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**Datasheet for the decision
of 8 December 2023**

Case Number: T 0602/21 - 3.3.03

Application Number: 10154167.0

Publication Number: 2192155

IPC: C08L33/04

Language of the proceedings: EN

Title of invention:

ACRYLIC BLENDS

Patent Proprietor:

Mitsubishi Chemical UK Limited

Opponent:

ARKEMA FRANCE

Relevant legal provisions:

EPC Art. 54(2)

RPBA 2020 Art. 13(2)

Keyword:

Novelty - novelty of use - second (or further) non-medical use
(no: main request; auxiliary requests 1 and 2)

Amendment after summons - taken into account (yes and no)

Decisions cited:

G 0002/88, T 0713/14, T 1294/16, T 0494/18, T 1598/18,
T 2091/18, T 2920/18, T 2988/18, T 0339/19, T 2295/19,
T 0247/20, T 0499/20



Beschwerdekammern
Boards of Appeal
Chambres de recours

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

Case Number: T 0602/21 - 3.3.03

D E C I S I O N
of Technical Board of Appeal 3.3.03
of 8 December 2023

Appellant: ARKEMA FRANCE
(Opponent) Département Propriété Industrielle
420, rue d'Estienne d'Orves
92700 Colombes (FR)

Representative: SSM Sandmair
Patentanwälte Rechtsanwalt
Partnerschaft mbB
Joseph-Wild-Straße 20
81829 München (DE)

Respondent: Mitsubishi Chemical UK Limited
(Patent Proprietor) Cassel Works
New Road
Billingham TS23 1LE (GB)

Representative: Appleyard Lees IP LLP
15 Clare Road
Halifax HX1 2HY (GB)

Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
18 March 2021 concerning maintenance of the
European Patent No. 2192155 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 lies from the interlocutory decision of the opposition division concerning maintenance of European patent No. 2 192 155 in amended form according to the claims of the main request filed during the oral proceedings on 9 February 2021 and a description adapted thereto.
- II. The following documents were, among others, cited in the decision under appeal:
- D3: WO 00/78863 A2
D3a: AU 200066877 B2
D6: EP 0 781 808 A2
D11a: Declaration of Mr P. Eustace dated
7 December 2020
- III. In the decision under appeal, the opposition division held, among others, that the subject-matter of the claims of the main request was novel over D3/D3a. D3a was indicated to be the English equivalent to D3, in German, whereby the content of documents D3 and D3a was identical. Also, D3 was the document to be taken as the closest prior art and the subject-matter of the claims of the main request involved an inventive step starting from D3. Further considering that none of the other objections raised by the opponent was successful, the patent amended on the basis of the main request was held to meet the requirements of the EPC.
- IV. The opponent (appellant) lodged an appeal against that decision. In the statement of grounds of appeal the appellant contested the decision on novelty and inventive step for the subject-matter of claims 3 and 4

of the main request.

- V. With their rejoinder to the statement of grounds of appeal, the patent proprietor (respondent) filed five sets of claims as auxiliary request 1 to 5 as well as the following documents:
- D12: Product Overview, Plexiglas® Molding Compounds, 1 page
 - D13: Grades of Degalan Moulding Compounds, 1 page
 - D14: Lucite® Diakon® Rapide, Lucite International, 1 page
- VI. The parties were summoned to oral proceedings and a communication pursuant to Article 15(1) RPBA indicating specific issues to be discussed at the oral proceedings was then sent to the parties.
- VII. With letter of 2 November 2023 the respondent filed three sets of claims as auxiliary requests 6 to 8.
- VIII. With letter of 5 December 2023 the respondent stated that they would not attend the oral proceedings and withdrew their request for oral proceedings. Regarding their auxiliary requests, the respondent withdrew auxiliary requests 2 to 5 and 7 and filed two sets of claims as auxiliary requests 2 and 3 which corresponded to previously filed auxiliary requests 6 and 8.
- IX. Oral proceedings were held on 8 December 2023 in the presence of the sole appellant, as announced.
- X. **The final requests of the parties were as follows:**

- (a) The appellant requested that the decision under appeal be set aside and that the patent be revoked.
- (b) The respondent requested in writing that the appeal be dismissed (main request) or, in the alternative, that the patent be maintained in amended form according to auxiliary request 1 filed with the rejoinder to the statement of grounds of appeal or any of auxiliary requests 2 or 3 filed with letter of 5 December 2023.

XI. Claim 3 of the **main request**, which is the sole claim of that request relevant for the present decision, read as follows (whereby the features are presented separately by the Board to facilitate the reading):

"3. Use of an acrylic polymer 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 derived from C₁-C₁₂ alkyl (C₁-C₈ alk)acrylate monomer units and optionally, up to 20% w/w, based on the said alkyl (alk)acrylate (co)polymer of a first copolymer derived from C₁-C₁₂ alkyl(C₀-C₈ alk) acrylate and/ or (C₀-C₈ 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 derived from C₁-C₁₂ alkyl (C₁-C₈ alk)acrylate monomer units and optionally, up to 20% w/ w, based on the said alkyl (alk)acrylate (co)polymer of a second copolymer derived from C₁-C₁₂ alkyl (C₀-C₈ alk)acrylate and/or (C₀-C₈ alk)acrylic acid monomer units,

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

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

as a reduced cooling cycle time composition,

wherein the composition is optionally an impact modified polymer composition."

XIII. Claim 3 of **auxiliary request 1** differed from claim 3 of the main request in that it contained the following additional feature:

"wherein the weight ratio of HMWA:LMWA in the composition is greater than 1:1".

XIII. Claim 3 of **auxiliary request 2** was identical to claim 3 of auxiliary request 1.

XIV. **Auxiliary request 3** corresponded to the main request in which claims 3 and 4 were deleted.

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

essentially as follows:

- (a) Documents D12 to D14 should be not admitted into the proceedings.
- (b) The subject-matter of claim 3 of each of the main request and auxiliary requests 1 and 2 was not novel over the disclosure of D3a.
- (c) Each of auxiliary requests 1 to 3 should be not admitted into the proceedings.
- (d) The objections of lack of inventive step raised at the oral proceedings before the Board against claims 1, 2 and 4 of auxiliary request 3 (corresponding to claims 1, 2 and 6 of the main request) in view of D3a or D6 as the closest prior art should be admitted into the proceedings.

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

- (a) Documents D12 to D14 should be admitted into the proceedings.
- (b) The subject-matter of claim 3 of each of the main request and auxiliary requests 1 and 2 was novel over the disclosure of D3a.
- (c) Each of auxiliary requests 1 to 3 should be admitted into the proceedings.
- (d) In the absence of any objection raised in appeal in writing against the claims of auxiliary request 3,

that request was allowable.

Reasons for the Decision

Main request

1. The operative main request is the main request on which the decision of the opposition division is based. The sole objections that were raised in appeal against the main request were directed to lack of novelty and lack of inventive step of claims 3 and 4 in view of various prior art documents. However, only the objection of lack of novelty put forward against claim 3 of the main request in view of the disclosure of document D3a is relevant for the present decision and is dealt with in substance hereinafter. In that respect, the finding of the opposition division that the disclosures of D3a and D3 were identical remained undisputed and the Board has no reason to be of a different opinion.
2. Novelty of claim 3 of the main request over D3a
 - 2.1 The novelty objection against claim 3 of the main request was raised in view of the examples of D3a.

Relevant disclosure of D3a

- 2.2 In that regard, D3a (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/m² at 23°C, and a melt volume-flow rate MVR (230°C/3.8 kg) per ISO 1133 of at least 11 cm³/10 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 (η_{sp}/c) of 25 to 35 ml/g as measured in chloroform per ISO 1628 Part 6.

In particular, the examples of D3a (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.

Is the subject-matter of claim 3 of the main request to be distinguished from the disclosure of D3a?

2.3 Claim 3 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 "as a reduced cooling cycle time composition", whereby it was in dispute between the parties whether or not the following features specified in said claim 3 were effectively satisfied by the examples of D3a carried out with either 5 wt.% or 10 wt.% of low molecular weight moulding compound:

(a) The requirements in terms of molecular weight specified in said claim 3;

(b) The purpose related feature "as a reduced cooling cycle time composition".

2.4 Regarding feature (a), the respondent argued that D3a failed to directly and unambiguously disclose that the requirements in terms of molecular weight defined in operative claim 3 of the main request were satisfied (rejoinder: points 2.1.20 to 2.1.24).

2.4.1 In that regard, claim 3 of the main request contains the three following requirements in terms of molecular weight:

- The HMWA component should have a weight average molecular weight of between 40k Daltons and 1000k

Daltons;

- The HMWA component should have a higher Mw than the LMWA;
- The LMWA component should have a weight average molecular weight of between the entanglement molecular weight (M_e) (expressed in k Daltons) and 250k Daltons.

2.4.2 The line of argument of the appellant was based on the consideration that the matrix polymer and the low molecular weight compound according to the examples of D3a corresponded to the HMWA and LMWA components, respectively, according to claim 3 of the main request. However, while D3a discloses the molecular weight of the low molecular weight compound used in the examples (D3a: page 10, last paragraph), it contains no explicit disclosure in respect of either the molecular weight of the matrix polymer or the entanglement molecular weight of the low molecular weight compound used to prepare the impact-strength modified moulding composition. Therefore, the question arose if it could be agreed with the appellant's view that the matrix polymer and the low molecular weight compound according to D3a met the requirements in terms of molecular weight of the HMWA component and LMWA component, respectively, according to claim 3 of the main request.

2.4.3 In that regard, the Board considers that the skilled person would understand the disclosure of D3a 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 D3a 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 D3a (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 D3a (50 000 g/mol, i.e. 50k Daltons). On top of that, the fact that in the examples of D3a the addition of the low molecular weight component leads to an increase in the melt flow rate of the impact modified polymer composition (D3a: 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. Therefore, it is derivable from D3a as a whole that the polymethacrylate matrix used in the examples of D3a 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 3 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 D3a could not have a weight average molecular weight above 1000k Daltons, as also specified in claim 3 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 D3a (90.000 to 200.000 g/mol, preferred 100.000 to 150.000 g/mol, page 4, lines 9-11).

For these reasons, the requirements in terms of the molecular weight of the HMWA component specified in claim 3 of the main request and corresponding to the first two features indicated in section 2.4.1 above do not constitute distinguishing features over the examples of D3a carried out with either 5 wt.% or 10 wt.% of the low molecular weight moulding compound.

- 2.4.4 In addition, the component of D3a corresponding to the LMWA material defined in operative claim 3 is the low molecular weight polymethacrylate disclosed therein, which in the examples of D3a is a copolymer of 85 wt% methylmethacrylate and 15 wt.% methyl acrylate having a weight average molecular weight of 50 000 g/mol (D3a: page 10, last paragraph). Although it is correct that there is no information in D3a if said molecular weight is above the entanglement molecular weight M_e , the question to be answered is if said requirement is implicitly satisfied in view of the information provided in the patent in suit in respect of said feature M_e . In this respect the molecular weight of the low molecular weight moulding compound disclosed in the examples of D3a (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 103, with a weight average molecular weight of 22.1k Daltons). Taking into account in addition the similarity of the copolymers in the examples of D3a 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 D3a may be below the entanglement molecular weight M_e . Although that issue was mentioned in the Board's communication (section 6.1.2), 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 D3a, in particular characterised in that it has a weight average molecular weight of 50 k Daltons, may not have satisfied the M_e requirement defined in claim 3 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 3 is implicitly satisfied in the examples of D3a.

For these reasons, the requirement in terms of molecular weight of the LMWA component specified in claim 3 of the main request and corresponding to the third feature indicated in section 2.4.1 above does not constitute a distinguishing feature over the examples of D3a carried out with either 5 wt.% or 10 wt.% of the low molecular weight moulding compound.

2.4.5 It is further noted that the conclusions reached in sections 2.4.3 and 2.4.4 above were already communicated to the parties in the Board's communication (section 6.1.2). In the absence of any counterarguments in that regard filed by the respondent (in particular in their letters of 2 November 2023 and 5 December 2023), there are no reasons for the Board to deviate from its preliminary considerations.

2.4.6 For these reasons, the respondent's arguments that D3a failed to directly and unambiguously disclose that the requirements in terms of molecular weight defined in operative claim 3 of the main request were satisfied

are rejected.

2.5 In view of the conclusion reached in section 2.4 above, the question remains to be answered whether the purpose related feature "Use ... as a reduced cooling cycle time composition" (see feature (b) identified in section 2.3 above) can be held to constitute an (additional) functional feature in the sense of decision G 2/88 (OJ EPO, 1990, 93) which is suitable to distinguish the subject-matter of operative claim 3 from the disclosure of the relevant examples of D3a.

2.5.1 In that regard, 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, 9.1 and 10.3 of the reasons).

2.5.2 In the present case, it is necessary to establish first the meaning of the term "reduced cooling cycle time composition".

a) In that respect, the skilled person working in the technical field of the patent in suit would understand that the term "cooling cycle time composition" is related to a critical stage of the cycle time in injection moulding processes (as reflected in paragraph 72 of the patent in suit; see also D11a: point 9 and D14: paragraphs under the heading "Reduced cooling time"; although D14 bears no publication date, the relevant passage appears merely to illustrate common general knowledge). This finding is in particular in line with the respondent's view that a typical injection moulding cycle is formed of two main stages, namely the injection cycle time and the cooling cycle time (letter of 2 November 2023: page 3, first paragraph).

b) In addition, it is agreed with the finding of the opposition division that the term "reduced" is, in the absence of any reference for comparison given in operative claim 3, to be read as a relative term, i.e. a comparison with a polymer composition not according to the claimed subject-matter (reasons: page 8, paragraph starting with "3) Concerning the ..."). However, in the absence of such a reference, the exact meaning of the term "reduced" cannot be established precisely.

c) In view of the above, the Board therefore considers that the term "reduced cooling cycle time composition" implies that the composition defined in claim 3 is used to shorten the cooling stage in injection moulding processes, whereby the exact meaning of that shorter stage is vague.

2.5.3 With that definition in mind, it is further noted that it remained undisputed that document D3a is directed to polymer blends for use in injection-moulding processes (see e.g. D3a: page 3, last paragraph; examples: page 9, first full paragraph), i.e. the processes for which the reduced cooling cycle time feature of claim 3 of the main request is relevant. Therefore, claim 3 of the main request does not include as a technical feature a "new mean of realisation" (i.e. method step) by which the new purpose is achieved (G 2/88: point 7.1 of the reasons, first and third paragraphs) and novelty cannot be acknowledged on that basis in the present case.

2.5.4 Under these circumstances, it remains to be assessed if document D3a makes available to the public the technical feature that the polymer blend disclosed therein, when used as described, achieves the effect of "reduced cooling cycle time composition".

a) In that regard, the sole disclosure of the patent in suit in respect of the feature "reduced cooling cycle time composition" is in paragraphs 71 and 72, which read as follows:

"[0071] Surprisingly, a polymeric melt blend in accordance with any of the aspects of the present invention has a much higher melt flow index (MFI) and comparable Tg when compared with the HMWA in isolation. [0072] As the Tg is maintained at a comparable level to

the HMWA the compositions can be used in a variety of similar applications but with improved processability due to the higher MFI. For instance, comparable processability can be maintained with reduced cycle times thus reducing the cost of production. Advantageously, the invention also provides processing advantages as high Tg blends require less processing time i.e. cooling time during processing. Faster part cooling rates in the tool can therefore be achieved with the invention. Furthermore, structural integrity can be achieved at higher final part temperatures, effectively reducing the cooling cycle times. One application where this is advantageous is thick section moulding applications which require high melt flow polymers. Such high melt flow polymers can be demoulded more quickly if the Tg of the polymer is higher."

In view of this, the technical effect underlying the "reduced cooling cycle time composition" feature according to claim 3 of the main request that is disclosed in the patent in suit is related to the fact that the polymeric melt blend comprising a HMWA and a LMWA components as defined therein have higher melt flow and comparable glass transition temperature (Tg) when compared with the sole HMWA component.

b) Regarding the disclosure of D3a, the last paragraph on page 3 thereof reads as follows:

"It was not foreseeable that the desired characteristics could be achieved by addition of a low molecular weight polymethacrylate molding compound. The new impact-strength-modified molding compound is suitable in particular for use in the injection-molding process, where good melt volume-flow rate is required

in order to ensure short cycle times and good filling of the molds. In the process, the other characteristics of the obtained injection-molded articles are not impaired, especially the dimensional stability at high temperature and the notched impact strength."

b1) It is correct that, as put forward by the respondent, said passage of D3a does not explicitly mention "reduced *cooling* cycle time" (emphasis by the Board) but merely short(er) cycle time. However, as already indicated in section 2.5.2.a above, it is accepted that a typical injection moulding cycle is formed of two main stages, namely the injection cycle time and the cooling cycle time. Although the respondent put forward that in some particular instances the injection cycle time could be more decisive than the cooling cycle time, this was only relevant when the melt flow of the polymer blend was very low (letter of 2 November 2023: page 3, fifth paragraph). However, as pointed out by the appellant (letter of 28 November 2023: section 4 on pages 8 and 9) such a situation is not valid for the disclosure of D3a, in particular for the examples thereof carried out with either 5 wt.% or 10 wt.% of the low molecular weight moulding compound, which is directed to polymer blends that have a melt flow above 11 cm³/10 min (D3a: claim 1 and table on page 11). That conclusion is further in line with the findings of the Board in the parallel case T 3272/19 (see point 2.6.5 of the reasons, third paragraph).

b2) In addition, it is derivable from the examples of D3a as well as from the last paragraph on page 3 of D3a (see preceding paragraph 2.5.4.b) that the effect of short cycle time mentioned therein is related to an increase in melt flow while maintaining the thermal

stability of the polymer blend which is obtained by adding to the polymer matrix a low molecular weight component. In that regard, it was agreed by both parties in the parallel case T 3272/19 (page 30, first full paragraph) that both the maintenance of a good glass temperature (T_g) feature according to the patent in suit and the "good Vicat properties" according to D3a (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. Since that view was not further disputed in the present case, the same conclusion is valid, namely that the maintenance of a good glass temperature according to paragraphs 71-72 of the patent in suit is not related to a new property as compared to the ones known from D3a, but an alternative way of describing a known property (thermal stability). Under these circumstances, the Board considers that the disclosure at paragraphs 71 and 72 of the patent in suit and in the last paragraph on page 3 of D3a (or in the table on page 11 thereof) both relate the use of the polymer blends defined in these documents to the same effect of a shorter time of the relevant part of the whole injection cycle, which is in both cases the cooling step as outlined above, which effect is related to the same properties of the polymer blend.

c) For these reasons, the Board arrives at the conclusion that the distinction made by the respondent between reduced cooling cycle time and reduced injection cycle time (rejoinder: points 2.1.15 and 2.1.17; letter of 2 November 2023: points 2.1.2 and 2.1.3) is not justified and that the indication "short cycle times" in D3a means "reduced cooling cycle time" in the sense of claim 3 of the main request and of the

patent in suit.

2.5.5 In addition, in view of the above considerations, the Board further shares the appellant's view (statement of grounds of appeal: page 4, last paragraph) that the purpose indicated in operative claim 3 "reduced cooling cycle time composition" does not open a new field of application as compared to compositions disclosed to lead to "short cycle times" as disclosed in D3a (page 3, third paragraph, fourth line).

a) In that respect, the Board considers that, for the reasons indicated in section 2.5.4 above, it cannot be concluded in view of the evidence on file that the "reduced cooling cycle time" feature according to claim 3 of the main request is directed to an effect that had not been made available in the prior art document D3a. Under these circumstances, the principle indicated in decision G 2/88, according to which novelty was acknowledged considering that the subject-matter being claimed (although it contained the same means of realisations as in the prior art) was directed to an effect that had not been made available in the prior art, does not apply to the present case (see point 10.2 of the reasons of G 2/88: the effect of controlling fungus with specific compounds was considered not to have been made available by a prior art document disclosing the use of the same compounds to regulate the growth of plants, even though the means of application of such compounds to plants was in both cases the same).

b) In addition, the respondent's argument that D12 and D13 evidenced the disadvantage found with the prior art, whereby increased melt flow was achieved at the expense of decreased thermal properties (rejoinder:

points 2.1.4 and 2.1.5), is not in line with the teaching of D3a and for that reason, fails to convince. In that regard, the Board further does not share the respondent's view that D12 to D14 showed that the subject-matter of claim 3 of the main request represented a new use (rejoinder: sections 2.1.2 to 2.1.7) for the same reasons as the ones indicated in section 2.5.4 above.

c) Also, the relevance of D11a (rejoinder: point 2.1.9) remained unclear to the Board since each compositions A to D prepared therein fulfill all the requirements of the composition defined in claim 3 of the main request (which in particular allows comonomers to be present in both HMWA and LMWA components in an amount of up to 20 wt.%). Therefore, in view of the reading of that term indicated in section 2.5.1.b above, the experiments carried out in D11a are not suitable to show that the compositions defined in claim 3 effectively provide a reduced cooling cycle time as compared to compositions not as defined in claim 3.

d) Although these concerns were indicated to the parties in the Board's communication (section 6.1.6), no counterarguments were put forward by the respondent in their later submissions. Under these circumstances, the Board has no reason to deviate from its preliminary considerations.

3. In view of the above, the wording of claim 3 of the main request "as a reduced cooling cycle time composition" 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 D3a carried out with 5 wt.% or 10 wt.% of low molecular weight moulding

component.

Admittance of documents D12 to D14

4. Documents D12 to D14 were filed by the respondent with their rejoinder to the statement of grounds of appeal, whereby these documents were used in support of their line of defence regarding novelty of claim 3 of the main request (rejoinder: points 1.7 and 2.1.2 to 2.1.7). Although the admittance of documents D12 to D14 was in dispute between the parties, it is derivable from the above analysis that no different conclusion would be reached even if the disclosure of these documents were - to the respondent's benefit - taken into account. In other words, the same conclusion is valid independently of whether or not any of these documents were admitted into the proceedings. Under these circumstances, the issue of admittance of D12 to D14 does not need to be addressed in details in the present decision. That finding was agreed upon by the appellant during the oral proceedings before the Board.
5. For these reasons, the subject-matter of claim 3 of the main request is not novel over the disclosure of D3a.

Auxiliary requests 1 and 2

6. It was indicated in the Board's communication (section 10.1) that since the amendment made in claim 3 of auxiliary request 1 as compared to claim 3 of the main request constituted no additional distinguishing feature over the disclosure of the relevant examples of D3a (the weight ratio of HMWA:LMWA is clearly well above 1:1 in these examples), it was not suitable to overcome an objection of lack of novelty over D3a that would be retained against claim 3 of the main request.

In the absence of any counterarguments from the respondent in that respect, there is no reason for the Board to deviate from its preliminary considerations according to which the subject-matter of claim 3 of auxiliary request 1 was not novel over the disclosure of D3a for the same reasons as outlined above for claim 3 of the main request.

7. Operative auxiliary request 2 is identical to auxiliary request 6 filed by the respondent with letter of 2 November 2023. It remained undisputed that auxiliary request 2 differed from auxiliary request 1 in that claim 4 thereof was deleted (respondent's letter of 2 November 2023: point 3.2, with reference to the then pending auxiliary request 6), which means that claim 3 of auxiliary request 2 is identical to claim 3 of auxiliary request 1. Also the Board has no reason to be of a different opinion. Therefore, claim 3 of auxiliary request 2 can only share the same fate as claim 3 of auxiliary request 1.
8. In view of the conclusions reached in sections 6 and 7 above that the subject-matter of claim 3 of each of auxiliary requests 1 and 2 is not novel over the disclosure of D3a without the need of any further analysis, there is no need for the Board to decide on the admittance of any of these requests, which was in dispute between the parties.

Auxiliary request 3

9. Admittance
 - 9.1 Auxiliary request 3 was filed with the respondent's letter of 5 December 2023, i.e. after notification of the summons to oral proceedings. Therefore, without

prejudice to the parties' arguments, its admittance is governed by Article 13(2) RPBA, according to which any amendment to a party's appeal case is, in principle, not taken into account unless there are exceptional circumstances, which have been justified with cogent reasons by the party concerned.

- 9.2 The Board concurs with the approach taken in several decisions (T 247/20, point 1.3 of the Reasons; T 2988/18, point 1.2 of the Reasons; T 2920/18, point 3.4 of the Reasons), according to which the examination under Article 13(2) RPBA is carried out in two steps. The first question to be answered is whether the submission objected to is an amendment to a party's appeal case (first step). If that question is answered in the negative, then the Board has no discretion not to take the submission into account. If, however, that question is answered in the affirmative, then the Board needs to decide whether there are exceptional circumstances, justified by cogent reasons (second step).

First step

- 9.2.1 Auxiliary request 3 differs from the main request only in that claims 3 and 4 have been deleted, i.e. it comprises only subject-matter which was also part of the main request.
- 9.2.2 In the present case, it was not argued by any of the parties that auxiliary request 3 did not constitute an amendment to the respondent's case. In that regard, the Board endorses the line of case law set out e.g. in decisions T 713/14 (reasons: points 4.2 and 4.3), T 494/18 (reasons: point 1.4), T 2091/18 (reasons: points 4.1 and 4.2), T 2920/18 (reasons: point 3.6) or

T 2295/19 (reasons: point 3.4) which likewise concerned deletions of claims or of alternatives embodiments within claims and regarded them as amendments.

Second step

9.2.3 Therefore it remains to be assessed if there are exceptional circumstances, supported by cogent reasons, which justify the admittance of auxiliary request 3 into the appeal proceedings.

a) In that regard, it was undisputed that the successful objection of lack of novelty against claim 3 was present from the outset of the appeal proceedings. The same is valid for the objection of lack of novelty that was pursued by the appellant in the statement of grounds of appeal against claim 4 of the main request, which was also considered to lack novelty over D3a in the Board's preliminary opinion (communication: sections 6.1.8 to 6.1.10), although no decision on that claim was eventually needed in view of the negative decision on novelty reached for claim 3 of the main request. Therefore, the Board agrees with the appellant that the filing of a set of claims according to auxiliary request 3, i.e. corresponding to the one of the main request in which claims 3 and 4 were deleted, would already have been possible and reasonable with the rejoinder to the statement of grounds of appeal (appellant's letter of 28 November 2023: point I.3).

9.2.4 However, in similar cases, some Boards have acknowledged exceptional circumstances when the admittance of the amendments was neither detrimental to procedural economy, nor to the convergent approach laid down in the RPBA 2020, nor to the legitimate interests of a party to the proceedings. This specific procedural

situation was considered an "exceptional circumstance" within the meaning of Article 13(2) RPBA, see e.g. T 1598/18 (reasons: point 25.1), T 1294/16 (reasons: points 18.3 and 19), T 339/19 (reasons: point 1.5), T 2920/18 (reasons: points 3.13 to 3.15), T 2295/19 (reasons: points 3.4.12 to 3.4.14), T 499/20 (reasons: point 7.3.3). The present Board agrees with this approach and finds it applicable to the present case for the following reasons:

a) By deleting any other pending auxiliary requests apart from auxiliary request 3 (section VIII above), whereby the latter only contained claims that were present in the main request allowed by the opposition division, the Board is satisfied that the convergent approach laid down in the RPBA 2020 (see explanatory remarks to Article 12 and 13 RPBA and e.g. T 1294/16, point 18.3 of the reasons) and the need for procedural economy are respected.

b) In addition, by maintaining only claims that were until then not attacked by the appellant in appeal proceedings, auxiliary request 3 is not detrimental to the legitimate interests of the appellant at that point of the proceedings (since no objections had been maintained/raised against these claims). In particular, the admittance of auxiliary request 3 would neither alter the factual or legal framework of the proceedings, nor compromise the procedural rights of the appellant.

c) Also, it is taken into account that the appellant's objections regarding an alleged lack of novelty over D6 that were raised against claim 4 of the main request or claim 4 of the then pending auxiliary request 2 filed with the rejoinder to the statement of grounds of

appeal were no longer relevant (see statement of grounds of appeal: page 5, third to fifth paragraphs; appellant's letter of 7 February 2023: points II.3). Under these circumstances, the Board is satisfied that admitting auxiliary request 3 into the proceedings supports procedural economy.

9.2.5 For these reasons, which in the Board's view constitute exceptional circumstances within the meaning of Article 13(2) RPBA, the Board made use of its discretion pursuant to Article 13(2) RPBA by admitting auxiliary request 3 into the proceedings.

10. Objections of lack of inventive step - Admittance

10.1 At the oral proceedings before the Board, the appellant indicated that they intended to substantiate objections of lack of inventive step in view of either D3a or D6 as the closest prior art against claims 1, 2 and 4 of auxiliary request 3.

10.2 However, it had already pointed out by the respondent in their rejoinder to the statement of grounds of appeal that the appellant had only very briefly asserted in their statement of grounds of appeal that claims 3 and 4 of the main request lacked inventive step, albeit without providing a proper reasoning. In particular, it was not explained why the decision of the opposition division in that respect would be wrong (rejoinder: points 3.1 and 3.2). Also, as indicated in the Board's communication (section 5), only claims 3 and 4 of the main request were objected to in the statement of grounds of appeal. It was further not disputed by the appellant, in particular at the oral proceedings before the Board, that also no objection of lack of inventive step was duly substantiated against

any of claims 1, 2 or 4 of the main request in their submission of 7 February 2023, which was filed in reaction to the respondent's rejoinder to the statement of grounds of appeal, or in their last written submission of 28 November 2023 (see in particular section III.1.a). Therefore, the appellant's objections of lack of inventive step against claims 1, 2 and 4 of auxiliary request 3 in view of either D3a or D6 put forward at the oral proceedings constitute an amendment to the appellant's case pursuant to Article 13(2) RPBA. As outlined above (section 9.1), such an amendment to a party's appeal case is, in principle, not taken into account unless there are exceptional circumstances, which have been justified with cogent reasons by the party concerned.

10.3 In the present case, considering that claims 1, 2 and 4 of auxiliary request 3 are identical to claims 1, 2 and 6 of the main request dealt with in the decision under appeal and allowed by the opposition division the Board cannot identify any exceptional circumstances which may justify the submission of these objections at such a late stage of the proceedings.

10.3.1 This is particularly true for the objection starting from D3a as the document constituting the closest prior art, which is in disagreement with the opposition division's finding (reasons: section 2.3.7). However, it was not explained in the statement of grounds of appeal or in any other written submissions why the opposition division would not be correct, i.e. that finding was not disputed before the oral proceedings in front of the Board were held.

10.3.2 Regarding the objection of lack of inventive step based on D6 as the closest prior art, it is further to be

considered that such an objection was neither dealt with, nor even put forward by the appellant (then opponent) during the opposition proceedings and the appellant has not shown that the circumstances of the case may justify the admittance of that objection at such a late stage of the proceeding. In particular no arguments in that sense were put forward either in writing or at the oral proceedings before the Board, in reaction to the Board's communication in which said concerns were indicated (section 13.2.5). In the circumstances of the present case, the Board further cannot recognise any reasons why such an objection could not have been submitted already during the opposition proceedings.

10.4 It is further noted that in the present case, the main request allowed by the opposition division contained several independent claims, namely claims 1, 2, 3, 4, 5, 6, 9 and 10. Under these circumstances, it would have been the duty of the appellant to duly substantiate already in their statement of grounds of appeal why they considered that the decision of the opposition division was wrong that each of these independent claims met the requirements of the EPC. In that regard, admitting the appellant's objections of lack of inventive step raised against claims 1, 2 and 4 of auxiliary request 3 (which correspond to claims 1, 2 and 6 of the main request) would go against the stipulations of Article 12(3) RPBA that the appellant should present their complete case in the statement of grounds of appeal.

10.5 At the oral proceedings before the Board, the appellant argued that it was stated in the statement of grounds of appeal that they requested the revocation of the patent in suit, which implicitly meant that all the

claims of the main request were then objected to.

However, such an implicit objection is not in line with the stipulations of Article 12(3) RPBA that the appellant shall set out clearly and concisely in their statement of grounds of appeal the reasons why it is requested that the decision under appeal be reversed, amended or upheld, and should specify expressly all the requests, facts, objections, arguments and evidence relied on. For that reason, the appellant's argument did not convince.

- 10.6 At the oral proceedings before the Board, the appellant further justified the late filing of the objections of lack of inventive step by the fact that the appellant was convinced that claims 3 and 4 of the main request were not allowable because they lacked novelty. Therefore, it was not unnecessary for them to file any further objections against other claims since the main request as a whole was not allowable for other reasons.

However, an opponent/appellant should not rely on their conviction that the Board will agree with their objection and should take into account that the Board might disagree with their view and rather accept the reasoning of the opposition division or of the other party. By not substantiating all their - possibly relevant - objections at the outset of the appeal proceedings, a party must accept the risk that such an objection might be not admitted into the proceedings if it is only raised at a later stage. For that reason, the appellant's argument is rejected.

- 10.7 At the oral proceedings before the Board, the appellant also considered that the inventive step objections should be admitted as a matter of fairness because

auxiliary request 3 was admitted at a very late stage of the proceedings.

However, the question of fairness was already taken into account in the analysis provided above: in the present case, one of the reason for admitting auxiliary request 3 is that it only contains claims that were already present in the main request allowed by the opposition division and which were not attacked in appeal. Under these circumstances, the appellant was given the opportunity to attack any of the claims of auxiliary request 3 already when filing their appeal, i.e. auxiliary request 3 was admitted taking into account, among others, that it did not compromise the procedural rights of the appellant.

- 10.8 In view of the above, there are neither exceptional circumstances justifying the admittance into the proceedings of the appellant's objections of lack of inventive step in view of D3a or D6 as the closest prior art which were raised against claims 1, 2 and 4 of auxiliary request 3, nor do the appellant's arguments constitute cogent reasons in the sense of Article 13(2) RPBA which would have justified the admittance into the proceedings of these objections at such a late stage of proceedings.
- 10.9 For these reasons, the Board found it justified not to take into account these inventive step objections (Article 13(2) RPBA).
- 10.10 For the sake of completeness, it is pointed out that the above conclusion on the non-admittance of the appellant's objections of lack of inventive step in view of D3a or D6 put forward against claims 1, 2 and 4 of auxiliary request 3 was reached independently of the

the fact that the respondent was not present at the oral proceedings before the Board. In other words, the fact that the respondent did not attend the oral proceedings did not have any influence on that decision and was irrelevant for reaching that decision. Therefore, the appellant's concerns in that regard, which were put forward at the oral proceedings before the Board, are rejected.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the opposition division with the order to maintain the patent in amended form on the basis of the claims of auxiliary request 3 filed with letter of 5 December 2023 after any necessary consequential amendments to the description.

The Registrar:

The Chairman:



D. Hampe

D. Semino

Decision electronically authenticated