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Aktenzeichen

File Number

Numéro du dossier

T 951 191 -3.3.3

In der Anlage erhalten Sie

eine Kopie des Berichtigungsbeschlusses

ein korrigiertes Vorblatt (Form 3030)

einen Leitsatz / Orientierungssatz (Form 3030)

Please find enclosed

a copy of the decision correcting errors

a corrected covering page (Form 3030)

a headnote / catchword (Form 3030)

Veillez trouver en annexe

une copie de la décision rectifiant des erreurs

une page de garde (Form 3030) corrigée

un sommaire / une phrase vedette (Form 3030)

Anmeldung Nr. / Patent Nr.:

(soweit nicht aus der Anlage ersichtlich)

Application No. / Patent No.:

84300759.2

(if not apparent from enclosure)

Demande n° / Brevet n°:

(si le n° n'apparaît pas sur l'annexe)

Internal distribution code:

- (A) Publication in OJ
(B) To Chairmen and Members
(C) To Chairmen

D E C I S I O N
of 10 March 1994

Case Number: T 0951/91 - 3.3.3

Application Number: 84300759.2

Publication Number: 0116456

IPC: C08L 59/02

Language of the proceedings: EN

Title of invention:
Toughened polyoxymethylene compositions

Patentee:
E.I. Du Pont De Nemours and Company

Opponent:
Degussa AG, Frankfurt

Headword:
Late submission/DU PONT

Relevant legal norms:
EPC Art. 114

Keyword:
"Announcement of late submission of unspecified experimental data - results not admitted"

Decisions cited:
G 0007/91, G 0008/91, G 0009/91, G 0004/92, T 0014/83,
T 0219/83, T 0122/84, T 0156/84, T 0258/84, T 0153/85,
T 0117/86, T 0101/87, T 0301/87, T 0326/87, T 0026/88,
T 0038/89, T 0182/89, T 0237/89, T 0430/89, T 0534/89,
T 0097/90, T 0137/90, T 0270/90, T 0611/90, T 0017/91,
T 0741/91, T 0010/92.

.../...

Headnote:

The discretionary power given to the departments of the EPO pursuant to Article 114(2) EPC serves to ensure that proceedings can be concluded swiftly in the interests of the parties, the general public and the EPO, and to forestall tactical abuse. If a party fails to submit the facts, evidence and arguments relevant to their case as early and completely as possible, without adequate excuse, and admitting the same would lead to an excessive delay in the proceedings, the Boards of Appeal are fully justified in refusing to admit them in exercise of the discretion provided by Article 114(2) EPC (Reasons, point 5.15; T 0156/84, OJ EPO 1987, 372, qualified).

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Relevant legal norms:
EPC Art. 19, 24, 54, 56, 83, 104, 114, 117
EPC R. 63

Keyword:
"Novelty (confirmed) - implicit disclosure (no)"
"Inventive step (confirmed) - non-obvious combination of known features"
"Disclosure - sufficiency (yes)"
"Announcement of late submission of unspecified experimental data - results not admitted"
"Decision adverse to a party - bias (no) - incompetence (no)"

Decisions cited:
G 0007/91, G 0008/91, G 0009/91, G 0004/92, T 0014/83,
T 0219/83, T 0122/84, T 0156/84, T 0258/84, T 0153/85,
T 0117/86, T 0101/87, T 0301/87, T 0326/87, T 0026/88,
T 0038/89, T 0182/89, T 0237/89, T 0430/89, T 0534/89,
T 0097/90, T 0137/90, T 0270/90, T 0611/90, T 0017/91,
T 0741/91, T 0010/92.

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Headnote follows



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Boards of Appeal

Chambres de recours

Case Number: T 0951/91 - 3.3.3

D E C I S I O N
of the Technical Board of Appeal 3.3.3
of 10 March 1994

Appellant:
(Opponent 02)

Degussa AG, Frankfurt
Zweigniederlassung Wolfgang
Zentrale Abteilung Patente
Rodenbacher Chaussee 4
Postfach 1345
D-63403 Hanau (DE)

Representative:

-

Respondent:
(Proprietor of the patent)

E.I. Du Pont De Nemours and Company
1007 Market Street
Wilmington
Delaware 19898 (US)

Representative:

Jones, Alan John
Carpmaels & Ransford
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London, WC1A 2RA (GB)

Decision under appeal:

Decision of the Opposition Division of the
European Patent Office dated 18 September 1991,
issued on 8 October 1991 rejecting the oppositions
filed against European patent No. 0 116 456
pursuant to Article 102(2) EPC.

Composition of the Board:

Chairman: C. Gérardin
Members: R. Lunzer
G. Davies

Summary of Facts and Submissions

- I. European patent No. 116 456 was granted on 25 May 1988 on the basis of application No. 84 300 759.2 filed on 7 February 1984, claiming priority from two US applications, 464411 of 7 February 1983 and 570037 of 16 January 1984, on the basis of 66 claims, Claim 1 reading as follows:

"A toughened thermoplastic polyoxymethylene composition consisting essentially of

(a) greater than 15 weight percent and not more than 40 weight percent of at least one thermoplastic polyurethane, which polyurethane has a soft segment glass transition temperature of lower than -15°C and an inherent viscosity of at least 0.7 and

(b) at least 60 weight percent and less than 85 weight percent of at least one polyoxymethylene polymer, which polyoxymethylene polymer has a molecular weight of from 20,000 to 100,000,

the above-stated percentages being based on the total amount of components (a) and (b) only, the thermoplastic polyurethane being dispersed throughout the polyoxymethylene polymer as a separate phase having an average cross-sectional size in the minimum direction of 0.1-0.9 μm (microns), and the composition having an Izod value (ASTM D-256, Method A) of greater than 375 J/m."

Claims 2 to 49 are dependent claims directed to preferred compositions according to Claim 1. Claims 50 to 52 concern shaped articles made from a composition according to any one of Claims 1 to 49. Claims 53 to 66 are related to a method of preparing a composition according to any one of Claims 1 to 49.

II. On 22 February 1989 oppositions were filed separately by Hoechst AG (Opponent 1) and Degussa AG (Opponent 2), both relying on the grounds of Article 100(a) EPC, alleging lack of novelty (Article 54 EPC) and lack of any inventive step (Article 56 EPC). In addition Opponent 1 relied on Article 100(b) (Article 83 EPC), contesting the sufficiency of the disclosure, and on Rule 29(4) and (5), the number of claims being regarded as excessive, the latter ground not being maintained subsequently. Both Opponents requested the revocation of the patent in its entirety.

The various objections were based mainly on the following documents:

- (1) DE-C-1 193 240 [= (1a) GB-A-1 017 244],
- (5) DE-A-2 051 028,
- (6) EP-A-0 155 847 (published 15.08.84),
- (7) DE-A-2 062 735,
- (8) "Polymer Blends and Composites" by Manson & Sperling, Plenum Press, 1976, p. 112, and
- (9) "Toughened Plastics" by Bucknall, Applied Science Publishers Ltd., London, 1977, p. 185,

as well as on 8 further citations (documents (10) to (17)) not submitted within the normal time limit pursuant to Article 99(1) EPC, in particular

- (16) Product Information Sheet "Ultramoll" of Bayer AG.

III. By its decision given orally on 18 September 1991, and issued in writing on 8 October 1991, the Opposition Division held that no valid grounds of opposition existed to the maintenance of the patent as granted. In particular, it held that none of the cited documents deprived the alleged invention of novelty. As far as inventiveness was concerned, it held that the

combination of a POM (see below) having a PS of 1 to 9 μm with a TPU having a Tg below -15°C was not obvious in the light of the cited prior art. The allegation of insufficiency of disclosure was also rejected.

In this decision the following abbreviations are used:

POM = polyoxymethylene

TPU = thermoplastic polyurethane

PS = particle size of the TPU particles in the POM

IV = inherent viscosity of the TPU, and

Tg = glass transition temperature of the TPU.

IV. An appeal against that decision was lodged solely by Opponent 2 (the Appellant) on 11 December 1991, the appeal fee was paid on the same day, and the Statement of Grounds of appeal was filed on 14 February 1992. All the grounds of opposition were said to be maintained.

(i) In substance, the Appellant first argued that the Opposition Division had failed properly to interpret the cited literature, and failed to deal with the case which had been raised by the Opponents. Regarding document (1), it drew attention to the fact that its Table II showed a four-fold or seven-fold improvement in the impact strength of the POM when 30% or 40% of TPU was included. That led inescapably to the inference that like results must have been achieved by like means, and thus that the other parameters, i.e. with respect to Tg, IV and PS, required by Claim 1 must also have been satisfied. Insofar as there could be any doubt as to the Tg of the TPU used in the examples of document (1), or the PS of its distribution within the matrix of the POM, the Opposition Division ought not to have concluded that the

Opponents had failed to discharge the burden of proof. Instead, if any genuine doubt remained, an independent expert opinion should have been sought by the Opposition Division. Alternatively it asked that substantially the following question should be put to the Enlarged Board (the question as formulated by the Appellant was expressed in the German language):

"Where the features of an example in a cited prior art document satisfy all the important characteristics of the claim in suit, save for some apparently inessential parameters, ought the burden of proof to be on the patentee to demonstrate the absence of such parameters from prior art example, rather than on the opponent to demonstrate their presence?"

- (ii) Similarly it argued with respect to document (5), which showed in Example 10 on page 9 that the inclusion of 20% of TPU in 80% of POM resulted in an impact strength of 448 J/m (when converted from the units there given), that it was implicit from the teaching of the patent in suit, to the effect that the attainment of high impact strength necessarily required compliance with all of the claimed parameters, that if very high impact strength was shown by an example in a prior art document, it was implicit from the teaching of the patent in suit that those other parameters must have been satisfied also by the prior art.

- (iii) Contrary to the argument of the Patentee, accepted in the decision under appeal, no synergistic effect had been demonstrated to

exist between the choice of Tg and PS in improving impact strength.

- (iv) The alleged invention was not sufficiently disclosed because Example 87, despite being at the edge of the claimed range, had very good impact strength, whereas Example 98, although satisfying all the other parameters of Claim 1, nonetheless had an impact strength of 326 J/m, which was well below the claimed lower limit of 375 J/m. Consequently, the skilled reader was left in doubt as to which conditions had to be satisfied to secure the desired results of the alleged invention.
- (v) Reimbursement of the appeal fee under Rule 67 EPC was sought by the Appellant on two distinct grounds. First, despite the fact that at the oral proceedings reference had been made by the Opponents to "Thermodynamic Miscibility in a Polyacetal Blend", ANTEC '91, page 1589 (document (15)) in connection with the interpretation of document (1), the failure of the Opposition Division to take that document into account in its decision constituted a substantial procedural violation (i.e. irregularity). Secondly, in addition to the fact that the Opposition Division had displayed bias, it had failed to understand the technical issues before it. Its members therefore did not satisfy the requirement within the meaning of Article 19(2) EPC of being "technical examiners". On that ground, the Appellant asked for the remittal of the case to the Opposition Division and for an expert to be commissioned; in addition, it asked for an order for costs to be made against the EPO itself, failing which a

further question should be put to the Enlarged Board concerning the effect of a decision in an opposition procedure taken by unqualified persons.

V. The Respondent (Patentee) argued in its counterstatement, filed on 28 August 1992, that the appeal was inadmissible on the ground that it had failed to identify the extent and grounds of appeal and that, if admissible, the Appellant had failed to establish any factual basis for allowing the appeal.

- (i) In substance, it was not clear at all what exactly was the case presented by the Appellant; in particular, if obviousness was relied on by the Appellant, the alleged closest prior art should have been identified and addressed in detail.
- (ii) Regarding the onus of proof on the question of novelty, the Respondent pointed out on the basis of several decisions of the Boards of Appeal that the burden of proof rested on the Opponent in opposition proceedings; if the parties made contrary assertions which they could not substantiate, the Patentee was given the benefit of the doubt.
- (iii) As far as the objection of insufficient disclosure was concerned, the three examples of the patent in suit referred to by the Appellant were all borderline, and thus did not support a general conclusion of insufficiency. There was no doubt that the patent specification contained all the information needed to enable a person skilled in the art to achieve the desired results quickly and reliably.

(iv) The criticism of the competence of the Opposition Division by the Appellant was unfounded. The thorough and expert approach of the Opposition Division in its intermediate communication, during oral proceedings and in the impugned decision was underlined. Even the representative of Opponent 1 had expressed appreciation of the great assistance afforded to the parties in the preparation of the oral proceedings.

VI. By letter dated 18 November 1993, received on 23 November 1993, the Appellant announced that it proposed to submit some fresh experimental data.

In a communication of 15 December 1993 the Board informed the parties that a draft decision based on all the documents then available had already been written. The submission of further experimental information proposed to be filed at some unspecified later date, some twenty months after the Statement of Grounds of appeal had been filed, was regarded as an abuse of procedure. In the exercise of its discretion under Article 114(2) EPC, the Board was thus not prepared to admit such fresh material.

VII. Opponent 1 took no part in the appeal, and indicated by its letter of 30 November 1992, received on 2 December 1992, that its opposition was withdrawn.

VIII. The Appellant requested:

(i) that the decision under appeal be set aside, and the patent revoked in its entirety;

- (ii) that the two questions mentioned above in paragraphs IV(i) and (v) be put to the Enlarged Board;
- (iii) that the appeal fees be reimbursed on the grounds specified in paragraph IV(v) above;
- (iv) that the case be remitted to the Opposition Division and an expert be commissioned.

The Respondent requested:

- (v) that the appeal be dismissed as inadmissible;
- (vi) that alternatively, it should be dismissed on its merits;
- (vii) that the Appellant's requests (ii) and (iii) above be rejected;
- (viii) that an order be made in the Respondent's favour for the costs of the present appeal.

Reasons for the Decision

Procedural issues

1. The appeal complies with Articles 106 to 108 and Rule 64 EPC and is admissible. In particular, it clearly appears from the Notice of Appeal that the decision under appeal is to be set aside entirely and the patent be revoked entirely, which can only mean that all the grounds of opposition are maintained.

2. In contrast to documents (1) to (9) which were cited in the Notices of Opposition, and thus produced in due time, documents (10) to (17) were filed with later statements by Opponent 1 outside the normal time limit pursuant to Article 99(1) EPC. Documents (10) to (13) were submitted on 7 August 1990, and documents (14) to (17) on 6 September 1991, thus twelve days only prior to the oral proceedings before the Opposition Division, in spite of the final remark in the communication of 19 March 1991 sent together with the summons to oral proceedings that "any additional submissions, statements and/or evidence should be filed well before the date of the oral proceedings". Under these circumstances, the Opposition Division was fully entitled to exercise its discretion pursuant to Article 114(2) EPC to decide which of the late filed documents (10) to (17) could be accepted into the procedure and which should be disregarded.

As far as document (15) is concerned, the minutes of oral proceedings, which the Appellant has not criticised and must thus be assumed to properly reflect the essence of its oral submissions, make no reference at all to this citation, which suggests that the latter played at most a minor role in the discussion of patentability. In the Board's view, it is thus reasonable to assume that the Opponents relied on the teaching of document (15) in order to interpret a particular aspect of document (1) (cf. Statement of Grounds of appeal, page 11, paragraph 3) and that the Opposition Division, having found that this point was not essential for the ultimate outcome of the case, regarded it as superfluous to deal with it in the decision and, consequently, passed over it in silence. It is not disputed that the relevance of a particular document, in this case document (15), is a matter of judgment and appreciation and that the

Appellant may disagree with the conclusions of the Opposition Division, but an interpretation - even wrong - cannot amount to a procedural violation.

For these reasons, the Board regards the attitude of the Opposition Division concerning the late filed documents as fully in line with the interpretation of Article 114(2) EPC by the Boards of Appeal; there can thus be no question of a procedural violation justifying the reimbursement of the appeal fees pursuant to Rule 67 EPC.

3. The Board has in turn duly examined document (15) and has found that it was not sufficiently relevant to be taken into consideration in view of its late submission. Therefore, this citation will be disregarded hereinbelow pursuant to Article 114(2) EPC.

In the same respect, the Board has examined the new document mentioned in the Statement of Grounds of appeal (page 9, paragraph 3), i.e. Toughened Plastics, C.B. Bucknall, Applied Science Publishers Ltd., London, 1977, page 296. Being a disclosure of general interest, this citation is accepted into the procedure and will be referred to as document (9') hereinbelow.

Admissibility of late-filed experimental data

4. As indicated in point VI above, the decision in this case was substantially completed on 22 November 1993.

On 25 November 1993, the Board received a letter dated 18 November from the Appellant, which, translated from the German original, reads as follows:

"In connection with the above-identified case, the Appellant gives notice that within the next two months it intends to file the results of comparative experiments."

By a communication dated 15 December 1993, the Board indicated that it regarded seeking to introduce new evidence at such a late stage of the proceedings, some twenty months after the Statement of Grounds of appeal had been filed, as an abuse of procedure. In the exercise of its discretion under Article 114(2) EPC, therefore, it was not prepared to admit any further experimental information.

5. So far as the Board is aware, the situation faced in the present case is novel in that the Board exercised its discretion under Article 114(2) EPC to disregard facts or evidence not submitted in due time by a party, before such facts or evidence had actually been filed. It is the established case law of the Boards of Appeal that facts and evidence, submitted for the first time in appeal proceedings, may be disregarded by the Boards of Appeal as a matter of discretion pursuant to Article 114(2) EPC. However, when considering a request to admit late-filed material, a Board exercising an adverse discretion will normally have the opportunity to form a view of the relevance of the material before coming to a decision. It is necessary therefore for the Board to review the discretionary powers provided by Article 114(2) EPC in the light of the case law of the Boards of Appeal and its legislative background.

- 5.1 The Boards of Appeal frequently have to decide whether late-filed documents or evidence are to be taken into account. Under Article 114(1) EPC, the EPO is obliged to examine the facts of its own motion, and in doing so, it is not restricted to the facts, evidence and arguments

provided by the parties and the relief sought. According to Article 114(2) EPC, however, the EPO may disregard facts or evidence which are not submitted in due time by the parties concerned. These two provisions have generated a considerable body of case law.

5.2 The due time for an opponent to file evidence in opposition cases is at the date of filing the Notice of Opposition (Article 99(1) EPC in conjunction with Rule 55(c) EPC). In this connection, reference may usefully be made to the note on "Opposition Procedure in the EPO" published in OJ EPO 1989, 417, which gives further guidance in relation to the time and manner in which the parties' cases in opposition proceedings should be presented. Thus, in paragraph 2 of the above document, it is stated:

"The EPO's aim remains to establish as rapidly as possible in the interests of both the public and the parties to the opposition proceedings whether or not the patent may be maintained given the Opponent's submissions. It seeks to achieve this by means of a speedy and streamlined procedure".

Paragraph 13 of the same document, referring to facts and evidence not submitted in due time, states:

"In order to expedite proceedings, parties should in principle submit all facts, evidence and requests at the beginning of the procedure. Where this is not possible, the facts, evidence or requests must be submitted at the earliest opportunity".

5.3 The Boards of Appeal have endorsed the above and emphasised that opponents should present all their objections during the opposition period, in accordance

with the requirement that proceedings be brought to a speedy conclusion and the principle of fairness to the other party (see T 101/87 of 25 January 1990, T 430/89 of 17 July 1991 and T 237/89 of 2 May 1991, none of which is reported in OJ EPO). As stated in T 117/86, OJ EPO 1989, 401, facts and evidence in support of an opposition which are presented after the nine-month period has expired are out of time and late, and may or may not be admitted into the proceedings as a matter of discretion under Article 114(2) EPC.

The due time, therefore, for submitting facts and evidence in the present case was the date of filing the notice of opposition on 22 February 1989, four years and nine months before the Appellant's announcement of its intention to file experimental evidence and it is clear that the evidence, if admitted, would have been late.

- 5.4 Thus the underlying principle, clearly recognised and implemented by the Boards of Appeal, e.g. in T 117/86 (supra), T 182/89, OJ EPO 1991, 391, and T 326/87, OJ EPO 1992, 522, is one of early and complete presentation of the parties' case, as opposed to the piecemeal and tardy introduction of the arguments and supporting evidence. As stated in T 326/87;

"It is this jurisprudence, together with the express wording of Article 114(2) EPC, a wording which is clear and unambiguous in all the three languages, that sets the legal limit on the inquisitorial duties of the Boards of Appeal under Article 114(1) EPC ..."

- 5.5 The language of the two paragraphs of Article 114 EPC is not only clear, as stated above, but as a matter of legislative formulation it takes the conventional form of expressing a general obligation in the first

paragraph, which is then qualified by a discretionary exception in the circumstances specified in the second. Where the discretion arises under the second paragraph, it may, in appropriate circumstances, be exercised to override the general obligation expressed in the first.

5.6 However, a leading case T 156/84, OJ EPO 1987, 372, held that the principle of examination by the EPO of its own motion under Article 114(1) EPC took precedence over the possibility of disregarding facts or evidence not submitted in due time under Article 114(2) EPC. This followed from the EPO's duty *vis-à-vis* the public not to grant or maintain patents which it is convinced are not legally valid. Thus, the EPO had to examine the relevance of citations introduced late into the proceedings. According to that decision, the sole effect of Article 114(2) EPC was to enable the EPO to disregard late-filed documents if they are not material to the decision without having to give detailed reasons (Reasons for the Decision, point 3.8). In practice, therefore, following this decision, the discretion under Article 114(2) EPC to disregard new facts or evidence, is normally exercised by the Boards of Appeal in the form of a so-called "examination as to relevance". The decision whether to take account of a late-filed document depends on its likely bearing on the outcome of the case (T 258/84, OJ EPO 1987, 119).

5.7 That interpretation does not appear to this Board to accord with the clear wording of Article 114(2) EPC, while some of the reasoning used in the earlier decision may also be questioned. Apart from the above-mentioned consideration of the public interest, Article 115 EPC was invoked as an aid to the interpretation of Article 114(2) EPC. It was observed that the discretionary power to disregard late-filed matter is applied by Article 114(2) EPC to "the parties", while

Article 115(1) EPC, which deals with observations by third parties, indicates that they, "shall not be a party to the proceedings". From those premises it was inferred that the EPO has no power to exclude late-filed material submitted by third parties, leading to the comment that -

"It would be ridiculous if the opponent had to file documents found late through a third party in accordance with Article 115 EPC, if he wished to ensure that they would not be disregarded under Article 114(2) EPC."

To avoid that anomaly it was concluded that late-filed relevant material cannot be excluded at all, even if filed by the parties (T 156/84, Reasons for the Decision, points 3.5 to 3.7).

- 5.8 However, it is no less arguable that Article 31 of the Vienna Convention on the Law of Treaties should be applied, as it has been on numerous occasions by the Enlarged Board and Boards of Appeal, to the interpretation of Article 115 EPC. By interpreting the above-cited words of that Article in the light of their object and purpose, it is clear that they are intended exclusively to cut down, and not to extend, the rights of third parties, still less to extend their rights beyond the rights of parties to proceedings before the EPO.
- 5.9 From this it would follow that if, as is clearly provided by Article 114(2) EPC, a party who is dilatory and introduces material late may have it disregarded in the exercise of the EPO's discretion, *a fortiori* the same sanction may be applied to a dilatory third party. There is consequently no reason to deny the existence of the discretionary power under Article 114(2) EPC to

exclude late-filed material, irrespective of its relevance, although, as explained in the next paragraph, relevance may influence how that power is to be exercised.

5.10 A court or any other judicial tribunal exercising a discretionary power is obliged to do so judicially, i.e. it may not act capriciously, but must take due account of all the material facts. In relation to oppositions before the EPO and appeals therefrom, a material fact is the relevance of any late-filed matter, as is also the asymmetric character of opposition proceedings, in which revocation of a patent is final, whereas dismissal of an opposition leaves the opponent with a further opportunity to challenge validity before the national courts.

5.11 This interpretation of Article 114(2) EPC is in accord with the more recent case law of the Boards of Appeal. As the Board found in T 97/90, OJ EPO 1993, 719, the wording of Article 114(1) EPC does not mean that the Boards of Appeal have to conduct rehearings of the first instance proceedings with an unfettered right, and indeed obligation, to look at all fresh matter regardless of how late it was submitted. It continued:

"Such an interpretation of Article 114(1) is out of the context not only of the remainder of the Article, namely Article 114(2), but also of the context of Article 111(1) EPC. When Article 114(1) is construed in its proper context, it becomes evident that there is a clear limit to the scope of any new matter that may be introduced into an appeal by the parties or by the Board itself, because cases on appeal must be and remain identical or closely similar to those on which first instance decisions have been rendered. There

is clear scope for the above interpretation in the Board's jurisprudence, in cases such as T 26/88, OJ EPO 1991, 30, T 326/87 (supra), T 153/85, OJ EPO 1988, 001 and T 611/90, OJ EPO 1993, 50, as well as in a number of unpublished cases, e.g. T 137/90 [26 April 1991] and T 38/89 [21 August 1990]." In the same case, the Board went on to say "a blanket obligation to look at all matter, however late filed, would render the function of the first instance departments either superfluous, or delegate their role to merely providing a preliminary opinion for subsequent judicial review and decision by the Boards of Appeal."

5.12 The Enlarged Board has recently clarified the law in respect of the appeal procedure in G 9/91, OJ EPO 1993, 408, holding that, in contrast to the merely administrative character of the opposition procedure, the appeal procedure is to be considered as a judicial procedure, as explained by the Enlarged Board in its recently issued decisions in the cases G 7/91, OJ EPO 1993, 356, and G 8/91, OJ EPO 1993, 346 (Reasons for the Decision, point 7 in each case). Such procedure is by its very nature less investigative than an administrative procedure. Although Article 114(1) EPC formally covers also the appeal procedure, the application of this provision generally in a more restrictive manner than in opposition proceedings is therefore justified.

5.13 The *Travaux Préparatoires* of the EPC also support this interpretation. According to the report of the Luxembourg Intergovernmental Conference concerning the first preliminary draft of the EPC of 1970 (Article 113(2), the text which later became Article 114(2)):

"provides, however, that the Board of Appeal is not obliged to consider facts or evidence which were not submitted when they should have been. This provision serves to prevent the appeal proceedings from being excessively delayed by negligent or intentionally dilatory applicants".

Moreover, a provision to the same effect had been proposed from the outset in 1961 "to prevent appeal proceedings from being dragged out unnecessarily by malicious or negligent appellants" (EC Patent Working Party, 29 May 1961). (A detailed account of the references to Article 114(1) and (2) in the *Travaux Préparatoires* is given in T 122/84, OJ EPO 1987, 177).

5.14 Thus, although it is the established case law of the Boards of Appeal, following case T 156/84, that the main criterion for deciding on the admissibility of a late-filed document is its relevance, i.e. its evidential weight in relation to other documents already in the case, the Boards have on a number of occasions disregarded late-filed evidence, refusing to examine the possible relevance of the submission.

For example, in T 534/89 (Abstract in OJ EPO 1993/09) and T 17/91 (Abstract in OJ EPO 1993/09), the Board exercised its discretion in each case under Article 114(2) EPC in deciding to disregard late-filed evidence of prior public use, without examining the possible relevance of the submission, on the grounds that the late filing represented an abuse of the procedure before the EPO and a breach of the principle of good faith between the EPO and the parties to proceedings before it.

In T 270/90, OJ EPO 1993, 725, the Board also refused to consider late-filed experimental data, on the grounds that the late submission (two weeks before oral proceedings) represented an abuse of procedure and that the principle of fairness had been breached. Likewise, in T 741/91 of 22 September 1993 (not published in OJ EPO) the Board refused to consider the relevance of evidence which had been filed one day prior to oral proceedings before the Opposition Division. The Board found that to file evidence at such a late date was not an acceptable conduct by a submitting party and that, therefore, the Opposition Division should have disregarded this evidence applying the discretion conferred upon it under Article 114(2).

Similarly, the Enlarged Board in G 4/92, OJ EPO 1994, 149, found as a matter of principle that the submission of new evidence or facts at an oral proceeding, which could have been filed earlier, represents an abuse of procedure which an instance of the EPO may sanction by refusing to take such facts or evidence into account pursuant to Article 114(2) EPC.

- 5.15 The discretionary power given to the departments of the EPO pursuant to Article 114(2) EPC serves to ensure that proceedings can be concluded swiftly in the interests of the parties, the general public and the EPO, and to forestall tactical abuse. Parties must take into account the possibility that late-filed material will be disregarded and do their best to submit the facts, evidence and arguments relevant to their case as early and completely as possible. If a party fails to do so without adequate excuse, and admitting the evidence would lead to an excessive delay in the proceedings, the Boards of Appeal are fully justified in refusing to admit it in exercise of the discretion provided by Article 114(2) EPC.

6. In the present case, the Board^o finds that the conduct of the Appellant in attempting to submit evidence at such a late stage of the proceedings is unacceptable and that it is justified, in the exercise of its discretion under Article 114(2) EPC, to refuse to admit such evidence. The Appellant waited nearly five years after filing its Notice of Opposition and some twenty months after filing its Statement of Grounds of appeal before seeking to introduce the experimental evidence in question. If facts or evidence are submitted by a party only at a late stage of the proceedings, the party must show good reason for the delay.

The Appellant gave the Board no explanation for the delay, nor has it shown that it was prevented from filing such evidence at an earlier date. The Respondent, as well as the EPO and the public at large, were left in ignorance of the full extent of the Appellant's case throughout this period. Were the evidence to be admitted, it would have the effect of unreasonably prolonging the proceedings as the Respondent would have to be given the opportunity of commenting on the evidence and filing its own experimental evidence in response. As stated in paragraphs 5.2 and 5.3 above, it is in the interest of both the public and the parties to opposition proceedings, and equally where there are appeals from opposition decisions, to establish as rapidly as possible whether or not the patent may be maintained, given the Opponent's submissions.

Substantive issues

Novelty

7. The first issue to be discussed is the question of novelty of the claimed subject-matter with regard to the teaching of documents (1), (5) and (6).

7.1 Document (1) describes a thermoplastically deformable composition comprising a TPU having a molecular weight of at least 8000 and a POM having a molecular weight of at least 4000, the weight ratio of the two components being from 5:95 to 95:5 (Claim 1). The compositions according to Runs 3 and 4 of Example 1 comprise 40 and 30 parts by weight respectively of a TPU and 60 and 70 parts by weight respectively of a POM of unspecified molecular weight; the TPU is defined as the reaction product of (a) a polyester derived from adipic acid and ethylene glycol with a hydroxy number of 56, (b) diphenylmethane-4,4'-diisocyanate and (c) 1,4-butanediol (columns 5/6, Tables I and II). No additional information is provided regarding the definition of the two components of the composition; nor does it mention the Izod value of the composition, i.e. the toughness measured according to ASTM D-256, Method A, as indicated in the patent specification (cf. page 7, lines 50 to 57).

The issue of novelty reduces thus to the question whether the specific features required in Claim 1 of the patent in suit, namely (i) Tg lower than -15°C , (ii) IV of at least 0.7, (iii) PS in the minimum direction of 0.1 to 0.9 μm , and (iv) Izod toughness higher than 375 J/m, can be regarded as implicitly disclosed in document (1).

7.1.1 Parameter (i): From the description of the patent in suit (page 7, lines 13 to 29) it appears that Tg is not only measured by a particular technique, namely a Du Pont Model 981 Dynamic Mechanical Analysis Cell attached to a Model 990 DTA instrument, but by using a particular rate heating. The latter, namely $2.5^{\circ}\text{C}/\text{min.}$, is sufficiently slow to permit the sample being tested to approach equilibrium, regardless of its heat history. The value of Tg required for the soft segment of the TPU

can thus be regarded as a characteristic material parameter reflecting the characteristics of the TPU itself.

On the one hand, it could be said in favour of the Appellant's point of view that the polyester used as a high molecular weight dihydroxy component in the preparation of the TPU according to Runs 3 and 4 of Example 1 in document (1) corresponds to the soft segments of TPU F and G according to Examples 12 and 14 of Table II of the patent in suit, and should thus have a similar value of Tg, i.e. -18 or -20°C. On the other hand, the experimental data in the same table of the patent in suit provide evidence that soft segments of TPU obtained from the same ingredients may have quite different Tg; this is quite clear from Examples 21 and 23, which mention Tg of the soft segments of -30 and +9°C, respectively. It is thus not possible to conclude that the Tg of the soft segments of the TPU according to Runs 3 and 4 of Example 1 in document (1) should be below -15°C.

7.1.2 Parameter (ii): Whereas the molecular weight of the TPU is expressed in the patent in suit in terms of inherent viscosity, document (1) refers to intrinsic viscosity to measure the molecular weight (column 3, lines 60 to 63) (cf. document (1a), page 2, lines 82 to 85). In view of the close relationship between the two parameters - the intrinsic viscosity being obtained by extrapolating to zero concentration the values of inherent viscosity of polymer solutions of various concentrations - there is a strong probability that the range of 0.4 to 2 of intrinsic viscosity according to document (1) satisfies the condition in the patent in suit that inherent viscosity of the TPU should be at least 0.7.

7.1.3 Parameter (iii): There is no information whatsoever about PS in document (1). In particular, the mixing conditions of the roller mill mixing set out in column 6, lines 18/19 do not allow any conclusion to be drawn about the PS of the TPU component within the POM matrix. As far as the experimental data in Table II of the citation are concerned, which the Appellant referred to more particularly, they merely show that the highest toughness corresponds to the compositions according to Runs 3 and 4 of Example 1, thus comprising TPU and POM in the weight ratios of 40:60 and 30:70; the sole fact that toughness is high does not allow the conclusion that the condition regarding parameter (iii) is satisfied.

On the contrary, an indirect comparison made on the above Appellant's assumptions that the conditions concerning parameters (i) and (ii) are implicitly satisfied in document (1), would lead to the conclusion that PS must be different in the citation and in the patent in suit. From Table II of document (1) it appears that POM alone shows a notched toughness of 4.4, and that in a blend containing 30% of TPU, one achieves an increase in the notched toughness of about 4.4 times. By contrast, Table I of the patent specification shows that toughness is multiplied by more than 11 by incorporating 30% of TPU in a POM composition. In the Board's view, on the basis of the Appellant's argumentation this difference in toughness can only be related to a difference in PS.

7.1.4 Parameter (iv): Whereas toughness is measured in cm kp/cm^2 in document (1), it is expressed in J/m in the patent in suit. Together with the Counterstatement of appeal the Respondent has filed an Annex A, wherein some of the values of notched toughness reported in document (1) are converted into the units used throughout the

patent specification. According to the Respondent, the notched toughness value for the 40:60 and 30:70 blends described in Table II of document (1) would be 310 and 195 J/m respectively, thus clearly below the minimum required in the patent in suit. The Appellant has not disputed the two assumptions made for this conversion, nor the results of these calculations, so that the Board relies on these figures to conclude that the compositions claimed in the patent in suit have far superior notched toughness.

- 7.1.5 In view of the above considerations, novelty of the claimed subject-matter can be acknowledged at least on the basis of toughness.

- 7.2 Document (5) relates to POM/TPU compositions (Claim 1). Although the general teaching of this citation is directed to mixtures containing the two polymer ingredients in weight ratios between 40:60 and 60:40 (Claim 2 and page 6, paragraph 3), Example 10 discloses a mixture containing 80 parts by weight of a POM identified as "Delrin 150" and 20 parts by weight of a TPU identified as "Estane 5710", thus falling within the weight proportions required in the patent in suit. This composition is said to have an Izod toughness of 1.16 mkg/Zoll, i.e. 448 J/m according to the conversion made by the Appellant in the Notice of Opposition (page 6, paragraph 2). The question arises thus whether features (i), (ii) and (iii) as defined above can be regarded as implicitly disclosed.
 - 7.2.1 In opposition procedure contradictory assertions were made by the parties regarding the Tg of the TPU after the Respondent specified in point 17 of its reply filed on 18 December 1989 that "Estane 5710" is the product actually used in Example 35 of the patent in suit, for which a Tg of -13°C is given (page 13, Table II). On the

one hand, Opponent 1 argued on the basis of a telephone conversation with the company Goodrich, supplier of that commercial product, that the Tg should be in fact -13°F , i.e. -25°C , and that such a value would be more in line with the high toughness of the composition (statement filed on 9 August 1990, page 7, paragraph 4). On the other hand, the Respondent pointed out that (1) TPU suppliers normally do not report Tg, (2) the provision of a bare temperature value for Tg without indication of the method is not definitive, and (3) all the data mentioned in the patent in suit are not second-hand information, but are the results of the inventors' own experiments (statement filed on 21 January 1991, passage bridging pages 7 and 8).

In the absence of any confirmation of that telephone conversation, for instance in the form of a Declaration by the supplier, the Board can only rely on the technical data in the patent in suit, which means that Tg in the composition according to Example 10 of document (5) does not satisfy the condition required in the patent in suit.

7.2.2 On the assumption that "Estane 5710" is the TPU used in Example 35 of the patent in suit and that all the data provided in the patent in suit have actually been determined by the Respondent, it is legitimate to rely on the value of IV of 0.67 given on page 13, Table II for that product. It follows that parameter (ii) does not satisfy the condition required in the patent in suit.

7.2.3 According to Example 10 of document (5) the two polymer components are mixed with a Brabender mixer at 200°C at 30 rpm (page 8, lines 1 to 4). Such processing conditions correspond to the working conditions recommended in the patent specification (compare page 9,

lines 22 to 24). Although there is no explicit disclosure of PS in the citation, the fact that a TPU having borderline Tg and IV values, -13°C and 0.67 respectively, gives rise to a composition having a toughness substantially higher than the minimum required in the patent in suit, affords the presumption that the condition regarding the PS could well be met. This is in line too with the Respondent's observation that a borderline Tg can be compensated somewhat by appropriate particle size (statement filed on 8 October 1990, page 5, paragraph 2).

7.2.4 It follows that, even on the basis of an interpretation of Example 10 according to the Appellant's submissions, novelty of the claimed subject-matter can be acknowledged on the basis of at least two objective differences, namely features (i) and (ii).

7.3 Document (6), which is cited against novelty within the meaning of Article 54(3) EPC, describes POM compositions containing 5 to 60 weight percent of a TPU (Claims 1 and 4). The Table on page 15 mentions mixtures containing 20, 30 and 40 weight percent of polyurethane C, satisfying thus the condition regarding the relative amounts of the two polymer components in the compositions according to the patent in suit.

There is no evidence from document (16), which was cited by Opponent 1 in order to overcome the lack of information about polyurethane C in document (6), that the commercial product "Ultramoll" described in document (16) and polyurethane C are identical. On the contrary, the fact that "Ultramoll" always contains small quantities of PVC (cf. document (16), page 1, Table), which is certainly an undesirable compound under the processing conditions described in the patent in suit,

speaks rather against such a correspondence; moreover, Tg and IV of "Ultramoll" are not even reported in document (16).

Document (6) will thus be discussed on the basis of the comparison made by Opponent 1 in Annex 2 of its statement filed on 9 August 1990, from which it appears that the composition containing 30% of polyurethane C should have an Izod toughness of 485 J/m.

- 7.3.1 Parameter (i): The value of -40°C indicated for polyurethane C is not conclusive. First, document (6) identifies that polymer on page 14, lines 9 to 14 as being a polyesterurethane obtained from hexamethylene diisocyanate, adipic acid, ethylene glycol, 1,4-butanediol, neopentylglycol and 1,6-hexanediol, but does not specify the relative amounts of these six compounds; as can be seen from Table II on page 13 of the patent in suit, more specifically from Examples 9 to 11, 15, 19 to 24, 26, 28, 32, 34, 35 and 38, the glass transition temperature of soft segments based on the same structural units varies between -35 and $+9^{\circ}\text{C}$, which shows that other features must have an influence on that parameter. Secondly, the provision of a Tg value without simultaneous indication of the method of measurement cannot be regarded as conclusive.

It follows that the general range of Tg described in document (6), i.e. "mostly not higher than -10°C , preferably not higher than -20°C " (page 10, lines 26/27), applies to polyurethane C. This rather vague characterisation cannot be used to infer a Tg lower than -15°C for polyurethane C.

- 7.3.2 Parameter (ii): Polyurethane C according to document (6) is said to have an "RSV" of 1.5 dl/g (page 14, line 14). This parameter is assumed to correspond to "viscosity

number" or "reduced viscosity" and is thus different from "inherent viscosity" as used in the patent in suit; moreover, whereas in the citation the determination of viscosity occurs at a concentration of 0.5 g/100 ml (page 3, lines 10/11), a concentration of 0.1% is used in the patent in suit (page 8, lines 39 to 42). Although the impossibility to decide about IV as the result of these differences was underlined in the communication issued by the Opposition Division together with the summons to oral proceedings (cf. point 1.6.2), that point has never been clarified and the Appellant has not considered that parameter in the Statement of Grounds of appeal. Under such circumstances, the Board can only give the Respondent the benefit of the doubt and, thereby, conclude that the inherent viscosity of polyurethane C does not fall within the range required in the patent in suit.

7.3.3 Parameter (iii): The same remark applies in the case of PS as in the case of IV (cf. point 1.6.4 of the communication by the Opposition Division). According to document (6), the two polymer ingredients are mixed on a Werner and Pfleiderer twin screw extruder of the type ZDSF at temperatures comprised between 190 and 230°C (page 13, lines 23 to 27). The fact that machines of the same kind are said to be preferred in the patent in suit (page 9, lines 36 to 41) does not mean that PS should be inevitably the same, because other factors, such as the operating parameters and screw design, have a decisive influence on PS. There is thus no evidence that PS in document (6) falls within the range required in the patent in suit.

7.3.4 Without even considering the parameters for which insufficient evidence has been provided by the Opponents, it is thus possible to acknowledge novelty on the basis of parameter (i).

7.4 The comparison of the teaching of each of documents (1), (5) and (6) with the subject-matter as defined in Claim 1 of the patent in suit shows that in each citation there is at least one parameter which does not meet the condition required in the patent in suit. As demonstrated above, the two compositions in document (1) discussed more particularly do not have the required toughness (parameter (iv)); in document (5), both the Tg and IV (parameters (i) and (ii)) of the composition according to Example 10 are outside their respective ranges as defined in the patent in suit; last, the range of Tg lower than -10°C according to document (6) cannot anticipate a range lower than -15°C as required in the patent in suit (parameter (i)). It follows that novelty of the claimed subject-matter can be acknowledged on the basis of these objective differences.

Inventive step

8. Although the discussion of the teachings of documents (1) and (5) in the framework of the issue of novelty rather speaks in favour of document (5) as representing the closest state of the art, the Board is going to adopt the same line as the parties in their submissions and the Opposition Division in its decision, i.e. consider document (1) as the closest state of the art. On the basis of the conclusion of point 7.1.4 above, the POM composition described in that citation can be regarded as having an insufficient toughness.

In the light of this shortcoming, the problem underlying the patent in suit can thus be seen in the provision of POM compositions having an improved toughness, namely higher than 375 J/m.

According to the patent in suit, this problem is solved by a POM composition containing a TPU (i) the soft segment of which has a T_g lower than -15°C , (ii) which has an IV of 0.7, and (iii) which is dispersed throughout the POM as a separate phase having an average cross-sectional size in the minimum direction of 0.1 to 0.9 μm .

Although the Appellant has pointed out that the TPU according to Example 98, which meets these requirements ($T_g = -48^\circ\text{C}$; IV = 0.73; PS = 0.5 μm), does not give rise to a POM composition having the required toughness (Izod toughness = 326 J/m), the Board considers in view of the large number of examples in the patent in suit that the combination of features (i) to (iii) provides an effective solution to the above-defined technical problem.

9. It has thus to be decided whether this solution is obvious to a person skilled in the art with respect to the documents relied upon by the Appellant.
- 9.1 From the experimental data in Table II as well as from the passage in column 4, lines 37 to 44 of document (1), it appears that 30 to 40 weight percent of TPU corresponds to optimal toughness of the POM compositions. No other parameter likely to have an influence on toughness is discussed in this citation. In fact, the main feature of the compositions according to document (1) is not a specific definition of their components, but their homogeneity, which is achieved by simply mixing the two polymers at higher temperatures (column 1, lines 1 to 9; column 3, lines 18 to 22; column 4, lines 24 to 36). This contrasts with the processing conditions defined in the patent in suit, which require an intensive mixing device capable of developing high shear above the melting points of the

ingredients in order to disperse the TPU in the POM and, thereby, create a finely-divided second phase having a specific size.

As pointed out by the Respondent in the opposition procedure (statement filed on 18 December 1989, Annex, point 3), document (1) can be construed as containing a generic disclosure with respect to the patent in suit. It is evident that such a broad teaching cannot render obvious the combination of features according to Claim 1 of the patent in suit.

- 9.2 Although Example 10 of document (5) considered in isolation can be regarded as a closer state of the art, the general teaching of this citation cannot lead the person skilled in the art to select the combination of physical features as specified in the patent in suit. This is not contradictory, for the weight ratio TPU:POM of the composition according to Example 10, namely 20:80, lies outside the range of 60:40 to 40:60 regarded as critical to ensure optimal mechanical properties, in particular high Izod toughness (page 10, last sentence to page 11, line 5). Moreover, the absence of rupture mentioned in the case of the composition according to Example 7 (page 9, Table), wherein the weight ratio TPU:POM is 60:40, would not provide an incentive for the skilled person to operate outside the preferred range.

The TPU used in Examples 7 and 10 is the polyurethane identified as "Estane 5710" known to have a Tg of -13°C and an IV of 0.67, both outside the respective ranges required in the patent in suit. This shows that document (5) failed to appreciate the criticality of these two parameters for high toughness properties. Similarly, the other TPU used in Examples 1 to 5 reported in this citation, namely "Texin 591A", is identical to polyurethane J used in Example 16 of the patent in suit

and has thus a Tg of -15°C and an IV of 1.41 (statement filed by the Respondent on 18 December 1989, page 8, lines 3 to 6). At most, the high Izod toughness reported in the case of Example 16 in the patent in suit (page 14, Table III; 641 J/m for the composition containing 30 weight percent of TPU) could be related by the skilled person to high IV, which is only one element of the solution proposed by the Respondent.

- 9.3 Document (7) describes the preparation of POM compositions by subjecting a mixture of POM and TPU to high shearing forces within a certain temperature interval, whereby excellent physical properties attributed to homogeneity are achieved (Claims 1 and 3; page 12, paragraph 2; page 18 and 19, Tables I and II). In practice, these compositions contain between 45 and 55 weight percent of POM and between 55 and 45 weight percent of TPU (cf. Examples 1 to 12).

As pointed out by the Respondent (statement filed on 8 October 1990, page 7, paragraph 2), the good mechanical properties referred to in document (7) cannot be regarded as surprising, since Izod value of such blends increases with the TPU content. Simultaneously, however, at TPU contents over 40 weight percent the desirable qualities of POM, in particular stiffness and solvent resistance, are progressively lost, and the product becomes a POM-modified TPU rather than a TPU-modified POM.

The methods used in document (7) and in the patent in suit in order to achieve high toughness are thus based on different technical concepts. Whereas document (7) teaches the incorporation of relatively large amounts of TPU, whereby a compromise in terms of stiffness and solvent resistance has to be made, the patent in suit proposes the addition of limited amounts of TPU in

combination with specific criteria regarding the definition of this component. Consequently, even if document (7) recognised the importance of shearing conditions to ensure good mechanical properties, this fact cannot by itself lead the skilled person to the specific definition of TPU as required in the patent in suit.

- 9.4 The correlation between the particle size of a rubbery component in a polymer matrix and the toughness of the polymer composition is described in documents (8) and (9). More specifically, document (8) indicates that "for a particular polymer pair there will be some size of the rubber domains that yields optimum toughness. Larger or smaller domains result in reduced toughness". This is confirmed in document (9), which says that "it is generally agreed within the industry that there is an optimum particle size for each type of matrix"; although this teaching concerns rubber ABS/compositions in the first place, this relationship is said to exist for other polymer pairs. The Board concurs with the Appellant that there is no reason why this apparently general relationship should not apply to the present systems based upon POM containing particulate TPU; the question arises thus whether this would provide an incentive for the skilled person to operate along that line in order to solve the above-defined technical problem.

Examination of the documents which deal specifically with POM/TPU systems, namely documents (1), (5) and (7), shows that the skilled person would not envisage increasing toughness by means of PS, because all three citations underline the beneficial effects of homogeneity on the general properties of these compositions. Whether the compositions are prepared by simply mixing the polymer components at higher

temperatures (document (1), column 4, lines 24 to 36), or by using appropriate solvents (document (5), page 7, middle of paragraph 2), or by applying high shearing forces (document (7), page 12, paragraph 2), the common feature of the resulting compositions is their homogeneity. There would thus be no reason for the skilled person to forego the advantages resulting from homogeneity and, thereby, no incentive to increase toughness by a method based on an entirely different technical concept.

9.5 Unlike document (9), document (9') seems to be strictly limited to HIPS polymers toughened either with polybutadiene or with butadiene styrene copolymer rubber. Even if, for the sake of argument, one assumed that Notched Izod impact strength of POM compositions varied with temperature according to the same pattern as toughened HIPS polymers (cf. Figures 10 and 11), this would at most give the skilled person the indication that toughness can be controlled by Tg of the elastomer, which is only one element of the solution proposed in the patent in suit.

9.6 However, in view of the definition of the claimed compositions which requires four specific conditions to be met simultaneously, it is not proper to consider these parameters in isolation.

First, the time which elapsed between the date of publication of document (1) (i.e. 23 November 1967) and document (5) (i.e. 29 April 1971), on the one hand, and the first date of priority of the patent in suit (i.e. 7 February 1983), on the other hand, speaks in favour of the Respondent. In the Board's view, a person skilled in the art would not need more than ten years to realise on the basis of common general knowledge that toughness of the known POM compositions could be improved by

selecting appropriate PS and Tg and, having come to that conclusion, to carry out the experiments necessary to determine suitable ranges for these two parameters. It is thus evident that the claimed subject-matter involves more than a mere optimisation of individual parameters.

Secondly, the numerous examples in the patent in suit provide evidence that borderline values of one of Tg, IV and PS of TPU are detrimental to the final Izod toughness value of the composition. In particular, the unacceptable toughness measured in the case of Examples 82, 84 to 86, 90, 95 and 97 (page 19, Table IX) can all be related to one of the above conditions not being satisfied. Conversely, if one excepts the case of Example 98, which will be discussed hereinafter, it can be said that, when the TPU satisfies the conditions of Tg, IV and PS as defined in Claim 1, the resulting POM compositions meet the requirement in terms of Izod toughness.

9.7 For these reasons, the combination of parameters required in the patent in suit cannot be regarded as obvious and, therefore, involves an inventive step.

10. Claim 1 being allowable, the same applies to dependent Claims 2 to 49, which are directed to preferred compositions according to Claim 1, as well as to Claims 50 to 52, which concern shaped articles made from a composition according to any one of Claims 1 to 49, and further to Claims 53 to 66, which are related to a method of preparing a composition according to any one of Claims 1 to 49, since the patentability of all these claims is supported by that of Claim 1.

Sufficiency of disclosure

11. The Appellant has challenged the sufficiency of the present disclosure by drawing attention to the fact that a TPU with a too high Tg gives rise to a POM composition having the required toughness (Example 87), whereas a TPU within the terms of the patent in suit gives rise to a POM composition not having the required toughness (Example 98) (cf. Statement of Grounds of appeal, page 9, paragraph 2). This objection cannot be accepted for the following reasons.

First, the claimed subject-matter as defined in Claim 1 is a composition characterised by the four parameters more particularly considered in the patent in suit, i.e. Tg, IV, PS and toughness, and should consequently be interpreted as such. Thus, only the compositions satisfying the conditions specified for each of these parameters fall within the scope of Claim 1; it follows that Example 87, wherein Tg is said to be -15°C , and Example 98, wherein the Izod toughness is only 326 J/m, are not illustrative of the compositions as claimed.

Secondly, as held by the Board in the decision T 301/87, OJ EPO 1990, 335, "the requirement for sufficiency is not a matter of satisfying the perfectionist but to enable the skilled person to handle the invention in normal practice" (Reasons for the Decision, point 4.13). In the present case, there can be no doubt that a skilled person, on the basis of the numerous examples in the patent in suit and in view of the correlation between the various parameters (page 19, lines 44 to 47), would know, if necessary by means of routine tests based on the method of trial and error, how to adjust one of the parameters of the TPU in order to increase a borderline toughness of the composition. As noted by the Board in the decision T 14/83, OJ EPO 1984, 105,

occasional lack of success does not impair feasibility in the sense of Article 83 EPC if, for example, some experimentation is still to be done to transform the failure into success, provided that such experimentation is not an undue burden and does not require inventive activity (Reasons for the Decision, point 6, paragraph 1).

Conclusion of the substantive issues

12. Examination of the substantive issues raised by the Appellant has brought to light (i) that the claimed subject-matter differs by at least one feature from the explicit teaching of each of documents (1), (5) and (6), (ii) that the combination of features as required in the patent is not obvious in view of the documents cited, either in isolation or in combination, and (iii) that there can be no question of insufficient disclosure. It is evident that the experimental data, which the Appellant intended to submit, were not likely to affect any of these conclusions.

Further procedural issues

13. The discussion of the issue of novelty has shown that a conclusion could be reached on the basis of at least one objective difference between the claimed subject-matter and each of the prior art documents relied upon by the Appellant in the framework of that objection. In the case of document (1), this difference is based on the result of undisputed evidence provided by the Respondent; in the case of document (5), it is based on information available in the patent in suit; in the case of document (6), it is immediately apparent in view of the explicit disclosure of that citation. Even if for several parameters characterizing the compositions described in these citations it has not been possible to

decide whether the one or the other actually met the conditions required in the patent in suit, that relative uncertainty has not been detrimental to the Appellant's case, since the Board's finding is not based on appreciations of contrary assertions made by the parties, but on well established facts.

The situation in the present case does not correspond to the situation envisaged by the Appellant in point V(i) above. In particular, it is clear that the issue of novelty cannot be raised in such terms, since the present decision is not the result of insufficient information provided by the Appellant; nor has the benefit of the doubt been given to the Respondent for any essential parameter following contrary assertions made by the parties, as was the case in the decision T 219/83, OJ EPO 1986, 211, wherein the Board ruled against the Opponent which had been unable to substantiate its assertion (cf. point 12, paragraphs 4 and 5). Furthermore, even an independent expert opinion could not compensate the absence of information in the prior art documents, for instance regarding the exact composition of polyurethane C in document (6). Under such circumstances, it is thus not proper to consider the question of the burden of proof in the terms raised by the Appellant, i.e. whether an Appellant (Opponent) should provide evidence that a condition is implicitly met in a citation or whether the Respondent (Patentee) should demonstrate that this condition is not met when the features of an example in a prior art document satisfy all the important characteristics of a claim, save for some apparently inessential parameters.

There is thus no reason to refer the question of law mentioned in point IV(i) to the Enlarged Board.

14. Similarly, the objections under Articles 24 and 19(2) EPC raised by the Appellant in the Statement of Grounds of appeal suggesting that the Opposition Division had been biased in its attitude to the parties (page 6, comments to point 2.2.3; page 8, paragraph 2, first two sentences) and against the "incompetence" of the Opposition Division (passage bridging pages 11 and 12) cannot be accepted.

14.1 Nothing in the minutes of the oral proceedings, which the Appellant has not criticised, leads to think that its arguments have not been duly considered by the Opposition Division or that the latter was suspected of bias during these oral proceedings. The Board is admittedly not in a position to comment about what was actually said about document (9); however, for the reasons given above (point 9.5), this point is not essential for the issue of inventive step, since it is not proper to consider PS or any other parameter in isolation. In other words, even if the Opposition Division had followed the Appellant's approach regarding the relationship between particle size and toughness in TPU/POM compositions, this would not have affected the ultimate outcome of that issue.

The decision itself does not reveal any bias. The fact that the value of several parameters of the TPU described in the prior art documents could not be determined exactly and that yet the Opposition Division eventually decided in favour of the Respondent does not mean that the Opposition Division interpreted any uncertain situation against the Appellant. On the contrary, the reasons in the decision clearly show that a decision could be reached on the basis of other parameters which were objectively different, and that the former parameters were not essential for that decision.

It is the essence of opposition proceedings that contrary assertions are made by the parties and that, ultimately, the Opposition Division has to base its decision regarding a particular issue on the arguments presented by one party. As appreciated by this Board in the unpublished decision T 10/92 of 25 February 1993 (Reasons for the Decision, point 10), the fact that an Opposition Division relies on the arguments presented by a patentee to reject an opposition cannot be equated with a substantial procedural violation justifying the reimbursement of the appeal fees under Rule 67 EPC.

- 14.2 As far as the objection of "incompetence" of the Opposition Division is concerned, the Board takes the view that the content of the file should be examined to ascertain whether it reveals major deficiencies in the analysis of technical questions.

Examination of the opposition file shows that a thorough communication dealing with the main points raised by the parties was issued on 28 March 1990, and that a second communication specifying in great detail the issues to be discussed during the oral proceedings was sent together with the summons to these oral proceedings. This preparation to the oral proceedings was particularly appreciated by the Respondent and, apparently, by Opponent 1 (Counterstatement of appeal, point 24).

Furthermore, the Board observes that the Appellant did not file any substantive reply after the Notice of Opposition and even specified in a short letter received on 9 July 1990 that it did not regard it as necessary to comment on the communication of the Opposition Division of 28 March 1990; in the Board's view, that would have been an appropriate opportunity to draw the attention of the Opposition Division to any misinterpretation of

arguments and/or misunderstanding of documents. Moreover, the minutes of the oral proceedings do not suggest that the main technical issues were not dealt with in a "competent" manner. Finally, as far as the decision itself is concerned, the Board can only confirm the finding of the Opposition Division on all the substantive issues.

There can thus be no question of a procedural violation under Article 19(2) EPC justifying the reimbursement of the appeal fee pursuant to Rule 67 EPC.

14.3 Consequently, the request to refer the question of law mentioned in point IV(v) to the Enlarged Board is rejected.

15. In view of the conclusions reached in points 13 and 14, it is evident that opinions by experts, although likely to clarify the situation regarding the one or the other parameter(s) discussed more specifically in the framework of the objection of lack of novelty, would not affect any of the substantive issues and, thereby, the ultimate outcome of the case.

It is equally evident that, if the case were to be remitted to the Opposition Division for re-examination of the oppositions, the first instance could only confirm its previous conclusions on the basis of similar, if not identical arguments.

The corresponding requests by the Appellant are thus rejected.

16. Apart from the fact that the factual basis for an order of costs to be paid by the EPO has been rejected, the Board observes that its powers with regard to making orders for costs are limited by the provisions of

Article 104 EPC to making an order where appropriate against a party. It is clear from the whole structure of the EPC, including Article 3(1) of the Protocol on Privileges and Immunities, that neither a Board of Appeal, nor any court of law, has the power to order the EPO to make a payment of the nature here requested.

17. In point 26(6) of the Counterstatement of appeal the Respondent has requested an award of costs, however without indicating the grounds justifying such a request.

That Counterstatement dealt with all the points raised by the Appellant. No subsequent action by the Appellant occurred requiring the preparation of a further written statement or the provision of comparative examples by the Respondent, and no oral proceedings were held. Thus, the costs incurred by the Respondent did not go beyond the costs normally incurred by a patentee defending its patent. Consequently, there is no reason to depart from the principle pursuant to Article 104(1) EPC that "each party to the proceedings shall meet the costs he has incurred".


The request by the Respondent for an apportionment of costs pursuant to Rule 63 EPC is thus rejected.

Order


For these reasons, it is decided that:

1. The appeal is dismissed.
2. The Appellant's request for two questions of law to be referred to the Enlarged Board is rejected.
3. The Appellant's request for reimbursement of the appeal fee is rejected.
4. The Appellant's request for an order for costs to be made against the EPO is rejected.
5. The Appellant's requests for the remittal of the case to the Opposition Division and for an expert to be commissioned are rejected.
6. The Respondent's request for an apportionment of costs is rejected.

The Registrar:


E. Görgmaier

The Chairman:


C. Gérardin

RL

MS