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# Datasheet for the decision of 11 February 2021

**Case Number:** T 3272/19 - 3.3.03

**Application Number:** 10185812.4

**Publication Number:** 2277946

**IPC:** C08L33/04

**Language of the proceedings:** EN

**Title of invention:**
ACRYLIC BLENDS

**Patent Proprietor:**
Lucite International UK Limited

**Opponent:**
ARKEMA FRANCE

**Relevant legal provisions:**
EPC Art. 54, 76(1), 100(b), 111(1), 112(1), 123(2)
RPBA 2020 Art. 11, 12(4), 13(2)

**Keyword:**

Amendment to case - amendment admitted (yes)
Grounds for opposition - added subject-matter (no) - insufficiency of disclosure (no)
Divisional application - added subject-matter (no)
Novelty - novelty of use - second (or further) non-medical use (no: main request and auxiliary requests 1 to 4)
Referral to the Enlarged Board of Appeal - (no)
Remittal (yes)

**Decisions cited:**

G 0002/88, G 0001/06, G 0002/10, G 0003/14, T 0059/87, T 0279/93, T 0892/94, T 0189/95, T 1855/06

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**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 3272/19 - 3.3.03**

# D E C I S I O N
# of Technical Board of Appeal 3.3.03
# of 11 February 2021

| | |
|---|---|
| **Appellant:** (Opponent) | ARKEMA FRANCE<br>Département Propriété Industrielle<br>420, rue d'Estienne d'Orves<br>92700 Colombes (FR) |
| **Representative:** | Arkema Patent<br>Arkema France<br>DRD-DPI<br>420, rue d'Estienne d'Orves<br>92705 Colombes Cedex (FR) |
| **Respondent:** (Patent Proprietor) | Lucite International UK Limited<br>Cumberland House<br>15-17 Cumberland Place<br>Southampton<br>Hampshire SO15 2BG (GB) |
| **Representative:** | Appleyard Lees IP LLP<br>15 Clare Road<br>Halifax HX1 2HY (GB) |
| **Decision under appeal:** | **Interlocutory decision of the Opposition Division of the European Patent Office posted on 8 October 2019 concerning maintenance of the European Patent No. 2277946 in amended form.** |

**Composition of the Board:**

| | |
|---|---|
| **Chairman** | D. Semino |
| **Members:** | O. Dury |
| | W. Ungler |

## Summary of Facts and Submissions

I. The appeal of the opponent is against the interlocutory decision of the opposition division posted on 8 October 2019 concerning maintenance of European patent No. 2 277 946 in amended form according to the claims of the main request as filed during oral proceedings on 4 July 2019. The application on which the patent is based was filed as divisional application No. 10 185 812.4 of parent application No. 06 726 789.8, which was filed as an international application, published as WO 2006/114 576.

II. Said main request comprised 13 claims, of which claims 1, 8 and 9, which are the sole claims relevant to the present decision, read as follows (whereby the features of claim 1 are presented separately by the Board to facilitate the reading):

"1. Use of an acrylic composition comprising a melt blend of a thermoplastic high molecular weight acrylic material (HMWA) and a thermoplastic low molecular weight acrylic material (LMWA),

at least 70% w/w, based on the total weight of the HMWA, of the said HMWA comprising an alkyl (alk)acrylate (co)polymer, the said (co)polymer comprising at least 80% w/w of a first polymer unit derived from $C_1$-$C_{12}$ alkyl ($C_1$-$C_8$ alk)acrylate monomer units and optionally, up to 20% w/w, based on the said alkyl (alk)acrylate (co)polymer of a first copolymer unit derived from $C_1$-$C_{12}$ alkyl($C_0$-$C_8$ alk)acrylate and/or ($C_0$-$C_8$ alk)acrylic acid monomer units,

the said HMWA having a weight average molecular weight of between 40k Daltons and 1000k Daltons,

at least 70% w/w, based on the total weight of the LMWA, of the said LMWA comprising an alkyl(alk)acrylate (co)polymer, the said (co)polymer comprising at least 80% w/w of a second polymer unit derived from $C_1$-$C_{12}$ alkyl ($C_1$-$C_8$ alk)acrylate monomer units and optionally, up to 20% w/w, based on the said alkyl (alk)acrylate (co)polymer of a second copolymer unit derived from $C_1$-$C_{12}$ alkyl($C_0$-$C_8$ alk) acrylate and/or ($C_0$-$C_8$ alk)acrylic acid monomer units,

the said LMWA having a weight average molecular weight of between the entanglement molecular weight (Me) (expressed in k Daltons) and 250k Daltons,

with the proviso that the HMWA has a higher Mw than the LMWA,

to provide a high Tg melt blended composition or moulded polymer product, wherein the product is optionally impact modified."

"8. Use according to any preceding claim wherein the first polymer unit and the second polymer unit are the same."

"9. Use according to any preceding claim wherein the first copolymer unit and the second copolymer unit are the same."

III. A notice of opposition had been filed against the patent, requesting the revocation of the patent in its

entirety.

IV. The following documents were *inter alia* cited in the decision under appeal:

D1: WO 2006/114 576 (the parent application as published)
D3: EP 1 348 735
D4: EP 0 781 808
D9: WO 00/78863
D9a: AU 20066877 B2
D10: WO 2005/047392
D13: Declaration by Mr. P Eustace, dated 01-05-19

V. In the decision under appeal, the opposition division held *inter alia* that:

(a) The amendment "wherein the product is optionally impact modified" did not constitute added matter. A valid support therefor was in particular given in D1 (point 3 of the reasons).

(b) It was derivable from common general knowledge and from the patent specification that the requirement according to operative claim 8 that the first polymer unit and the second polymer unit be the same meant that the (co)polymers should be derived from identical monomer unit(s) rather than identifying two polymers being identical in each and every polymer property. Similar considerations applied for operative claim 9 (point 4.1 of the reasons).

In addition, although the term "high Tg" might be unclear, clarity was not a ground for opposition. Also, the skilled person was capable to distinguish

between materials having low and high Tg on the basis of common general knowledge and of the information of the patent specification (point 4.3 of the reasons).

For these reasons, among others, the requirements of sufficiency of disclosure were met.

(c) Regarding novelty (points 5.1, 5.2 and 5.3 of the reasons), the relative term "high Tg" was vague and could not "be used for making a detailed, reasonable novelty assessment". That requirement was in particular satisfied by the compositions prepared in example 4 of D3 and by the compositions according to D9 and D10.

In addition, considering that operative claim 1 was directed to a melt blend of two specific polymeric compounds, the case in hand differed from the case dealt with in G 2/88 (OJ EPO, 1990, 93), which concerned the recognition of a previously unknown property of a single compound. Therefore, the findings of G 2/88 had no relevance for the present case, contrary to the patentee's view.

Further considering that neither example 4 of D3, nor D9, nor D10 directly and unambiguously disclosed the requirements of claim 1 that Me< Mw of LMWA < 250 kDaltons, the novelty objections of the opponent were rejected.

Therefore, novelty over example 4 of D3 and over D9 and D10 was acknowledged.

(d) Regarding inventive step, D9 was the closest prior art document. However, D9 did not deal with the

technical problems underlying the operative claims, which were related to the matching of the improvement in melt flow (in comparison with a single polymer) whilst providing a "higher" Tg than the comparative single polymer, which meant that comparable processability could be maintained while providing reduced cycle times. In that respect, the patent in suit contained ample experimental evidence showing the beneficial results achieved by the subject-matter being claimed. Therefore, D9, on its own or in combination with e.g. D4, could not provide any information to modify its teaching for solving the problems indicated above. For these reasons, an inventive step was acknowledged.

Consequently, the opposition division decided that the patent could be maintained in amended form on the basis of the main request. In view of that decision, there was no need for the opposition division to deal with any of auxiliary requests 1-13 filed with letter of 2 Mai 2019.

VI. The opponent (appellant) appealed against the above decision. With the statement setting out the grounds of appeal filed with letter of 18 February 2020 the appellant requested that the decision of the opposition division be set aside and that the patent be revoked. The following document was also filed with the statement (said document was filed as D13 but renumbered D14 by the Board in view of document D13 already mentioned in the decision under appeal):

D14: Polymer Properties Database (polymerdatabase.com/polymer physics/Ne Table 2.html)

VII. With its response to the statement of grounds of appeal, the patent proprietor (respondent) requested that the appeal be dismissed (main request) or, in the alternative, that the patent be maintained in amended form according to any of auxiliary requests 1 to 13 filed therewith. Reference was in particular made to D13 and D9a and their admittance into the proceedings was requested.

Claim 1 of auxiliary request 1 differed from claim 1 of the main request in that the following features were inserted between "to provide a high Tg melt blended composition or moulded polymer product," and "wherein the product is optionally impact modified":

"wherein a high Tg is a Tg which is higher than that for a comparative copolymer with the same MFI which is derived from the same type and equivalent amount of $C_1$-$C_{12}$ alkyl($C_1$-$C_8$ alk) acrylate monomer(s) but a higher amount of $C_1$-$C_{12}$ alkyl acrylate monomer(s),"

VIII. In a communication dated 14 August 2020 accompanying the summons to oral proceedings the Board indicated specific issues to be discussed at the oral proceedings. The following points were in particular identified:

(a) In its statement of grounds of appeal, the appellant seemed to have raised an objection pursuant to Article 123(2) EPC but made reference to D1, which is the parent application as filed. Therefore, it appeared that the objection was rather an objection pursuant to Article 76 EPC (section 5.1);

(b) The feature "high Tg" specified in operative claim 1 was not a feature related to a specific use of the compositions defined in said claim 1 (i.e. leading to a new application) but rather appeared to constitute a property of said composition itself. In addition, the use referred to in operative claim 1 (melt blended compositions, moulded product) did not appear to be different from the one disclosed in the examples of D9 (first paragraph on page 9). Under these circumstances, it did not appear that the findings of G 2/88 could apply to the present case, i.e. it did not appear that the feature "to provide high Tg ..." was suitable to distinguish the claimed compositions from compositions of D9 disclosing the same compositions but not explicitly the feature "to provide high Tg ..." (section 7.4.1).

IX. With letter of 11 January 2021 the respondent filed a new auxiliary request and requested its admittance into the proceedings. It was to be numbered auxiliary request 2 and to be dealt with after auxiliary request 1 filed with the statement of grounds. Auxiliary requests 2 to 13 filed with the statement of grounds of appeal were filed again and renumbered auxiliary requests 3 to 14, respectively.

Claim 1 of auxiliary request 2 differed from claim 1 of auxiliary request 1 in that the following feature was inserted therein (after the proviso that the HMWA has a higher Mw than the LMWA):

"and wherein the first polymer unit and the second polymer unit are the same, ".

Claim 1 of auxiliary request 3 differed from claim 1 of

the main request in that the following features were added at the end of the claim:

", and wherein the acrylic polymeric composition comprises, based on the weight of the acrylic polymer composition, up to 55% w/w of LMWA and at least 40% w/w of HMWA".

Claim 1 of auxiliary request 4 differed from claim 1 of the main request in that it contained the amendments made in both auxiliary request 1 and auxiliary request 3.

Claim 1 of auxiliary request 5 (13 claims) differed from claim 1 of the main request in that the ranges defining the amount of both the first copolymer unit and the second copolymer unit were each amended to read "optionally, up to 8% w/w" (instead of "optionally, up to 20% w/w"). The wording of claims 8 and 9 was the same than the one of claims 8 and 9, respectively, of the main request.

In addition, the respondent filed the following documents and requested their admittance into the proceedings:

D15: Product Overview: Plexiglas® Molding Compounds, Plexiglas® 6N, 7N and 8N; one page
D16: Grades of Degalan Moulding Compounds: Degalan G6, G7 and G8; one page
D17: Lucite® Diakon® *Rapide*: key benefits; one page

Furthermore, the respondent requested that, should the Board maintain that the feature “high Tg” specified in claim 1 of the main request was not a feature related

to a specific use of the compositions defined in said claim 1 (i.e. leading to a new application) on the basis that it only constituted a property of the composition, then the following questions were to be referred to the Enlarged Board of Appeal:

"(1) Is it the intention of G2/88 and G6/88 to exclude from protection for novelty of purpose non-medical use claims by reason of the fact that they refer to a property of the product claimed not disclosed in the prior art not withstanding that the property can define an application for which the product can be used?"

"(2) If the answer to question 1 is no. Then what burden of proof, if any, is required to show that the advantageous property can, in fact, define an application?"

X. With the explicit agreement of both parties, oral proceedings were held on 11 February 2021 in the form of a videoconference (the Board was in a room at the premises in Haar and both parties were connected via video link).

During the oral proceedings, the respondent requested that the objections put forward by the appellant against auxiliary request 5, which differed from the ones raised in writing against the main request, in particular in respect of lack of novelty and lack of inventive step, be not admitted into the proceedings. Should these objections be admitted, the respondent requested remittal of the case to the opposition division. The appellant agreed on the remittal under those circumstances.

XI. The appellant's arguments, in so far as relevant to the present decision, may be summarised as follows:

Admittance of late filed documents

(a) D14 should be admitted because it was filed at the outset of the appeal proceedings and was related to the appellant's objection regarding the Me feature specified in the operative claims.

D15-D17 should not be admitted because they were filed only one month before the oral proceedings before the Board and were not relevant.

The appellant had no objection regarding the admittance into the proceedings of D9a and D13.

Main request - Novelty over D9

(b) D9/D9a

It was agreed that the disclosure of D9 could be read in the light of the one of D9a.

The subject-matter of claim 1 of the main request lacked novelty over the disclosure of D9/D9a as a whole or the examples of D9/D9a carried out with 5 or 10 wt.% low molecular weight acrylic polymer. Regarding these examples, although D9/D9a neither explicitly disclosed the molecular weight of the impact modified acrylic polymer, nor specified that the molecular weight of the low molecular weight acrylic polymer was above Me, it was derivable from the information of D9/D9a that these features were implicitly satisfied and that the molecular weight of the impact modified acrylic polymer was higher

than the one of the low molecular weight acrylic polymer. In addition, the compositions of D9/D9a were used in injection moulding processes as the ones of the patent in suit and provided the same effects, namely the addition of the low molecular weight acrylic polymer led to an increase in melt flow of the higher molecular weight acrylic polymer while good thermal resistance properties were maintained. In that respect, it was acknowledged at the oral proceedings before the Board that the Vicat feature of D9/D9a, the Tg feature of the patent in suit and the heat deflection temperature (HDT) feature mentioned in D15 to D17 all referred to the same property, namely good dimensional stability at elevated temperature. In addition, D9/D9a taught that these advantageous properties led to reduced cycle time and good filling of the moulds, as in the patent in suit. Under these circumstances, the use feature specified in claim 1 of the main request did not constitute a distinguishing feature over the disclosure of D9/D9a. For these reasons, the subject-matter of claim 1 of the main request was not novel over D9.

Referral to the Enlarged Board of Appeal

(c) No argument was put forward by the appellant, in particular at the oral proceedings before the Board, regarding the request for a referral to the Enlarged Board of Appeal made by the respondent.

Auxiliary requests 1 to 4 - Novelty over D9

(d) The same arguments as outlined above in respect of novelty of the main request over D9 were also valid for each of auxiliary requests 1 to 4.

Auxiliary request 5 - Article 76 and 123(2) EPC

(e) Neither the earlier application as filed (D1) nor the present application as filed provided a valid basis for impact modified moulded polymer products at the level of generality defined in claim 1 of auxiliary request 5. In particular, the only products mentioned in the application as filed were thick section moulded polymer products. Also, the fourth paragraph on page 17 of D1 was only directed to core-shell impact modifiers and not to impact modifiers in general. A similar argumentation applied to some dependent claims. For these reasons, the requirements of Article 76 and 123(2) EPC were not met.

Auxiliary request 5 - Sufficiency of disclosure

(f) Regarding claim 1, the term “high Tg” was unclear and it was not possible for the skilled person to determine if said feature was satisfied on the basis of the information provided in paragraph 85 and/or in the experimental part of the patent specification in that respect. In particular, paragraph 85 did not apply to homopolymers, which were encompassed by the definitions of the polymers mentioned in claim 1.

In addition, the skilled person did not have sufficient information in order to select appropriately the polymer units so that "the first polymer unit and the second polymer unit are the same" or so that "the first copolymer unit and the second copolymer unit are the same", as defined in claims 8 and 9 of auxiliary request 5. For these

reasons, the requirements of sufficiency of disclosure were not met.

Auxiliary request 5 - Admittance of further objections - Remittal

(g) There were no exceptional circumstances justifying the late filing of the objections raised against auxiliary request 5 at the oral proceedings before the Board in respect of lack of novelty over D9, D3 and D10 and of lack of inventive step starting from D9 as closest prior art. However, these objections were based on documents that were well known to the respondent and had been thoroughly discussed during the opposition and appeal proceedings.

During the oral proceedings before the Board, the appellant explicitly stated that he had no objection against a remittal to the department of first instance to deal with these issues as requested by the respondent.

XII. The respondent's arguments, in so far as relevant to the present decision, may be summarised as follows:

Admittance of late filed documents

(a) No argument was submitted by the appellant to justify the filing of D14 only in appeal. Since it was directed to the Me feature present in the granted claims, there was no reason why it could not have been filed earlier. In addition, D14 was not relevant since, as indicated by the opposition division, the Me was specific of each composition. Therefore, D14 should not be admitted.

D15 to D17 were very short, not complicated to understand and were filed in reaction to an issue raised for the first time in section 7.4.1 of the Board's communication. In addition, D15 to D17 showed that the feature "high Tg" specified in the operative claims was, in the present technical field, effectively related to specific uses. These documents were further submitted in support of the former line of argumentation of the respondent. For these reasons, D15 to D17 should be admitted.

Main request - Novelty over D9

(b) It was agreed that the disclosure of D9 could be read in the light of the one of D9a.

No information in respect of the molecular weight of the impact modified acrylic polymer was provided in the examples of D9/D9a carried out with 5 or 10 wt.% low molecular weight acrylic polymer. In view of the information provided in D9/D9a in that respect, it could not be concluded that the requirement defined in claim 1 of the main request that the molecular weight of the HMWA component should be above the molecular weight of the LMWA component was mandatorily met.

No information was provided in D9/D9a or had been submitted by the appellant to show that the molecular weight of the low molecular weight acrylic polymer used in the examples of D9/D9a was effectively above the entanglement molecular weight Me, as requested by claim 1 of the main request.

In addition, it was derivable from the patent in

suit that the feature "to provide high Tg" meant that the compositions defined in claim 1 of the main request provided a technical effect, as disclosed in paragraph 85 of the patent in suit, which was not disclosed in D9/D9a and which, according to the findings of G 2/88, conferred novelty to the use claims of the main request. It was important to note that, in the technical field of melt processable moulding compositions, grades of moulding compositions were categorised by their thermal properties, as shown in D15 to D17.
In that respect, it was acknowledged at the oral proceedings before the Board that the Vicat feature of D9/D9a, the Tg feature of the patent in suit and the heat deflection temperature (HDT) feature mentioned in D15 to D17 all referred to the same property, namely good dimensional stability at elevated temperature. Therefore, a "high Tg" was not merely a property of a composition but it represented a marketed use and category of application of the composition in the field of the patent in suit. As derivable from G 2/88, the fact that the Tg of the composition was a property of the composition itself was of no relevance when it came to determining whether that feature provided a new use.

For these reasons, the subject-matter of claim 1 of the main request was novel over D9.

Referral to the Enlarged Board of Appeal

(c) The questions indicated in section IX above should be referred to the Enlarged Board of Appeal if the Board were to maintain that the feature “high Tg” specified in claim 1 of the main request was not a

feature related to a specific use of the compositions defined in said claim 1 (i.e. leading to a new application) on the basis that it only constituted a property of the composition. Indeed, this finding of the Board would appear to be a divergence from the established case law.

Auxiliary requests 1 to 4 - Novelty over D9

(d) At the oral proceedings before the Board, it was explicitly agreed that the same arguments as outlined above in respect of novelty of the main request over D9 were also valid for each of auxiliary requests 1 to 4. In particular, no additional arguments (as compared to the main request) were put forward at the oral proceedings by the respondent regarding novelty of each of auxiliary requests 1 to 4.

Auxiliary request 5 - Article 76 and 123(2) EPC and sufficiency of disclosure

(e) At the oral proceedings before the Board, it was indicated that the admittance of the objections raised against auxiliary request 5 pursuant to Article 76 and 123(2) EPC or regarding sufficiency of disclosure were not objected to in as far as they were the same as the ones put forward against the main request.

(f) In that respect, the subject-matter of claim 1 was directly and unambiguously derivable from the definition of the first, third and fourth aspects of the invention defined in a general manner in both the earlier application as filed (D1) and the present application as filed. For these reasons,

the requirements of Article 76 and 123(2) EPC were met.

(g) Regarding sufficiency of disclosure, the patent in suit provided in paragraph 85 a clear definition of "high Tg" as defined in claim 1 of auxiliary request 5. Such "high Tgs" were further demonstrated in the examples of the patent specification, as already held by the opposition division.

Regarding claims 8 and 9 of auxiliary request 5, the skilled person would find enough information in the patent specification, in particular in the examples, how to select the same first (co)polymer unit and second (co)polymer unit.

For these reasons, the objections of the appellant regarding sufficiency of disclosure should be rejected.

Auxiliary request 5 - Admittance of further objections - Remittal

(h) At the oral proceedings before the Board, it was stated that the objections intended to be raised by the appellant against auxiliary request 5 regarding lack of novelty over D9, D3 and D10 as well as the objection of lack of inventive step in view of D9 as closest prior art would be submitted for the first time at the oral proceedings. However, these three documents had already been considered during the opposition proceedings and addressed for the assessment of the novelty of the main request. In addition, auxiliary request 5 had been submitted at the outset of the appeal proceedings and had even

already been submitted during the opposition proceedings (as auxiliary request 4, filed with letter of 2 May 2019). Therefore, there was no reason for submitting these objections for the first time at such a late stage of the proceedings. In particular, arguments in support of an inventive step starting from D9 as closest prior art had been submitted by the respondent in the rejoinder to the statement of grounds of appeal and no counter-arguments had been provided in writing in that respect. For these reasons, the objections of the appellant regarding lack of novelty over D9, D3 and D10 as well as the objection of lack of inventive step in view of D9 as closest prior art should be not admitted into the proceedings.

(i) Should the above objections of the appellant be admitted, the case should be remitted to the first instance as a matter of fairness, to allow the respondent to prepare an appropriate defense.

XIII. The appellant requested that the decision under appeal be set aside and that the patent be revoked.

The respondent requested that the appeal be dismissed (main request) or, in the alternative, that the patent be maintained in amended form according to any of auxiliary request 1 filed with the rejoinder to the statement of grounds of appeal, or any of auxiliary requests 2 to 14 filed with letter of 11 January 2021.

## Reasons for the Decision

1. Admittance of documents

1.1 Document D14

The respondent requested that D14, which was filed with the appellant's statement of grounds of appeal, be not admitted into the proceedings.

1.1.1 Considering that the statement of grounds of appeal was filed with letter of 18 February 2020, the admittance of D14 is subject to the stipulations of Article 12(4) RPBA 2020.

1.1.2 Since it is undisputed that D14 was filed for the first time during the appeal proceedings, it represents an amendment to the appellant's case according to the first sentence of Article 12(4) RPBA 2020 and its admittance is subject to the Board's discretion (Article 12(4) RPBA 2020, first paragraph, second sentence).

1.1.3 Considering that D14 consists of a single table comprising a list of entanglement molecular weights for various polymers, which correspond to the Me feature specified in operative claim 1, that document is not only easy to understand but is also related to a feature which was essential for the outcome of the decision under appeal, in particular because it was held by the opposition division to confer novelty to the subject-matter being claimed. It is further to be taken into account that the appellant's arguments based on D14 are in support of the same line of attack as the one used during the opposition proceedings. Although it

is correct that D14 could have been filed earlier (since it is undisputed that Me is part of a feature which was already present in claim 1 as granted), it is held to have been filed at the first opportunity in reaction to the decision under appeal, which was negative for the appellant. Under these circumstances, the Board finds it appropriate to exercise its discretion pursuant to Article 12(4) RPBA 2020 by admitting D14 into the proceedings.

1.2 Documents D9a and D13

Although D9a and D13 were cited in the contested decision (section 6 of the Facts and Submissions), these documents were undoubtedly filed after the nine months deadline pursuant to Article 99(1) EPC (i.e. they were late-filed). However, the admittance of these documents, which was not decided upon in the contested decision, was requested by the respondent. The appellant explicitly indicated at the oral proceedings before the Board that they had no objection against the admittance of D9a and D13 into the proceedings. Further considering that:

- D9a was relied upon by both parties, in particular during the oral proceedings, who both indicated that the disclosure of D9a - in English - was equivalent to the one of D9 - in German -;

- D13 was already filed with letter of 2 May 2019 during the opposition proceedings, in support of then pending auxiliary request 4 (now auxiliary request 5), but did not need to be dealt with in view of the positive decision of the opposition division regarding the then valid main request.

the Board finds it appropriate to exercise its discretion pursuant to Article 12(4) RPBA 2020 by admitting D9a and D13 into the proceedings.

1.3 Documents D15 to D17

The appellant requested that D15 to D17, which were filed with the respondent's last written submission dated 11 January 2021, be not admitted into the proceedings.

1.3.1 Considering that the summons to the oral proceedings and the Board's communication were simultaneously sent to the parties on 14 August 2020, the admittance of D15 to D17 is subject to the stipulations of Article 13(1) and (2) RPBA 2020 (the transitional provisions pursuant to Article 25 RPBA 2020 do not apply).

1.3.2 In that respect, the Board agrees with the respondent that D15 to D17 may be held to have been filed in reaction to an issue which was first addressed in section 7.4.1 of the Board's communication (see section VIII (b) above), which differed in substance from the argument retained by the opposition division in respect of the applicability of the findings of decision G 2/88 for the case in hand (see section V(c), second paragraph above). Therefore, the Board considers that there are exceptional circumstances in the case in hand, which justify the filing of D15 to D17 in reaction to the Board's communication.

1.3.3 For these reasons, the Board finds that the conditions for not taking into account the documents under Article 13(2) RPBA 2020 do not apply. Rather, the Board, making use of its discretion pursuant to

Article 13(1) RPBA 2020, decides to admit each of D15 to D17 into the proceedings.

**Main request**

2. Novelty over D9

2.1 During the current proceedings the arguments regarding novelty (and inventive step) were either based on document D9 (e.g. decision under appeal; statement of grounds of appeal) or D9a (rejoinder to the statement of grounds of appeal; both parties at the oral proceedings). In the present decision, following the common position of the parties that D9 and D9a are equivalent documents and in the absence of any evidence to the contrary, the assessment of novelty and inventive step will be made in respect of document D9 only. However, the same conclusions would be reached considering D9a.

2.2 D9 (claim 1) deals with an impact-strength-modified polymethacrylate moulding compound, characterized by a Vicat softening temperature per ISO 306 (B 50) of at least 90°C, a notched impact strength (Charpy) per ISO 179/1eA of at least 3.0 $kJ/m^2$ at 23°C, and a melt volume-flow rate MVR (230°C/3.8 kg) per ISO 1133 of at least 11 $cm^3/10$ min, obtained by mixing, in the melt,

a) 80 to 98 wt% of an impact-strength-modified polymethacrylate moulding compound with

b) 20 to 2 wt% of a low molecular weight polymethacrylate moulding compound,

the impact-resistant moulding compound comprising 70 to 99 wt.% of a matrix of 80 to 100 wt.% of radical-

polymerized methyl methacrylate units and if necessary 0 to 20 wt.% of further comonomers that can undergo radical polymerization, and containing 1 to 30 wt.% of an impact-strength modifier,

and the low molecular weight polymethacrylate moulding compound comprising 80 to 100 wt.% of radical-polymerised methyl methacrylate units and 0 to 20 wt.% of further comonomers that can undergo radical polymerisation, and having a viscosity number ($\eta_{sp/c}$) of 25 to 35 ml/g as measured in chloroform per ISO 1628 Part 6.

In particular, the examples of D9 (pages 9-11) disclose the preparation of samples by injection-moulding of a composition comprising:

- an impact-strength modified moulding composition comprising 92.5 wt.% of a matrix polymer and 7.5 wt.% of a core-shell impact modifier, whereby the matrix polymer is made of 91 wt.% methyl methacrylate and 9 wt.% methyl acrylate;

- an amount of either 0, 5 or 10 wt.% of a low molecular weight moulding compound comprising 85 wt.% methyl methacrylate and 15 wt.% methyl acrylate units with a weight average molecular weight of about 50,000 g/mol.

2.3 Claim 1 of the main request is drafted as a use claim, namely the use of a composition comprising two polymeric components as defined therein (LMWA and HMWA), for a particular purpose, namely to provide a high Tg melt blended composition or moulded product (wherein the product is optionally impact modified), whereby it was in dispute between the parties whether

or not the following features specified in said claim 1 were effectively satisfied by the examples of D9 carried out with either 5 wt.% or 10 wt.% of low molecular weight moulding compound:

(a) The requirements in terms of the molecular weight of the HMWA component, which should be between 40k Daltons and 1000k Daltons and above the one of the LMWA component;

(b) The requirement in terms of the molecular weight of the LMWA component, which should be between the entanglement molecular weight Me and 250k Daltons;

(c) The purpose related feature "use ... to provide a high Tg melt blended composition or moulded polymer product".

2.4 Regarding feature (a) defined in section 2.3

It is correct that no explicit disclosure in respect of the molecular weight of the matrix polymer used to prepare the impact-strength modified moulding composition is provided in D9.

However, in the Board's view, the skilled person would understand the disclosure of D9 as a whole as implying that the molecular weight of the impact modified polymer matrix should be higher than the one of the so-called low molecular weight polymethacrylate moulding compound. Firstly, the terminology used in D9 to indicate the second component (low molecular weight) implies that it has a lower molecular weight than the matrix. Secondly, the only ranges of molecular weight for the matrix indicated in D9 (90.000 to 200.000 g/mol, preferred 100.000 to

150.000 g/mol, page 4, lines 9-11), albeit as a preferred feature, provide values which are all largely above the molecular weight of the low molecular weight component indicated in the general disclosure (30.000 to 70.000 g/mol, in particular 40.000 to 60.000 g/mol, page 7, lines 2-3) and in the examples of D9 (50 000 g/mol, i.e. 50k Daltons). On top of that, the fact that in the examples of D9 the addition of the low molecular weight component leads to an increase in the melt flow rate of the impact modified polymer composition (D9: table on page 11) confirms that the impact modified polymer matrix must have a higher weight average molecular weight than the low molecular weight component, as put forward by the appellant during the oral proceedings before the Board. Therefore, it is derivable from D9 as a whole that the polymethacrylate matrix used in the examples of D9 implicitly, but directly and unambiguously, has a weight average molecular weight higher than 50k Daltons, which is both above 40k Dalton and higher than the molecular weight of the low molecular weight polymer component used therein, as required by claim 1 of the main request.

In addition, it was not objected to by the respondent that the impact modified polymethacrylate matrix used in the examples of D9 could not have a weight average molecular weight above 1000k Daltons, as also specified in claim 1 of the main request. The Board has also no reason to deviate from that view, in particular because there is no reason to expect that that requirement would not be met in view of the very high value of the higher limit of the range of molecular weight indicated in claim 1 (1000k Daltons) and taking into account the preferred values indicated in D9 (90.000 to 200.000 g/mol, preferred 100.000 to 150.000 g/mol,

page 4, lines 9-11).

For these reasons, the requirement in terms of the molecular weight of the HMWA component specified in claim 1 of the main request does not constitute a distinguishing feature over the examples of D9 carried out with either 5 wt.% or 10 wt.% of the low molecular weight moulding compound.

2.5 Regarding feature (b) defined in section 2.3

The component of D9 corresponding to the LMWA material defined in operative claim 1 is the low molecular weight polymethacrylate disclosed therein, which in the examples of D9 is a copolymer of 85 wt% methylmethacrylate and 15 wt.% methyl acrylate having a weight average molecular weight of 50 000 g/mol (D9: page 10, last paragraph). Although it is correct that there is no information in D9 if said molecular weight is above the entanglement molecular weight Me, the question to be answered is if said requirement is implicitly satisfied, as put forward by the appellant in view of the information provided in the patent in suit in respect of said feature Me (statement of grounds of appeal: sections 6.8-6.9). In this respect the molecular weight of the low molecular weight moulding compound disclosed in the examples of D9 (50 000 g/mol) is not only according to all preferred embodiments indicated in paragraph 46 of the patent in suit, but also much higher than the molecular weight of the low molecular weight component used in the examples of the patent in suit (see "base polymer 3" in paragraph 106, with a weight average molecular weight of 22.1k Daltons). Taking into account in addition the similarity of the copolymers in the examples of D9 and of the patent in suit, the Board finds it not credible

that the molecular weight of the low molecular weight component in the examples of D9 may be below the entanglement molecular weight Me. Although that issue was mentioned in the Board's communication (section 7.5.3), no argument or evidence was provided by the respondent to show that there were any reason to consider that the low molecular weight component used in the examples of D9, in particular characterised in that it has a weight average molecular weight of 50 k Daltons, may not have satisfied the Me requirement defined in claim 1 of the main request. Under these circumstances, the Board holds that the requirement in terms of the molecular weight of the LMWA component specified in operative claim 1 is implicitly satisfied in the examples of D9.

For these reasons, the requirement in terms of molecular weight of the LMWA component specified in claim 1 of the main request does not constitute a distinguishing feature over the examples of D9 carried out with either 5 wt.% or 10 wt.% of the low molecular weight moulding compound.

2.6 Regarding feature (c) defined in section 2.3

2.6.1 Decision G 2/88 is directed to so-called "second non-medical uses", i.e. claims defining a "use of compound X for a particular purpose" (or similar wording), where the only possibly novel feature is the purpose of that use. The Enlarged Board held that where a particular technical effect underlying such use was described in the patent, the proper interpretation of that claim would require a functional feature to be implicitly contained in the claim as a technical feature. The Enlarged Board thus concluded that, with respect to a claim to a new use of a known compound, such new use

might reflect a newly discovered technical effect described in the patent. The attaining of such a technical effect should then be considered as a functional technical feature of the claim. Had that technical feature not previously been made available to the public by any of the means set out in Article 54(2) EPC, then the claimed invention was novel, even though such technical effect might have inherently taken place in the course of carrying out what had previously been made available to the public. In that respect, the conclusion was reached taking into account that "The recognition or discovery of a previously unknown property of a known compound, such property providing a new technical effect, can clearly involve a valuable and inventive contribution to the art" (G 2/88: points 2.3, 9 and 9.1 of the reasons).

2.6.2 In the decision under appeal, the opposition division held that the findings of G 2/88 did not apply to operative claim 1 because the claim was directed to a melt blend of two specific polymeric compounds and therefore did not concern the recognition of a previously unknown property of a single compound as in G 2/88 (see section V(c) above).

However, in the Board's view, the findings of G 2/88 are not restricted to unknown properties of a single compound but may equally apply to unknown properties of a composition comprising several components. Rather, the decisive question to be answered is whether or not a new use, related to a newly discovered technical effect (described in the patent in suit), may be attributed to the otherwise known compositions.

2.6.3 In that respect, both parties read the term "high Tg" on the basis of the definition of that term given in

paragraph 85 of the patent in suit (see e.g. statement of grounds of appeal: sections 5.4-5.10; rejoinder to the statement of grounds of appeal: sections 4.3-4.6).

However, 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 particular, if a term present in a claim has a clear, accepted, generic meaning, it may not be held to have a limited meaning in view of the description of the patent specification (Case Law of the Boards of Appeal of the EPO, 9th edition, 2019, section II.A.6.3.1).

In the present case, it makes no doubt that the feature "Tg" refers to a usual property of polymers, namely glass transition temperature. Although the term "high Tg" is a relative one and a sharp border cannot be drawn between "high Tg" and "low Tg", this means that said feature has to be read in its broadest - technically meaningful - sense, i.e. as including any value which a skilled person could consider as a high one. On the contrary, there is no reason why the term "high Tg" should be read as being limited in the sense of paragraph 85 of the patent in suit.

In view of the above, the feature "high Tg" is read as a relative term which has a vague meaning and which is related to an intrinsic property of the composition otherwise defined in claim 1 of the main request.

2.6.4 The respondent argued that D9 did not clearly and unambiguously disclosed that the compositions provided therein could be used to provide high Tg in addition to increasing the melt flow as compared to a comparative copolymer with the same MFI which was derived from the

same type and equivalent amount of $C_1$-$C_{12}$ alkyl($C_1$-$C_8$ alk) acrylate monomer(s) but a higher amount of $C_1$-$C_{12}$ alkyl acrylate monomer(s).

However, it was agreed by both parties during the oral proceedings before the Board that both the "high Tg" feature according to the patent in suit and the "good Vicat properties" according to D9 (see feature VST defined on page 8 and mentioned in the paragraph preceding the table on page 11 as well as in that table) were parameters indicating good dimensional stability at elevated temperature. Therefore, the feature "high Tg" is not related to a new property as compared to the ones known from D9, but an alternative way of describing a known property.

In particular, D9 already teaches that the addition of the low molecular weight component as defined therein leads to improved melt flow while maintaining good dimensional stability at high temperature of the impact modified high molecular weight component defined therein (D9: page 3, third paragraph; page 11, first paragraph). Therefore, D9 effectively provides the same teaching as the patent in suit in that respect, whereby it is noted that, as explained in section 2.7.3 above, in the case in hand the definition of high Tg based on paragraph 85 of the patent in suit cannot be considered as a limitation of the subject-matter being claimed.

During the oral proceedings before the Board, the respondent argued that in the examples of D9 the amount of impact modifier was simultaneously decreased when the amount of the low molecular weight component was increased. Since two variables were changed at the same time in these examples, the skilled person could not attribute any changes in melt flow and glass transition

temperature to the addition of the lower molecular weight copolymer alone, so the respondent. However, it was clarified by the Board at the oral proceedings that the examples of D9 were carried out by melt blending a pre-blended composition comprising an impact-modifier and a (high molecular weight) matrix component with a low molecular weight component. Therefore, the addition of the low molecular weight component mandatorily led to a reduction of both the matrix and the impact modifier in the pre-blended component in a proportional manner. Under these circumstances, the effects shown in D9 are undoubtedly related to the sole addition of the low molecular weight component. For that reason, the argument of the respondent did not convince.

2.6.5 The respondent additionally argued that D15 to D17 showed that, in the present technical field, the skilled person would understand that “high Tg” meant specific end uses and applications. The respondent in particular pointed out that it was indicated in paragraph 75 of the patent in suit that the reference to “high Tg” was related to “reduced cycle time” in particular "reduced cooling time during processing", which effects were also not known from D9.

In that respect, the applications and uses disclosed in D9 (injection moulding) are undoubtedly identical to the ones described in the patent in suit in relation to the feature "high Tg" (paragraphs 75, 78 and 90) and the ones described in D15 to D17 in relation to the feature heat deflection temperature (HDT). In addition, although it is agreed with the respondent that D15 to D17 show that in the technical field of the patent in suit commercial products may indeed be categorised according to different levels of heat deflection temperature (HDT), it was agreed by both parties at the

oral proceedings before the Board that that feature was related to the dimensional stability at elevated temperature in the same manner as "high Tg" according to the patent in suit and "good Vicat properties" according to D9. Therefore, the reference to HDT in D15 to D17 (apart from not having any direct correspondence in the claim) provides no additional technical effect as compared to the disclosure of "good Vicat properties" according to D9.

In addition, the advantage of achieving reduced cycle time mentioned in paragraph 85 of the patent in suit and relied upon by the respondent is already mentioned in D9 (last paragraph on page 3). Although D9 does not explicitly mention "reduced cooling time" in that respect, it was acknowledged by both parties at the oral proceedings before the Board that the cooling time was the decisive feature of the cycle time in injection moulding processes, as also confirmed in paragraph 75 of the patent. Besides, it has to be noted that the wording of operative claim 1 is neither related to a reduction of cycle time, nor to a reduction of cooling time as specified in paragraph 85 of the patent in suit but merely to the provision of "high Tg" compositions or moulded polymer product. Since, as explained above (section 2.7.3), there is no reason in the case in hand to read that term in a more limited manner than the one based on its literal reading, the respondent's argument related to "reduced cycle time" and "reduced cooling time" are rejected.

Under these circumstances, the disclosure of D15 to D17 do not support the respondent's view according to which the feature "high Tg" is effectively related to a new use derived from a new technical effect not known from

D9.

2.6.6 In view of the above, the wording of claim 1 of the main request “to provide a high Tg melt” is not directed to any new specific use resulting from said “high Tg” but only defines that the claimed composition must exhibit said property (unclear as it may be) which is nothing more than an alternative way of describing an effect known from D9. In particular, said feature was not shown to be related to any specific use (leading to new applications) and the one mentioned in the claim (melt blended compositions, moulded product) cannot be distinguished from the ones disclosed in the examples of D9. For these reasons, the feature "to provide high Tg ..." does not constitute an additional functional feature in the sense of G 2/88 which may distinguish the subject-matter being claimed from the disclosure of the examples of D9 carried out with 5 wt.% or 10 wt.% of low molecular weight moulding component.

2.7 Therefore, the subject-matter of claim 1 of the main request is not novel over said examples of D9.

3. Request for a referral to the Enlarged Board of Appeal

3.1 According to Article 112(1) EPC, questions may be referred to the Enlarged Board in order to ensure uniform application of the law or if a point of law of fundamental importance arises.

3.2 The respondent requested that, should the Board decide that the feature “high Tg” specified in claim 1 of the main request was not a feature related to a specific use of the compositions defined in said claim 1 (i.e. leading to a new application) on the basis that it

constituted a property of the composition, then the questions specified in above section XV c) be referred to the Enlarged Board of Appeal, as this finding of the Board would appear to be a divergence from the established case law.

3.3 The sole argument put forward in support of that objection was that decision G 2/88 showed that new applications could, and often did, result from a property of the composition (letter of 11 January 2021: section 5.3). For example, in G 2/88 it was the lubricating properties of the compound that led to the new use of the compound for lubrication.

However, in the Board's view, when applying the findings of G 2/88 to the case then in hand, novelty was acknowledged considering that the use being claimed (as friction reducing additives) had not been previously made available to the public in the opposed prior art document (in particular, document (2) only taught an effect in respect of rust inhibition but did not contain any technical teaching to the effect of reducing friction; T 59/87, decision of 14 August 1990: see in particular the second paragraph of point 2 of the reasons of the decision and point 2.4 of the reasons). Therefore, the decisive question to be answered when acknowledging novelty to a second non-medical use claim by relying on G 2/88 is whether or not the use being claimed is related to a technical effect demonstrated in the patent in suit which was not made available in the opposed prior art document. As explained in section 2 above, the present Board concluded that in the case in hand it was not shown that the patent in suit demonstrated any such (new) technical effect underlying the use being claimed ("to provide a high Tg melt blended composition or moulded

polymer product") which had not already been made available by D9.

For these reasons, the Board does not consider that the decision reached in above section 2 diverges from the findings of G 2/88, as argued by the respondent.

3.4 As indicated by the Chairman of the Board during the oral proceedings, decision G 2/88 was taken about thirty years ago and was since then the object of consistent case law, as derivable from the many decisions mentioned in that respect in the Case Law, *supra*, I.C.8.1. The Board is in particular of the opinion that the present decision is in line with other decisions mentioned in sub-section I.C.8.1.3 e) of said Case Law, entitled "Discovery of new properties underlying the known use". Reference is in particular made to the passages thereof related to decisions T 279/93 (of 12 December 1996; see point 5.4 of the reasons), T 892/94 (OJ EPO 2000, 1; see point 3.4 of the reasons), T 189/95 (of 29 February 2000; see point 2.4 of the reasons) and T 1855/06 (of 18 June 2009; see point 6 of the reasons). Therefore, the present decision is also held for these reasons not to diverge from the established case law.

3.5 In view of the above, the respondent's request for a referral to the Enlarged Board of Appeal is refused.

**Auxiliary requests 1 to 4**

4. As compared to the main request, no additional or separate arguments were put forward by the respondent in respect of novelty over D9 for the subject-matter of claim 1 according to any of auxiliary requests 1 to 4. At the oral proceedings before the Board, the

respondent even explicitly agreed with the Board that the same conclusion in that respect was bound to be reached for each of these auxiliary requests as for the main request. Under these circumstances, the subject-matter of claim 1 according to each of auxiliary requests 1 to 4 lacks novelty over D9 for the same reasons as outlined above in respect of the main request.

**Auxiliary request 5**

5. At the oral proceedings before the Board, the Chairman indicated to the appellant that, considering that no objection against auxiliary request 5 had been raised in writing by the appellant, the question arose if they had any objection at all.

The appellant replied that the same objections pursuant to Articles 76(1) and 123(2) EPC and regarding sufficiency of disclosure as for the main request were valid for auxiliary request 5. In addition, the appellant indicated that he intended to raise against auxiliary request 5 objections pursuant to Article 54 EPC in view of each of documents D9, D3 and D10 as well as an objection pursuant to Article 56 EPC starting from D9 as closest prior art.

Considering that the respondent had no objection regarding the admittance of the objections raised against auxiliary request 5 which were the same as the ones put forward against the main request, the objections of the appellant in respect of Article 76(1) and 123(2) EPC and regarding sufficiency of disclosure were dealt with and decided upon by the Board at the oral proceedings and the reasons for these decisions are dealt with in sections 6 and 7 below.

The decision taken by the Board in relation to the other objections of the appellant regarding novelty and inventive step of auxiliary request 5, which were evoked for the first time at the oral proceedings before the Board and the admittance of which was objected to by the respondent, are then addressed in the following section 8.

6. Amendments: Article 76(1) and 123(2) EPC

6.1 In section 5.1 of the Board's communication, it was indicated that it was unclear whether the appellant's objections put forward in section 4 of the statement of grounds of appeal in respect of the feature at the end of claim 1 reading "... or moulded polymer product, wherein the product is optionally impact modified" was raised pursuant to Article 76(1) EPC or Article 123(2) EPC. However, the appellant clarified at the oral proceedings before the Board that said objection was raised pursuant to both Articles.

6.2 The subject-matter of claim 1 is directed to the use of an acrylic composition as defined therein to provide a high Tg melt blended composition or moulded polymer product, wherein the product is optionally impact modified. The appellant's objections pursuant to both Article 76(1) and 123(2) EPC concern the question as to whether a valid support may be found in the earlier application as filed (D1) or in the application as filed for impact modified moulded polymer products as defined in said claim 1.

6.3 In that respect, for the assessment of Article 123(2) EPC, the question to be answered is whether or not the subject-matter of an amended claim

extends beyond the content of the application as filed, i.e. whether after the amendment the skilled person is presented with new technical information (see G 2/10, OJ EPO 2012, 376, point 4.5.1 of the Reasons and Case Law, *sup*ra, II.E.1.1). In addition, in accordance with the established case law of the boards of appeal of the EPO, exactly the same principles are to be applied when assessing Article 76(1) EPC and Article 123(2) EPC, and in particular the subject-matter being claimed in a divisional application must be directly and unambiguously derivable from both the earlier (parent) application as filed (here, D1) and the (divisional) application as filed (see G 1/06, OJ EPO 2008, 307 and Case Law, *supra*, II.F.2.1).

6.3.1 Regarding Article 76(1) EPC, it is agreed with the appellant that the passage at page 16, first full paragraph of D1, which was relied upon by the respondent (section 3.2 of the rejoinder), is not specifically directed to an impact modified moulded product as mentioned in operative claim 1, which is the object of the appellant's objection. Therefore, said passage cannot provide a valid support at least for the embodiment of claim 1 directed to such a moulded product.

However, the earlier application as filed (D1) was directed to various distinct embodiments defined as "aspects of the present invention", in particular:

- An acrylic polymeric composition comprising a melt blend of thermoplastic HMWA and LMWA components as defined in the last paragraph on page 4 of D1 ("first aspect"), whereby it is further explicitly indicated in the second paragraph on page 16 of D1 that said composition may form the base polymer of

a further system requiring a base polymer such as an impact modified polymer;

- An impact modified acrylic polymer composition comprising a base polymer in accordance with the acrylic polymeric compositions according to the first aspect and a core-shell impact modifier (D1: page 17, third full paragraph; "third aspect");

- A moulded product comprising an acrylic polymeric composition according to the first, second or third aspect of the present invention (paragraph bridging pages 22 and 23 of D1; "fourth aspect").

In view of the above, a valid basis for an impact modified moulded polymer product as defined in operative claim 1 is directly and unambiguously derivable from the paragraph bridging pages 22 and 23 in combination with the fourth paragraph on page 17 and the second paragraph on page 16 of the parent application as filed D1. In particular, since the paragraph bridging pages 22 and 23 is directed to moulded products in general, it cannot be held that it should be read in a more limited manner, e.g. as being only valid for "thick section moulded polymer products", contrary to the appellant's view (letter of 26 October 2020: section 2, seventh paragraph). The Board is further of the opinion that the fact that the "third aspect" is directed to compositions comprising a more specific type of impact modifier (namely core-shell impact modifiers) than the more generic disclosure given for that component in respect to the "first aspect" (impact modifier in general) does not impose that the fourth aspect of the invention would be read as being limited to core-shell impact modifiers, as argued by the appellant, in particular during the

oral proceedings before the Board, in view of the fact that all previous aspects are mentioned in the context of the fourth aspect.

6.3.2 As clarified during the oral proceedings before the Board, the appellant's objection pursuant to Article 123(2) EPC was identical to the one pursuant to Article 76(1) EPC. Further considering that the divisional application as filed contains the same passages as the ones of D1 relied upon above in respect of Article 76(1) EPC and in the absence of any additional arguments of the appellant in that respect, the same conclusion as for Article 76(1) EPC is bound to be reached regarding the appellant's objection pursuant to Article 123(2) EPC.

6.4 Although an objection regarding added subject-matter was also raised against dependent claims (letter of 26 October 2020: section 2, sixth paragraph), no additional argument was put forward for these claims over the ones outlined above in respect of claim 1, not even at the oral proceedings before the Board. Therefore, the same conclusion as for claim 1 is reached also for these dependent claims.

6.5 Under these circumstances, the appellant's objections pursuant to Article 76 and 123(2) EPC are rejected.

7. Article 100(b) EPC

7.1 In order to meet the requirements of sufficiency of disclosure, an invention has to be disclosed in a manner sufficiently clear and complete for it to be carried out by the skilled person, without undue burden, on the basis of the information provided in the patent specification, if needed in combination with the

skilled person's common general knowledge. This means in the present case that the skilled person should in particular be able to use a composition according to operative claims 1, 8 or 9, which is contested by the appellant.

7.2 Claim 1

7.2.1 Regarding claim 1, the appellant argued that there was a lack of sufficiency of disclosure related to the definition of the term “high Tg”.

7.2.2 In that respect, claim 1 is a use claim which is characterised by a combination of structural features related to the definition of the HMWA and LMWA materials which have to be mandatorily present, with the additional functional feature "to provide a high Tg melt blended composition or moulded polymer product", whereby said functional feature was neither shown nor argued to be mandatorily implicitly satisfied by all the compositions falling under the structural definition of claim 1. The question to be answered is, therefore, if the patent in suit, optionally in combination with common general knowledge, provides sufficient guidance how to achieve such "high Tg".

7.2.3 As explained above (see section 2.7.3) there is no reason in the case in hand to read the term "high Tg" in a limited manner, in particular not in the sense of paragraph 85 of the patent in suit, as was done by both parties. Rather, said feature has to be read in its broadest technically sensible meaning.

7.2.4 The objections raised by the appellant in sections 5.5-5.8 of the statement of grounds of appeal are closely related to the definition of "high Tg"

according to paragraph 85 of the patent in suit. In view of the conclusion reached in section 2.7.3 above, that objection fails. In particular, the arguments of the appellant do not show that the skilled person would have any difficulty in providing "high Tg" (read in its broadest sense) melt blended compositions using two acrylic materials HMWA and LMWA as defined in operative claim 1. In addition, the objection related to the meaning of the term "high Tg" can only be held to be related to the definition of the scope of the claims, which is an issue of clarity (which, according to G 3/14 (OJ EPO 2015, 102), cannot be addressed at the present stage since the feature at stake is already present, in the same context, in claim 1 as granted) rather than sufficiency of disclosure.

7.2.5 The appellant further argued that the selection of monomers to prepare both the HMWA and the LWMA defined in claim 1 so that they exhibit a "high Tg" according to operative claim 1 required an undue burden (section 5.6 of the statement of grounds of appeal). Also, the definition of that term was relative and it was not possible from the data of the patent in suit to distinguish between low and high Tg (sections 5.7-5.9 of the statement of grounds of appeal).

In the Board's view, these arguments are again related to the definition of the scope of the claims and constitute a possible issue of clarity rather than sufficiency of disclosure, as argued by the respondent (sections 2.4 to 2.6 of the rejoinder to the statement of grounds of appeal).

7.3 Claims 8 and 9

7.3.1 Regarding claim 8 of auxiliary request 5, the wording of the claim itself unambiguously defines that the first polymer unit (which is defined in claim 1, on which claim 8 is dependent, as relating to the HMWA component) and the second polymer unit (which is defined in claim 1, on which claim 8 is dependent, as relating to the LMWA component) should be identical. Further considering that claim 1 defines an unambiguous group of components among which said polymer units may be selected and some specific examples thereof are illustrated in examples 1 to 3 of the patent in suit, the skilled person would have no difficulty to decide how to choose the first and second polymer units as defined in operative claim 8.

In that respect, the Board does not agree with the opposition division that the term "the same" imposes that the HMWA polymer and the LMWA polymer must derive from identical monomer and comonomer units (section 4.1 of the reasons of the decision: last two paragraphs). Rather, as indicated above, the term "the same" only defines that the HMWA and LMWA polymers must have the same main monomer, without any further limitation regarding the nature of an optionally present comonomer and/or the amount of such comonomer(s).

7.4 Regarding claim 9 of auxiliary request 5, the same considerations as outlined above for claim 8 are valid, only with respect to the optional comonomer.

7.5 In view of the above, the appellant's arguments do not provide any reason for the Board to overturn the opposition division's decision pursuant to Article 100(b) EPC.

8. Further objections raised against auxiliary request 5

8.1 During the oral proceedings before the Board, the respondent objected to the admittance of the objections of lack of novelty over D9, D3 and D10 and of lack of inventive step starting from D9 as closest prior art because they had not been submitted in writing beforehand although auxiliary request 5 had been in the proceedings from the outset of the proceedings and duly substantiated by the respondent. Also, it was requested that the case be remitted to the department of first instance in case these objections were admitted.

8.2 In that respect, it was not disputed by the appellant that the objections of lack of novelty over D9, D3 and D10 and of lack of inventive step starting from D9 as closest prior art were raised for the first time at the oral proceedings before the Board and this, although auxiliary request 5 had been filed at the outset of the appeal proceedings and even already during the opposition proceedings. Therefore, there are no exceptional circumstances which may justify such a late-filing of these objections (Article 13(2) RPBA 2020), as in fact explicitly acknowledged by the appellant himself during the oral proceedings before the Board.

8.3 However, the Board considers that in the case in hand, also the respondent has at no stage of the proceedings provided any substantiation in defense of auxiliary request 5 in respect at least of the novelty objections over D3 and D10, thereby also not fulfilling its duty of providing a full case at the outset of the proceedings. Although novelty over these documents was acknowledged by the opposition division (based on the finding that the requirement in terms of the molecular

weight of the LMWA component, which should be higher than the entanglement molecular weight Me defined in claim 1, was not directly and unambiguously disclosed therein), it was derivable from section 7.5.3 of the Board's communication that the Board may deviate from that conclusion. Nevertheless, no written submissions were filed by the respondent to provide arguments in that respect, in particular explaining if the amendments made possibly distinguished the subject-matter being claimed from the disclosures of D3 and D10 considered as relevant by the appellant. Also, the questions addressed in the present decision in respect of the main request regarding novelty of the use claims in view of the findings of G 2/88 (section 2.7 above) were never addressed by the parties (or the opposition division) in respect of these documents.

8.4 In view of the above, it appears appropriate that the outstanding issues, which have not been properly discussed so far, be considered by two instances. Furthermore, remittal of the case to the department of first instance for further prosecution, was explicitly requested by the respondent and was not contested by the appellant at the oral proceedings before the board.

8.5 For these reasons, the case is remitted to the department of first instance for further prosecution (Article 111(1) EPC; Article 11 RPBA 2020).

**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.

The Registrar: The Chairman:

B. ter Heijden D. Semino

Decision electronically authenticated