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**Datasheet for the decision
of 22 March 2022**

Case Number: T 1543/19 - 3.3.09

Application Number: 05016989.5

Publication Number: 1607433

IPC: C08J5/18, C08L23/14

Language of the proceedings: EN

Title of invention:

Polymer film comprising a propylene random copolymer

Patent Proprietor:

Borealis Technology Oy

Opponent:

Basell Poliolefine Italia S.r.l.

Headword:

Polymer film/BOREALIS

Relevant legal provisions:

EPC Art. 100(a), 100(b), 54(1)

Keyword:

Grounds for opposition - insufficiency of disclosure (no)
Novelty - (no)

Decisions cited:

T 0492/92, T 0089/13

Catchword:

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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 1543/19 - 3.3.09

D E C I S I O N
of Technical Board of Appeal 3.3.09
of 22 March 2022

Appellant: Basell Poliolefine Italia S.r.l.
(Opponent) Via Pontaccio 10
20121 Milano (IT)

Representative: LyondellBasell
c/o Basell Poliolefine Italia
Intellectual Property
P.le Donegani 12
44122 Ferrara (IT)

Respondent: Borealis Technology Oy
(Patent Proprietor) P.O. Box 330
06101 Porvoo (FI)

Representative: Kador & Partner PartG mbB
Corneliusstraße 15
80469 München (DE)

Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 22 March 2019
rejecting the opposition filed against European
patent No. 1607433 pursuant to Article 101(2)
EPC.**

Composition of the Board:

Chairman A. Haderlein
Members: C. Meiners
D. Rogers

Summary of Facts and Submissions

- I. The appeal was filed by the opponent (appellant) against the opposition division's decision to reject the opposition. The opposition division held that the main request (the patent as granted) complied with the requirements of *inter alia* sufficiency of disclosure (Article 100(b) EPC) and novelty (Article 54(1) EPC).
- II. In its notice of opposition, the appellant had requested that the patent in suit (hereafter "the patent") be revoked in its entirety on the grounds for opposition under Article 100(a) EPC (lack of novelty and inventive step) and Article 100(b) EPC (insufficiency of disclosure).
- III. The following documents, filed by the appellant in the opposition and appeal proceedings, are relevant to the present decision:
- D9 Experimental report of Davide Ferrari, filed with the notice of opposition
- D9bis Experimental report, filed by the appellant with the statement setting out the grounds of appeal, declaration of Davide Ferrari (2nd)
- D10 WO 97/31954 A1
- IV. In its reply to the statement setting out the grounds of appeal, the patent proprietor (respondent) made no substantive submissions and requested that the appeal be dismissed. The respondent also requested oral proceedings as an auxiliary measure.

V. The board summoned the parties to oral proceedings. Moreover, the board issued a communication pursuant to Article 15(1) RPBA 2020 in which it set out its preliminary opinion. The preliminary finding of the board was that the subject-matter of claim 1 of the patent was sufficiently disclosed but was not novel over example 11 and comparative example 12 of D10.

VI. In a letter filed in electronic form on 13 December 2021, the respondent withdrew its request for oral proceedings.

VII. The board cancelled the oral proceedings.

VIII. Claim 1 as granted reads:

"A polymer film comprising a propylene random copolymer with the comonomer being ethylene and a total comonomer content of 4.5 to 12 mol%, wherein the sealing initiation temperature SIT of the film is $T_m - 33$ °C or less and wherein the content of xylene solubles is from 4 to 15 wt%."

IX. The appellant's arguments, where relevant to the decision, may be summarised as follows.

(a) The claimed subject-matter of claim 1 as granted was insufficiently disclosed. This meant, in the present case, preparing a polymer film comprising a propylene random copolymer having the features specified in claim 1. No measuring method for determining the comonomer content was disclosed in the patent, nor was any method of measurement provided in the patent for measuring the sealing initiation temperature (SIT). As was demonstrated in documents D9 and D9bis, the values obtained for

the SIT for a propylene random copolymer depended markedly on the seal strength adopted in the tests. Consequently, a given embodiment could fall within or outside the limit specified in claim 1 as granted. Claim 1 did not include a limitation to a specific application with which a specific seal strength value would be associated.

- (b) Regarding the requirement of novelty, the films disclosed in example 11 and comparative example 12 of D10 had all the features of the films of claim 1 as granted, except for an explicit disclosure of the melt temperature T_m of the random copolymer, and the fact that it was not possible to verify that the SIT value of the film was equal to or less than $T_m - 33^\circ\text{C}$. However, in view of the serious deficiencies in respect of the determination of the SIT, a feature based on this parameter could not provide a differentiation over the prior art.

X. The respondent made no substantive submissions during the appeal proceedings.

XI. Requests

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

The respondent requested that the appeal be dismissed.

Reasons for the Decision

1. The patent

The patent relates to a polymer film comprising a propylene random copolymer with the comonomer being ethylene, characterised by a total comonomer content of 4.5 to 12 mol%, wherein the content of xylene solubles is from 4 to 15 wt% and wherein the sealing initiation temperature (SIT) of the film is $T_m - 33^\circ\text{C}$ or less. According to the patent, such films are mainly used for packaging purposes. The films as claimed exhibit a low SIT in relation to the melting temperature T_m (paragraphs [0001] and [0012] and claim 1).

2. Sufficiency of disclosure

2.1 As regards the sufficiency of disclosure of the subject-matter of claim 1 as granted, the board's communication sets out the following in points 3.1 and 3.2:

"3.1 The first argument put forward by the appellant in its grounds of appeal in respect of sufficiency of disclosure is that there existed different measurement methods for determining the comonomer content of the polypropylene copolymers claimed. Moreover, there was no test method disclosed in the patent in suit for measuring this parameter.

The board preliminarily agrees with the respondent's arguments before the opposition division, that any ambiguity arising from the lack of an indication of a

test method for the determination of the comonomer content in claim 1 might render the scope of the claim unclear but does not render the subject-matter of claim 1 insufficiently disclosed. The board considers that the corresponding line of arguments put forward in the impugned decision is convincing. If various methods of different accuracy exist for measuring a parameter, a skilled person would employ the more accurate method when needed and less accurate ones for routine measurements. In the preliminary opinion of the board, a skilled person would choose an absolute test method for the determination of the ethylene content when exact values are required, like nuclear magnetic resonance (NMR) spectroscopy (see also T 492/92, r. 3.3).

3.2 The sealing initiation temperature (SIT) is the temperature at which a fixed seal strength is reached. The scope of claim 1 appears to be ambiguous in respect of the determination of the SIT. However, this ambiguity rather concerns the fringes of the claim. The corresponding objection of the appellant thus appears to be subsumable under the provisions of Article 84 EPC (clarity of the claims) and not under Article 100(b) EPC (sufficiency of disclosure).

Depending on the conditions of measurement, a given embodiment may fall within the scope of claim 1 or not, as convincingly demonstrated by the appellant in D9/D9bis. It appears that a skilled person is able to precisely determine the melting temperature of a given polypropylene using the pertinent information provided in the patent (see paragraphs [0093] and [0094] of the patent). Hence, the required threshold SIT of a given polypropylene film in order to fall within the scope of claim 1 can be precisely determined, i.e. $T_m - 33^{\circ}\text{C}$.

The required minimum seal strength appears to depend on the application area of the films, and claim 1 does not include a limitation to a specific application. No lowest required minimum seal strength and test method are indicated in claim 1. Hence, an ambiguity arises whether at a threshold temperature of ($T_m - 33^\circ\text{C}$), the sealing initiation temperature is reached or not. This ambiguity, however, has to be taken into account for the purposes of assessment of novelty (see e.g. T 89/13, r. 6. and 9.)."

The appellant has not provided any counter-arguments. Therefore, the board sees no reason to revise its preliminary opinion on sufficiency of disclosure. Consequently, the subject-matter of claim 1 is sufficiently disclosed, and the ground for opposition under Article 100(b) EPC does not prejudice the maintenance of the patent.

3. *Novelty*

3.1 As regards the question of novelty, the board's communication states (in points 4.1 and 4.2):

"4.1 According to the decision under appeal, the claimed subject-matter was novel over D10 because this document did not clearly and unambiguously disclose that the film has a SIT of $T_m - 33^\circ\text{C}$ or less.

4.2 For the reasons mentioned under point 3.2, the uncertainty as to the determination of the SIT has to be taken into account for the assessment of novelty. The requirement of a SIT of $T_m - 33^\circ\text{C}$ or less is the potential distinguishing feature over document D10. Depending on the required minimum seal strength (fixed seal strength required) when determining the SIT, a

given embodiment may fall under the scope of claim 1 or not. As argued by the appellant, however, the patent in suit does not disclose the method for determining the SIT. Hence, the feature SIT of $T_m - 33^\circ\text{C}$ or less cannot delimit the subject-matter of claim 1 from example 11 and comparative example 12 of D10. Therefore, the subject-matter of claim 1 lacks novelty vis-à-vis document D10 (Article 54(1) EPC), as argued by the appellant."

- 3.2 No counter-arguments were provided by the respondent. Thus, the board has no reason to revise its preliminary opinion. Therefore, the subject-matter of claim 1 as granted lacks novelty. Consequently, the ground for opposition under Article 100(a) EPC in combination with Article 54 EPC, lack of novelty, prejudices the maintenance of the patent.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:



A. Nielsen-Hannerup

A. Haderlein

Decision electronically authenticated