Datasheet for the decision
of 16 November 2012

Case Number: T 1364/09 - 3.3.09
Application Number: 96919045.3
Publication Number: 830641
IPC: G03F 7/029, G03C 9/08, B29C 67/00

Language of the proceedings: EN

Title of invention:
Photohardenable epoxy composition

Patent Proprietor:
DSM IP Assets B.V.

Opponent:
Huntsman Advanced Materials (Switzerland) GMBH

Headword:
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Relevant legal provisions:
EPC Art. 54, 108
EPC R. 80, 99(2), 101(1)
RPBA Art. 12(2)(4)

Keyword:
"Appeal of patent proprietor (inadmissible)"
"New documents in appeal (admissible)"
"Novelty of the request maintained by the opposition division (no)"

Decisions cited:
T 0674/96

Catchword:
-
Case Number: T 1364/09 - 3.3.09

DECISION
of the Technical Board of Appeal 3.3.09
of 16 November 2012

Appellant I:
(Patent Proprietor)
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Appellant II:
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Composition of the Board:
Chairman: W. Sieber
Members: N. Perakis
F. Blumer
Summary of Facts and Submissions

I. Mention of the grant of European patent No. 0 830 641 in respect of European patent application No 96919045.3 in the name of DSM N.V. (now DSM IP Assets B.V.) was published on 27 August 2003 (Bulletin 2003/35). The patent was granted with 12 claims, claim 12 reading as follows:

"12. A combination of a free radical initiator and a photo-generating acid precursor used in a photohardenable composition wherein the initiator and the precursor are characterized by optical molar extinction coefficients and wherein the combination of the initiator and the precursor is optimized for use with a multi-wavelength argon ion laser operating in the UV and producing multiple major wavelengths and the combination is such that a normalized ratio of the extinction coefficients of the precursor and the initiator at one major wavelength is less than a factor of 3.0 the ratio of extinction coefficient at a second major wavelength."

II. An opposition was filed by Huntsman Advanced Materials (Switzerland) GmbH requesting revocation of the patent in its entirety on the basis of Article 100(a) EPC (lack of novelty and inventive step), Article 100(b) and (c) EPC.

III. By its interlocutory decision announced orally on 19 March 2009 and issued in writing on 21 April 2009, the opposition division maintained the European patent in amended form with Claims 1 and 2 according to the auxiliary request filed during the oral proceedings.
Claims 1 and 2 read as follows:

"1. A combination of a free radical initiator and a photo-generating acid precursor used in a photohardenable composition wherein the initiator and the precursor are characterized by optical molar extinction coefficients and wherein the combination of the initiator and the precursor is optimized for use with a multi-wavelength argon ion laser operating in the UV and producing multiple major wavelengths and the combination is such that a normalized ratio of the extinction coefficients of the precursor and the initiator at 351 nm is less than a factor of 3.0 the ratio of extinction coefficient at 364 nm."

"2. The combination of claim 1, wherein the free radical initiator is 4-(2-hydroxyethoxy)phenyl-(propyl)ketone and the photo-generating acid precursor is mixed triarylsulfonium hexafluoroantimonate salts and wherein the molar extinction coefficients are measured in methanol or ethanol."

The opposition division considered that the subject-matter of claims 1 and 2 of the auxiliary request as well as the description adapted to these claims during the oral proceedings met the requirements of the EPC.

IV. Both the patent proprietor and the opponent filed a notice of appeal against the interlocutory decision of the opposition division on 30 June 2009 and 15 June 2009, respectively, and paid the appeal fee on those dates. The patent proprietor requested that the decision of the opposition division be set aside and
that the patent be maintained on the basis of the main request filed on 19 March 2009 at the oral proceedings before the opposition division. The opponent requested that the decision of the opposition division be set aside and that the patent be revoked in its entirety.

V. The appellant/opponent filed a statement setting out the grounds of appeal on 19 August 2009, including the following documents:

D16: EP 0 699 704 A1, and
D17: Technical report.

According to the appellant/opponent, the addition of dependent claim 2 in the auxiliary request - found allowable by the opposition division - contravened Rule 80 EPC, amended claim 1 of this request did not meet the requirements of Articles 84 and 123(2) EPC, the claimed invention was insufficiently disclosed, the claimed subject-matter lacked novelty in view of D16, and therefore could also not be based on an inventive step.

VI. The appellant/patent proprietor did not file any statement setting out the grounds of its appeal.

VII. By letter dated 18 August 2011 the appellant/opponent filed an additional document reflecting the general knowledge of the person skilled in the art in further support of the objection relating to sufficiency of disclosure.

VIII. Apart from the announcement in its letter of 24 October 2012 that it would not attend the oral proceedings
which took place on 16 November 2012, the appellant/patent proprietor took no active part in these appeal proceedings.

IX. The relevant arguments put forward by the appellant/opponent orally and in writing may be summarised as follows:

- The auxiliary request should not have been allowed by the opposition division since it offended Rule 80 EPC. The addition of (new) dependent claim 2 was not occasioned by a ground for opposition under Article 100 EPC. It did not limit the subject-matter of the corresponding independent claim. The fact that this dependent claim might constitute a valuable fall-back position did not justify its addition in opposition proceedings to a remaining broader independent claim.

- Prior art reference D16 and test report D17 should be admitted into the proceedings since they were filed as a reaction to the maintenance of the auxiliary request by the opposition division.

- The subject-matter of claim 1 lacked novelty in view of D16 (example 3). As demonstrated by D17, the combination of the radical photo-initiator Darocure 1173® (= free radical initiator) and the photo-generating acid precursor UVI-6990 Cypacure® (= photo-generating acid precursor) of example 3 of D16 shows a normalized extinction coefficient below 3, when measured at 351 nm and 364 nm and using 351 nm as the reference wavelength.
X. The appellant/opponent requested that the decision under appeal be set aside and that European patent No. 0 830 641 be revoked in its entirety.

XI. The appellant/patent proprietor requested in its notice of appeal that the decision of the opposition division be set aside and that the patent be maintained on the basis of the main request filed on 19 March 2009 at the oral proceedings before the opposition division.

Reasons for the Decision

1. Admissibility of appeals

1.1 The appeal of the appellant/opponent is admissible.

1.2 No written statement setting out the grounds of appeal was filed by the appellant/patent proprietor within the time limit provided by Article 108, third sentence, EPC. Since neither the notice of appeal nor any other document filed contains anything that could be regarded as a statement of grounds pursuant to Article 108 EPC and Rule 99(2) EPC, the appeal of the patent proprietor has to be rejected as inadmissible (Rule 101(1) EPC).

1.3 As a consequence of the inadmissibility of its appeal, the patent proprietor has only the rights of a respondent and can no longer request that the decision of the opposition division be set aside and that the patent be maintained on the basis of the main request filed on 19 March 2009 at the oral proceedings before the opposition division. At most, it can request that
the appeal filed by the opponent be dismissed. In fact this is how the board interprets the patent proprietor's request in this appeal.

2. Admissibility of documents D16 and D17

As set out by the appellant/opponent, documents D16 and D17 were filed only at the appeal stage since during the oral proceedings held before the opposition division on 19 March 2009 the patent proprietor had surprisingly filed a new main request as well an auxiliary request, which were introduced into the proceedings despite the opponent's objections. At that stage of the proceedings (i.e. during the oral proceedings) the opponent was not in a position to provide appropriate evidence to demonstrate that the subject-matter of new claim 1 of the auxiliary request lacked novelty.

It is evident from the above that D16 and D17 were filed in reaction to the decision of the opposition division. Under these circumstances the board admits D16 and D17 into the proceedings (Article 12(2) and (4) RPBA).

3. Novelty

3.1 The board agrees with the appellant/opponent that the subject-matter of claim 1 simply refers to a combination of a free radical initiator and a photo-generating acid precursor which is further characterized in that the normalized ratio (R) of the extinction coefficients of the precursor and the initiator (measured at 351 nm and 364 nm) is less than
a factor of 3.0 using 351 nm as the reference wavelength. As indicated by the appellant/opponent in its statement setting out the grounds of appeal, for the examples of table 4 of the patent in suit this requirement can be expressed as follows:

\[ R \text{ (at 364 nm)} < 3R \text{ (at 351 nm)} \]
\[ R \text{ (at 364 nm)} / R \text{ (at 351 nm)} < 3 \]

The feature referring to the purpose of the combination, namely "used in a photohardenable composition wherein the initiator and the precursor are characterized by optical molar extinction coefficients and wherein the combination of the initiator and the precursor is optimized for use with a multi-wavelength argon ion laser operating in the UV and producing multiple major wavelengths" has to be disregarded in the assessment of novelty since it does not limit the claimed combination. In fact, any combination of free radical initiator and photo-generating acid precursor disclosed in the state of the art which has the required ratio and is suitable for the purpose referred to in claim 1 anticipates the subject-matter claimed.

3.2 The appellant/opponent has based its lack of novelty objection on D16, in particular Example 3. D16 discloses a process to render the surface of shaped articles anti-scratch and abrasion-resistant by applying to the surface of said articles a composition which polymerises and crosslinks in situ by UV radiation. These compositions comprise a radical photo-initiator in combination with a cationic photo-initiator.
The radical photo-initiator of D16 corresponds to the free radical initiator required in claim 1. This is evident from the fact that both D16 (column 3, line 58) and the patent in suit (page 5, lines 18-20) identify the same compound, namely Irgacure-184®, as a suitable example of this type of initiator. On the other hand, the cationic initiator of D16 corresponds to the photo-generating acid precursor of the opposed patent. Again both D16 (column 4, lines 6-7) and the patent in suit (page 5, lines 20-21) identify UVI-6974-Curacure® as an example for this type of initiator.

3.3 Example 3 of D16 discloses a combination of the radical photo-initiator Darocure 1173® and the cationic photo-initiator UVI-6690 Cypacure®. Thus, example 3 of D16 discloses the combination of a free radical initiator and a photo-generating acid precursor as required by claim 1 of the auxiliary request found allowable by the opposition division.

Since, however, example 3 of D16 does not disclose the coefficients of extinction of the radical photo-initiator and the cationic photo-initiator, the appellant has determined their extinction coefficients at 351 nm and 354 nm and subsequently calculated the extinction coefficient ratio normalized at 351 nm.

The experimental report D17 shows for the combination of the free radical initiator and the photo-generating acid precursor of example 3 of D16 a normalized extinction coefficient ratio of 2.739, when the determination of the extinction coefficients and the calculation of the extinction coefficient ratios are carried out in the same way as in the examples of
table 4 of the patent in suit. Furthermore, the measurement of the extinction coefficients was done in methanol, a solvent also mentioned in the patent specification (page 5, line 22).

3.4 It has thus been demonstrated that the initiator combination of example 3 of D16 falls within the subject-matter of claim 1, thereby depriving it of novelty.

4. The board also agrees with the appellant/opponent that the addition of a new dependent claim having no counterpart in the granted patent is neither appropriate nor necessary to meet a ground for opposition defined in Article 100 EPC. Therefore, such an amendment is not allowable in opposition proceedings in view of Rule 80 EPC (e.g. T 674/96 of 29 April 1999, reasons point 3.10, not published in the OJ EPO). Although such an objection could be easily overcome, for example by deleting the objected claim, the patent proprietor decided not to do so.

5. In view of the above the subject-matter according to the auxiliary request found allowable by the opposition division is not patentable, and there is no need to elaborate on the further objections raised by the appellant/opponent.
Order

For these reasons it is decided that:

1. The appeal of the patent proprietor is rejected as inadmissible.

2. The decision under appeal is set aside.

3. The patent is revoked.

The Registrar: The Chairman:

M. Cañueto Carbajo W. Sieber