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**D E C I S I O N**  
of 22 July 1998

**Case Number:** T 0573/95 - 3.3.3

**Application Number:** 85303077.3

**Publication Number:** 0164215

**IPC:** C08F 2/34

**Language of the proceedings:** EN

**Title of invention:**

Gas fluidised bed terpolymerisation of olefins

**Patentee:**

BP Chemicals Limited

**Opponent:**

Union Carbide Chemicals and Plastics Company Inc.

**Headword:**

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**Relevant legal provisions:**

EPC Art. 83, 113, 114(1)

**Keyword:**

"Grounds of opposition"

"Basis of decision - opportunity to comment (yes)"

"Disclosure - sufficiency (yes) - reference to examples"

**Decisions cited:**

G 0009/91, G 0010/91

**Catchword:**

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Case Number: T 0573/95 - 3.3.3

**D E C I S I O N**  
of the Technical Board of Appeal 3.3.3  
of 22 July 1998

**Appellant:**  
(Proprietor of the patent) BP Chemicals Limited  
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**Representative:**  
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**Respondent:**  
(Opponent) Union Carbide Chemicals and Plastics  
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**Representative:**  
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**Decision under appeal:** Decision of the Opposition Division of the  
European Patent Office posted 18 May 1995  
revoking European patent No. 0 164 215 pursuant  
to Article 102(1) EPC.

**Composition of the Board:**

**Chairman:** C. Gérardin  
**Members:** B. ter Laan  
J. Stephens-Ofner

## Summary of Facts and Submissions

- I. Mention of the grant of European patent No. 0 164 215 in respect of European patent application No. 85 303 077.3, filed on 30 April 1985, claiming priority from an earlier application in France (8406773 of 2 May 1984), was announced on 23 August 1989, on the basis of ten claims.

Claim 1 referred to a gas fluidised bed process for the production of copolymers having a density of between 0.900 and 0.935, comprising the copolymerisation of (a) ethylene, (b) propylene and/or 1-butene and (c) alpha olefins comprising 5 to 8 carbon atoms, in the presence of a specific catalyst system.

Claims 2 to 7 concerned preferred embodiments of the process according to Claim 1.

Claim 8 was directed to a copolymer of (a) ethylene, (b) propylene and/or 1-butene and (c) an alpha-olefin comprising 5 to 8 carbon atoms or a mixture of these alpha-olefins, obtainable by the process according to Claim 1, which copolymer was characterised by several features, feature (g) reading:

"a total content in comonomers (b) and (c) present in the fraction of the copolymers which is soluble in boiling n-hexane which does not exceed by more than 15% the total content in comonomers (b) and (c) present in the fraction of the copolymer which is insoluble in boiling n-heptane."

Claims 9 and 10 were directed to preferred embodiments of the copolymer according to Claim 8.

II. On 22 May 1990 a Notice of Opposition against the granted patent was filed, in which the revocation of the patent in its entirety was requested on the grounds set out in Article 100(a) EPC. The Statement of Grounds of Opposition contained the following passage, referring to feature (g) of Claim 8:

"This limitation finds no basis in the description of E.P. 0 164 215. Tables 1 and 3 on pages 12 and 14 show that the total content of comonomers (b) and (c) present in the fraction of the copolymers which is soluble in boiling n-hexane far exceeds the total of content of monomers (b) and (c) present in the fraction of the copolymers which insoluble in boiling n-heptane."

III. By a decision announced orally on 9 May 1995 and issued in writing on 15 May 1995, the Opposition Division revoked the patent on the ground that the claimed subject-matter was not sufficiently disclosed to be reduced to practice by the skilled person (Article 100(b) EPC). That decision was based on a set of amended claims filed on 28 April 1995, in which in particular in Claim 8 the word "which" following the expression "boiling n-hexane" had been deleted. In substance it was held that

A. Although admittedly an objection under Article 100(b) EPC had not been raised explicitly in the Statement of Grounds of Opposition, the amendments to the claims subsequently offered by the Proprietor and the arguments presented in the Opponent's reply of 13 September 1993 made it clear that Claim 8 as granted did not meet the

requirements of Article 83 EPC and that, in fact, the ground of insufficiency was admissible as it was implicitly present from the beginning of the opposition proceedings.

B. The subject-matter of Claim 8, feature (g), was to be interpreted such that the 15% indicated in that claim referred to the amount of comonomers b) and c) as such, as the Opponent had argued, and not to the total amount of those comonomers present in the copolymer, as the Proprietor had stated. In the light of that interpretation, the relatively homogeneous polymers of the examples of the patent in suit did not comply with the even higher homogeneity requirements of Claim 8. Therefore, it was not clear that the process of Claim 1, to which Claim 8 referred, could indeed be used to obtain the copolymers according to Claim 8. As the patent specification therefore did not teach the skilled person how to obtain those copolymers, the requirements of Article 83 EPC were not fulfilled.

C. The issues of novelty and inventive step were, as a consequence, not decided.

IV. On 10 July 1995 the Appellant (Proprietor) lodged an appeal against the above decision and paid the prescribed fee simultaneously. The Statement of Grounds of Appeal was filed on 18 September 1995. The arguments presented in that statement and in further submissions as well as during the oral proceedings held on 22 July 1998 can be summarized as follows:

- A. The objection under Article 100(b) EPC was late raised and should, in line with decision G 10/91, not be admitted into the proceedings (Article 114 EPC). In addition, there had not been sufficient opportunity to counter the objection as it had been raised for the first time during oral proceedings (Article 113 EPC).
- B. Claim 8 as granted should be interpreted pursuant to Article 69(1) EPC and its Protocol. From the patent specification, which referred to Tables 1 and 3, it was then clear that the 15% of feature (g) referred to the total comonomer content in each of the copolymer fractions soluble in n-hexane and insoluble in n-heptane, respectively, not to the comonomer content of the copolymer fraction soluble in boiling n-hexane. All the examples fell within that definition of feature (g), so that Article 83 EPC was complied with.
- C. The various amendments of Claim 8 offered in the letter of 17 July 1998 in which the % was defined more clearly, were the basis of three auxiliary requests.
- V. The Respondent's (Opponent's) written and oral submissions can be summarized as follows:
- A. The objection under Article 100(b) EPC was implicitly present in the Notice of Opposition, although no explicit reference to that article was made. Therefore, it was submitted in time. Moreover, Article 83 EPC was explicitly referred to in a submission of the Opponent filed well before the oral proceedings. Therefore, the Appellant had had ample opportunity to deal with the objection.

B. The wording of Claim 8 was clear and unambiguous in that the 15% referred to the monomer content of the n-hexane soluble copolymer fraction. There was no reason for the skilled person to refer to the patent specification for interpretation of the percentage. As none of the examples fell within the scope of Claim 8, feature (g), the skilled person was not capable of preparing the copolymer of Claim 8, so that the requirements of Article 83 were not fulfilled.

C. The amendments proposed by way of auxiliary requests contravened Article 123(2) and (3) EPC.

VI. The Appellant requested that the decision under appeal be set aside and a patent be maintained on the basis of the claims as granted or, alternatively, on the basis of the requests as submitted proposed in the letter of 17 July 1998 and during the oral proceedings before the Board, respectively.

The Respondent requested that the appeal be dismissed.

**Reasons for the Decision**

1. The appeal is admissible.
2. *Admissibility of the objection under Article 100(b) EPC*

The objection under Article 83 EPC was based upon the Respondent's interpretation of Claim 8, feature (g). That interpretation was already given in the Statement of Grounds of Opposition, page 9, paragraph (g). There the Respondent in fact stated that none of the examples fell within the scope of feature (g) of Claim 8. The conclusion that, for that reason, Article 83 EPC would

not be complied with, is only expressly drawn in the Respondent's submission of 13 September 1993, page 2, paragraph 3.0, which was filed well after the 9 months opposition period (which ended on 23 May 1990), but well before the oral proceedings before the first instance (held on 9 May 1995).

- 2.1 The Appellant's arguments boil down to the effect that the Opposition Division had wrongly exercised its discretion to admit the new Ground of Opposition into the opposition proceedings. The Appellant relied heavily on G 10/91 (OJ EPO 1993, 420) in support of its argument that the ground under Article 100(b) (insufficiency) was a novel one at the time of the oral proceedings before the Opposition Division and should accordingly not be admitted, for no exceptional reasons pursuant to the above decision of the Enlarged Board were demonstrated at that time. Although the principle of valenti non fit injuria (G 10/91 (supra) as well as G 9/91 (OJ EPO 1993, 408)) was not expressly said in those cases to apply to proceedings before the Opposition Division, as opposed to the Boards of Appeal, it is nonetheless significant that the Appellant did in fact deal with the substantive issue that gave rise, or rather was alleged to give rise to the ground of insufficiency. In truth the ground wasn't at that time, nor for that matter at earlier stages in the written proceedings preceding the hearing, new in the real as opposed to the formal sense: it has always been and remains a ground to be properly formulated under Article 84 EPC which, of course, was not available to the Opponent in attacking claims that stood unamended.

- 2.2 In deciding upon the legitimacy of the admission by the Opposition Division of this "novel ground", the Board wishes to avoid a formalistic approach, which would



rely purely upon the labelling under Article 83 or 100(b) EPC of a ground of objection which in truth falls to be decided under Article 84 EPC. At the same time the Board wishes to take due note of the way that this ground had been argued before the Opposition Division as well as on appeal. It is accordingly prepared to accept that the substantive issue was legitimately admitted by the Opposition Division in its "insufficiency guise", although of course it remained to be argued and decided upon essentially on arguments more pertinent to Article 84 EPC. Furthermore, the labelling of the objection doesn't really matter at this stage and goes merely to the burden of proof which of course is more easily shifted in Article 84 EPC than can be in Article 83 EPC cases, where the burden lies squarely upon an opponent's shoulders to establish the objection, based on evidence, upon the balance of probability.

2.3 In the present case, the Opposition Division revoked the patent on the ground of insufficient disclosure, so that it manifestly thought that that ground was relevant and prejudiced the maintenance of the patent. Whether that opinion was correct or not does not influence the admissibility of the ground of insufficient disclosure. The point is, that the Opposition Division, having estimated that insufficient disclosure might prejudice the maintenance of the patent and thus admitted the ground of insufficiency into the proceedings, acted within the terms laid down in G 10/91 (supra), and therefore correctly exercised its discretion under Article 114(1) EPC.

2.4 The Appellant also argued that it had not had adequate opportunity to answer the objection of insufficiency. However, Article 83 EPC had been explicitly referred to a year and a half before the oral proceedings before the first instance and from the minutes of those oral

proceedings it appears that the Appellant used that occasion to counter the objection. Therefore, the Appellant not only did have, but actually used the opportunity to reply to the insufficiency objection and the Board cannot concur with the Appellant's view that Article 113 EPC was not complied with.

3. *Sufficiency of disclosure*

The discussion between the parties amounted to the question whether or not Claim 8, feature (g) was ambiguous and needed or did not need interpretation.

3.1 A percentage is a proportion based upon a total of 100 unities. The meaning of a percentage changes each time a different total is taken as the basis. Therefore, when a percentage is given, in order to make sense, there should also be an indication of the total forming the basis for the proportion.

3.2 According to present claim 8, feature (g), the total content in comonomers (b) and (c) present in the fraction of the copolymers which is soluble in boiling n-hexane should not exceed by more than 15% the total content in comonomers (b) and (c) present in the fraction of the copolymer which is insoluble in boiling n-heptane. Clearly, in the wording of the claim, there is no indication of the total used as the basis for that percentage and the skilled person, when reading the claim, is immediately confronted with the question of which total constituted the basis for the percentage. In fact, it is this unclarity of the basis used for the percentage concerned which caused the dispute between the parties. Therefore, in the Board's opinion, there is a clear need for interpretation of the meaning of the percentage indicated in feature (g) of Claim 8.

3.3 The skilled person, seeking an explanation of unclear terms, will turn to the patent specification for clarification. In doing so, he will have a positive attitude, that is, he will assume that the claims are in accordance with the specification, which is in line with Article 69(1) EPC. In the present case, some of the properties of the product as claimed in Claim 8 are discussed on page 5, line 46 to page 6, line 44 (features (a) to (j)). Feature (g) is described on page 6, lines 1 to 5: "It has also been found that in the fraction of the copolymers which is soluble in boiling n-hexane, the total content in comonomers (b) and (c) does not exceed the total content in comonomers (b) and (c) of the fraction of the copolymers which is insoluble in boiling n-heptane by more than 15%. This characteristic is shown in detail in the examples and in Tables 1 and 3." In the light of the last sentence, the Respondent's argument that the examples were supposed to illustrate the process of Claim 1 and that the polymers of Claim 8 might be a selection of the polymers that could be produced by the process of Claim 1, so that the skilled person would not expect all examples to fall within the ranges required by Claim 8, cannot be accepted. Also, the contents of Tables 1 to 3 show all the features of Claim 8 except the inorganic residue content (feature (m)). Therefore, there can be no doubt that those Tables do in fact refer to the product defined in Claim 8, that the last two rows ("weight content(%) of units derived from comonomers (b) and (c), in the fractions which are:" and "total difference in monomer content") have a bearing on feature (g) and that the latter (indicated as "B+C") directly shows feature (g). Even if a typing error occurred in the definition of "B", from the wording of the claim and the description, page 6, line 4 and from the definition of "C" it is clear that  $b_2$  was meant to be  $b_3$ . Since it is immediately evident that in all examples "B+C" falls within the scope of

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feature (g) of Claim 8, and in the light of the details contained in the description, the Board is satisfied that the skilled person is provided with ample information how to obtain copolymers within the scope of Claim 8. Therefore, the requirements of Article 83 EPC are fulfilled.

3.4 A further point to consider is that the issue of sufficiency has to be decided not by reference to the wording of the claims, but by reference to the whole content of the European patent application (cf. Article 83 EPC: "The European patent application must disclose..."), hence including the examples. Since it is not disputed that the examples of the patent as granted, which correspond in substance to the examples of the patent application, provide a clarification for the ambiguous formulation of Claim 8 and the Respondent has not demonstrated that they could not be reproduced, there can be no doubt that from that viewpoint, too, the requirements of Article 83 EPC are met.

3.5 For those various reasons the Board concludes that the objection under Article 100(b) EPC is not justified.

4. As the Appellant's main request is allowed, the auxiliary requests need not be taken into consideration.

5. The Opposition Division revoked the patent on the ground of insufficient disclosure and, as a consequence, did not express its opinion regarding novelty and inventive step. In order not to deprive any of the parties of the possibility to be heard by two instances, the Board makes use of its power under Article 111(1) EPC and refers the case back to the Opposition Division for further prosecution of those two issues.

**Order****For these reasons it is decided that:**

1. The decision under appeal is set aside.
2. The case is remitted to the Opposition Division for further prosecution of the case in order to decide the remaining substantive issues of novelty and inventive step on the basis of the claims as granted.


The Registrar:



E. Görgmaier



The Chairman:



C. Gérardin

C. Gérardin

