because it is apparent from par. [0007] and [0011] of the patent that the optical properties of the film are mainly affected by the outer sealing layer, an aspect which is not restricted in any way in claim 1 at issue. This outer layer is in fact not even defined in the claim, so that the claimed subject-matter also encompasses films having outer layers configured in a

- 7 - T 0555/18

manner that would inevitably result in poor optical properties (e.g. opaque layers).

Furthermore, the fact that the film of example 2 of the patent (paras. [0203]-[0205]) exhibits poor optical properties reinforces the argument that the invention in claim 1 at issue does not provide an improvement in this respect. While example 2 does not disclose the FTIR ratio, the proprietor argued that this parameter was determined by the quenching/orientation steps. Since in example 2 these steps are conducted in accordance to the invention, following the line of argumentation of the proprietor would imply that the FTIR ratio in this example should also fall within the preferred ranges of the invention. In fact, the patent itself attributes the poor optical properties in example 2 to the use of an outer layer made of a polyethylene having relatively high density, which confirms the conclusion that the optical behaviour mainly depends on the properties of the external layer (which is not defined in claim 1 at issue).

- 1.4.5 Since the invention defined in claim 1 provides none of the alleged technical effects proposed in the patent, the problem solved must be reformulated less ambitiously, namely as the provision of an alternative film to the one known from D3.
- 1.5 Is the FTIR ratio an unusual parameter?
- 1.5.1 Before addressing the question of obviousness, it is necessary to clarify the substantial meaning of the FTIR ratio (the only distinguishing feature) and to determine whether it can be regarded as an <u>unusual</u> parameter.

-8- T 0555/18

- 1.5.2 According to the patent (par. [0131] and [0132]), the FTIR ratio represents a proxy for the ratio between the degree of crystallinity of the semi-crystalline polyamide (proportional to the peak area at 1199 cm<sup>-1</sup>) and the total polyamide content (proportional to the peak area at 1170 cm<sup>-1</sup>). Thus, the defined low values of the FTIR ratio imply (see par. [0133] of the patent) that the film has a large content of polyamide with a relatively low degree of crystallinity.
- 1.5.3 In its preliminary opinion, the board indicated that the FTIR ratio was considered to be an unusual parameter and that, consequently, in case of doubt it was the proprietor who carried the burden of proof to demonstrate that working within the defined range would not be obvious in view of the cited prior art.
- 1.5.4 At the oral proceedings, the proprietor argued that the FTIR ratio was not an unusual parameter because, as evidenced by point 4.4.3 and figure 4.9 of D10 ("Nylon Plastic Handbook", pages 88 and 89), it was known for the skilled person that the degree of crystallinity of polyamides could be measured using an FTIR ratio of the characteristic amorphous and crystalline bands of the polyamide.
- 1.5.5 The board disagrees with this argumentation because the concept of "unusual parameter" does not necessarily imply that the parameter is unknown, but rather that it is uncommon in the sense that it is not generally used in the specific form proposed in the claims within the underlying technical field. In the present case, it is apparent that the FTIR ratio as defined in claim 1 is not commonly used in the underlying technical field, at least in the specific form proposed in the claim, because apart from the fact that D10 is the only

- 9 - T 0555/18

reference to a similar parameter in the entire cited prior art, this document actually refers to the ratio of the absorbance values and not to the ratio of the integral of the absorbance curve as defined in claim 1. Moreover, the wavenumbers of the characteristic bands are not the same for all polyamides, so the specific parameter defined in claim 1 does clearly not represent a conventional (or even a suitable) parameter for determining the crystallinity of all polyamides defined therein. In particular, as pointed out at the oral proceedings, the bands (1199  $\mathrm{cm}^{-1}$  and 1170  $\mathrm{cm}^{-1}$ ) and the baselines proposed in the claim seem to be appropriate for measuring the crystallinity of polyamide 6, but not that of other polyamides also defined in the claim, such as polyamide 66 or 6/12 (see Table 4.6 and Figures 4.7-4.8 of D10).

The board therefore concludes that the parameter FTIR ratio as defined in claim 1 should be regarded as an unusual parameter.

- 1.6 Burden of proof to assess the obviousness of an unusual parameter
- 1.6.1 In fact, when the only feature distinguishing the invention from the closest prior art is a range of an unusual parameter, the assessment of obviousness might be clouded by the fact that such parameters are by definition rarely described in the relevant prior art. This problem can be addressed by associating the parameter with more common aspects in the field in order to indirectly estimate the parametrical values (or their order of magnitude) which would be obtained when the underlying technical problem is solved in view of the teachings in the cited prior art. Such indirect comparisons might however lead to uncertain

- 10 - T 0555/18

conclusions, opening the question of who should bear the burden of proof as to whether or not the resulting estimates are sufficient to render the invention obvious.

- 1.6.2 In a number of cases, the boards of appeal dealt with an analogous problem in the assessment of <u>novelty</u> by shifting the burden of proof to the proprietor. More specifically, in some ex-parte cases the boards concluded (see catchword of T 1764/06, reason 3.5 of T 1920/09 and reason 1.1.5 of T 1995/15) that the burden of proof should be shifted to the proprietor to demonstrate that an unusual parameter was not anticipated by the cited prior art. This approach was also followed in some inter-partes cases (see headnote of T 0131/03 and reason 2.3 of T 0740/01), provided that there was a strong presumption that the unusual parameter was indeed inherently disclosed in the prior art.
- 1.6.3 Since it is apparent that the problem addressed in these decisions (concerning novelty) is analogous to that described in par. 1.6.1 above (concerning obviousness), the present board has concluded that when the only feature distinguishing a claim from the closest prior art is a range of an unusual parameter, a similar approach to that proposed in T 0131/03 and T 0740/01 should be applied to decide on the question of obviousness. In particular, once it has been established that it would be obvious for the skilled person to solve the underlying technical problem in ways that can be presumed to inherently lead to values within or close to the claimed range, it is the proprietor who should carry the burden of proof to demonstrate that implementing such solutions would not lead to the claimed parametrical range.

- 11 - T 0555/18

The board considers that this approach is justified, because it would be unequitable for a party to benefit from the uncertainties created by its decision to define the invention in terms of an unusual parameter.

- 1.7 Obviousness of the solution
- 1.7.1 Document D3 explicitly discloses (see table I) a film with the same polyamide as the exemplary forms of the invention (nylon-6) in concentrations falling within the scope of claim 1 (40 vol.%). Furthermore, D3 teaches (page 3, lines 1-2 and claim 2) that the films in this document preferably exhibit high levels of free shrink at low temperatures (50, 60 or even 80% free shrink at 85°C).
- 1.7.2 The proprietor argued that high free shrink levels were not necessarily linked to a low crystallinity, because the shrink level did not only relate to the amount of amorphous polyamide but also to the quenching/reheating/orientation steps (see page 102 of D13: "Triple bubble film lines for manufacturing 7-layer coextruded films", Proc. of FlexPak Americas, 2000). Thus, even if the teachings in D3 led to films having the same type/ amount of polyamide and high free shrink levels as the invention, this did not necessarily imply that the FTIR ratio (i.e. the crystallinity to polyamide amount ratio) fell within the claimed range, because the high shrink level could have resulted from the quenching/reheating/orientation steps. Since there was no hint in the prior art that would lead the skilled person to adjust the crystallinity of the polyamide in the film of D3 such that the FTIR ratio would fall within the claimed range, the subject-matter of claim 1 was not obvious in view of this document.

- 12 - T 0555/18

1.7.3 As the proprietor did not contest that a skilled person starting from the film in table I of D3 and looking for alternatives would find an incentive (in view of the teachings in D3) to explore alternative films having high or even very high levels of free shrink (i.e. up to 80%), the board considers that it would be obvious for the skilled person to contemplate films having high amounts of semi-crystalline polyamide, such as nylon-6 disclosed in table I of D3, and a very high free shrink at low temperatures. The only outstanding question is therefore whether these obvious alternatives would lead to an FTIR ratio falling within the claimed range.

Even if, for the sake of the argument, it was accepted (in proprietor's favour) that it is technically possible for such highly shrinkable semi-crystalline polyamide films to exhibit high levels of crystallinity (and therefore high values of FTIR ratio), this is clearly not the most likely scenario, as the patent itself points out (par. [0133]) that a film having a high shrink level at a low temperature in combination with a large content of semi-crystalline polyamide represents "an indication of relatively low crystallinity". The board therefore concludes that there is a strong presumption that such films will tend to exhibit low degrees of crystallinity, which in combination with the large amounts of polyamide proposed in table I of D3 would lead to low FTIR ratio values.

As indicated in point 1.6.3 above, under these circumstances it is the proprietor who carries the burden of proof to demonstrate that the films which would be obtained in an obvious way in view of the teachings in D3 would fall outside the scope of claim 1. This burden has not been discharged by the

- 13 - T 0555/18

proprietor, because no evidence has been provided to demonstrate that a film as proposed in table I of D3 and configured to have a very high free shrink level (as also proposed in D3) would have an FTIR ratio falling outside the claimed range. In fact, the argument that it is not impossible for the films in D3 to have an FTIR ratio falling outside the range of the invention or that there is no definitive proof that the films in D3 have a crystallinity low enough to render claim 1 obvious, appear to be an attempt by the proprietor to benefit from the uncertainties caused by its decision to draft the invention in terms of an unusual parameter, which is precisely what the board intends to avoid by shifting the burden of proof to the proprietor or by giving the opponent the benefit of the doubt.

The board therefore concludes that the solution proposed in claim 1 at issue is obvious in view of D3, so the requirement of inventive step is not complied with.

- 2. Auxiliary requests 1-3 and 5-9 Inventive Step
- 2.1 Claim 1 of auxiliary request 1 corresponds to that of the main request wherein the film has been annealed. The process of annealing constitutes an additional heating/cooling step to adjust the semi-crystalline structure of the film and to relief inner stresses of the material.

The board considers that the reference to this <u>process</u> <u>step</u> does not provide any meaningful restriction of the scope of protection of the film claimed, since virtually any film can be said to have properties which could have been imparted by an annealing step. The same

- 14 - T 0555/18

arguments and conclusions as presented for the main request therefore apply, which implies that the subject-matter of claim 1 at issue is not inventive in view of document D3.

Claim 1 of auxiliary request 2 corresponds to that of the main request wherein the film has a first outer layer comprising a polyolefin and serving as a moisture barrier, and a second layer comprising a semicrystalline polyamide.

The film disclosed in table I of D3 includes both a first olefin outer layer serving as moisture barrier and a second layer comprising semi-crystalline polyamide. Thus, the reasons and conclusions presented for claim 1 as granted also apply to this request, which is therefore not considered to be inventive.

2.3 Claim 1 of auxiliary request 3 corresponds to that of auxiliary request 2 further including a third layer comprising a polyolefin which also acts as a moisture barrier.

The film disclosed in table I of D3 also includes a third layer falling within the scope of claim 1. Thus, the reasons and conclusions presented for claim 1 of the main request and auxiliary request 2 also apply to this request. The requirements of Article 56 EPC are therefore not met.

2.4 Claim 1 of auxiliary requests 5-9 corresponds to that of the main request. Consequently, the same arguments and conclusions presented for the claims as granted apply to these requests, which are thus not considered to be inventive.

- 15 - T 0555/18

- 3. Auxiliary request 4 Inventive step
- 3.1 Claim 1 of this request corresponds to that of the main request wherein the layer containing the polyamide comprises a blend of 60-99 wt.% of a primary component and 1-40 wt.% of a secondary component selected from the group of polyamide 6/69, polyamide MXD6, polyamide MXDI, polyamide 66/610, amorphous polyamide, polyether block amide copolymer, polyester, EVOH, polystyrene, polyolefin, and ionomer resin.
- 3.2 Closest prior art and problem solved
- 3.2.1 Document D3 is still considered to represent the closest prior art. The subject-matter of claim 1 at issue differs from this document in that the FTIR ratio is lower than 1.65 and in that the layer containing the polyamide comprises a blend of polymers as indicated above.
- 3.2.2 The board first notes that the primary component is not defined in the claim, so this component could in principle correspond to the polyamide defined at the beginning of the claim (i.e. polyamide 6/12 having a melting point of at least 125°C, polyamide 6, polyamide 66 or polyamide 6/66) or to a different component. The board has not found any indication in the patent or in the proprietor's arguments concerning a specific effect of the defined blend. Consequently, the only problem solved by the invention is that of providing an alternative film to the one known from D3.
- 3.3 Obviousness of the solution
- 3.3.1 Having established that a FTIR ratio lower than 1.65 is obvious in view of D3 alone (see inventive step

- 16 - T 0555/18

argumentation for the main request), the only relevant question is whether the additional differentiating feature provides an inventive contribution.

3.3.2 As pointed out by the appellant (with reference to novelty), the films of examples 1 and 2 of document D4, both describing heat-shrinkable polyamide-containing films for food packaging, include polyamide layers comprising mixtures of nylon 6 and an amorphous polyamide as defined in claim 1 at issue. The board therefore considers that the use of layers with polymer mixtures as proposed in claim 1 represents a known alternative in the field of food packaging.

In view of the above considerations, a skilled person looking for alternatives to the film of D3 would consult D4, and in doing so would find and incorporate the solution proposed in claim 1 without exercising inventive skills.

- 3.3.3 The subject-matter of claim 1 is therefore considered obvious in view of D3 combined with the teachings of D4, and thus not inventive within the meaning of Article 56 EPC.
- 4. Admittance of late-filed documents and requests
- 4.1 Document D15 and auxiliary request 10 were respectively filed for the first time with the statement of grounds of appeal and with the proprietor's reply before entry into force of the RPBA 2020, so their admittance is governed by Article 12(4) RPBA 2007.
- 4.2 Document D15 is a test report which has been cited to substantiate a new novelty attack based on document D4. In particular, D15 intends to demonstrate that the FTIR

- 17 - T 0555/18

ratio of a film disclosed in D4 falls within the range defined in claim 1. The board notes that in the summons to attend oral proceedings, the opposition division expressed its opinion that none of the cited documents clearly disclosed an FTIR ratio as defined in claim 1. It is therefore apparent that the appellant could and should have reacted to this opinion by submitting a corresponding test report and/or by formulating additional novelty objections within the time limit under Rule 116(1) EPC. The opponent has not provided any justification for the late-filing of the test report and the corresponding novelty objection. It is also noted that the appellant did not rely on D15 at the oral proceedings. The board therefore exercises its discretion under Article 12(4) RPBA 2007 not to admit this document into the appeal proceedings.

- Claim 1 of auxiliary request 10 corresponds to that of the main request, wherein the FTIR ratio is further restricted to a value equal or lower than 1.30, an approach which diverges from all the higher ranking requests. When asked for the reasons for pursuing this approach at this late stage of the proceedings, the proprietor indicated that this request represented a reaction to the late filing of document D15, but since D15 has not been admitted into the appeal proceedings, the board sees no reason to admit a late-filed request submitted in response to this document. The board thus exercises its discretion not to admit auxiliary request 10 into the appeal proceedings either.
- 5. In summary, the board has concluded that the subjectmatter of claim 1 as granted (main request) and of the
  auxiliary requests 1 to 9 is obvious and thus not
  inventive in view of D3 (or of its combination with
  D4), and that auxiliary request 10 is not admitted into

- 18 - T 0555/18

the proceedings. It follows that none of the sets of claims underlying the proposed requests meets the requirements of the EPC.

## Order

# For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The patent is revoked.

The Registrar:

The Chairman:



D. Hampe J.-M. Schwaller

Decision electronically authenticated