

Internal distribution code:

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

**Datasheet for the decision
of 24 May 2022**

Case Number: T 2161/18 - 3.3.03

Application Number: 08005050.3

Publication Number: 1953179

IPC: B29B9/12, B29K67/00,
C08G63/183, C08G63/185

Language of the proceedings: EN

Title of invention:

Polyester polymer particles having a small surface to center
viscosity gradient

Patent Proprietor:

GRUPO PETROTEMEX, S.A. DE C.V.

Opponent:

T.EN Zimmer GmbH

Relevant legal provisions:

EPC Art. 54, 56, 100(a), 100(c)

RPBA Art. 12(4)

RPBA 2020 Art. 13(1), 13(2)

Keyword:

Late-filed evidence - admitted (no)

Grounds for opposition - added subject-matter (no) - lack of patentability (no)

Late-filed objection - admitted (no)

Decisions cited:

G 0009/91, G 0002/10, G 0003/14, T 0131/01, T 0597/07,

T 0671/08, T 1042/18



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 2161/18 - 3.3.03

D E C I S I O N
of Technical Board of Appeal 3.3.03
of 24 May 2022

Appellant:

(Opponent)

T.EN Zimmer GmbH
Friesstrasse 20
60388 Frankfurt am Main (DE)

Representative:

Meyer-Dulheuer MD Legal Patentanwälte PartG mbB
Speicherstraße 59
60327 Frankfurt am Main (DE)

Respondent:

(Patent Proprietor)

GRUPO PETROTEMEX, S.A. DE C.V.
Ricardo Margain No. 444
Torre sur, Piso 16
Col. Valle de Campestre
San Pedro Garza Garcia, Nuevo Leon 66265 (MX)

Representative:

Tostmann, Holger Carl
Wallinger Ricker Schlotter Tostmann
Patent- und Rechtsanwälte Partnerschaft mbB
Zweibrückenstrasse 5-7
80331 München (DE)

Decision under appeal:

**Decision of the Opposition Division of the
European Patent Office posted on 6 July 2018
rejecting the opposition filed against European
patent No. 1953179 pursuant to Article 101(2)
EPC.**

Composition of the Board:

Chairman D. Semino
Members: O. Dury
R. Cramer

Summary of Facts and Submissions

I. The appeal of the opponent is against the decision of the opposition division rejecting the opposition filed against European Patent No. 1 953 179. The application on which the patent is based was filed as divisional application No. 08 005 050.3 of an earlier European patent application.

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

D1: US 5 442 036

D3: US 6 066 713

D6: EP 0 661 326 A2

D7: US 2002/0128427 A1

D9: US 4 064 112

D15: WO 03/046045 A1

D17: EP 0 842 210 B1

D19: Declaration of Mr. Kezios, dated
17 October 2011

III. In that decision the following conclusions were reached:

- Document D19 was admitted into the proceedings;
- The subject-matter of the claims as granted neither extended beyond the content of the application as filed, nor beyond the one of the earlier application as filed;

- The subject-matter of the claims as granted was novel over documents D15 and D6;
- The subject-matter of the claims as granted was inventive starting from D17 as the closest prior art document, even in the light of the teaching of D3. Also, D3 was held not to constitute a suitable document to be taken as the closest prior art;
- An objection regarding lack of clarity in relation to paragraph 30 of the patent in suit was rejected.

For these reasons, the opposition was rejected.

IV. The opponent (appellant) filed an appeal against the above decision and, together with the statement of grounds of appeal, filed the following documents:

- D20: WO 2005/092949 A1
- D21: DE 10 2004 015 515 A1
- D22: Journal Article from IFJ, June 2004, B. Otto and U. Berger, "Zimmer Develops Direct to Preform PET Packaging Process", pages 67-69
- D23: B. Otto and N. Hally, Powerpoint slides of a presentation shown at the Conference "7th World Congress: The Polyester Chain", Zurich, Switzerland, 2 December 2002
- D24: Slides of D23 as presented with Dr. Otto's original notes for oral presentation
- D26: US 5 656 221

Reference was further made to a document D25, which was however not filed.

V. With its rejoinder to the statement of grounds of appeal, the patent proprietor (respondent) filed two

sets of claims as first and second auxiliary requests.

- VI. In a communication dated 15 April 2019 the Board confirmed to the appellant that, in spite of the difficulties they encountered with their telefax, the statement of grounds of appeal had been received in full in due time and that the Board did not intend to disregard some of the annexes thereto as being late filed for this sole reason.
- VII. With letter of 19 February 2019 the appellant filed the following documents:
- D27: US 6 461 575 B1
D28: DE 198 48 245 A1
D30: Declaration of Dr. B. Otto, dated
1 February 2019
- VIII. With letter of 5 November 2021, the appellant put forward further arguments.
- IX. The parties were summoned to oral proceedings and a communication pursuant to Article 15(1) RPBA 2020 dated 3 February 2022 was then issued by the Board.
- X. Oral proceedings were held on 24 May 2022 in the presence of both parties.
- XI. **The final requests of the parties were as follows:**
- (a) The appellant requested that the decision of the opposition division be set aside and that the patent be revoked.
- (b) The respondent requested that the appeal be dismissed, or alternatively that the decision under

appeal be set aside and the patent be maintained in amended form on the basis of the claims of the first or the second auxiliary request, both filed with the rejoinder to the statement of grounds of appeal.

XII. Claim 1 of the **main request (patent as granted)**, which is the sole claim relevant for the present decision, reads as follows:

"1. A process for making a container from a polyester polymer, comprising feeding polyester particles having a degree of crystallinity of at least 35% and an intrinsic viscosity of at least 0.70 dL/g to an extrusion zone, melting the particles in the extrusion zone to form a molten polyester polymer composition, and forming a sheet or a molded part from extruded molten polyester polymer, further comprising drying the particles before feeding the particles to the extrusion zone, wherein the particles are not solid state polymerized before drying and wherein the particles have an acetaldehyde level of 10 ppm or less prior to melting in the extrusion zone,

wherein the polyester particles fed to the extrusion zone have an intrinsic viscosity at their surface which is less than 0.25 dL/g higher than the intrinsic viscosity at their center, the "surface" being the outer 8 - 12% by mass, while the "center" being the inner 8 - 16% by mass of the particle around the particle center point,

wherein degree of crystallinity, intrinsic viscosity and difference in intrinsic viscosity between surface and center are determined according to the respective methods as disclosed in the description, and

wherein said particles are in the form of pellets."

XIII. The **first and second auxiliary requests** are not relevant to the present decision.

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

(a) Documents D20 to D24, D26 to D28 and D30 should be admitted into the proceedings;

(b) Claim 1 as granted and paragraph 30 of the patent in suit extended beyond the content of the application as filed;

(c) The subject-matter of claim 1 as granted was not novel over D15;

(d) The subject-matter of claim 1 as granted was not inventive starting from document D17 as the closest prior art;

(e) The objections of lack of inventive step starting from either D15 or D3 as the closest prior art document should be admitted into the proceedings.

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

(a) Documents D20 to D24, D26 to D28 and D30 should be not admitted into the proceedings;

- (b) Claim 1 as granted and paragraph 30 of the patent in suit did not extend beyond the content of the application as filed;
- (c) The subject-matter of claim 1 as granted was novel over D15;
- (d) The subject-matter of claim 1 as granted was inventive starting from document D17 as the closest prior art;
- (e) The appellant's objections of lack of inventive step starting from either D15 or D3 as the closest prior art document should be not admitted into the proceedings.

Reasons for the Decision

Main request (patent as granted)

1. Admittance of documents D20 to D24 and D26
 - 1.1 In its letter of 5 November 2021, the appellant stated that documents D21 to D24 and D26 were already admitted by the Board with its communication dated 15 April 2019 (page 8: end of the second full paragraph). In the Board's communication of 3 February 2022 (section 4.3.3), it was indicated that it was not clear to the Board how such a conclusion was reached and the appellant's attention was brought to the last paragraph of the Board's communication dated 15 April 2019, in which it was stated that although the Board did not intend to disregard these documents in view of the technical difficulties advanced by the appellant when

filing its statement of grounds of appeal (problems with the telefax), that statement of the Board was "made without prejudice to the Boards discretion to disregard them for other reasons, e.g. because the documents could have been presented in the first instance proceedings (Article 12(4) RPBA)". Upon receipt of the Board's communication, that argument was not pursued by the appellant any further, in particular not at the oral proceedings.

1.2 Considering that D20 to D24 and D26 were filed with the statement of grounds of appeal, the (non)admission to the proceedings of these documents and of the submissions based thereon is regulated by the provisions of Article 12(4) RPBA 2007 (see Article 25(2) RPBA 2020).

1.3 In that respect, the aim of opposition-appeal proceedings is to obtain a judicial review of the opposition decision and not to bring a "fresh case" (Case Law of the Boards of Appeal of the EPO, 9th edition, 2019, V.A.4.11.1), as explicitly indicated in Article 12(2) RPBA 2020. In particular, it is a matter for each party to submit all facts, evidence, arguments and requests relevant for the enforcement or defence of its rights as early and completely as possible, in particular in *inter partes* proceedings, in order to act fairly towards the other party and, more generally, to ensure due and swift conduct of the proceedings (Case Law, *supra*, V.A.4.1.2, 4.2.1, 4.4.2.b, 4.11.1 and 4.11.3.a).

1.4 In its letter of 6 April 2022 and at the oral proceedings before the Board, the appellant argued that these documents were only filed at such a late stage of the proceedings because, at the time of the opposition

proceedings, they were deemed less important than the other documents already on file (which would imply that they were known to the appellant at that time). Furthermore the decision of the opposition division on novelty, which turned out to be negative for the appellant, was not known before the end of the oral proceedings before the opposition division. The appellant, contrary to the above argument, stated at the oral proceedings before the Board that, in view of that decision, an additional search was carried out, which led to these documents. According to the appellant, it should further be taken into account that they only became aware of these documents very recently and that they were then filed as soon as possible and early enough in appeal to allow the respondent to consider them thoroughly.

Since it was undisputed that D20, D21, D23 and D24 were all filed in support of new objections of lack of novelty (statement of grounds of appeal: page 6 to top of page 9) and considering that the operative main request is the patent as granted, there can be in the Board's view no compelling reasons for filing these documents and raising these objections for the first time in appeal. For the same reason, there can also be no justification for carrying out an additional search in reaction to the decision of the opposition division and/or for raising new objections during the appeal proceedings, even at the outset of these proceedings.

Admitting these documents into the proceedings would further not be in line with the criterion of Article 12(2) RPBA 2020 that the primary object of the appeal proceedings is to review the decision under appeal in a judicial manner and that the parties' appeal cases shall be directed to facts, objections, arguments and

evidence on which the decision under appeal was based.

For these reasons, the appellant's arguments are rejected.

- 1.5 The appellant further argued that D21 was filed to corroborate assumptions made earlier by the opponent in its objection of lack of novelty based on D15 (statement of grounds of appeal: page 9, section "Lack of Novelty III: D15). Therefore, the appellant held that D21 was filed in reaction to the decision under appeal, in order to support an argument which did not convince the opposition division.

However, considering that D21 was filed in 2004, it was not available at the priority/filing date of D15 (2001/2003). Under such circumstances, D15 cannot have made any reference to D21. Nor was it shown by the appellant that D21 contained any indication that the process disclosed therein was used in the passages of D15 relied upon by the opponent for its novelty objection. Therefore, it cannot be concluded that D15 must be read in the light of D21 and/or that any information derivable from D21 must apply to the disclosure of D15. For these reasons, the argument that D21 demonstrated the validity of an assumption made in respect of D15 fails to convince and cannot justify that D21 should be admitted for that reason.

- 1.6 Although document D22 did not appear to have been referred to explicitly in the statement of grounds of appeal, the respondent seemed to understand that D22 was - implicitly - referred to in the last paragraph on page 8 of the statement of grounds of appeal (rejoinder to the statement of grounds of appeal: last paragraph on page 7). However, as noted by the respondent, D22

was only used as a combination document with D20/D21. Therefore, regarding its admittance into the proceedings, D22 can only share the same fate as D20/D21.

- 1.7 Document D26 was filed in order to support an argument related to the reading of claim 1 (statement of grounds of appeal: bottom of page 4; top of page 10). However, it was not shown that this issue was relevant for the decision under appeal, nor that it was in dispute between the parties. Under these circumstances, the appellant has not provided any reasons justifying the filing of D26 with the statement of grounds of appeal.
- 1.8 In view of the above, the Board found it appropriate to make use of its power to hold documents D20 to D24 and D26 inadmissible pursuant to Article 12(4) RPBA 2007.
2. Admittance of documents D27, D28 and D30
 - 2.1 Considering that D27, D28 and D30 were submitted after the statement of grounds of appeal (appellant's letter of 19 February 2019), their admittance underlies the stipulations of Article 13(1) RPBA 2020 (equivalent to Article 13(1) RPBA 2007), according to which any amendment to a party's case after it has filed its grounds of appeal or reply may be admitted only at the Board's discretion.
 - 2.2 The Board's view (section 4.4.1 of the communication dated 3 February 2022) that document D30 corresponded to document D25 which was mentioned in the statement of grounds of appeal but not filed therewith was not contested.

2.3 The appellant has not provided any justification why these documents were only filed at such a late stage of the proceedings. In that respect, since the operative main request is the patent as granted, there is no reason justifying the filing of these documents for the first time in appeal, as outlined above in respect of D20 to D24 and D26. Admitting these documents into the proceedings would further run counter to the economy of the proceedings and not be in line with the requirements of Article 12(3) RPBA 2020 (whose wording is in essence identical to the one of Article 12(2) RPBA 2007), which specifies that the statement of grounds of appeal shall contain a party's complete appeal case.

2.4 For these reasons, the Board found it appropriate to make use of its discretion by not admitting D27, D28 and D30 into the proceedings (Article 13(1) RPBA 2020).

3. Article 100(c) EPC

3.1 Extension beyond the content of the application as filed

3.1.1 The appellant argued that claim 1 as granted and paragraph 30 of the patent in suit extended beyond the content of the application as filed.

3.1.2 Claim 1 as granted

(a) The question to be answered is whether or not the subject-matter being claimed extends beyond the content of the application as filed (here: European application number 08 005 050.3), 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, *supra*, II.E.1.1 and 1.3.1). In that respect, it has to be assessed if a direct and unambiguous basis for the subject-matter being claimed may be found in the application as filed. In the case of multiple amendments being made, as is the case here for claim 1 as granted, the question has to be posed whether the specific combination of features now being defined in said claim 1 emerges from the application as filed, whereby the description is not to be viewed as a reservoir from which features pertaining to separate embodiments can be freely combined in order to artificially create a certain embodiment (Case Law, *supra*, II.E.1.6.1).

(b) In that respect, it was indicated in section 6.2.3 of the Board's communication dated 3 February 2022 that claim 1 as granted appeared to correspond to claim 22 of the application as filed with the following amendments:

a) Modification of the degree of crystallinity to "at least 35%" (instead of "at least 15%");

b) Addition of the feature "further comprising drying the particles before feeding the particles to the extrusion zone";

c) Addition of the feature "wherein the particles are not solid state polymerized before drying";

d) Addition of the feature that the "particles have an acetaldehyde level of 10 ppm or less prior to melting in the extrusion zone";

e) Addition of the definition of the "surface" and "center" in % by mass;

f) Addition of the reference that the parameters mentioned in claim 1 are determined according to the methods indicated in the description;

g) Addition of the feature that the particles are "in the form of pellets".

The following preliminary considerations were further indicated:

- Regarding amendment a), it seems that a basis for the range of "at least 35%" may be found in the list of ranges given on page 22, lines 16-18 of the application as filed. In the absence of any pointer in the application as filed for using a particle having a degree of crystallinity of "at least 35%", amendment a) appears to represent an arbitrary selection among the alternatives specified in the application as filed (section 6.2.4 of the communication);
- It appears that the combination of all features of claim 1 as granted is directly and unambiguously derivable from claim 29 of the application as filed taking into account the general information disclosed in the application as filed (regarding the definition of "center" and "surface" as well as regarding the determination of the features otherwise mentioned in said claim 29), whereby the degree of crystallinity is merely limited to a preferred embodiment disclosed in said application as filed (sections 6.2.5 to 6.2.7 of the communication).

(c) At the oral proceedings before the Board, the appellant stated that the sole objection pursued against claim 1 as granted was the one directed to above amendment a) (see page 2 of the minutes: second full paragraph). However, in that respect, the Board sees no reason to deviate from its preliminary opinion that a single selection within a single list of alternative ranges disclosed in a general manner in the application as filed (here the degree of crystallinity of "at least 35 %" as disclosed on page 22, lines 16-18 of the application as filed) provides a direct and unambiguous basis for amendment a). In that respect, considering that the passage at page 22, lines 16-18 of the application as filed is disclosed in a general manner, the Board is satisfied that it would be applicable to any embodiment of the application as filed, in particular to the subject-matter of original claim 29 which constitutes, as outlined above, the main basis for the subject-matter of claim 1 as granted.

3.1.3 Paragraph 30 of the patent in suit

(a) In its letter of 6 April 2022 (section 4.1.2) and at the oral proceedings before the Board, the appellant argued that paragraph 30 of the patent in suit extended beyond the content of the application as filed.

(b) However, the Board agrees with the respondent (as argued at the oral proceedings before the Board) that an explicit support for paragraph 30 of the patent in suit is given in the passage from page 8, line 25 to page 9, line 5 of the application as filed.

(c) In its letters of 5 November 2021 (section 1.1) and 6 April 2022 (section 4.1.2) and at the oral proceedings before the Board, the appellant argued that

paragraph 30 of the patent specification, in which it is indicated that the polyester processed according to claim 1 may be in any suitable shape (and is not limited to polyester pellets as specified in claim 1 as granted), broadened the scope of claim 1 as granted by giving it too much room for interpretation according to Article 69(1) EPC.

However, as explained in sections 3.1.2(c) and 3.1.3(b) above, claim 1 as granted and paragraph 30 of the patent in suit both find a direct and unambiguous basis in the application as filed. In particular, the Board sees no reason why the subject-matter of claim 1 as granted, which is defined among others by the requirement that the polyester particles are in the forms of pellets, should be held to be directed to polyester in the form of spheres, cubes, chips, pastilles or stars as indicated in paragraph 30 of the patent in suit and/or why the subject-matter of paragraph 30 may be held to extend beyond the content of the application as filed for that reason. In that respect, it is noted that the appellant stated that its objection was not an objection of lack of clarity (letter of 6 April 2022: page 8, second paragraph), which in any case cannot be raised in the present case since the operative claims are the claims as granted (see decision G 3/14, OJ 2015, 102). For these reasons, the appellant's argument fails to convince.

3.2 Extension beyond the content of the earlier application as filed

Although an objection pursuant to Article 76(1) EPC was raised in the appellant's letter of 5 November 2021 (section 1.4), the Board's preliminary view that said objection was not persuasive (communication of

3 February 2022: section 6.3) was not contested any further by the appellant. Also, no objection pursuant to Article 76(1) EPC was pursued by the appellant at the oral proceedings before the Board (see page 2 of the minutes: second full paragraph).

3.3 In view of the above, the ground of opposition under Article 100(c) EPC does not prejudice maintenance of the patent as granted.

4. Articles 100(a) and 54 EPC

4.1 Considering that none of documents D20 to D24 was admitted into the proceedings, the sole novelty objection to be dealt with in the present decision is the one put forward by the appellant in respect of claim 1 as granted in view of examples 3 and 4 of document D15, which was already dealt with in the decision under appeal.

4.2 The appellant's novelty objection put forward in writing in appeal was based on the combination of D15 with D21, whereby D21 was indicated by the appellant to be necessary to demonstrate the correctness of some assumptions relied upon during the opposition proceedings. However, since D21 was not admitted into the proceedings, that objection cannot succeed.

4.3 At the oral proceedings before the Board, the appellant pursued its objection that the subject-matter of claim 1 as granted was not novel over D15 alone, whereby it was argued that the intrinsic viscosity gradient specified in claim 1 as granted ("wherein the polyester particles fed to the extrusion zone have an intrinsic viscosity at their surface which is less than 0.25 dL/g higher than the intrinsic viscosity at their

center") was implicitly disclosed in view of the process according to examples 3 and 4 of D15. The appellant's view that this attack did not constitute a new objection raised for the first time at the oral proceedings was not contested by the respondent.

- 4.3.1 Considering that it remained undisputed that there was no explicit disclosure of said intrinsic viscosity gradient in D15, the question to be answered is if said feature is implicitly disclosed, in particular in respect of the processes according to examples 3 and 4 thereof.
- 4.3.2 According to the Boards' established case law, a prior art document anticipates the novelty of a claimed subject matter if the latter is directly and unambiguously derivable from that document, including any features implicit to a person skilled in the art. In that respect, an alleged disclosure can only be considered "implicit" if it is immediately apparent to the skilled person that nothing other than the alleged implicit feature forms part of the subject matter disclosed (Case Law, *supra*, I.C.4.3).
- 4.3.3 In the present case, the opposition division already concluded in the decision under appeal that the intrinsic viscosity gradient according to claim 1 as granted was not implicitly satisfied in examples 3 and 4 of D15 (see the end of the paragraph bridging pages 6 and 7 of the decision under appeal).
- 4.3.4 However, no additional evidence was provided by the appellant to refute the conclusion reached by the opposition division.

4.3.5 In addition, the Board shares the respondent's view (as argued during the oral proceedings before the Board) that, considering that the process according to examples 3 and 4 of D15 includes two crystallisation steps carried out at an elevated temperature over a prolonged period of time (D15: page 18, lines 3-10; Tables 2.1 and 2.2; for the details of the process see also: claims 1, 3, 7 and 8; page 5, lines 31-33; page 7, lines 23-29), it cannot be excluded that at the end of the second crystallisation step the polyester particles exhibit an intrinsic viscosity gradient which is not according to the requirement defined in claim 1 as granted. In that respect, the Board also shares the respondent's view that the rather low increase in overall intrinsic viscosity specified in Tables 2.1 and 2.2 of D15 in respect of examples 3 and 4 (from 0.804 to 0.812 dl/g and from 0.795 to 0.827 dl/g, respectively) cannot be equated with an intrinsic viscosity gradient mandatorily satisfying the requirement of claim 1 as granted. Therefore, it cannot be concluded from the evidence on file that said intrinsic viscosity gradient is implicitly, but directly and unambiguously, disclosed in the processes of examples 3 and 4 of D15.

4.4 In view of the above, the appellant's arguments do not justify that the decision of the opposition division in respect of novelty over D15 be overturned.

5. Articles 100(a) and 56 EPC

5.1 General objection

In the statement of grounds of appeal (bottom of page 9 to top of page 11: section "Lack of Inventive Step I"), the appellant raised a rather general objection of lack

of inventive step mainly based on the argument that the problem allegedly solved by the patent in suit was not credibly solved over the whole breadth of the operative claims. However, the arguments advanced in support of that objection do not show that the claimed subject-matter can be achieved in an obvious manner by a person skilled in the art, having regard to the state of the art available at the priority date of the patent in suit, which is the condition to be verified under Article 56 EPC. Under these circumstances, that objection cannot succeed on its own.

5.2 Objection based on D17 as the closest prior art document

5.2.1 It was common ground that, as already held by the opposition division, D17 constitutes a suitable document representing the closest prior art. The Board has no reason to deviate from that view.

5.2.2 Distinguishing features

(a) D17 (claim 1) discloses a process for producing molded polyester articles having a low acetaldehyde content comprising the steps of

a) reacting a glycol and a dicarboxylic acid in a first melt phase thereby to form a polyester, said glycol being selected from the class consisting of glycols having 2-10 carbon atoms and said dicarboxylic acid being selected from alkyl dicarboxylic acids having 8-16 carbon atoms,

b) solidifying and pelletizing said polyester,

c) remelting said polyester to form a second melt

phase, and

d) forming said polyester into shaped articles,

characterised by the combination of: (i) the polymerisation being conducted exclusively in the melt phase; (ii) the first melt forming polyester pellets having an intrinsic viscosity value of between 0.65 and 0.85; and (iii) the acetaldehyde content of the polyester being lowered exclusively by a process consisting of devolatilizing the melted or remelted polyester in the melt phase by passing a purge agent over the polyester melt in an apparatus adapted to generate a large amount of surface area per unit volume and/or adapted rapidly to regenerate exposed melt liquid surface, whereby solid state polymerisation to increase intrinsic viscosity and remove acetaldehyde is obviated.

(b) Although D17 discloses that the polyester pellets may be subjected to an - optional - crystallisation step (paragraphs 27 and 37), whereby examples 1-10 were effectively carried out using such a step (see paragraph 43 of D17 and D19: table on page 4), it was undisputed that there is no indication in D17 of a specific degree of crystallinity of "at least 35%" as specified in claim 1 as granted;

(c) It was also undisputed that D17 does not contain any indication regarding the intrinsic viscosity gradient of the pellets used therein and that no evidence or argument in that respect is on file. In that regard, the opposition division considered that it could be assumed that the gradient in intrinsic viscosity could be low since no solid state polymerisation was carried out, but that there was no

evidence in that respect (reasons of the decision: page 10, penultimate paragraph). Hence, the opposition division considered that said feature was not mandatorily satisfied in D17. In the absence of any evidence to the contrary, there is no reason for the Board to deviate from that view.

(d) In its letter of 6 April 2022 (page 13, lines 1-6) and at the oral proceedings before the Board, the appellant put forward that the process according to D17 comprised, as an optional step, a drying step according to claim 1 as granted (see D17: column 6, lines 45-48).

However, in the passage of D17 relied upon by the appellant a drying step is disclosed, as indeed acknowledged by the appellant, as an optional feature that may be carried out in a process according to the general teaching of D17 when the polyester pellets are not stored under dry conditions prior to remelting for subsequent moulding into articles. In addition, according to that passage, the drying step is carried out "during" the remelting step. Under these circumstances, it cannot be concluded that D17 unambiguously discloses a step of "drying the particles before feeding the particles to the extrusion zone", in particular not in a process comprising the additional mandatory requirements in terms of intrinsic viscosity (according to claim 1 of D17, the pellets being processed may have an intrinsic viscosity below 0.70 dL/g) and an acetaldehyde level (which is not limited in claim 1 of D17 and appears to be higher than 10 ppm in some of the examples of D17) specified in claim 1 as granted.

(e) In view of the above, the Board is satisfied that the subject-matter of claim 1 as granted differs from

the disclosure of D17 at least in the following three features:

- The degree of crystallinity of "at least 35%";
- The mandatory drying step of the particles before feeding them to the extrusion zone;
- The requirement in terms of intrinsic viscosity gradient.

5.2.3 Objective problem solved over D17

a) The respondent argued that D19 and the examples of the patent in suit showed that the problem effectively solved resided in the provision of a process in which a reduced loss of intrinsic viscosity occurred (as compared to a solid-state polymerisation based process known from the art).

b) In that respect, the Board is satisfied that the examples of the patent in suit and of D19 show that said problem is effectively solved. In addition, the examples summarised in the tables on pages 8 and 9 of D19 convincingly show that polyester pellets having a degree of crystallinity according to claim 1 as granted ("of at least 35%") exhibit significantly less loss in intrinsic viscosity as compared to similar pellets having a lower degree of crystallinity when processed according to claim 1 as granted.

c) However, it is derivable from examples 1-10 of D17 (which were carried out with crystallised polyester and without solid state polymerisation) that the process according to D17 also does not appear to lead to a loss of intrinsic viscosity of the polyester. In addition,

since no direct comparison between a process according to claim 1 as granted and a process according to D17 was made, the problem formulated by the respondent appears to have been also solved in D17.

d) Although the appellant argued in a very general manner that the problem allegedly solved by the patent in suit was not credible over the whole breadth of the operative claims (see section 5.1 above), no further details in support of that objection were submitted and no evidence in support thereof was filed. Under these circumstances, those concerns can only be held to constitute theoretical doubts which are not supported by any facts. Therefore, that argument is rejected.

e) For these reasons, the problem effectively solved over D17 resides in the provision of a further process for making a container from a polyester polymer, whereby the loss of intrinsic viscosity of the polyester is minimised.

5.2.4 Obviousness

a) The question has to be answered if the skilled person, desiring to solve the problem indicated in section 5.2.3.e) above would, in view of the closest prior art, possibly in combination with other prior art or with common general knowledge, have modified the disclosure of the closest prior art in such a way as to arrive at the claimed subject-matter. In the present case, this means that it has to be assessed if the skilled person would have had any motivation to modify the process according to D17 by implementing the three measures identified in section 5.2.2.(e) above (degree of crystallinity of at least 35%; drying step before feeding to the extrusion zone; intrinsic viscosity

gradient). In that respect, the appellant's objections were based on D17 alone or in combination with either D3 or D15.

b) Concerning the teaching of D17 alone

b1) Regarding the crystallisation degree of at least 35%, the respondent's view that this level of crystallinity was very high and amounted to almost complete crystallisation was not contested. It is further known in the art that such a process step is costly and time-consuming, which is generally not wanted.

In that respect, it is derivable from D17 (paragraph 27) that such an optional crystallisation step may be carried out according to D9, which discloses that crystallisation leads to a density of at least 1.390 g/cm^3 , preferably $1.403\text{-}1.415 \text{ g/cm}^3$ (D9: claims 1-2; column 2, lines 56-62), which was argued by the appellant to correspond to a degree of crystallinity of 40% (reasons of the decision under appeal: middle of page 10). In addition, it appears that a degree of crystallinity of at least 35% is usual in the art (see e.g. D16: column 5, lines 58-62). Therefore, using a degree of crystallinity of at least 35% appears at first sight to be a common measure.

However, it is indicated in D17 (column 2, lines 32-34) that the process disclosed therein avoids the costly additional steps of the conventional process such as crystallising. In addition, it is agreed with the respondent that, as shown in D19 (section 6 and table on page 4), the skilled person would understand from the comparison of the examples of D17 carried out with or without crystallisation that the optional

crystallisation disclosed in D17 provides no advantages in any way.

Under these circumstances, it cannot be concluded that the skilled person aiming at minimising the loss of intrinsic viscosity would obviously have crystallised the polyester pellets to a degree of at least 35%.

b2) Regarding the step of drying the particles before feeding them to the extruder, not only does D17 not provide any indication in that sense (see section 5.2.2.(d) above), but, to the contrary, it is even derivable from the introductory part of D17 itself that the aim of D17 was precisely to avoid such a step (paragraph 5, first sentence, in combination with paragraph 4, in particular column 2, lines 18-22). Therefore, in the Board's view, D17 teaches away from such a modification of the process disclosed therein;

b3) Regarding the intrinsic viscosity gradient specified in claim 1 as granted, there is no evidence on file that such a gradient can be achieved while carrying out the process of D17. In particular, considering that the process of D17 comprises a devolatilisation step, i.e. a treatment at high temperature, it cannot be excluded that such a gradient may not be satisfied.

b4) In view of the above, the Board considers that it is not obvious from the teaching of D17 alone to provide a further process for making a container from a polyester polymer, whereby the loss of intrinsic viscosity of the polyester is minimised, by modifying the process of D17 according to claim 1 as granted.

c) Concerning the combination of D17 with D3 or D15

c1) Considering that, as outlined above, D17 teaches away from modifying the process taught therein by implementing a drying step and/or by carrying out a crystallisation step to a degree of at least 35%, also the combination of D17 with any other prior art document cannot be held to lead in an obvious manner to the subject-matter of claim 1 as granted.

c2) In addition, the Board shares the opposition division's view that document D3 is directed to processes which improve the drawing ability of polyester for making fibers and films and which may include a solid state polymerisation step (decision under appeal: page 9, fourth full paragraph and last paragraph) and not to processes for making moulded articles without solid state polymerisation as in D17. Therefore, also for that reason, the combination of D17 with D3 can only be based on hindsight, which is not allowable.

c3) Further considering that the process of D15 comprises two mandatory crystallisation steps (which are either unnecessary or to be avoided according to the teaching of D17) and that there is no evidence on file that also that process may lead to the intrinsic viscosity gradient according to claim 1 as granted, the combination of D17 with D15 can also for that reason not lead to the subject-matter of said claim 1 in an obvious manner.

c4) For these reasons, the appellant's objections based on the combination of D17 with either D3 or D15 are rejected.

5.2.5 In view of the above, the subject-matter of claim 1 as granted is inventive in view of D17 as the closest prior art document.

5.3 Objections based on either D15 or D3 as the closest prior art document - Admittance of the objections

5.3.1 In its letter of 5 November 2021, the appellant raised for the first time in appeal additional objections of lack of inventive step either starting from D15 as the closest prior art in combination with D1 (section 2.2, starting on page 10) or based on D3 as the closest prior art in combination with D6, D7 and D15 (section 2.4, starting on page 16).

However, considering that the substantiation of these objections was not provided in the statement of grounds of appeal and was submitted after the summons to oral proceedings were notified to the parties, they constitute an amendment to the appellant's appeal case, the admittance of which is subject to the discretion of the Board under Article 13(2) RPBA 2020 (see Article 25(1) and (3) RPBA 2020). According to this provision an amendment to a party's case shall in principle not be taken into account unless there are exceptional circumstances, which have been justified with cogent reasons by the party concerned.

5.4 In that respect, no arguments were put forward by the appellant why such objections were raised so late.

Further considering that the operative main request is the patent as granted, which was dealt with in the decision under appeal, and that documents D1, D3, D6, D7 and D15 (which were relied upon by the appellant) were already on file during the opposition proceedings,

the Board cannot identify any exceptional circumstance which may justify the submission of these objections at such a late stage.

This is particularly true for the objection starting from D3 as the document constituting the closest prior art, which is in disagreement with the opposition division's finding that D3 was not a suitable starting point (reasons of the decision: middle of page 9 to top of page 10). However, it was not explained in the statement of grounds of appeal why the opposition division would not be correct, i.e. that finding was at that stage not disputed.

Also, it is taken into account that the novelty objection in view of D15 was dealt with in the decision under appeal, whereby novelty was acknowledged in view of the lack of disclosure (even implicitly) of the intrinsic viscosity gradient. Therefore, at least one difference between the subject-matter of claim 1 as granted and the prior art document D15 was established by the opposition division. Under these circumstances, there is no reason why the appellant could not have raised an objection of lack of inventive step starting from D15 as the closest prior art document either already during the opposition proceedings - which was not done - or, at the latest, with the statement of grounds of appeal - which was also not done.

Regarding the objection starting from D15 as the closest prior art document, the appellant further argued that a change of the opposition ground from a lack of novelty to a lack of inventive step was admissible at any time if the ground of lack of novelty did not apply (letter of 5 November 2021: section 2.2, starting on page 10), whereby reference was made to

decisions T 597/07 and T 131/01 (OJ EPO 2003, 115). However, it is noted that the case underlying decision T 131/01 differs from the present one at least in the significant fact that an objection of lack of inventive step was substantiated already in the statement of grounds of appeal (T 131/01 page 7, third paragraph), which is not the case here. The same is valid regarding the case underlying T 597/07 (see statement of grounds of appeal of the appellant/opponent dated 8 June 2007: pages 2 and 3). An additional reason that speaks against admitting the objections raised for the first time by the appellant with letter of 5 November 2021 is related to the time of their (late) filing, which is based on the stipulations of Article 13(2) RPBA 2020, which was not in force when decisions T 597/07 and T 131/01 were taken. Therefore, also for that reason, the appellant's reference to these decisions is irrelevant. Decision T 1042/18 (see point 4.9 of the Reasons), confirms the applicability of Article 13(2) RPBA 2020 to the new inventive step objection as presented by the appellant.

In its letter of 6 April 2022 (page 9, third paragraph), the appellant put forward that not admitting the objections of lack of inventive step starting from D15 as the closest prior art would contravene Article 114 EPC because inventive step could not have been examined earlier and because the Board was obliged to assess the inventive step of its own motion if novelty had been proven. Reference was further made to decision T 671/08, in which a late-filed new ground of opposition was even admitted during oral proceedings.

However, in the present case, the appellant could and as outlined above would even have had good reasons to

present its objections of lack of inventive step starting from D15 or D3 earlier (either during the opposition proceedings or with the statement of grounds of appeal). Therefore, the argument that these objections could not have been filed earlier cannot be followed. In addition, although Article 114(1) EPC stipulates that the EPO shall examine the facts of its own motion, it has to be born in mind that, as indicated in section 18 of decision G 9/91 (OJ EPO 1993, 408), this provision is generally to be applied in appeal proceedings in a more restrictive manner than in opposition proceedings, since appeal proceedings are by nature less investigative than an administrative procedure such as the opposition proceedings. In view of the judicial nature and purpose of inter partes appeal proceedings and in the interests of an efficient and fair procedure, it is therefore necessary that all parties complete their submissions at the beginning of the appeal stage in so far as this is possible. This conclusion is for instance reflected in the provisions of Article 12(3) RPBA 2020, which specifies that the statement of grounds of appeal and the reply shall contain a party's complete appeal case, and in Article 13(1) and (2) RPBA 2020, which both limit the possibility to amend an appeal cases in the course of the appeal proceedings. In that respect, decision T 1042/18 (point 4.7 of the Reasons) also confirms that Article 13(2) RPBA 2020 implements Article 114(2) EPC.

Regarding decision T 671/08, which was also relied upon by the appellant, it is clearly indicated therein that the conclusion reached was the consequence of exceptional circumstances (see catchword: first paragraph and section 7.5 of the reasons): in that case, a new objection of "fundamental nature" was

raised late by the opponent but was nevertheless exceptionally admitted by the Board because disregarding it would have rendered any discussions on novelty and inventive step meaningless, had it been left unresolved. This went against the spirit and purpose of the EPC, so the Board. Considering that it was not shown that such exceptional circumstances as in the case underlying decision T 671/08 are present in the present case and further considering that also the Board does not consider that this is the case, the circumstances of the case in hand differ from those dealt with in T 671/08 so that it cannot be held that the conclusion reached in T 671/08 must apply to the present situation. Therefore, the appellant's argument based on that decision is rejected already for this reason alone.

In view of the above, the appellant's arguments do not constitute cogent reasons in the sense of Article 13(2) RPBA 2020 which would have justified the admittance into the proceedings of the amendment to the appellant's case at such a late stage of proceedings. For these reasons, there are also in the Board's view no exceptional circumstances justifying the admittance into the proceedings of the appellant's objections of lack of inventive step which were raised for the first time in appeal with letter of 5 November 2021. For these reasons, the Board found it justified not to take into account the inventive step objections starting from either document D15 or document D3 as the closest prior art (Article 13(2) RPBA 2020).

5.5 In view of this, the appellant's arguments submitted in appeal do not provide any reason for the Board to deviate from the conclusion reached by the opposition division that the subject-matter of claim 1 as granted

involves an inventive step.

6. As it was confirmed by the appellant at the end of the oral proceedings (see page 3 of the minutes, first full paragraph) that they had no additional objections in respect of the main request and none of the ones put forward, admitted and decided upon above is successful, the appeal is to be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



B. ter Heijden

D. Semino

Decision electronically authenticated