

Internal distribution code:

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

**Datasheet for the decision
of 10 October 2012**

Case Number: T 0007/10 - 3.3.03
Application Number: 00957891.5
Publication Number: 1238011
IPC: C08L 67/02, B32B 27/08
Language of the proceedings: EN

Title of invention:
Thermoplastic compositions having high dimensional stability

Patent proprietor:
Associated Packaging Enterprises, Inc.

Headword:
-

Relevant legal provisions:
EPC Art. 123(3)

Keyword:
"Amendments - Extension of scope of protection - (Main request and auxiliary requests 1 to 4: Yes)"
"Late submitted material - Admissibility - (Auxiliary requests 5 to 10: No)"

Decisions cited:
-

Catchword:
-



Case Number: T 0007/10 - 3.3.03

D E C I S I O N
of the Technical Board of Appeal 3.3.03
of 10 October 2012

Appellant: Associated Packaging Enterprises, Inc.
(Patent proprietor) 900 South U.S. Highway 1
Jupiter, FL 33477 (US)

Representative: Elizabeth Swan
Withers & Rogers LLP
Goldings House
2 Hays Lane
London, SE1 2HW (GB)

Respondent I: E.I. du Pont de Nemours and Company
(Opponent 02) 1007 Market Street
Wilmington, Delaware 19898 (US)

Representative: Dr. Oliver Dannenberger
Abitz & Partner
Postfach 86 01 09
D-81628 München (DE)

Respondent II: Eastman Chemical Company
(Opponent 01) 100 North Eastman Road
Kingsport, TN 37660-5075 (US)

Representative: Dr. Jobst Wibbelmann
Wuesthoff & Wuesthoff
Schweigerstrasse 2
D-81541 München (DE)

Decision under appeal: Decision of the opposition division of the
European Patent Office posted 03 November 2009
revoking the patent 1 238 011.

Composition of the Board:

Chairman: B. ter Laan
Members: D. Marquis
C. Vallet

Summary of Facts and Submissions

- I. The appeal lies from the decision of the opposition division dated 03 November 2009 to revoke the European patent 1 238 011 based on the application number 00 957 891.5, originating from international application PCT/US2000/23655 having an international filing date of 29 August 2000 and published as WO 01/40377.
- II. The patent was granted with a set of thirty three claims. Claims 1, 8, 18, 24, 25, 26, 27 and 32 read as follows (emphasis by the Board):
- "1. A thermally crystallized thermoplastic polymeric composition having a degree of crystallinity of at least 15%, said composition comprising:
- a bulk polymer comprising an alkylene terephthalate or naphthalate polyester selected from the group consisting of PET, PBT, PEN, PETG, PCT, PCTA, PTT, and mixtures thereof, said bulk polymer optionally comprising up to 10 wt% of a polyethylene based on the total weight of the bulk polymer;
- an additive in a concentration from 4 wt% to 40 wt%, based on a total weight of the composition, comprising a substantially amorphous co-polymer of ethylene and an acrylate; and
- a compatibilizer/emulsifier/surfactant (CES) in a concentration from 0.1 wt% to 8 wt%, based on the total weight of the composition, comprising a grafted or backbone co-polymer or ter-polymer of ethylene and a glycidyl acrylate or maleic

anhydride, and optionally an acrylate selected from the group consisting of methylacrylate, ethylacrylate, propylacrylate, butylacrylate, **ethylhexylmethacrylate**, and mixtures thereof."

"8. A thermoplastic polymeric composition according to any preceding claim wherein said CES is selected from the group consisting of ethylene/glycidyl methacrylate co-polymer, ethylene/maleic anhydride co-polymer, ethylene/glycidyl methacrylate/methacrylate ter-polymer, ethylene/glycidyl methacrylate/ethylacrylate ter-polymer, ethylene/ glycidyl methacrylate/ butylacrylate ter-polymer, **ethylene/glycidyl methacrylate/ethylhexylacrylate ter-polymer**, ethylene/maleic anhydride/methacrylate ter-polymer, ethylene/maleic anhydride/ethylacrylate ter-polymer, ethylene/maleic anhydride/ butylacrylate ter-polymer, **ethylene/maleic anhydride/ ethylhexylacrylate ter-polymer**, and mixtures thereof."

"18. A thermoplastic polymeric composition according to any preceding claim wherein the additive is in a concentration from 4 wt% to 15 wt%, based on a total weight of the composition, and wherein the compatibilizer/emulsifier/surfactant (CES) is in a concentration from 0.1 wt% to less than 4 wt%, based on the total weight of the composition, and wherein the acrylate is selected from the group consisting of methacrylate, ethylacrylate, propylacrylate, butylacrylate, **ethylhexylacrylate**, and mixtures thereof."

- "24. A composition according to any one of the preceding claims which is heat-set."
- "25. A container made from the thermoplastic polymeric composition according to any preceding claim."
- "26. A container according to claim 25 which is a food container."
- "27. A container according to any of claims 25 or 26 which is ovenable."
- "32. A dimensionally stable container made from a thermoplastic polymeric composition comprising:
an alkylene terephthalate or naphthalate bulk polymer selected from the group consisting of PET, PBT, PEN, PETG, PCT, PCTA, PTT and mixtures thereof,
an additive in a concentration from about 4% wt to about 40 wt%, based on a total weight of the composition, comprising a substantially amorphous co-polymer of ethylene and an acrylate; and
a compatibilizer/emulsifier/surfactant (CES) in an concentration from about 0.1 wt% to about 8 wt%, based on the total weight of the composition, comprising a grafted or backbone co-polymer or ter-polymer of ethylene and a glycidyl acrylate or maleic anhydride, and optionally an acrylate selected from the group consisting of methylacrylate, ethylacrylate, propylacrylate, butylacrylate, **ethyhexylacrylate**, and mixtures thereof."

III. Two oppositions to the grant of the patent were filed on 02 November 2005. The opponents requested the revocation of the patent in its entirety based on the grounds according to Article 100(a) EPC (novelty and inventive step; both opponents), Article 100(b) (opponent 02) and Article 100(c) EPC (opponent 02).

IV. The decision of the opposition division was based on the main request and auxiliary requests 1 and 2 filed during the oral proceedings on 08 October 2009. In its written decision, the opposition division allowed the correction in claim 1 of "ethylhexylmethacrylate" into "ethylhexylacrylate" under Rule 139 EPC. The opposition division held that it was clear from the discrepancy between granted claims 1 and 8 that an error was present. Originally filed claim 1 and granted claim 32 also referred to "ethylhexylacrylate", as did the corresponding passages of the description in the application as filed and in the patent specification. Thus, the opposition division held that a skilled man knew not only that there was an error, but also what was actually meant and how the correction should be.

However, the patent was revoked as the opposition division held that claim 1 of the main request lacked clarity (Article 84 EPC), that claim 1 of the first auxiliary request lacked a basis in the originally filed documents (Article 123(2) EPC) as well as clarity (Article 84 EPC) and that claim 1 of the second auxiliary request lacked a basis in the originally filed documents (Article 123(2) EPC).

V. On 22 December 2009, the patent proprietor filed an appeal and the prescribed appeal fee was paid on the same day. The statement of grounds of appeal was filed on 05 March 2010 together with a main request and ten auxiliary requests. Claim 1 of the main request reads (emphasis by the Board):

"1. A heat-set thermally crystallized thermoplastic polymeric ovenable food container having a degree of crystallinity of above 15%, said container being formed from a composition comprising:
a bulk polymer comprising an alkylene terephthalate or naphthalate polyester selected from the group consisting of PET, PBT, PEN, PETG, PCI, PCTA, PTT, and mixtures thereof;
an additive in a concentration from 4 wt% to 40 wt%, based on a total weight of the composition, comprising a substantially amorphous co-polymer of ethylene and an acrylate; and
a compatibilizer/emulsifier/surfactant (CES) in a concentration from 0.1 wt% to 8 wt%, based on the total weight of the composition, comprising a grafted or backbone co-polymer or ter-polymer of ethylene and a glycidyl acrylate or maleic anhydride, and optionally an acrylate selected from the group consisting of methylacrylate, ethylacrylate, propylacrylate, butylacrylate, **ethylhexylacrylate**, and mixtures thereof."

Claim 1 of the first auxiliary request differs from claim 1 of the main request in that the first part of the claim reads:

"1. A heat-set thermally crystallized thermoplastic polymeric food container capable of being heated to at least 176 - 204°C (350 - 400°F) without significant distortion having a degree of crystallinity of above 15%, said container being formed from a composition comprising [...]".

Claim 1 of the second auxiliary request differs from claim 1 of the main request in that the first part of the claim reads:

"1. A heat-set thermally crystallized thermoplastic polymeric food container for use in high temperature food application, having a degree of crystallinity of above 15%, said container being formed from a composition comprising [...]".

Claim 1 of the third auxiliary request differs from claim 1 of the main request in that the first part of the claim reads:

"1. A heat-set thermally crystallized thermoplastic polymeric dual-ovenable food container, having a degree of crystallinity of above 20%, said container being formed from a composition comprising [...]".

Claim 1 of the fourth auxiliary request differs from claim 1 of the main request in the addition in the last part of the definition of the CES:

"[...] and mixtures thereof, wherein the melt flow index of the CES is less than 10g/10 min."

Claim 1 of the fifth auxiliary request reads:

- "1. A dimensionally stable container having a level of crystallinity of above 15% and made from a thermoplastic polymeric composition comprising:
- an alkylene terephthalate or naphthalate bulk polymer selected from the group consisting of PET, PBT, PEN, PETG, PCT, PCTA, PTT, and mixtures thereof;
- an additive in a concentration from about 4 wt% to about 40 wt%, based on a total weight of the composition, comprising a substantially amorphous co-polymer of ethylene and an acrylate; and
- a compatibilizer/emulsifier/surfactant (CES) in a concentration from about 0.1 wt% to about 8 wt%, based on the total weight of the composition, comprising a grafted or backbone co-polymer or ter-polymer of ethylene and a glycidyl acrylate or maleic anhydride, and optionally an acrylate selected from the group consisting of methylacrylate, ethylacrylate, propylacrylate, butylacrylate, **ethylhexylacrylate** and mixtures thereof.

Claim 1 of the sixth auxiliary request differs from claim 1 of the fifth auxiliary request in that the first part reads:

- "1. A dimensionally stable food container for use in high temperature food application having a level of crystallinity of above 15% and made from a thermoplastic polymeric composition comprising [...]".

Claim 1 of the seventh auxiliary request differs from claim 1 of the fifth auxiliary request in that the first part reads:

"1. A dimensionally stable ovenable food container having a level of crystallinity of above 15% and made from a thermoplastic polymeric composition comprising [...]".

Claim 1 of the eighth auxiliary request differs from claim 1 of the fifth auxiliary request in that the first part reads:

"1. A dimensionally stable food container capable of being heated to at least 176 - 204°C (350 - 400°F) without significant distortion having a level of crystallinity of above 15% and made from a thermoplastic polymeric composition comprising [...]".

Claim 1 of the ninth auxiliary request differs from claim 1 of the fifth auxiliary request in that the first part reads:

"1. A dimensionally stable dual-ovenable food container having a level of crystallinity of above 20% and made from a thermoplastic polymeric composition comprising [...]".

Claim 1 of the tenth auxiliary request differs from claim 1 of the fifth auxiliary request in that the first part reads:

"1. A dimensionally stable ovenable food container having a level of crystallinity of above 15% and made from a thermoplastic polymeric composition comprising [...]"

and in the addition in the last part of the definition of the CES:

"[...] and mixtures thereof, wherein the melt flow index of the CES is less than 10g/10 min."

- VI. On 8 July 2010, respondent I (opponent 02) submitted a reply to the grounds of appeal in which the admissibility of the auxiliary requests 2 to 10 into the proceedings was contested.
- VII. On 16 August 2010, respondent II (opponent 01) submitted a reply to the grounds of appeal holding that the replacement of "ethylhexylmethacrylate" by "ethylhexylacrylate" in the main and auxiliary requests should not be allowed under Rule 139 EPC and that it constituted an inadmissible broadening of the scope of the claims (Article 123(3) EPC).
- VIII. On 23 July 2012, the Board summoned the parties to oral proceedings to be held on 10 October 2012.
- IX. By letter dated 07 August 2012, the appellant wrote to inform the Board that he did not intend to attend oral proceedings. The appellant requested to hold the oral proceedings in his absence and also requested the issuance of a decision on the main request and the ten auxiliary requests filed with the grounds of appeal. The appellant did not comment on the arguments provided

- by the respondents in their replies to the grounds of appeal.
- X. By letter dated 27 August 2012, respondent I requested that the oral proceedings be cancelled unless the Board of Appeal was minded to grant any of the requests of the appellant, and that a decision be taken to reject the appeal.
- XI. By letter of 10 September 2012, respondent II requested that the costs incurred for attendance at the oral proceedings be imposed on the appellant if the appellant should not take part in the oral proceedings and would not withdraw his request for oral proceedings.
- XII. By letter of 13 September 2012, the appellant withdrew his request for oral proceedings. The letter did not contain any comments on the arguments provided by the respondents in their replies to the grounds of appeal.
- XIII. By fax of 27 September 2012, the Board informed the parties that the oral proceedings were cancelled and that, as the appellant had withdrawn his request for oral proceedings, the Board considered that the request for an apportionment of costs by respondent II was now redundant and would not need a decision.
- XIV. The arguments of the appellant filed in writing pertained to the allowability of the main and auxiliary requests having regard to Article 123(2) EPC and Article 84 EPC. At no stage of the proceedings did the appellant give comments on the arguments of the respondents, in particular not concerning the

requirements of Rule 139 EPC and Article 123(3) EPC or the admissibility of the auxiliary requests.

XV. The arguments provided by the respondents can be summarised as follows:

- (a) Claim 1 of the main request required that the CES component be made of an acrylate including *inter alia* ethylhexylacrylate and no longer of ethylhexylmethacrylate. Claim 1 encompassed embodiments that were excluded from the claims as granted and therefore infringed Article 123(3) EPC. Such an amendment was not allowable under Rule 139 EPC as it was not an obvious mistake and the correction proposed was not evident.
- (b) The second to tenth auxiliary requests were filed at a late stage of the proceedings. The second and fifth auxiliary requests had been withdrawn by the appellant during oral proceedings before the opposition division. The third, fourth and sixth to tenth auxiliary request had never formed part of the first instance proceedings. The purpose of the appeal proceedings *inter partes* is to give the losing party the possibility of challenging the decision of the opposition division on its merits. As the decision under appeal did not pertain to the subject matter of auxiliary requests 2 to 10, these should not be admitted into the appeal proceedings.

XVI. The appellant had requested in writing that "*the case be remitted back to the opposition division for consideration of sufficiency, novelty and inventive*

step in the event that one of the main or auxiliary requests 1 to 10 was considered to be allowable".

Respondents I and II had both requested in writing that the appeal be dismissed and that the patent be revoked in its entirety.

Reasons for the Decision

1. The appeal is admissible.

Main request

2. Claim 1 of the main request concerns a heat-set thermally crystallized thermoplastic polymeric ovenable food container. It is based on the container of granted claims 25 to 27 which refer to claims 1 to 24 as granted for the composition forming the container. Contrary to claim 1 as granted, which refers to ethylhexyl**meth**acrylate, claims 8 and 18 as granted mention ethylhexylacrylate (see point II above).
3. Rule 139 EPC
 - 3.1 According to Rule 139 EPC, second sentence, a correction of an error concerning the claims is only allowable if it is obvious that nothing else could have been intended than what is offered as the correction.
 - 3.2 In the present case, the list of monomers present in the compatibilizer / emulsifier / surfactant (CES) terpolymer of claim 1 of the main request differs from that of claim 1 as granted in that

ethylhexyl**meth**acrylate was deleted and ethylhexylacrylate was added. It is not immediately obvious from the reading of claim 1 as granted that ethylhexylacrylate was meant instead of ethylhexyl**meth**acrylate in the list of acrylates constituting the (CES) terpolymer. In fact, both ethylhexylacrylate and ethylhexyl**meth**acrylate monomers could be used in the preparation of the (CES) terpolymer and are disclosed as such in the granted patent in paragraph [0017] (ethylhexyl**meth**acrylate) and in paragraphs [0027] and [0045] (ethylhexylacrylate). Hence, the description as granted does not render immediately evident that nothing else than ethylhexylacrylate was intended in claim 1.

The same reasoning applies to the apparent contradiction between granted claim 1 and granted claims 8 and 18. While claim 1 discloses a closed list of monomers including ethylhexyl**meth**acrylate and excluding ethylhexylacrylate, the corresponding lists of monomers of claims 8 and 18 exclude ethylhexyl**meth**acrylate and include ethylhexylacrylate. As ethylhexyl**meth**acrylate and ethylhexylacrylate are both plausible monomers for the preparation of the CES terpolymer, there is no way of telling which of these two monomers was intended in the claims.

- 3.3 The fact that claim 1 as granted discloses a list of "acrylate" monomers does not rule out the use of ethylhexyl**meth**acrylate from that list because that monomer is a methacrylate and not an acrylate. In fact, it is well known that the generic term "acrylate" encompasses both acrylates and methacrylates, as confirmed by the wording of paragraph [0045] of the

patent in suit which clearly shows that specific methacrylate monomers are described as acrylates "[...] *ter-polymer comprising ethylene and a glycidyl acrylate, such as glycidyl methacrylate [...]*" and in "*The CES co-polymer or ter-polymer preferably also includes other acrylates such as methacrylate, ethylacrylate, [...]*".

3.4 The addition of ethylhexylacrylate instead of ethylhexyl**meth**acrylate in the list of acrylate monomers of claim 1 of the main request is therefore not the correction of an obvious error in the meaning of Rule 139 EPC because the correction is not obvious in the sense that it is not immediately evident that nothing else would have been intended than what is offered as the correction.

4. Article 123(3) EPC

4.1 The deletion of ethylhexyl**meth**acrylate and addition of ethylhexylacrylate from the list of acrylate monomers in claim 1 of the main request is an amendment of a granted claim. Such an amendment has to fulfil the requirements of Article 123(3) EPC, that is, it may not constitute an extension of the protection conferred by the European patent.

4.2 In so far as granted claims 25 to 27 refer to the composition according to granted claim 1, the protection conferred by the European patent has been extended in that the subject matter of claim 1 of the main request now includes ethylhexylacrylate which was excluded from the closed list of granted claim 1 "*[...] acrylate selected from the group consisting of*

methylacrylate, ethylacrylate, propylacrylate, butylacrylate, ethylhexylmethacrylate, and mixtures thereof."

- 4.3 In so far as granted claims 25 to 27 refer to the composition of granted claim 8, the protection conferred by the European patent has been extended in that the subject matter of claim 1 of the main request now includes grafted or backbone copolymers made from ethylhexylacrylate whereas granted claim 8 was limited to specific ethylhexylacrylate terpolymers only.
- 4.4 In so far as granted claims 25 to 27 refer to the composition of granted claim 18, the protection conferred by the European patent has been extended in that the subject matter of claim 1 of the main request now includes compositions containing more than 4 wt% and up to 8 wt% of a CES prepared from ethylhexylacrylate together with more than 15 wt% and up to 40 wt% of an additive. Claim 18 as granted only disclosed a composition wherein the additive was present in a concentration of 4 wt% to 15 wt% and 0.1 to 4 wt% of CES terpolymer.
- 4.5 Also, the protection conferred by independent claim 32 as granted, which concerns a dimensionally stable container, has been extended in claim 1 of the main request as it now encompasses bulk polymers that may comprise any polymer other than alkylene terephthalate or naphthalate bulk polymers selected from the group consisting of PET, PBT, PEN, PETG, PCT, PCTA, PTT while granted claim 32 was limited to "*alkylene terephthalate or naphthalate bulk polymer selected from the group*

consisting of PET, PBT, PEN, PETG, PCT, PCTA, PU and mixtures thereof" only.

- 4.6 As a consequence, the deletion of ethylhexyl**meth**acrylate and the addition of ethylhexylacrylate from the list of acrylate monomers present in the compatibilizer / emulsifier / surfactant (CES) terpolymer of claim 1 as granted is a modification that extends the protection conferred by the patent in suit. The main request does therefore not fulfil the requirements of Article 123(3) EPC.

First to fourth auxiliary requests

5. Article 123(3) EPC

Claim 1 of each of the first to fourth auxiliary requests contains the same definition of the bulk polymer and of the terpolymer comprised in the compatibilizer /emulsifier/ surfactant (CES) as in claim 1 of the main request. The arguments regarding claim 1 therefore also apply to claim 1 of these auxiliary requests. Hence, first to fourth auxiliary requests do not comply with the requirements of Article 123(3) EPC.

Fifth auxiliary request

6. Admissibility

- 6.1 The purpose of the appeal procedure in an inter partes case is mainly to give the losing party the possibility of challenging the decision of the opposition division on its merits (cf. G 9/91, OJ EPO 408, point 18 of the

reasons). In the present case, the appealing patent proprietor, unsuccessful before the opposition division, thus has the right to have the rejected requests reconsidered by the Board of Appeal. If the patent proprietor wants other requests to be considered, admission of these requests into the proceedings is a matter of discretion of the Board of Appeal which can hold them inadmissible if they could have been presented in the first instance opposition proceedings (Article 12(4) RPBA).

- 6.2 The subject matter of claim 1 of the fifth auxiliary request relates to a dimensionally stable container. This request is identical to the first auxiliary request presented at the beginning of the oral proceedings before the opposition division on 8 October 2009 (filed as auxiliary request 5 with letter dated 5 October 2009). That first auxiliary request was however withdrawn by the patent proprietor during oral proceedings before a substantive decision on patentability could be reached by the opposition division. According to point 4 of the opposition division's minutes of the oral proceedings of 3 November 2009, the appellant, after the chairman had announced that the main request did not meet the requirements of Article 123(2) EPC, withdrew the then first auxiliary request and submitted new requests as a replacement. None of those new requests, on which the decision of the opposition division is based, featured a dimensionally stable container as in claim 1 of the first auxiliary request withdrawn in opposition, in appeal reintroduced as the fifth auxiliary request.

6.3 The Board considers that the appellant has had the possibility to pursue the subject matter of claim 1 of the present fifth auxiliary request in the first instance opposition proceedings but did not wish to do so of his own accord. To admit the fifth auxiliary request into the appeal proceedings would result in a change of the factual framework of the case which would then have to be remitted to the first instance. That would necessarily lead to a procedural delay which, in view of the present situation, would be unjustified. The Board therefore makes use of its discretion under Article 12(4) RPBA and does not admit the fifth auxiliary request into the proceedings.

Sixth to tenth auxiliary requests

7. The subject matter of claim 1 of each of the sixth to tenth auxiliary requests relates to a dimensionally stable container. The claims of these requests differ from those of the fifth auxiliary request in that the intended use of the dimensionally stable container, its temperature resistance and/or level of crystallinity have been reworded or further limited. The content of claim 1 of each of the sixth to tenth auxiliary requests is therefore essentially the same as that of claim 1 of the fifth auxiliary request and is likewise directed to subject matter upon which the first instance has not had the possibility to decide. Therefore, the reasons for refusing to admit the fifth auxiliary request into the appeal proceedings are also valid for the sixth to tenth auxiliary requests, which are, as a consequence, also not admitted into the proceedings.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar

The Chairman

E. Görgmaier

B. ter Laan