

Internal distribution code:

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

D E C I S I O N
of 14 September 2001

Case Number: T 1009/00 - 3.3.3

Application Number: 92111701.6

Publication Number: 0524501

IPC: C08G 18/02

Language of the proceedings: EN

Title of invention:

A process for the production of polyisocyanates containing allophanate and isocyanurate groups

Patentee:

Bayer Corporation

Opponent:

RHODIA CHIMIE

Headword:

-

Relevant legal provisions:

EPC Art. 100, 111(1)

EPC R. 55(c), 56(1)

Keyword:

"Examination of opposition - admissibility - (yes)"

Decisions cited:

T 0134/88, T 0199/92, T 0534/94

Catchword:

-

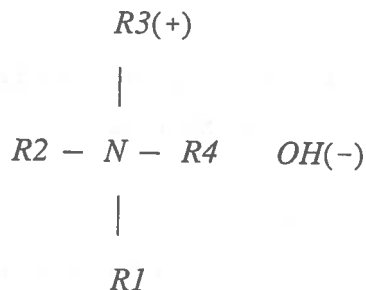
Summary of Facts and Submissions

I. The grant of European patent No. 0 524 501 in respect of European patent application No. 92 111 701.6 filed on 9 July 1992 and claiming priority of the US patent application No. 733 549 of 22 July 1991, was announced on 30 October 1996 (Bulletin 1996/44) on the basis of three claims.

Claim 1 as granted reads as follows:

"A process for the production of a polyisocyanate composition having an NCO content of 10 to 47 % by weight and a viscosity of less than 1300 mPa.s (25° C), wherein the viscosity is determined from a mixture containing less than 1 % by weight of the starting organic diisocyanate, and containing isocyanurate and allophanate groups in a molar ratio of monoisocyanurates to monoallophanates of 10 : 1 to 1 : 5 which comprises

a) catalytically trimerizing a portion of the isocyanate groups of hexamethylene diisocyanate in the presence of trimethylbenzylammonium hydroxide or of a trimerization catalyst of the formula



wherein R₁ to R₄ represent identical or different alkyl groups having from 1 to 20 carbon atoms, which may be substituted by hydroxyl groups with

the proviso that two of the radicals R_1 to R_4 may form a heterocyclic ring having from 3 to 4 carbon atoms together with the nitrogen atom and optionally with a further nitrogen or oxygen atom or wherein the radicals R_1 to R_3 may each represent ethylene radicals which form a bicyclic triethylene diamine structure together with the quaternary nitrogen atom and a further tertiary nitrogen atom, provided that the radical R_4 then represents a hydroxyalkyl group having from 2 to 4 carbon atoms,

b) adding 0.01 to 0.5 moles [sic], per mole of said organic diisocyanate, of a monoalcohol containing 6 to 9 carbon atoms to said organic diisocyanate prior to or during the trimerization reaction of step a),

c) terminating the trimerization reaction at the desired degree of trimerization by adding a catalyst poison and/or by thermally deactivating the catalyst and

d) removing any unreacted hexamethylene diisocyanate by distillation to a content of the product of hexamethylene diisocyanate of less than 1 % by weight."

Dependent Claims 2 and 3 refer to preferred embodiments of the process according to Claim 1.

II. On 30 July 1997, a Notice of Opposition was filed in which revocation of the patent in its entirety was requested on the grounds of Article 100(a) EPC (lack of novelty and lack of inventive step) and Article 100(b) EPC (insufficiency).

The objections were supported by the following documents:

D1: US-A-4 324 879;

D2: FR-A-2 613 363; and

D3: US-A-4 810 820.

- III. In its letter of 12 December 1997, the Patentee objected that the grounds raised in the Notice of Opposition were not sufficiently substantiated.

With its communication pursuant to Article 101(2) EPC dated 22 October 1998, the Opposition Division informed the parties that the Notice of Opposition included deficiencies within the meaning of Rule 55(c) EPC, which led to the Notice of Opposition being regarded as inadmissible (Rule 56(1) EPC).

With a letter dated 24 June 1999, the Opponent contested the findings of the Opposition Division concerning the inadmissibility of the Notice of Opposition and, in that respect, referred in particular to the decision T 534/94 of 23 March 1995 (not published in OJ EPO).

- IV. By decision issued on 7 August 2000, the Opposition Division rejected the Notice of Opposition as inadmissible in accordance with Rule 56(1) EPC.

In substance, the Opposition Division stated that the opposition complied with Article 100 EPC but not with Rule 55(c) EPC. It took the view that the Notice of Opposition did not deal specifically with any feature of the contested claims, neither with the invention as a whole, nor with its essential content; furthermore that no circumstances became recognizable which enabled

the Patentee and the Opposition Division to pass conclusive judgment on the alleged grounds for opposition without having to make enquiries of their own. In that respect the decision T 134/88 of 18 December 1988 (not published in OJ EPO) was referred to. In particular, indications were lacking as to which particular statements in D1 and D2 were alleged to destroy the novelty of the claims of the patent in suit and as to which specific passages in D1 and D3 were alleged to question the presence of inventive step of the claimed subject-matter. The decision also held that the statements made in view of D1 under the heading "lack of clarity (Article 100(b) EPC)" in the Notice of Opposition were so vague that even the grounds for opposition they referred to did not become clear. Since these deficiencies had not been remedied before expiry of the opposition period, an essential requirement of the Notice of Opposition had not been met and the opposition had therefore to be rejected as inadmissible.

- V. On 6 October 2000, a Notice of Appeal was lodged by the Opponent against this decision with simultaneous payment of the prescribed fee.

In the Statement of Grounds of Appeal filed on 28 November 2000, the Appellant argued essentially as follows:

- (i) The Opposition Division had acknowledged that the opposition complied with Article 100 EPC, this implying that the grounds for opposition had been specified, and well identified by the Opposition Division. Furthermore, the extent to which the patent had been opposed was clearly mentioned under Item V of the opposition form filed on 30 July 1997.

- (ii) Thus, the decision of the Opposition Division was based only on the fact that it had considered that the Notice of Opposition did not mention the facts, evidence and arguments in support of these grounds in conformity with Rule 55(c) EPC.
- (iii) The findings in the decision under appeal, that the absence of precise reference in the Notice of Opposition itself to specific statements in the cited documents in respect of the subject-matter of the contested claims, meant that an essential requirement had not been met, amounted to an excessively restrictive interpretation of Rule 55(c) EPC and one which did not correspond to that of the established case law.
- (iv) On the contrary, as stated in the decision T 534/94, a Notice of Opposition should be considered as admissible, provided it presented arguments that were understandable by the Patentee and the Opposition Division without undue burden, bearing in mind that the Opposition Division and the Patentee are not only skilled in the art but also competent in examining novelty and inventive step. Consequently, the fact that a minimum of effort might be required for understanding the Notice of Opposition did not represent a sufficient ground for the refusal.
- (v) The reference made by the Opposition Division to the decision T 134/88 was not pertinent, since in that specific case no prior art documents had been cited by the Opponent.

- (vi) The first two paragraphs of the Notice of Opposition dealt with lack of sufficiency (Article 100(b) EPC) and lack of novelty. They clearly referred to the processing conditions disclosed in D1 and a comparison made between D1 and the patent in suit would have allowed the person skilled in the art to understand, without undue burden, the relevance of the objections raised (i.e. either lack of sufficient disclosure or lack of novelty in view of D1).
- (vii) D2 referred to D1 and taught that the reaction should be stopped at a low conversion stage in order to obtain a low viscosity. It was clearly indicated in the Notice of Opposition that the combination of D2 with D1 disclosed all the features of all the claims of the patent in suit, except the presence of allophanates, which was implicit.
- (viii) In the third paragraph of the Notice of Opposition which dealt with inventive step, it was clearly disclosed that D3 taught that allophanates lowered the viscosity of the medium.
- (ix) No reference to specific passages of D1, D2 and D3 had been mentioned in the Notice of Opposition but this did not represent an undue burden for the skilled person wishing to check the pertinence of the cited documents, since the relevant features disclosed by these documents had been clearly identified in the Notice of Opposition, quite apart the fact that D1 and D3 were very short documents. Furthermore, most of the relevant passages in the cited documents had been underlined.

VI. The arguments presented by the Respondent in its fax dated 16 May 2001, may be summarized as follows:

- (i) Five and half pages had been needed by the Appellant, in order to explain that the Notice of Opposition was sufficiently founded.
- (ii) This long submission could not change the fact that the opposition was not sufficiently founded before the expiry of the opposition period.

VII. The Appellant requested that the decision under appeal be set aside and, by implication, that the Notice of Opposition be held to be admissible. As an auxiliary request, the Appellant requested oral proceedings.

The Respondent requested that the appeal be dismissed.

Reasons for the Decision

1. The appeal is admissible.
2. The Opposition Division rejected the Notice of Opposition as inadmissible in accordance with Rule 56(1) EPC, since it did not comply with the provisions of Rule 55(c) EPC.
3. According to Rule 55(c) EPC the Notice of Opposition shall contain:
 - (i) a statement of the extent to which the European patent is opposed,
 - (ii) a statement of the grounds on which the opposition is based, as well as

- (iii) an indication of the facts, evidence and arguments presented in support of these grounds.
4. In view of items V and VI of the opposition form 2300.1 of the Notice of Opposition lodged by the Appellant on 30 July 1997, it is evident that the above requirements (i) and (ii) are met, since it is mentioned that the patent is opposed in its entirety (cf. item V of the opposition form) and that the opposition is based on the grounds of Article 100(a) EPC (lack of novelty and lack of inventive step) and of Article 100(b) EPC (insufficiency) (cf. item VI of the opposition form).
 5. Thus, it remains to be decided whether the requirements (iii) of Rule 55(c) EPC are met.
 6. It is accepted jurisprudence that the term "indication" in Rule 55(c) EPC means that a Patentee and the Opposition Division must be able to understand, without undue burden, the case that is being made against the patent in the Notice of Opposition (cf. for instance T 199/92 of 11 January 1994 (not published in OJ EPO) and T 534/94, supra). This requirement does not exclude the possibility that the Patentee and the Opposition Division may have to undertake a certain amount of interpretation. Furthermore, the requirements under Rule 55(c) EPC must be distinguished from the strength of the Opponent's case, i.e. whether that case presented in the Notice of Opposition is also sufficient to bring about the revocation of the patent.
 7. In the first paragraph of the statement of grounds of opposition ("Mémoire") of the Notice of Opposition under the heading "Lack of clarity (Article 100(b)EPC)", the Appellant has submitted, without any reference to specific passages in D1, that the processing conditions disclosed in this document are the same as those used in the patent in suit, but

that they lead to compositions which differ from those obtained according to the patent in suit. Hence, the Appellant has concluded that, if the process conditions disclosed in D1 do indeed lead to compositions different from those obtained according to the patent in suit, the patent in suit does not disclose the claimed invention in a manner sufficiently clear and complete to be carried out by a person skilled in the art.

7.1 Thus, the relevant question is whether the Patentee and the Opposition Division are able to understand, without undue burden, the case made against the patent on the ground of lack of a sufficient disclosure.

7.2 In the Board's view, it is evident that the arguments of the Appellant rely on a comparison between the processing conditions disclosed in D1 and those required by the patent in suit.

7.3 D1, which has been also acknowledged in the description of the prior art of the patent in suit (cf. page 2, line 14) and which was thus known to the Patentee, is a document which comprises a description having four and one half pages including three examples. With the abstract of D1 (8 lines), the skilled reader is made aware that this document deals with a process for the production of partially trimerized hexamethylene diisocyanate, which yields isocyanurate isocyanates having a low viscosity and low monomer content by the use of a quaternary ammonium hydroxide catalyst. There is no doubt, in particular in view of the similarity of aim with the patent in suit as reflected by the relative terms "low viscosity" and "low monomer content" used in the abstract, that the skilled person would at least look for more specific information in the document, i.e. by checking the three examples of the citation and the detailed description of the

process conditions (cf. D1, column 3, line 25 to column 6, line 47). Furthermore, it is evident, in view of the mentioned viscosities at 25°C, that the compositions obtained in the examples of D1 differ at least in that respect from the compositions obtained by the process according to the patent in suit. Thus, the skilled reader could establish, without undue burden, the extent of similarity of the process conditions and the extent of the difference of the resulting products as between D1 and the patent in suit.

8. In the paragraph "Lack of novelty (Articles 52 and 54(3) and 4) EPC)" of the statement of grounds of opposition of the Notice of Opposition, the Appellant has referred to D1 and to the document D2 read in combination with D1.

8.1 The reference in the heading of this paragraph to Articles 54(3) and 54(4) EPC can only be considered as an obvious error, since the documents cited in support of the objection of lack of novelty are not European patent applications, but a US patent and a French patent application respectively, both published several years before the priority date of the patent in suit. Nevertheless, it is clear that these documents are cited as novelty destroying anticipating disclosures.

8.2 Given that the case under Article 100(b) EPC against the patent in suit is understandable in terms of a comparison of the process conditions according to the examples of D1 with those required by the patent in suit, the same must hold true for the allegation of lack of novelty in view of the disclosure of D1, since the Appellant has made reference to its arguments provided under Article 100(b) EPC and has essentially argued that "the same causes give the same effects".

- 8.3 This means that, if the teaching of the patent in suit would be considered as sufficient for carrying out the invention, the process conditions disclosed in D1 would also lead to the same products as in the patent in suit, since the processing conditions disclosed in D1 are, in the Appellant's view, the same as those required by the patent in suit.
- 8.4 Thus, the understanding of the case made under the ground of lack of novelty in view of D1, merely requires a comparison between the detailed description of the process of D1 (cf. column 3, line 25 to column 6, line 47) with the features of claim 1 of the patent in suit and does not represent in the Board's view an undue burden for both the Patentee and the Opposition Division.
- 8.5 Concerning D2: the Appellant has submitted that D2 in combination with D1 to which it refers, discloses all the features of the claimed invention. Whether and to what extent this applies is, however, of secondary importance, since this supplementary attack also relies on the case for lack of novelty made on the basis of D1, which is, for the reasons given, readily understandable.
9. In the third paragraph ("Lack of inventive step, (Articles 52 and 56 EPC") of the statement of grounds of opposition of the Notice of Opposition, the Appellant has submitted that D3 teaches that allophanates reduce the viscosity of a medium and that it is therefore obvious to use the alcohol present in the process of D1 to form allophanates and thus to reduce the viscosity of the products of D1.
- 9.1 By starting from D1 in this manner, it is evident that the Appellant has considered D1 as the closest state of the art. In view of the submission made and of the

Examples of D1, in which the viscosity of the composition obtained is higher than that required by the patent in suit, it is also evident that, in the Appellant's view, starting from D1, the technical problem to be solved is to obtain isocyanurate isocyanates with a reduced viscosity.

- 9.2 D3 is relatively short document which only relates to the manufacture of polyisocyanates containing allophanate groups and it is readily recognizable for the skilled reader, that D3 refers in particular to allophanate polyisocyanate products having a relative low viscosity (cf. D3, Abstract; Summary of the invention, column 2, lines 9 to 12; Example 1).
- 9.3 Therefore, the skilled person readily understands that the Notice of Opposition identifies a document which must be regarded as the closest prior art (D1), the definition of the technical problem (to reduce the viscosity of the products of D1) and the solution proposed (presence of alcohol in order to produce allophanate polyisocyanates) as well as the conclusion that the solution proposed is obvious in view of the teaching of D3 (manufacture of allophanate polyisocyanates of low viscosity). This does not, however, require further extraneous enquiries but merely an informed interpretation of what is written, albeit concisely, in the Notice of Opposition, and a knowledge of the contents, on the one hand, of the patent in suit and, on the other, of the short documents D1 and D3. Thus, in the Board's view, the case that is being made against the patent in the Notice of Opposition on the ground of opposition of lack of inventive step in view of the combination of D1 with D3 is understandable by the Patentee and the Opposition Division without undue burden.

10. The argument in the decision under appeal that the Appellant has cited documents without indicating any specific pages or lines or passages in these documents is not convincing, since both D1 and D3 are short and their content is already focussed on the relevant features of the claimed subject-matter.

11. The further argument in the decision under appeal with respect to the decision T 134/88, that the Notice of Opposition must indicate the technical context to allow the Patentee and the Opposition Division to examine the alleged grounds for revocation without having to make enquiries of their own is also not convincing for the following reason.

The facts on which the decision T 134/88 is based, are not comparable with those of the present case. In that case, a Notice of Opposition was directed against an alleged lack of inventive step without citing any prior art document and related only to the assessment of one individual feature of the claimed combination invention without dealing with the invention as a whole, or at least with its essential content. In the present case, by contrast, state of the art was cited, and the essential features (i.e. processing conditions, the presence of alcohol and the subsequent formation of low viscosity allophanate polyisocyanates) of the patent in suit have been identified in these documents and dealt with.

12. It follows from the above considerations that the Notice of Opposition is admissible and that, therefore, the contested decision must be set aside. Since the main request is allowable, there is no need to hold oral proceedings.

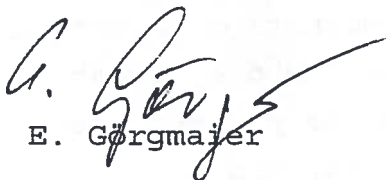
13. Having regard to the fact that the first instance did not examine whether the grounds of opposition prejudice the maintenance of the patent in suit, the Board has decided to make use of its powers under Article 111(1) EPC to remit the case to the first instance for further prosecution.

Order

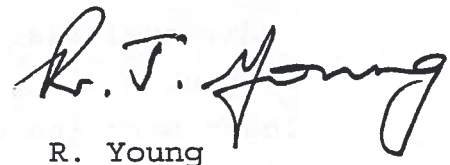
For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the first instance for further prosecution.

The Registrar:


E. Görgmayer

The Chairman:


R. Young