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Datasheet for the decision of 12 December 2017

Case Number: T 1810/14 - 3.3.03

Application Number: 04768631.6

Publication Number: 1682604

IPC: C08G65/40

Language of the proceedings: ΕN

Title of invention:

USE OF POLYETHER KETONES FOR MAKING A COMPONENT

Patent Proprietor:

VICTREX MANUFACTURING LIMITED

Opponents:

Evonik Degussa GmbH Solvay Specialty Polymers USA, LLC

Relevant legal provisions:

EPC R. 80 EPC Art. 123(3), 123(2), 84, 54, 111(1) RPBA Art. 13(1), 13(3)

Keyword:

Amendment occasioned by ground for opposition - (yes)
Amendments - broadening of claim (no) - extension beyond the content of the application as filed (no)
Claims - clarity (yes)
Novelty
Appeal decision - remittal to the department of first instance (yes)

Decisions cited:

G 0002/10, T 0610/95, T 1149/97, T 0181/02, T 0263/05, T 0993/07



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Case Number: T 1810/14 - 3.3.03

D E C I S I O N of Technical Board of Appeal 3.3.03 of 12 December 2017

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Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted on 5 August 2014 revoking European patent No. 1682604 pursuant to

Article 101(3)(b) EPC.

Composition of the Board:

Chairman D. Semino Members: O. Dury

C. Brandt

- 1 - T 1810/14

Summary of Facts and Submissions

- I. The appeal by the patent proprietor lies against the decision of the opposition division revoking European patent No. 1 682 604.
- II. Claims 1 and 15 of the granted patent read as follows:
 - "1. A method of making a component, the method comprising:

selecting a precursor material from which to make said component wherein said precursor material comprises a polymeric material having an MV in the range 0.05 to 0.11 kNsm⁻² when measured using capillary rheometry operating at 400°C at a shear rate of 1000s⁻¹ using a tungsten carbide die, 0.5x3.175mm, wherein said polymeric material is of a type which includes:

- (a) phenyl moieties;
- (b) carbonyl moieties; and
- (c) ether moieties

and is selected from the group comprising polyetheretherketone, polyetherketone, polyetherketoneketone, polyetherketoneetherketoneketone, polyetheretherketoneketone, polyether-diphenyl-ether-phenyl-ketone-phenyl-; and extruding or injection moulding said precursor material by subjecting the precursor material to a temperature above its melting temperature in an extrusion or injection moulding apparatus."

"15. A method of making a component which has a wall which includes a region having a thickness of 3mm or

- 2 - T 1810/14

less, the method comprising:

- (A) selecting a precursor material which comprises a polymeric material having an MV in the range 0.05 to $0.11~\rm kNsm^{-2}$ when measured using capillary rheometry operating at $400\,^{\circ}\mathrm{C}$ at a shear rate of $1000\,\mathrm{s}^{-1}$ using a tungsten carbide die, $0.5\times3.175\,\mathrm{mm}$, wherein said polymeric material is of a type which includes:
- (a) phenyl moieties;
- (b) carbonyl moieties; and
- (c) ether moieties

said component".

and is selected from the group comprising polyetheretherketone, polyetherketone, polyetherketoneketone, polyetherketoneketone, polyetheretherketoneketone, polyetheretherketoneketone, polyether-diphenyl-ether-phenyl-ketone-phenyl-; and

(B) treating said precursor material, thereby to form

- III. Two notices of opposition against the patent were filed, in which the revocation of the patent in its entirety was requested.
- IV. The contested decision was based on a main request and on the first to the fifth auxiliary requests filed with letter dated 1 April 2014.

Claims 1 and 10 of the main request read as follows:

"1. A method of making a component, the method comprising:

selecting a precursor material from which to make said component wherein said precursor material **either:**

- 3 - T 1810/14

consists essentially of a polymeric material having an MV in the range 0.05 to 0.11 $\rm kNsm^{-2}$ when measured using capillary rheometry operating at 400°C at a shear rate of $1000s^{-1}$ using a tungsten carbide die, 0.5x3.175mm, wherein said polymeric material is of a type which includes:

- (a) phenyl moieties;
- (b) carbonyl moieties; and
- (c) ether moieties

and is polyetheretherketone homopolymer;

or

includes 30 to 80wt% of polymeric material, and 20 to 70wt% of filler means, said polymeric material having an MV in the range 0.05 to 0.11 kNsm⁻² when measured using capillary rheometry operating at 400°C at a shear rate of 1000s⁻¹ using a tungsten carbide die, 0.5x3.175mm, wherein said polymeric material is of a type which includes:

- (a) phenyl moieties;
- (b) carbonyl moieties; and
- (c) ether moieties

and is polyetheretherketone homopolymer;

and

extruding or injection moulding said precursor material by subjecting the precursor material to a temperature above its melting temperature in an extrusion or - 4 - T 1810/14

injection moulding apparatus."

- "10. A method of making a component which has a wall which includes a region having a thickness of 3mm or less, the method comprising:
- (A) selecting a precursor material which either:

consists essentially of a polymeric material having an MV in the range 0.05 to 0.11 $\rm kNsm^{-2}$ when measured using capillary rheometry operating at 400°C at a shear rate of $1000\rm s^{-1}$ using a tungsten carbide die, 0.5x3.175mm, wherein said polymeric material is of a type which includes:

- (a) phenyl moieties;
- (b) carbonyl moieties; and
- (c) ether moieties

and is polyetheretherketone homopolymer;

or

includes 30 to 80wt% of polymeric material, and 20 to 70wt% of filler means, said polymeric material having an MV in the range 0.05 to 0.11 kNsm⁻² when measured using capillary rheometry operating at 400°C at a shear rate of 1000s⁻¹ using a tungsten carbide die, 0.5x3.175mm, wherein said polymeric material is of a type which includes:

- (a) phenyl moieties;
- (b) carbonyl moieties; and
- (c) ether moieties

and is polyetheretherketone homopolymer;

- 5 - T 1810/14

and

(B) treating said precursor material, thereby to form said component".

Claims 1 and 9 of the first auxiliary request corresponded to claims 1 and 10 of the main request, respectively, whereby the lower end of the range of the feature MV was modified to "0.08 $kNsm^{-2}$ " (in each claim and for both alternatives specified for the precursor material).

Claims 1 and 8 of the second auxiliary request corresponded to claims 1 and 10 of the main request, respectively, whereby the range of the feature MV was modified to "0.08 to 0.10 $kNsm^{-2}$ " (in each claim and for both alternatives specified for the precursor material).

The third and fourth auxiliary requests corresponded to the main request and to the first auxiliary request, respectively, whereby the second alternative defined therein for the precursor material ("includes 30 to 80 wt%...") was deleted in all claims.

The fifth auxiliary request corresponded to the main request whereby the second alternative defined therein for the precursor material ("includes 30 to 80 wt%...") was deleted in all claims and wherein in claim 1 the method was further limited to injection moulding (the features directed to extrusion were deleted).

V. In the course of opposition proceedings the following documents were *inter alia* cited:

- 6 - T 1810/14

D7: EP-A-0 722 985 D9: EP-A-0 001 879

D13: EP-A-0 125 816

D15: EP-A-0 152 161

D16: EP-A-1 170 318

D18: J. Devaux et al., Polymer (1985), Vol. 26, pages 1994-2000

In the contested decision, the opposition division inter alia held that:

- claims 1 and 10 of the main request did not fulfil the requirements of Rule 80 EPC because of the presence of the second alternative for the precursor material defined therein. Besides, the subject-matter of claim 10 directed to the second alternative for the precursor material ("includes 30 to 80 wt%...") did not fulfil the requirements of Article 123(2) EPC. Also, the subject-matter of claims 1 and 10 directed to the second alternative for the precursor material ("includes 30 to 80 wt%...") did not fulfil the requirements of Article 123(3) EPC.
- For similar reasons the first and second auxiliary requests did not fulfil the requirements of Rule 80 EPC as well as of Article 123(2) and (3) EPC.
- The third to fifth auxiliary requests were found not to be novel over one or more of D7, D9, D13, D15 and D16.
- VI. The patent proprietor (appellant) appealed the above decision. With the statement setting out the grounds

- 7 - T 1810/14

for the appeal the appellant requested that the decision be set aside and that the case be remitted to the department of first instance for further prosecution on the basis of any of the main request and of the first to the seventh auxiliary requests filed therewith. Also, the following document was submitted:

D22: two photographs of waste extrudate from MV measurement of PEEK polymer

- VII. In their reply to the statement of grounds of appeal respondents 1 and 2 (opponents 1 and 2, respectively) requested that the appeal be dismissed.
- VIII. Issues to be discussed at the oral proceedings were specified by the Board in a communication dated 16 June 2017.
- IX. With letters of 4 August 2017 and 1 September 2017 respondent 2 submitted the following documents:

D23: JP-60 15 452

D23T: English translation of D23

D24: JP-61 55674

D24T: English translation of D24

D25: Declaration by J. El Hibri, dated

31 August 2017

X. With letter of 20 September 2017 the appellant submitted a new main request and new first to seventh auxiliary requests in replacement of the then pending requests.

Regarding the main request, claim 1 corresponded to claim 1 of the main request dealt with in the contested decision whereby:

- 8 - T 1810/14

- the upper end of the range of the feature MV was modified for both embodiments of the precursor material and so as to read "0.10 kNsm⁻²";
- for the second alternative specified for the precursor material the wording "or includes 30 to 80wt% of polymeric material" was replaced by "or is a composite material which includes 30 to 80wt% of a single type of polymeric material".

Claim 2 of the main request read as follows:

"2. A method according to claim 1, wherein said polymeric material has an MV of less than $0.10~\rm kNsm^{-2}$, when measured as aforesaid."

Claim 9 of the main request further corresponded to claim 10 of the main request dealt with in the contested decision with the following amendments:

- the MV feature was modified as in claim 1;
- the material precursor was limited to the first embodiment (i.e. the "composite material" alternative was deleted);
- feature (B) was modified so as to read "treating said precursor material by melt processing by extrusion or injection moulding, thereby to form said component". Claims 2 to 8 were dependent on claim 1.

The first auxiliary request only differed from the main request in that the following wording was added at the end of claim 1:

"wherein the polymeric material or the composite material is provided in a pack including at least 1kg of the polymeric material".

- 9 - T 1810/14

The second auxiliary request only differed from the main request in that in claim 1 the expression "selecting a precursor material" was modified to read "selecting at least 10g of a precursor material".

Claims 2-8 of the second auxiliary request were directed to embodiments of claim 1.

The other auxiliary requests are not relevant for the present decision.

- XI. Claims 1 and 9 of the above main request are both directed to two alternative methods of making a component by selecting a precursor material which either i) consists essentially of a specific polyetheretherketone or ii) is a composite material. Those alternatives i) and ii) will be referred to in the present decision as "alternative 1" and "alternative 2", respectively (for all operative requests).
- XII. Oral proceedings before the Board were held on 12 December 2017 in the presence of all parties.
- XIII. The appellant's arguments, insofar as relevant to the decision, may be summarised as follows:

Main request

(a) The amendments of claim 1, in particular the splitting in two alternatives for the definition of the precursor material, was done in order to define that the precursor material defined therein contained a single type of polymeric material, which was necessary in order to overcome novelty (and possibly inventive step) objections raised in - 10 - T 1810/14

respect of compositions comprising blends of polymeric materials, while ensuring that the requirements of Article 123(2) and (3) EPC were also satisfied. Also, both embodiments defined in claim 1 were encompassed by granted claim 1. According to T 263/05, such amendments were allowable.

Similarly, claim 9 corresponded to an amendment of claim 15 as granted which addressed a novelty objection over D9.

For those reasons, the requirements of Rule 80 EPC were satisfied.

- (b) Regarding Article 123(3) EPC, operative claims 1 and 9 were encompassed by the scope of granted claims 1 and 15, respectively. Considering that some passages of the description and various examples of the patent in suit illustrated the subject-matter of alternative 2, the findings of T 1149/07 did not apply to the present case.
- (c) The subject-matter of alternative 1 of claim 1 was derivable from the combination of passages of the application as filed directed to the "fifth aspect" of the invention given on pages 17 and 18 of the application as filed.

Regarding alternative 2 of claim 1, the definition of the composite material was further indicated in a general manner at the bottom of page 15.

The subject-matter of claim 9 was derivable from the combination of passages of the application as filed directed to the "sixth aspect" of the - 11 - T 1810/14

invention given on pages 18 and 19 of the application as filed.

Therefore, the requirements of Article 123(2) EPC were satisfied.

(d) Regarding Article 54 EPC, the wording of claim 1 "making a component" implied an act carried out to create an article of some industrial use that had some purpose as an article of commerce. In that respect, it should be taken into account that a patent was directed to inventions susceptible of industrial application. Therefore, the generation of scrap or waste material did not fall within the scope of "making a component". As shown in the pictures of D22, waste extrudates from melt viscosity (MV) measurements of polyetheretherketone polymers were not a "component" in the sense of claim 1. In that respect, the determination method carried out in D25 had been intentionally modified by its authors in order to achieve the filament shown therein. Therefore, the disclosure in D7, D13, D15 and D18 related to the determination of melt viscosity within the range defined in claim 1 of polyetheretherketone homopolymers by extrusion in a test apparatus did not anticipate the subjectmatter being claimed. In particular, none of those documents disclosed any intended use of the waste by-products.

Concerning D9, D15 and D16, the respondents' objections in respect of operative claim 1 were based on the combination of specific examples thereof with the general teaching of those documents concerning the use in extrusion or injection moulding applications. However, since

- 12 - T 1810/14

said examples were not unambiguously according to the invention of those documents, their combination with said general teaching did not amount to a direct and unambiguous disclosure.

Regarding operative claim 9, none of the prior art documents cited disclosed an article having a wall as defined therein.

For those reasons, none of the cited documents anticipated the operative claims.

First auxiliary request

(e) It was derivable from the application as filed in its whole that the polymeric material or composite material to be used in the "fifth aspect" of the invention as precursor material could be provided in a pack according to the "first aspect" of the invention, in particular according to page 5, lines 8-9, 11-13 and 18-19. Therefore, the requirements of Article 123(2) EPC were met.

Second auxiliary request

- (f) The added feature "at least 10g" was disclosed as a preferred embodiment of the "fifth aspect" of the invention on page 18 of the application as filed and was combinable with the other passages of the application as filed identified in respect of claim 1 of the main request. Therefore, the requirements of Article 123(2) EPC were satisfied.
- (g) It was clear from the wording "from which to make said component" that the "at least 10g" of precursor material were to be used in the extrusion

- 13 - T 1810/14

or injection moulding apparatus (Article 84 EPC).

(h) None of the cited documents, in particular D7, D13, D15 and D18, explicitly or implicitly disclosed the use of "at least 10g" of precursor material as now specified in claim 1.

Besides, none of the cited prior art disclosed a component having "a wall" as defined in claim 9.

Therefore, the requirements of Article 54 EPC were satisfied.

Late-filed documents - Admittance

(i) There was no justification why D23/D23T and D24/D24T were filed so late. Those documents further referred to polyetherketones, not polyetheretherketones as in the operative claims. Besides, the indications related to "intrinsic viscosity" provided in D23T and D24T did not make sense and rather appeared to be related to "inherent viscosity". Therefore, extracting an estimated melt viscosity from D23 required considerable further analysis. In view of the above, the correctness of the translations of D23 and D24 was highly questionable. Under those circumstances, D23/D23T and D24/D24T should not be admitted to the proceedings.

- 14 - T 1810/14

XIV. The respondents' arguments, insofar as relevant to the decision, may be summarised as follows:

Main request

(a) Considering the deletions made in the description of the application as filed, the respondent had deliberately abandoned any embodiment directed to composite material. Operative claim 1 was a mean to circumvent that abandonment made before grant, which resulted in an abuse of the proceedings.

Operative claim 1 further amounted to two independent claims. However, as ruled out in T 993/07 (cited erroneously as T 933/07 in respondent 2's submissions), T 181/02 and T 610/95, the addition of an independent claim could not be considered as an appropriate reaction to a ground of opposition. In addition, the second alternative ("composite material") was not encompassed by granted claim 1 because a composite material, which implied a particular bonding between the polymeric matrix and the filler, was to be distinguished from a polymeric composition merely comprising fillers (blend). In that respect, paragraphs 10 and 25 were directed to the use of the components prepared by the methods being claimed for making composite materials, but not to the use of composite materials as precursor material as defined in claim 1 of the main request. Besides, "polymeric material" and "composite material" were described as different alternatives throughout the application as filed. Also, the alternative of claim 1 directed to "composite material" was neither searched, nor examined.

- 15 - T 1810/14

Therefore, the requirements of Rule 80 EPC were not satisfied.

(b) Alternative 2 of claim 1 was not encompassed by the scope of granted claim 1 and further amounted to reinserting subject-matter which had been deliberately deleted from the text of the granted patent, which was not allowable (T 1149/97). Also, claim 9 further extended the scope of protection of the patent in suit.

Therefore, the requirements of Article 123(3) EPC were not satisfied.

(c) The subject-matter of each of both alternatives of claim 1 could only be arrived at after performing several combination within the ambit of the application as filed, in particular in respect of the type of precursor material, the MV range and the use of polyetheretherketone homopolymer as sole polymeric component. In that respect, the expression "polyetheretherketone homopolymer" was to be distinguished from the term "polyetheretherketone".

The same was valid regarding claim 9.

For those reasons, the requirements of Article 123(2) EPC were not met.

(d) Regarding Article 84 EPC, the wording "consists essentially of" in claims 1 and 10 was unclear. Besides, claim 2 of the main request did not add any limitation to claim 1 and was, thus, unclear.

- 16 - T 1810/14

(e) Each of documents D7, D13, D15 and D18 disclosed the determination of melt viscosity within the range defined in claim 1 of polyetheretherketone homopolymers by extrusion in a test apparatus, which anticipated the subject-matter of claim 1 when it was read in its broadest sense. It was shown in D25 that the extrudate obtained in such determination methods was not a mere waste material, but was a filament having a well determined shape. Since it was not clear which polymer was used and what had exactly been done in D22, no conclusion could be drawn therefrom.

Regarding operative claim 9, the term "wall" contained therein was not limiting in any manner. Therefore, the novelty-destroying disclosures of D7, D13, D15 and D18 also anticipated the subjectmatter of operative claim 9.

It was further derivable from the information contained in each of D9, D15, D16, that examples 10, 3 and 5, and 7 to 9 thereof, respectively, were according to the invention defined therein. Therefore, the combination of each of those examples with the general teaching provided in those documents regarding the use in extrusion or injection moulding applications anticipated the subject-matter of operative claim 1.

For those reasons, the subject-matter of claims 1 and 9 was not novel.

First auxiliary request

(f) The combination of features according to claim 1 was not directly and unambiguously derivable from - 17 - T 1810/14

the application as filed and was, thus, not allowable pursuant to Article 123(2) EPC.

Second auxiliary request

- (g) The combination of features according to claim 1 was not directly and unambiguously derivable from the application as filed and was, thus, not allowable pursuant to Article 123(2) EPC.
- (h) The requirements of Article 84 EPC were not met for the following reasons:
- The meaning of the expression "consisting essentially of" (operative claims 1 and 9) was unclear.
- Claim 2 was unclear because it did not add any limitation to claim 1.
- The added feature as compared to the main request only defined that at least 10 g of precursor material should be selected, but it was not clearly indicated whether that amount had to be used in the extrusion or injection moulding apparatus.
- (i) Considering that the added feature "at least 10g" was implicitly disclosed in each of the novelty destroying pieces of prior art retained against the main request, the requirements of Article 54 EPC were not satisfied for the same reasons as for the main request.

The feature "having a wall" as defined in claim 9 was also implicitly satisfied by all the components obtained in the disclosures of D7, D13, D15 and D18

- 18 - T 1810/14

which were held to anticipate the subject-matter of claim 1 of the main request.

Therefore, the subject-matter of claims 1 and 9 was not novel.

Late-filed documents - Admittance

(j) D23/D23T and D24/D24Ta were retrieved by a further search, also for other files and were obtained owing to the improvement of the searching tools within respondent 2's organization, in particular in respect of prior art in the Japanese language. Those documents were submitted at the first possible opportunity.

D23/D23T and D24/D24T disclosed the processing via extrusion and injection moulding of (filled) compositions of polyetheretherketones having an intrinsic viscosity of 0.8 dl/g, which was according to D18 to be equated with a melt viscosity of 0.09 $\rm kNsm^{-2}$.

Therefore D23/D23T and D24/D24T were $prima\ facie$ highly relevant and should be admitted to the proceedings.

XV. The appellant requested that the decision under appeal be set aside and that the case be remitted to the department of first instance for further prosecution on the basis of any of the main request or the first to seventh auxiliary requests, all requests filed with letter dated 20 September 2017.

The appellant also requested that D23 and D24 be not admitted into the proceedings.

- 19 - T 1810/14

Respondents 1 and 2 requested that the appeal be dismissed.

Respondent 2 also requested that D23, D24 and D25 be admitted into the proceedings.

Reasons for the Decision

Main request

- 1. Rule 80 EPC
- 1.1 According to Rule 80 EPC, the claims of a granted patent may be amended, provided that the amendments are occasioned by grounds for opposition under Article 100 EPC.
- 1.2 Operative claim 1 corresponds to granted claim 1 whereby the definition of the precursor material was limited to two alternatives in particular by specifying that it either i) consists essentially of a specific polyetheretherketone (alternative 1) or ii) is a composite material (alternative 2) as defined therein. It was not disputed by the parties that alternatives 1 and 2 are directed to two distinct embodiments i.e. that the subject-matter of claim 1, although it is drafted as a single independent claim, in fact corresponds to two independent claims. The question which has to be answered is whether that amendment is an appropriate and necessary response by the appellant in the sense that it can fairly be said to be occasioned by grounds for opposition.

- 20 - T 1810/14

1.2.1 It was not disputed that several novelty and inventive step objections were put forward against granted claim 1 by the respondents during the opposition proceedings. In particular, novelty objections were raised e.g. by respondent 2 in respect of examples 5, 8 and 17 of D15, which are related to polymer blends. It is further derivable e.g. from claim 1 of D7 that the compositions disclosed therein comprise two different polymeric materials.

In the Board's view, both alternatives now defined in claim 1 of the main request are attempts made by the appellant to distinguish the subject-matter being claimed *inter alia* from those compositions of D15 and D7 for the following reasons:

- "consists essentially" of polyetheretherketone homopolymer. In that respect, the term "consists essentially" allows for the presence of other components in addition to the components mandatory in the claim, provided that the essential characteristics of the claimed composition are not materially affected by their presence (see Case Law of the Boards of Appeal of the EPO, 8th edition, 2016, II.A.6.2). Therefore, alternative 1 aims at conferring novelty over the compositions of D15 and D7 comprising more than one polymer as essential components;
- alternative 2: the material composite of claim 1 includes a single type of polymeric material which is polyetheretherketone. In that respect the wording of alternative 2 "includes 30 to 80 wt% of a single type of polymeric material, ... wherein said polymeric material is ... and is polyetheretherketone

- 21 - T 1810/14

homopolymer" excludes the presence of any other polymeric material, contrary to respondent 1's view (letter of 10 March 2015, last paragraph).

Therefore, both alternatives of claim 1 as amended effectively constitute an appropriate response at least to some attacks put forward by the respondents against granted claim 1.

1.2.2 The respondents argued in addition that the composite materials now defined in the second alternative of claim 1 were not covered by those according to granted claim 1 and covered a completely different subjectmatter whose introduction is not related to a ground of opposition.

However, considering that:

- granted claim 1 was drafted using an open formulation "said precursor material comprises a polymeric material ...);
- the patent specification was explicitly directed to composite materials (paragraphs 10, 25, examples 7a-c, 8a-g, 9a, 10a, 16a-e).

the scope of protection of granted claim 1 encompasses methods using composite materials as now defined in alternative 2 of claim 1.

During the oral proceedings before the Board respondent 1 argued that since the term "composite material" had a specific meaning and was to be distinguished from polymer compositions comprising fillers, alternative 2 was not encompassed by granted claim 1. However, no evidence in support of that

- 22 - T 1810/14

submission was provided by respondent 1. Besides, although two main embodiments directed to either the polymeric material per se or to composite materials are indicated throughout the application as filed (page 5, lines 18-20 and 24-25; page 14, lines 5-12; page 18, lines 14-16; examples directed either to precursor materials consisting of a single polymer or to highly filled compositions comprising a single polymer), it was not shown that any specific meaning was given to the term "composite material". More important, it was not shown that a composite material defined according to claim 1 of the main request would not be encompassed by the open formulation of granted claim 1 "wherein said precursor material comprises a polymeric material...". Therefore, that argument is rejected.

In that respect, it is further noted that parts of the application as filed directed to composite materials (e.g. nature of the fillers) were deleted from the description during the examination phase. However, in the Board's view, it is derivable from paragraphs 10 and 25 of the patent in suit together with examples 7a-c, 8a-g, 9a, 10a, 16a-e of the patent in suit, which are indicated to be according to the invention (see paragraph 35 of the patent in suit), that methods comprising selecting a precursor material which is a composite material as now defined in operative claim 1 are effectively supported by the disclosure of the patent in suit as a whole and, thus, encompassed by granted claim 1. Therefore, those passages of the patent specification show that alternative 2 of operative claim 1 (composite material) was encompassed by granted claim 1.

In view of the above, alternative 2 of claim 1 does not amount to adding a new independent claim, the subject-

- 23 - T 1810/14

matter of which is completely different from that of the granted claims, as argued by respondent 1. In particular, it cannot be concluded that such subject-matter was not searched or is a completely new embodiment, as argued by the respondents. Indeed, that subject-matter being encompassed by the granted claims and explicitly contained in the application as filed, it should have been searched and examined.

Therefore, it cannot be agreed with the respondents that the second alternative of claim 1 was not covered by granted claim 1. Rather, in view of the above, both alternatives now defined in claim 1 constitute two different areas comprised within the scope of granted claim 1.

- 1.3 It is correct that the addition of further independent claims may normally be objected to under Rule 80 EPC as was ruled in T 993/07 (point 1.7 of the reasons), T 263/05 (OJ EPO 2008, 329: points 4.7 and 4.8 of the reasons), T 181/02 (point 3.2 of the reasons) and T 610/95 (point 2.1 of the reasons). However, it may also be derived from the above passages of T 181/02 and T 610/95 that, in some cases, the replacement of a granted single independent claim by two independent claims may be allowable e.g. in cases where a granted independent claim covers two specific embodiments. Such cases are for instance illustrated in T 181/02 (point 3.2 of the reasons) and T 263/05 (points 4.7 and 4.8 of the reasons). The Board is of the opinion that the present case is, as explained in previous sections 1.2.1 to 1.2.3, another example of this situation.
- 1.4 In view of the above, the amendments made in operative claim 1 (as compared to granted claim 1) constitute a reasonable response by the appellant to try to avoid

- 24 - T 1810/14

revocation of the patent, in the sense that they can fairly be said to be occasioned by grounds of opposition put forward in respect of granted claim 1.

- 1.5 For similar reasons, the same conclusion is reached in respect of operative claim 9, for which the amendments made in granted claim 15 are occasioned by a novelty objection over D9.
- 1.6 Therefore, the requirements of Rule 80 EPC are met.
- 2. Article 123(3) EPC
- 2.1 Article 123(3) EPC precludes amending the claims during opposition proceedings in such a way as to extend the protection conferred by the patent as granted.

 Therefore, in order to decide whether or not an amendment of the patent in suit satisfies the requirements of Article 123(3) EPC it is necessary to compare the protection conferred by the granted claims with that of the operative claims after amendment.
- 2.2 The respondents argued that alternative 2 of claim 1 was not encompassed by the scope of granted claim 1.
 - However, alternative 2 of operative claim 1 is an embodiment of granted claim 1 for the reasons indicated in section 1.2.2 above.
- 2.3 Making reference to T 1149/97 respondent 2 argued that alternative 2 of claim 1 infringed the requirements of Article 123(3) EPC because it amounted to reinserting subject-matter which had been deliberately deleted from the text of the granted patent ("cut off effects").

- 25 - T 1810/14

However, the conclusion of T 1149/97 was reached because it was held that the embodiments being claimed in the amended patent were not covered by the granted claims (points 6.1.13 and 6.1.14 of the reasons), which was forbidden by Article 123(3) EPC which was in particular governed by the guiding principle that "once a European patent has been granted, an act by a third party which would not infringe the patent as granted should not be able to become an infringing act as a result of amendment after grant" (last paragraph of section 6.1.10 of the reasons). In the present case, as indicated in section 1.2.2 above, alternative 2 is comprised within the scope of granted claim 1. Therefore, the factual situation of the present case is different from that of T 1149/97.

2.4 Respondent 2 argued in addition that claim 9 of the main request extended the protection covered by the patent.

However, the subject-matter of claim 9 is a limitation of granted claim 15 to precursor materials which consist essentially of a polymeric material which is a polyetheretherketone homopolymer with an upper limit for the MV of $0.10~\rm kNsm^{-2}$ and melt processing by extrusion/injection moulding as treating method (B).

- 2.5 For those reasons, the requirements of Article 123(3) EPC are satisfied.
- 3. Article 123(2) EPC
- 3.1 According to standard jurisprudence an amendment is to be regarded as introducing subject-matter extending beyond the content of the application as filed, and hence unallowable, if the overall change in the content

- 26 - T 1810/14

of the application/patent results in the skilled person being presented with information that is not directly and unambiguously derivable from the information presented by the application as filed (Case Law, *supra*, II.E.1).

- 3.2 The respondents argued that claims 1 and 9 did not satisfy the requirements of Article 123(2) EPC.
- 3.3 Alternative 1 of claim 1

The subject-matter of claim 1 corresponds to the specific disclosure of the method according to page 18, lines 4-9 of the application as filed (which is an embodiment of the method disclosed in a general manner at page 17, lines 18-30) with the further following limitations:

- the precursor material should consist essentially of a polymeric material;
- the polymeric material should be a polyetheretherketone homopolymer;
- the melt viscosity should be in the range specified in claim 1.

The use of a precursor material which consists essentially of a polymeric material is disclosed at page 18, lines 14-15 of the application as filed with reference to the same embodiment and within a list of two alternatives (the other being a precursor material consisting essentially of a composite material).

The amendment directed to "polyetheretherketone" is further derivable from page 18, lines 1-2 of the application as filed where it is disclosed as the preferred polymeric material within the same embodiment. It is true that the term "homopolymer" is

- 27 - T 1810/14

not indicated therein and that it may be derived from the information provided e.g. at page 11, lines 15-20 of the application as filed that the term "polyetheretherketone" as used in the application as filed was not mandatorily limited to homopolymers only (different groups Ar representing moiety (iv) bonded at different positions on the benzene ring could be contemplated, as argued by respondent 1 during the oral proceedings before the Board). However, the use of polyetheretherketone homopolymer is also disclosed as an especially preferred embodiment at page 13, lines 24-25 of the application as filed (taking into account page 17, lines 30-31 of the application as filed) and in the examples thereof (see in particular the preparation method of example 1).

The only additional limitation is the range of melt viscosity of 0.05 to $0.10~\rm kNsm^{-2}$. Although this range is not disclosed *per se* in the application as filed, it may be obtained from the combination of the end points of the ranges disclosed at page 17, lines 22-24 of the application as filed still in the context of the embodiment under consideration.

In view of the above, the subject-matter of alternative 1 of claim 1 is based on the combination of passages of the application as filed which are all related to the "fifth aspect" of the application as filed, mainly as preferred features thereof.

Said combination of features is further illustrated, at least for the embodiments of claim 1 directed to a method employing injection moulding, by examples 5a, 5c, 5e and 5g (the melt viscosity of the blend of polyetheretherketone is 0.09 kNsm⁻² as indicated in Table 2, example 4d at page 23) and examples 6a to 6g

- 28 - T 1810/14

of the application as filed.

In view of the above, it is concluded that in the circumstances of the present case, the application as filed contains some pointers to the combination of features now being specified in alternative 1 of claim 1 so that the subject-matter so defined emerges from the application as filed and does not result in the presentation of new technical information (Case Law, supra, II.E.1.4.1).

3.4 Alternative 2 of claim 1

The same conclusion as in respect of alternative 1 is reached in respect of alternative 2 of claim 1 when starting from the disclosure at page 18, lines 14-15 of the application as filed (this time choosing the "composite material" among the two alternatives specified therein) and further considering the definition of the composite material according to the passage at page 15, lines 18-27, which indicates that the composite material preferably comprises polyetheretherketone as single polymeric material. In that respect, the combination of features of alternative 2 directed to injection moulding is further illustrated by examples 7a, 7c, 7e, 8a to 8c, 9a and 9b of the application as filed.

3.5 Claim 9

The same considerations as for claim 1 are valid considering the disclosure at page 19, lines 13-15 of the application as filed, whereby it is further indicated in the passages at page 18, lines 22-23 that the method described as the sixth aspect is based on the method of the fifth aspect. Therefore, starting

- 29 - T 1810/14

from page 19, lines 13-15, the subject-matter of claim 9 may be arrived at by limiting the precursor material to a polymeric material essentially consisting of polyetheretherketone homopolymer.

- 3.6 For those reasons, the requirements of Article 123(2) EPC are satisfied.
- 4. Article 84 EPC
- As indicated in section 1.2.1 above, the meaning of the expression "consisting essentially of" (operative claims 1 and 9), which was objected to by the respondents, has an accepted and clear meaning in the art.
- 4.2 Regarding operative claim 2, it formally excludes the endpoint of the range of MV defined in claim 1 (0.10 kNsm⁻²). Therefore, the respondents' objection according to which said claim 2 did not add any limitation to claim 1, is not convincing.
- 4.3 For those reasons, the respondents' objections are rejected.
- 5. Documents D22 and D25 Admittance

In the absence of any objections regarding the admittance to the proceedings of D22 (filed with the appellant's statement of grounds of appeal) and D25 (filed with respondent 2's letter of 1 September 2017), there is no reason for the Board not to admit those documents. D22 and D25 are, thus, in the proceedings.

6. Article 54 EPC - Claim 1, alternative 1

- 30 - T 1810/14

- 6.1 Documents D7, D13, D15 and D18
- 6.1.1 The following passages of D7, D13, D15 and D18 disclose the determination of melt viscosity of polyetheretherketone homopolymers in a test apparatus and using extrusion:
 - page 4, lines 41-45 of D7, which is directed to a polyetheretherketone (formula (5)) with a melt viscosity of 500 to 3800 poise i.e. 0.05 to 0.38 kNsm⁻²;
 - example 7a of D13, which discloses a polyetheretherketone having a melt viscosity of 0.051 kNsm⁻² measured at 400°C at a shear rate of 1000 s⁻¹ by extrusion according to ASTM D1238 (page 26, lines 23-25 and table at the top of page 27; see also reference to example 3 i.e. page 17, lines 19-23);
 - example 3 of D15 (paragraph bridging pages 18 and 19), which is directed to a polyetheretherketone having a melt viscosity of 0.91 kNsm⁻² measured on an extruder (as indicated on page 17, lines 23-25);
 - page 1994 (under the heading "Melt Viscosity") and table 1 of D18, wherein a PEEK homopolymer PEEK-2 is disclosed, which has a melt viscosity of 0.09 kNsm⁻² as determined using a capillary rheometer, which is an extruder.
- 6.1.2 It is shown in D25 that the determination of the melt viscosity of a polyetheretherketone homopolymer having a melt viscosity in the range defined in operative claim 1 using a capillary rheometer operating at 400°C and at a shear rate of 1000s⁻¹ through a cylindrical

- 31 - T 1810/14

capillary die of $0.5 \times 3.175 \text{mm}$ leads to extrudates in the form of a long filament having a specific shape since it is predetermined by the die of the extrusion apparatus used to perform the measurement.

In the absence of any statement in D25 or any evidence provided by the appellant in that respect, there is no reason to consider that the determination method carried out in D25 was intentionally modified by its authors in order to achieve the filament shown therein, as argued by the appellant during the oral proceedings before the Board. Therefore, the appellant's argument does not convince.

In view of the above, D25 shows that the determination methods of melt viscosity of polyetheretherketone homopolymers in a test apparatus by extrusion as reported in the above passages of D7, D13, D15 and D18 constitute a disclosure of a method of making a component by extrusion comprising a precursor material as defined in alternative 1 of operative claim 1.

- 6.1.3 The appellant argued that it was shown in D22 that carrying out a melt viscosity measurement of polyetheretherketone polymers resulted in waste extrudates, which were not "components" in the sense of operative claim 1.
 - (a) However, neither the operative claims nor the patent specification contain a definition or limitation regarding the term "component". In particular there is no indication that a "component" should be limited to "a part of a machine, apparatus etc. having commercial or industrial use" as argued by the appellant. Besides, the question whether or not an article is

intended to be used as a part of a larger whole or not does not characterise mandatorily the product per se. Therefore, it may not be held that the term "component" implies any limitation related to the use made thereof as argued by the appellant.

- 32 -

(b) It is noted that claim 1 is not merely related to "a component" but to "a method of making a component" which in particular comprises a step of "extruding or injection moulding (...) in an extrusion or injection moulding apparatus". Therefore, the wording of the claim per se implicitly defines that an article or product is made, whereby the polymeric material has to be given a certain desired form.

However, it was shown in D25 that the determination method of melt viscosity leads to such an article. Although the appellant argued that it was also shown in D22 (see in particular Figure 1) that the product thus obtained is a small filament with an undefined shape, the appellant could not explain, in particular during the oral proceedings before the Board, why the extrudates shown in Figures 1 and 2 of D22 were so different from each other (whereas Figure 1 shows a small rod with undefined shape, Figure 2 shows a long filament very similar to that of D25). Also, no information regarding the nature of the polyetheretherketone or the exact methodology used in D22 was provided in reply to respondent 2's objections in that respect (letter of 4 August 2017: bottom of page 8; letter of 1 September 2017: bottom of page 2). Under such circumstances, the information provided in D22 does not allow the Board to overturn the opposition division's conclusion according to which the method - 33 - T 1810/14

of determination of melt viscosity identified above in each of D7, D13, D15 and D18 is a "method of making a component" whereby a precursor material consisting of polyetheretherketone homopolymer is extruded in an extrusion apparatus according to operative claim 1. Nor can it overturn the Board's conclusion reached from D25 (section 6.1.2 above).

- 6.1.4 In view of the above, the subject-matter of alternative 1 of operative claim 1 is anticipated by each of the passages of D7, D13, D15 and D18 identified in above section 6.1.1.
- 6.2 Document D9
- 6.2.1 The respondents' objection directed to alternative 1 of operative claim 1 is based on the combination of example 10 of D9 (page 20), which discloses a polyetheretherketone having an intrinsic viscosity of 0.67 with the passages at page 14, lines 30-33 and page 15, line 3 in which it is taught that the compositions of D9 may be extruded. In that respect the appellant acknowledged that the polyetheretherketone prepared in example 10 of D9 had a melt viscosity of 0.09 kNsm⁻² (statement of grounds of appeal: page 15, second paragraph below the Table) i.e. within the range of operative claims 1 and 9.
- 6.2.2 However, it is derivable from D9 as a whole that the aim of that invention was to prepare polymers having a sufficient toughness (claim 1, which makes specific reference to "tough" polymers; page 1, lines 14-22; examples). The toughness test which is used in D9 is detailed at page 6, lines 8-23 of D9, whereby it is stated that "if the film survives this treatment without breaking ... it is deemed to be tough; if not it

- 34 - T 1810/14

is deemed to be brittle". In the footnote of the table at page 20 of D9, it is further acknowledged in respect of example 10 that "some parts of the film surviving test but other parts failing", which led to the rating "Borderline of toughness" for that sample. In view of the above it is derivable from D9 that the polyetheretherketone prepared in example 10, which did not completely pass the toughness test, is not unambiguously disclosed as being according to the invention of D9. Therefore, also the combination of said example with the general teaching of D9 regarding the possible use of the compositions according to the invention indicated at pages 14 and 15 thereof is not directly and unambiguously disclosed.

- 6.2.3 Under those circumstances, the considerations of the respondents regarding the rounding up and/or the accuracy of the values of inherent viscosity and/or reduced viscosity disclosed in D9 and whether or not those values satisfy the requirements defined in D9 (page 1, lines 18-22; page 2, lines 5-20; page 14, lines 3-7; example 10 in Table 1) are not relevant.
- 6.3 Document D15
- 6.3.1 The additional respondents' objection based on D15 and directed to alternative 1 of operative claim 1 is based on the combination of either example 3 or example 5 with the passage at page 7, lines 21-25 of D15.
- 6.3.2 Example 3 of D15 is directed to a polyetheretherketone having a melt viscosity of 0.091 kNsm⁻² measured on an extruder (as indicated on page 17, lines 23-25).

According to page 18, line 18 to page 19, line 2 of D15, "no significant effect on the crystallisation

properties was observed" for said example 3. Considering that a crucial aspect of D15 is to provide polymeric chains such as polyetheretherketones with specific terminal groups in order to increase their crystallisation rate (claim 1; page 1, lines 2-4 and 28-35; page 7, lines 21-30) and that it is explicitly indicated that the passage at page 7, lines 21-25 of D15 which is related to injection moulding concerns "compositions of the invention which crystallise more rapidly than a polyetherketone composition not containing the ionic end group", it is questionable that example 3 of D15 effectively provides the increased crystallisation properties mentioned at page 7, lines 25 in combination with the general teaching related to wire coating. Under such circumstances, the combination of example 3 with the general teaching at page 7, lines 23-25 of D15 is not directly and unambiguously disclosed therein.

In that respect, considering that the passage at page 7, lines 21-25 is based on a condition (increased crystallisation rate) which is not unambiguously disclosed as being satisfied in example 3 (following the statement that "no significant effect on the crystallisation properties was observed"), the fact that example 3 of D15 falls under claim 1 of D15 does not affect the above conclusion, contrary to the respondents' view.

6.3.3 Example 5 of D15 is directed to a blend of (a) 9 parts of a polyetheretherketone having a molecular weight by number Mn of 12,000 and (b) 1 part of a product of Example 4.

Considering that it is shown in the table on page 20 that at least some the properties of (a) alone are

- 36 - T 1810/14

significantly modified by the addition of (b) (see e.g. parameter Tc), the blend of (a) and (b) is not a composition "consisting essentially" of a polyetheretherketone homopolymer as defined in operative claim 1. Therefore, the combination of example 5 of D15 with another passage of the description of D15 cannot anticipate alternative 1 of the subject-matter being claimed, which is limited to selecting a precursor material "consisting essentially of" a polyetheretherketone homopolymer.

6.4 Document D16

- 6.4.1 The respondents' objection directed to alternative 1 of operative claim 1 is based on the combination of examples 7 to 9 with the passages of paragraphs 13 and 14 of D16 which indicate that the polyetheretherketone prepared in D16 have excellent thermal stability and are inherently melt processable, thus making those polymers "mouldable, extrudable and useful as a plastic".
- 6.4.2 However, it is derivable from paragraphs 43 and 44 of D16 that examples 7 to 9 of D16 concern a study on the effect of temperature on the reaction conditions, whereby it is shown that 60°C is the ideal working temperature in order to achieve a reasonable molecular weight within a limited period of time (12h). Whereas the polyetheretherketone prepared in example 3 had an inherent viscosity of 0.79 dl/g, those of examples 7 to 9, performed at 40°C, 80°C and 100°C instead of 60°C, exhibited an inherent viscosity of 0.60 dl/g, 0.40 dl/g and 0.21 dl/g, respectively.

It is further noted that the polyetheretherketones prepared in examples 7 to 9 of D16 all have an inherent

- 37 - T 1810/14

viscosity lower than that of the composition according to example 3 of D16 (carried out at 60 °C: see page 6, line 48 and paragraph 37; inherent viscosity of 0.79 dl/g: page 6, line 50). Also, it is further indicated at paragraph 29 of D16 that "this process not only produces PEEK of high enough IV to be of practical interest but also...", which indicates that a minimum inherent viscosity (IV) is required for a polyetheretherketone to be of interest in the authors' view. It is further indicated in paragraphs 2 and 3 of D16 that polyetheretherketone prepared according to a different process than that of D16 could not be used as a moulded plastic due to their low molecular weight, indicated as corresponding to an inherent viscosity below 0.7 dl/g. Under those circumstances, it cannot be concluded that it is directly and unambiguously derivable from D16 that the PEEK prepared in examples 7 to 9 of D16 were indeed extruded or injection moulded or were even taught to be extrudable as mentioned in paragraph 14 of D16.

In view of section 6.1 above, the subject-matter of operative claim 1, alternative 1, is not novel over each of the passages of D7, D13, D15 and D18 identified in section 6.1.1 above. However, the respondents' novelty objections in respect of D9, D15 (combination of examples 3 or 5 with page 7, lines 21-25) and D16 are rejected.

- 38 - T 1810/14

First auxiliary request

- 7. Article 123(2) EPC
- 7.1 Auxiliary request 1 differs from the main request in that the expression "wherein the polymeric material or the composite material is provided in a pack including at least 1kg of the polymeric material" was added at the end of claim 1.
- 7.2 Said expression is indicated in a general manner and for both alternatives 1 and 2 at page 5, lines 8-11 and 18-20 of the application as filed.
- 7.3 However, said passages of the application as filed are directed to the "first aspect" of the application as filed, namely "a pack comprising a polymeric material" as defined e.g. in original claim 1 or at page 3, lines 5-17. Therefore, the combination of features specified in claim 1 can only be arrived at by combining said passages related to the "first aspect" of the invention with the other passages of the application as filed directed to the "fifth aspect" of the invention ("method of making a component comprising extruding or injection moulding a polymeric material") identified in above section 3.3. No passage of the application as filed was identified by the appellant to show that there was a direct and unambiguous connection between those specific passages related to either the "first aspect" or the "fifth aspect". In that respect, it is in particular noted that the feature which has now been added is not disclosed in the examples of the application as filed and it is not apparent what relationship it may have with a method of making a component according to the fifth aspect of the invention. Under such circumstances, the combination of

- 39 - T 1810/14

features now defined in claim 1 can only be arrived at by artificially creating an embodiment by combining various passages of the application as filed which were originally directed to separate embodiments. Such a combination cannot be held to amount to a disclosure which is directly and unambiguously derivable from the application as filed (see Case Law, supra, II.E.1.4.1).

Therefore, claim 1 of the first auxiliary request is not allowable pursuant to Article 123(2) EPC.

Second auxiliary request

- 8. Article 123(2) EPC
- 8.1 Auxiliary request 2 differs from the main request in that the expression "at least 10 g of" was added after "selecting" and before "a precursor material" in claim 1.
- 8.2 Said expression is indicated in a general manner within the part of the description related to the "fifth aspect" at page 18, lines 18-20 of the application as filed. Said passage is further disclosed on page 18 of the application as filed between two other paragraphs providing a support for other parts of operative claim 1 and as an especially preferred embodiment of the "fifth aspect": therefore, that passage of the application as filed constitutes a pointer, which, in combination with the other passages of the application as filed identified in respect of claim 1 of the main request (see section 3.3) results in the combination of features now present in claim 1 emerging from the application as filed.

- 40 - T 1810/14

- 8.3 For those reasons, the respondents' objection pursuant to Article 123(2) EPC is rejected.
- 9. Article 84 EPC
- 9.1 The same conclusions as indicated in sections 4.1 and 4.2 in respect of the main request are valid for the second auxiliary request.
- 9.2 In addition, in the Board's view, the wording of claim 1 "from which to make said component" defines that the "at least 10g" of precursor material mentioned in claim 1 are to be used in the extrusion or injection moulding apparatus.
- 9.3 Therefore, the respondents' objections pursuant to Article 84 EPC are rejected.
- 10. Article 54 EPC
- 10.1 In the absence of any evidence that the determination methods of melt viscosity disclosed in the passages of D7, D13, D15 and D18 which were found to anticipate the subject-matter of claim 1 of the main request (see above section 6.1.1) were effectively carried out using "at least 10g" of precursor material as now defined in claim 1, it cannot be concluded that that feature is mandatorily satisfied in those prior art documents.

Consequently, novelty of alternative 1 of claim 1 over the passages of each of D7, D13, D15 and D18 identified in section 6.1.1 above, has to be acknowledged.

10.2 For the same reasons as for the main request (see above sections 6.2 to 6.4) the novelty objections in respect of D9, D15 (combination of examples 3 or 5 with page 7,

- 41 - T 1810/14

lines 21-25) and D16 submitted in writing by the respondents against alternative 1 of claim 1 are rejected.

10.3 The subject-matter of claim 9 is directed to a method of making a component "which has a wall which includes a region having a thickness of 3mm or less".

In that respect, the patent in suit does not provide any limitation in respect of the definition of the term "wall". Under those circumstances, the normal rule of claim construction is that the terms used in a claim should be given their broadest technically sensible meaning in the context of the claim in which they appear.

In the present case, the term "wall" is read as meaning that the "component" being made by the method of claim 9 must exhibit a region having one dimension which is significantly smaller than the other two dimensions (which effectively defines the thickness of said "wall").

Considering that the extrudates obtained by a method of determination of melt viscosity by extrusion according to any of D7, D13, D15 and D18 (see above section 6.1.1) were shown to be in the form of a filament, which does not have such "a wall", those documents do not anticipate the subject-matter of claim 9.

10.4 The subject-matter of claim 9 is further novel over each of D9, D15 (combination of examples 3 or 5 with page 7, lines 21-25) and D16 for the same reasons as regarding claim 1 of the main request (see above sections 6.2 to 6.4), namely because for each of those documents, the combination of the examples and a

- 42 - T 1810/14

passage of the description contemplated by the respondents is not directly and unambiguously derivable from those documents.

10.5 For those reasons, the respondents' novelty objections did not succeed.

Admittance of late-filed documents

- 11. After the communication of the Board setting out its preliminary view of the case had been received, respondent 2 submitted with letter of 4 August 2017 the new documents D23/D23T and D24/D24T. Considering that the filing of those documents represents an amendment to a party's case pursuant to Article 13(1) RPBA, the admission to the proceedings of D23/D23T and D24/D24T is subject to the Board's discretion (Article 13(1) RPBA) and underlies the additional stipulations of Article 13(3) RPBA.
- 11.1 Regarding the late filing, it was not contested by respondent 2 that those documents were available to the public and could have been retrieved earlier. The explanations provided by respondent 2 according to which a further search, also for other files, and the improvement of the searching tools within respondent 2's organization in particular to retrieve prior art in the Japanese language cannot justify the filing of prior art documents at such a late stage. Also, there was no surprising development of the case which could justify an additional search.
- 11.2 Regarding the relevance, respondent 2's objection was based on the argument that some examples of D23/D23T and D24/D24T disclosed the processing via extrusion and injection moulding of (filled) compounds of

- 43 - T 1810/14

polyetheretherketone having an intrinsic viscosity of $0.8 \, \mathrm{dl/g}$, which was according to D18 (Tables 1 and 5) to be equated with a melt viscosity of $0.09 \, \mathrm{kNsm^{-2}}$.

However, it was convincingly explained by the appellant that it is doubtful whether the viscosities disclosed in the examples of D23/D23T and D24/D24T are "inherent viscosities" or "intrinsic viscosities" (see appellant's argument on page 5 of their letter dated 20 September 2017). Therefore, the correlation between the viscosity values indicated in D23T and D24T and melt viscosity based on the data of D18 which was made by respondent 2 is also doubtful and would require a careful investigation.

It is further noted that, during the oral proceedings, the appellant contested the validity of the translation of D23 and D24 (both in Japanese) filed as D23T and D24T.

11.3 In view of the above, the admission to the proceedings of D23/D23T and D24/D24T would raise new issues, which would require to provide sufficient time for the appellant to prepare appropriate lines of defense. This, however, runs counter to the need for procedural economy. Besides, those new issues could not reasonably be expected to be dealt with by the appellant or the Board without adjournment of the oral proceedings.

For those reasons, the Board does not admit D23/D23T and D24/D24T to the proceedings pursuant to Article 13(1) and (3) RPBA.

- 44 - T 1810/14

12. Remittal

The issue of inventive step was not addressed in the contested decision. Further considering that the appellant requested remittal to the first instance, which was not objected to by the respondents, the Board finds it appropriate to remit the case to the department of first instance for further prosecution (Article 111(1) EPC).

Order

For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The case is remitted to the department of first instance for further prosecution on the basis of the second auxiliary request filed with letter dated 20 September 2017.

The Registrar:

The Chairman:



B. ter Heijden

D. Semino

Decision electronically authenticated