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D E C I S I O N
of 22 January 2003

Case Number: T 0686/99 - 3.3.1

Application Number: 91115262.7

Publication Number: 0496937

IPC: C10M 129/18

Language of the proceedings: EN

Title of invention:
Lubricant for refrigeration compressors

Patentee:
Hitachi, Ltd.

Opponent:
Cognis Deutschland GmbH & Co. KG
Imperial Chemical Industries PLC

Headword:
Lubricant for refrigerating apparatus/HITACHI

Relevant legal provisions:
EPC Art. 123(2)

Keyword:
"Main and first to third auxiliary request: amendment (not allowable) - particular combination of features within two lists of alternative features not derivable from the application as filed"

Decisions cited:
G 0009/91, T 0406/86, T 0295/87, T 0727/00

Catchword:
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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0686/99 - 3.3.1

D E C I S I O N
of the Technical Board of Appeal 3.3.1
of 22 January 2003

Appellant: (Opponent)
Cognis Deutschland GmbH & Co. KG
Postfach 130164
D-40551 Düsseldorf (DE)

Representative:
-

(Opponent)
Imperial Chemical Industries PLC
Imperial Chemical House
Millbank
London SW1P 3JP (GB)

Representative:
Geary, Stephen
W.H. Beck, Greener & Co.
7 Stone Buildings
Lincoln's Inn
London WC2A 3SZ (GB)

Respondent: (Proprietor of the patent)
Hitachi, Ltd.
6, Kanda Surugadai 4-chome
Chiyoda-ku
Tokyo (JP)

Representative:
Ricker, Mathais, Dr. Dipl.-Chem.
Patent- und Rechtsanwälte
Bardehle, Pagenberg, Dost
Altenburg, Geissler, Isenbruck
Postfach 86 06 20
D-81633 München (DE)

Decision under appeal: Interlocutory decision of the Opposition Division of the European Patent Office posted 16 April 1999 concerning maintenance of European patent No. 0 496 937 in amended form.

Composition of the Board:

Chairman: R. Freimuth
Members: P. F. Ranguis
J. P. B. Seitz

Summary of Facts and Submissions

I. The Appellant (Proprietor of the patent) lodged an appeal against the interlocutory decision of the Opposition Division to maintain the European patent No. 0 496 937 (European patent application No. 91 115 262.7) in the form as amended pursuant to Article 102(3) EPC.

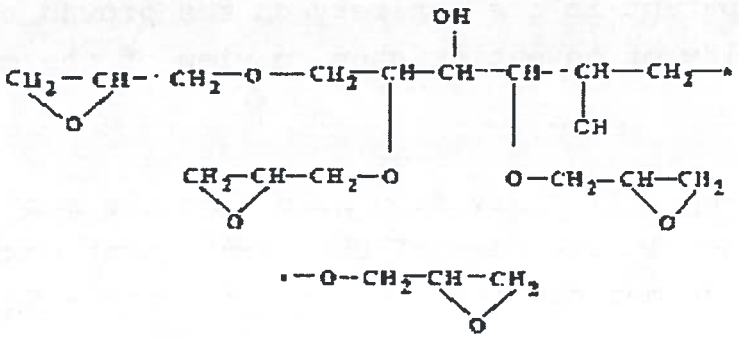
II. Notice of Opposition had been filed by the Respondents I and II (Opponents I and II), requesting revocation of the patent in its entirety on the ground of lack of novelty or inventive step in view of the cited prior art.

III. The Opposition Division held that the subject-matter claimed in the form of the then fourth auxiliary request met the requirements of Article 54 and 56 EPC.

IV. Oral proceedings before the Board took place on 22 January 2003. The Appellant, in the course of the oral proceedings, withdrew all his previous requests and filed in lieu thereof four requests as main request and first to third auxiliary request. Claim 1 of the main request read as follows:

"1. Use as a lubricant of a lubricant composition miscible in hydrofluorocarbon and hydrochlorofluorocarbon refrigerants, in combination with hydrofluorocarbon refrigerants selected from difluoromethane, pentafluoroethane, 1,1,2,2-tetrafluoroethane, 1,1,1,2-tetrafluoroethane, 1,1,2-trifluoroethane, 1,1,1-trifluoroethane, 1,1-difluoroethane, and monofluoroethane, in a refrigerating apparatus containing a refrigerator compressor therein, wherein the lubricant composition comprises as a base oil at least one member selected

from ester oils selected from hindered ester oils obtained by esterification reaction of an organic fatty acid with a polyhydric alcohol, complex ester oils obtained from a polyhydric alcohol, a polybasic acid and an organic fatty acid, and a mixture thereof, and 0.05 to 10% by weight of an epoxy compound having at least two epoxy groups based on the weight of the composition, wherein the epoxy compound is at least one member selected from the group consisting of alkylene glycol diglycidyl ethers, sorbitol polyglycidyl ether



(4)

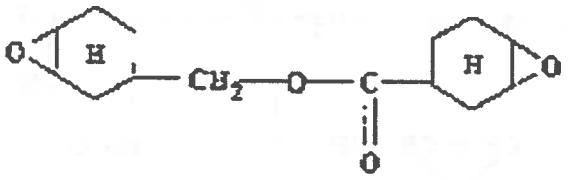
and alicyclic epoxy compounds, and 0.01 to 5% by weight of a phenolic anti-oxydant based on the weight of the composition".

Claim 1 of the first auxiliary request differed from Claim 1 of the main request in that the hydrofluorocarbon refrigerants were restricted to those selected from 1,1,2,2-tetrafluoroethane, 1,1,1,2-tetrafluoroethane, 1,1,2-trifluoroethane and 1,1,1-trifluoroethane.

Claim 1 of the second auxiliary request read as follows:

"1. Use as a lubricant of a lubricant composition miscible in hydrofluorocarbon and hydrochlorofluorocarbon refrigerants, in combination with hydrofluorocarbon refrigerants selected from

difluoromethane, pentafluoroethane, 1,1,2,2-tetrafluoroethane, 1,1,1,2-tetrafluoroethane, 1,1,2-trifluoroethane, 1,1,1-trifluoroethane, 1,1-difluoroethane, and monofluoroethane, in a refrigerating apparatus containing a refrigerator compressor therein, wherein the lubricant composition comprises as a base oil at least one member selected from ester oils selected from hindered ester oils obtained by esterification reaction of an organic fatty acid with a polyhydric alcohol, complex ester oils obtained from a polyhydric alcohol, a polybasic acid and an organic fatty acid, and a mixture thereof, and 0.05 to 10% by weight of an epoxy compound having at least two epoxy groups based on the weight of the composition, wherein the epoxy compound is at least one member selected from a compound of the formula:



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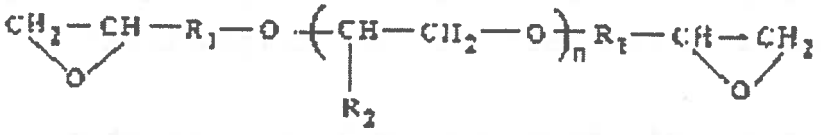
alkylene glycol diglycidyl ethers selected from compounds of the formula



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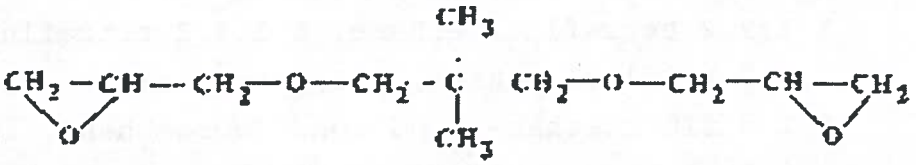
wherein R_1 is an alkylene group; R_2 is a hydrogen atom or an alkyl group; and n is an integer of 1 to 22;

a compound of the formula:



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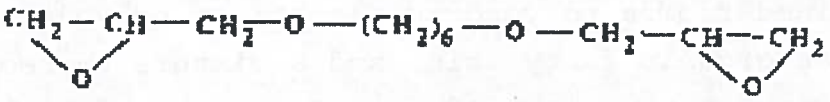
and a compound of the formula:



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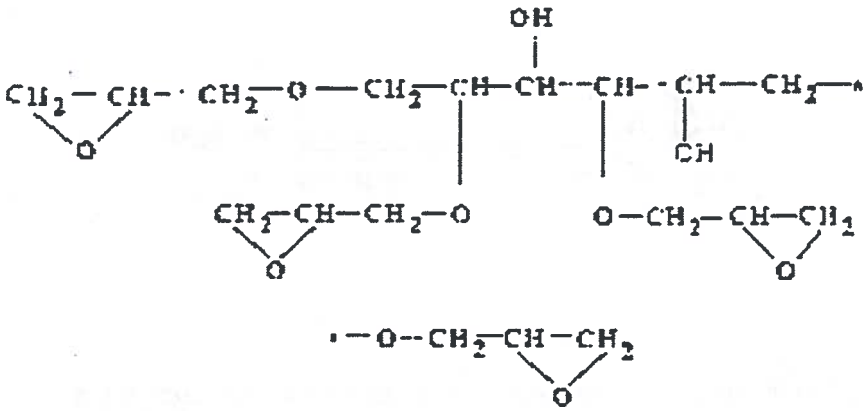
and sorbitol polyglycidyl ether:



(4)

and 0.01 to 5% by weight of a phenolic antioxydant based on the weight of the composition".

Claim 1 of the third auxiliary request differed from Claim 1 of the second auxiliary request in that the epoxy compound was restricted to alicyclic compound of formula (5).

V. In respect of the compliance of the amendments made to the claims with the requirements of Article 123 EPC, the Appellant argued that the feature relating to a

"use as a lubricant of a lubricant composition ... in a refrigerating apparatus containing a refrigerator compressor therein" found support in the application as filed on page 1, lines 4 to 5 and 11 to 14. Furthermore, the features mentioned in each request relating to hydrocarbon refrigerants and to ester oils as base oils also emerged clearly from the application as filed on page 36, lines 19 and 20; page 18, lines 2 to 8, 18 and 19 and page 7, lines 17 to 25 respectively.

VI. The Respondents submitted that the claimed subject-matter of each request resulted from the selection of an ester oil as base oil, on the one hand, and of hydrofluorocarbons as refrigerants, on the other. This amendment amounted to a multiple selection which was not directly and unambiguously derivable from the application as filed thereby contravening Article 123(2) EPC.

VII. The Appellant requested that the decision under appeal be set aside and that the patent be maintained either on the basis of his main request, or of one of his three auxiliary requests all filed during the oral proceedings.

The Respondents requested that the appeal be dismissed.

VIII. At the end of the oral proceedings, the decision of the Board was announced orally.

Reasons for the Decision

1. The appeal is admissible.

2. *Rule 57a EPC*

The amendments made to the claims as granted are designed to overcome objections raised by the Respondents-Opponents in the course of the appeal proceedings. Therefore, the amendments are considered appropriate and necessary and the Board, in exercising due discretion, admits the sets of claims as amended according to the main request and the first to third auxiliary request into the appeal proceedings (cf. decisions T 295/87, OJ EPO 1990, 470, point 3 of the reasons; T 406/86, OJ EPO 1989, 302, point 3.1 of the reasons).

3. *Article 114 EPC - Extent of scrutiny*

The Appellant has amended the claims as granted in the course of the proceedings before the Board (cf. point IV above). In case of such amendments, they must be fully examined by the Board as to their compatibility with the requirements of the EPC, in particular with the provisions of Article 123 EPC (cf. G 9/91, OJ EPO 1993, 408, point 19 of the reasons).

Main request

4. *Article 123(2) EPC - Amendments*

4.1 The first fresh amendment made by the Appellant to Claim 1 as granted concerns a change of category, i.e. the switch from a composition claim to a claim directed to the use of that composition "as a lubricant ... in a refrigerating apparatus containing a refrigerator

compressor therein". Other amendments concern the mandatory presence of an ester oil in the base oil in combination with particular hydrofluorocarbon refrigerants indicated in the list mentioned in Claim 1.

4.2 The Board, as the Respondents, sees no objections with respect to Article 123(2) EPC in the change of claim category which is actually supported by the application as filed on page 1, lines 4 to 5 and 11 to 14.

4.3 The same is not true for the other amendments made to Claim 1. Indeed, the present wording of that claim specifies a fresh embodiment in requiring the presence of an ester oil and of hydrofluorocarbon refrigerants. The Respondents objected to that particular combination of features as generating subject-matter extending beyond the content of the application as filed.

In order to determine whether or not the subject-matter of an amended claim extends beyond the content of the application as filed it has to be examined whether that claim comprises technical information which a skilled person would not have clearly and unambiguously derived from the original application.

4.3.1 The passage of the description as filed relating to the base oil, referred to by the Appellant read:

"As the base oil in the lubricant composition, there is used at least one member selected from the group consisting of ester oils, alkylbenzene oils and mineral oils. Particularly, as the ester oils, it is preferable to use hindered ester oils obtained by esterification reaction of an organic (fatty) acid with a polyhydric

alcohol, and complex ester oils obtained from a polyhydric alcohol, a polybasic acid and an organic (fatty) acid, alone or as a mixture thereof" (cf. page 7, lines 17 to 25),

From this passage, however, the skilled person can only derive that an oil selected among equivalent alternative base oils, i.e. ester oils, alkylbenzene oils or mineral oils, may be used. This shows that the application as filed discloses in an undifferentiated way different categories of base oils without any pointer regarding the selection of one particular category thereof. Therefore, priority is not given to ester oils from the original host of equivalent base oils.

4.3.2 The application as filed discloses on page 36, lines 19 and 20 the use of lubricating compositions "in combination with hydrofluorocarbon and hydrochlorofluorocarbon refrigerants". Furthermore, although the original description mentions *inter alia* the particular hydrofluorocarbons listed in present Claim 1 as refrigerants, (cf. page 18, lines 2 to 27), it can be derived from the sentence "these hydrofluorocarbons and hydrochlorofluorocarbons can be used alone or as a mixture thereof" (cf. page 18, lines 26 to 27) that the person skilled in the art is faced with equivalent alternative refrigerants, none of them being prioritized in the original application.

4.3.3 In view of the above, combining in Claim 1 a base oil mandatorily comprising ester oils with the hydrofluorocarbons listed in Claim 1, results from a multiple selection within two lists of alternative features, namely of ester oils from the list of base oils and of hydrofluorocarbons from the list of refrigerants, thereby generating a fresh particular combination. The content of the application as filed

must not be considered to be a reservoir from which individual features pertaining to separate sections can be combined in order artificially to create a particular combination. In the absence of any pointer to that particular combination, this combined selection of features does not, for the person skilled in the art, emerge clearly and unambiguously from the content of the application as filed (cf. T 727/00 of 22 June 2001, point 1.1.4 of the reasons).

4.4 In conclusion, the subject-matter of Claim 1 of the main request offends against the provisions of Article 123(2) EPC and since the Board can only decide on a request as a whole, this request must be rejected.

First auxiliary request

5. *Article 123(2) EPC - Amendments*

5.1 Compared with Claim 1 of the main request, Claim 1 of the first auxiliary request was further amended to restrict the list of refrigerants (cf. point IV above). However, such an amendment does not change the issue as set out for the main request. Indeed, for the above reasons (cf. point 4.3), the fresh particular combination of ester oils and of hydrofluorocarbon refrigerants does not emerge clearly and unambiguously from the application as filed, though the original description mentions *inter alia* the hydrofluorocarbons listed in present Claim 1 as refrigerants (cf. page 18, lines 18 to 19).

5.2 Therefore, in the Board's judgment, for the same reasons as set out regarding Claim 1 of the main request, the result of the amendments made to Claim 1 of the first auxiliary request is that the skilled man

is presented with information which are not directly and unambiguously derivable from the application as filed and this request must also be rejected as offending the requirements of Article 123(2) EPC.

Second and third auxiliary requests

6. *Article 123(2) EPC - Amendments*

6.1 Concerning Claim 1 of the second and third auxiliary request, the further amendments made by the Appellant amounts to restricting the definition of epoxy compounds set out in Claim 1 of the main request to that disclosed in Claims 6 and 7 as originally filed (second auxiliary request) or in Claim 7 as originally filed (third auxiliary request). However, Claim 1 of the second and the third auxiliary request comprise the same amendments objected to in Claim 1 of the main request.

6.2 In view of the above reasons (cf. point 4.3 above), combining a base oil mandatorily comprising ester oils with the particular hydrofluorocarbons listed in Claim 1 of the second or third auxiliary request, results from a multiple selection within two lists of alternative features without any pointer to that particular combination in the application as filed. In the Board's judgment, such a combination is not directly and unambiguously derivable from the application as filed and those requests must be rejected as offending the requirements of Article 123(2) EPC as well.

7. Since none of the requests put forward comply with the requirements of the EPC, the appeal must be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

N. Maslin R. Freimuth