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File Number: T 182/92 - 3.3.3
Application No.: 88 103 922.6
Publication No.: 0 282 927
Title of invention: Cross-linked organosiloxane polymers

Classification: C08G 77/50

D E C I S I O N
of 6 April 1993

Applicant: HERCULES INCORPORATED

Headword:

EPC Articles 54 and 89; Rule 67

Keyword: "Right of priority (yes) - novelty (yes)"
"Reimbursement of the appeal fee (no) - rejection after one
communication (T 300/89 followed) - erroneous interpretation of a
document - no substantial procedural violation"



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Boards of Appeal

Chambres de recours

Case Number : T 182/92 - 3.3.3

D E C I S I O N
of the Technical Board of Appeal 3.3.3
of 6 April 1993

Appellant :

HERCULES INCORPORATED
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Representative :

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Decision under appeal :

Decision of the Examining Division of the
European Patent Office dated 24 September 1991
refusing European patent application
No. 88 103 922.6 pursuant to Article 97(1) EPC.

Composition of the Board :

Chairman : F. Antony
Members : C. Gérardin
M. Aúz Castro

Summary of Facts and Submissions

- I. European patent application No. 88 103 922.6 filed on 11 March 1988, claiming the priority of 20 March 1987 from an earlier application in the United States and published under the publication No. 282 927, was refused by a decision of the Examining Division dated 24 September 1991.

This decision was based on a set of 18 claims, of which Claim 1 filed on 9 July 1991 reads as follows:

"A hydrosilation cross-linked or cross-linkable organohydrosiloxane polymer, characterized in that the organohydrosiloxane is a linear poly(organo-hydrosiloxane) having at least 30% of its Si-H groups reacted with hydrocarbon residues derived from polycyclic polyenes having at least two non-aromatic, non-conjugated carbon-to-carbon double bonds in their rings."

Claims 2 to 18 correspond to the original version of these claims, which means that dependent Claims 2 to 8 are directed to preferred organohydrosiloxane polymers according to Claim 1, independent Claim 9 is concerned with a method of preparing a cross-linked or cross-linkable poly(organo-hydrosiloxane), and dependent Claims 10 to 18 relate to particular embodiments of this method.

- II. The ground for the decision was lack of novelty of the subject-matter of the main product claim with regard to the teaching of FR-A-2 595 364 (document (1)), published on 11 September 1987. More specifically, it had been stated in a communication preceding the decision that the priority date of the application could not be recognised, for there was no reference in the priority document to "cross-linkable" polyorgano-hydrosiloxanes. It followed that

document (1), which described the preparation of "cross-linkable" linear polyorganohydrosiloxanes with more than 30% of their Si-H groups reacted with polycyclic polyenes, was relevant prior art within the meaning of Article 54(1) and (2) EPC.

- III. On 7 November 1991 a Notice of Appeal was lodged against this decision with payment of the prescribed fee. In the statement of Grounds of Appeal filed on 24 January 1992, the Appellant pointed out that, although admittedly there was no explicit reference to "cross-linkable" products, there were several passages in the priority document which mentioned products liable to be cross-linked subsequently. The priority date of 20 March 1987 had thus been rightly claimed and document (1) could not be a bar to novelty. From a procedural point of view the decision of refusal after one single communication was regarded as premature.
- IV. In the appeal brief the Appellant made an unconditional request for oral proceedings. In the Statement of Grounds of Appeal the Appellant requested that the decision under appeal be set aside, a patent be granted on the basis of Claim 1 filed on 9 July 1991 and Claims 2 to 18 filed originally, and the appeal fee be reimbursed.

Reasons for the Decision

1. The appeal complies with Articles 106 to 108 and Rule 64 EPC and is admissible.
2. In order to clarify whether oral proceedings were requested irrespective of the final decisions regarding the above substantive and procedural issues, the Appellant was contacted on 6 April 1993. It has been agreed that if the Board could take a positive view on the substantive issue,

i.e. confirm the claimed priority date of the application in suit and thereby acknowledge novelty of the claimed subject-matter, and refer the case to the first instance for prosecution of examination procedure, oral proceedings would not be necessary.

3. The current wording of the claims does not give rise to any objections under Article 123(2) EPC.

With regard to Claim 1 filed originally the main product claim differs in that it is specified at the beginning of the claim that the organohydrosiloxane polymer is "hydrosilation" cross-linked or cross-linkable, and at the end of the claim that the polycyclic polyenes are "having at least two non-aromatic, non conjugated carbon-to-carbon double bonds in their rings". Cross-linking of the poly-(organohydrosiloxane) is said to occur via a hydrosilation reaction with the polycyclic polyene on page 3, lines 6/7 of the application as published; further, the structural definition of the polycyclic polyene is mentioned on page 3, lines 9/10.

As to Claims 2 to 18 they have not been amended.

4. Although an explicit reason why the priority date of the application in suit could not be recognised is not given in the decision of refusal, the latter refers to the communication of 1 March 1991, wherein this objection had been raised in connection with the use of the word "cross-linkable" to qualify the polymers claimed in the main product claim. From the content of this communication it can be inferred that the priority document did not explicitly disclose "cross-linkable" polymers and that, consequently, the priority of 20 March 1987 could not be recognised. Since, on the other hand, the Appellant has apparently had no difficulty to interpret this objection

correctly, it can be concluded that the Examining Division's finding was adequately substantiated.

It follows that from a more substantive viewpoint the issue of the priority date boils down to the question whether not only hardened products, but hardenable products as well are within the scope of the priority document.

In this document it is first indicated that, depending upon the number of Si-H linkages and the ratio of silane hydrogens to carbon-carbon double bonds in the reaction mix, polymers of a wide range of cross-link density - namely tacky solids, elastomeric materials and tough glassy polymers - can be prepared; the first two are intermediate products liable to be further polymerised to the tough glassy polymer state by heat treatment to effect further cross-linking (page 4, line 28 to page 5, line 3). Further, whereas a single heating temperature is generally suitable for lower levels of cross-linking, heating is usually carried out in stages when higher levels of cross-linking are desired (page 4, lines 15 to 22). More generally, if the cyclic polymers have chemically distinguishable carbon-carbon double bonds, the initial product of the reaction at lower temperatures can be recovered as a flowable, heat-curable liquid prepolymer; such prepolymers are stable at room temperature, but, upon reheating to an appropriate temperature, they may be fully cured (page 5, lines 4 to 18). It is subsequently referred to B-stage type prepolymers described as viscous, flowable liquids being 30 to 60% cross-linked, useful as structural adhesives curable in situ (page 5, lines 19 to 36). All these passages clearly refer to products which can still be further cross-linked; it is thus consistent to regard such products as cross-linkable.

In deciding on entitlement to priority, one should not follow a narrow, literal approach, but should investigate whether the priority document indeed relates to "the same invention". With this in mind, there is thus no doubt that cross-linkable polymers can be inferred from the priority document and that, consequently, the right of priority cannot be denied, i.e. that the Appellant is entitled to the claimed priority for both cross-linked and cross-linkable products.

5. It follows that document (1) does not form part of the state of the art within the meaning of Article 54(1) and (2) EPC and that novelty of the claimed subject-matter cannot be denied on the basis of the content of this citation. This conclusion obviates a discussion of the structure and the reactivity of the polymers according to document (1).
6. In spite of this conclusion regarding the issue of novelty, a patent cannot be granted yet, since the question of inventive step initially discussed in the communication of 1 March 1991 was not dealt with in the decision of refusal. The Board makes thus use of its power under Article 111(1) EPC to remit the case to the first instance for further prosecution.
7. The circumstances of the case do not justify a reimbursement of the appeal fee under Rule 67 EPC.

The reasoning for denying the right of priority and, thereby, raising an objection of lack of novelty was given in the communication of 1 March 1991, so that the requirements of Article 113(1) must be regarded as met. In this respect, the amendments in the claims filed on 9 July 1991 did not change the situation regarding the priority date. As far as the issuance of a decision of refusal after

one single communication is concerned, the Examining Division acted quite properly within its discretion, as explained in point 9 of the decision T 300/89 (OJ, EPO 1991, 480). The fact that the first instance reached a conclusion regarding the document of priority which could not be confirmed by the Board is a matter of interpretation of a document, i.e. a matter of judgment, which cannot amount to a procedural violation. For these reasons, the request for reimbursement of the appeal fee must be rejected.

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 prosecution of the examination procedure.
3. The request for reimbursement of the appeal fee is rejected.

The Registrar:



E. Gorgmaier

The Chairman:



F. Antony