Decision of Technical Board of Appeal 3.3.1 dated 12 September 2002 T 525/99 - 3.3.1

(Language of the proceedings)

Composition of the board:

Chairman: A. J. Nuss

Members: P. P. Bracke

S. C. Perryman

Patent proprietor/Appellant: The Lubrizol Corporation

Opponent/Respondent: (1) Exxon Chemical Patents Inc.

- (2) RWE-DEA AG f.Mineraloel u. Chemie/FUCHS DEA Schmierstoffe GmbH & Co KG
- (5) CASTROL LIMITED
- (6) ExxonMobil Oil Corporation

Headword: Fluorohydrocarbons/LUBRIZOL

Article: 54(3) and (4), 84 EPC

Rule: 35(12) EPC

Keyword: "Novelty (yes): Article 54(3) EPC prior art - specific disclosure excluded by disclaimers - general disclosure not novelty destroying"-"Reference to Enlarged Board of Appeal (no)"

Headnote

I. Disclaimers based solely on an Article 54(3) EPC prior art document are not objectionable under the terms of Article 123(2) EPC.

II. Established jurisprudence on this matter giving a clear answer, no reference to the Enlarged Board of Appeal is necessary.

Summary of facts and submissions

I. The appeal lies from the Opposition Division's decision to revoke European patent No. 0 422 185.

In particular, the Opposition Division found that the disclaimers in the set of claims according to the then pending main request and first auxiliary request were not acceptable, since they did not specifically exclude the subject-matter disclosed in documents

- (5) EP-A-0 378 176 and
- (30) EP-A-0 377 122

and that the subject-matter claimed according to the then pending second auxiliary request lacked novelty over any of the disclosures of documents (5) and (30).

II. The Appellant filed with letter dated 7 August 2002 sets A, B, C and D, each set containing claims according to a main request and a first to third auxiliary request, amounting to a total of sixteen different requests.

The main request of set B consisted of 36 claims, of which the only independent claims read:

"1. A liquid composition comprising:

- (A) a major amount (an amount greater than 50% by weight) of at least one fluorine-containing hydrocarbon containing 1 or 2 carbon atoms, wherein fluorine is the only halogen in the fluorine-containing hydrocarbon; and
- (B) a minor amount (an amount of less than 50% by weight) of a soluble lubricant which is at least one carboxylic ester of a polyhydroxy compound containing at least 2 hydroxy groups and characterized by the general formula

$R[OC(O)R^{1}]_{n}$ (I)

wherein R is a hydrocarbyl group containing up to 20 carbon atoms, each R¹ is independently hydrogen, a straight chain lower hydrocarbyl group containing up to 7 carbon atoms, a branched chain hydrocarbyl group containing up to 20 carbon atoms, or a straight chain hydrocarbyl group containing from 8 to 22 carbon atoms provided that at least one R¹ group is hydrogen, a lower straight chain hydrocarbyl containing up to 7 carbon atoms or a branched chain hydrocarbyl group containing up to 20 carbon atoms, or a carboxylic acid- or carboxylic acid ester-containing hydrocarbyl group, and n is at least 2, wherein the hydrocarbyl group may contain hetero atoms;

with the provisos that

- (a) component (A) is not 1,1,1,2-tetrafluoroethane when component (B) is (i) 25 weight % of the composition of Mobil P51 (the pentaerythritol tetraester of a mixture of alkanoic acids having 7 to 9 carbon atoms) having a viscosity at 38°C of 25x10⁻⁶ m²/s, or (ii) 16 weight % of the composition of Mobil P41 (trimethylol propane triheptanoate) having a viscosity at 38°C of 15x10⁻⁶ m²/s;
- (b) component (A) is not 1,1,1,2-tetrafluoroethane when component (B) is: (i) 13 weight % of the composition of a mixture having a viscosity at 38°C of 87x10⁻⁶ m²/s, comprising 70% P-2000 (propylene glycol and propylene oxide to a molecular weight of 2000) and

30% Mobil P51, or (ii) 20 weight % of the composition of a mixture having a viscosity at 38°C of 4x10⁻⁵ m²/s, comprising 30% P-2000 and 70% Mobil P41, and

(c) component (A) is not 1,1,1,2-tetrafluoroethane when component (B) is: (i) 9, 12, 17 or 22 weight % of the composition of a mixture having a viscosity at 38°C of 89x10⁻⁶ m²/s, comprising 90% CP700 (glycerine and propylene oxide to a molecular weight of 700) and 10% Mobil P51; (ii) 8, 19 or 29 weight % of the composition of a mixture having a viscosity at 38°C of 203x10⁻⁶ m²/s, comprising 75% EDA511 (ethylene diamine and propylene oxide to a molecular weight of 511) and 25% Mobil P41; (iii) 9, 11 or 20 weight % of the composition of a mixture having a viscosity at 38°C of 245x10⁻⁶ m²/s, comprising 75% EDA511 and 25% Mobil P51; or (iv) 18 weight % of the composition of a mixture having a viscosity at 38°C of 78x10⁻⁶ m²/s, comprising 70% CP1406 (glycerine and propylene oxide to a molecular weight of 1406) and 30% Mobil P51."

"13. A liquid composition comprising:

- (A) from 70 to 99% by weight of 1,1,1,2-tetrafluoroethane; and
- (B) from 1 to 30% by weight of a soluble organic lubricant which is at least one carboxylic ester of a polyhydroxy compound containing from 3 to 10 hydroxyl groups and characterized by the general formula

$R[OC(O)R^1]_n$ (I)

wherein R is a hydrocarbyl group containing up to 20 carbon atoms, each R¹ is independently hydrogen, a straight chain alkyl group containing from 1 to 5 carbon atoms, a branched chain alkyl group containing from 5 to 20 carbon atoms, or a straight chain alkyl group containing from 8 to 22 carbon atoms, provided that at least one R¹ is hydrogen, a straight chain alkyl group containing 1 to 5 carbon atoms or a branched

chain alkyl group containing from 5 to 20 carbon atoms, and n is an integer of from 3 to 10, wherein the hydrocarbyl group may contain hetero atoms;

with the provisos that

- (a) component (A) is not 1,1,1,2-tetrafluoroethane when component (B) is (i) 25 weight % of the composition of Mobil P51 (the pentaerythritol tetraester of a mixture of alkanoic acids having 7 to 9 carbon atoms) having a viscosity at 38°C of 25x10⁻⁶ m²/s, or (ii) 16 weight % of the composition of Mobil P41 (trimethylol propane triheptanoate) having a viscosity at 38°C of 15x10⁻⁶ m²/s;
- (b) component (A) is not 1,1,1,2-tetrafluoroethane when component (B) is: (i) 13 weight % of the composition of a mixture having a viscosity at 38°C of 87x10⁻⁶ m²/s, comprising 70% P-2000 (propylene glycol and propylene oxide to a molecular weight of 2000) and 30% Mobil P51, or (ii) 20 weight % of the composition of a mixture having a viscosity at 38°C of 4x10⁻⁵ m²/s, comprising 30% P-2000 and 70% Mobil P41, and
- (c) component (A) is not 1,1,1,2-tetrafluoroethane when component (B) is: (i) 9, 12, 17 or 22 weight % of the composition of a mixture having a viscosity at 38°C of 89x10⁻⁶ m²/s, comprising 90% CP700 (glycerine and propylene oxide to a molecular weight of 700) and 10% Mobil P51; (ii) 8, 19 or 29 weight % of the composition of a mixture having a viscosity at 38°C of 203x10⁻⁶ m²/s, comprising 75% EDA511 (ethylene diamine and propylene oxide to a molecular weight of 511) and 25% Mobil P41; (iii) 9, 11 or 20 weight % of the composition of a mixture having a viscosity at 38°C of 245x10⁻⁶ m²/s, comprising 75% EDA511 and 25% Mobil P51; or (iv) 18 weight % of the composition of a mixture having a viscosity at 38°C of 78x10⁻⁶ m²/s, comprising 70% CP1406 (glycerine and propylene oxide to a molecular weight of 1406) and 30% Mobil P51."
- III. Oral proceedings took place on 12 September 2002.

IV. The Respondents objected to the lack of clarity of the claims, since the patent in suit did not indicate how the viscosity data in the disclaimers had been measured and since the extent of the claimed scope could not unambiguously be defined due to the trade designations in the disclaimers.

Moreover, they submitted that the claimed subject-matter was not novel over documents (5) and (30), since there was a broad overlap between the esters described in documents (5) and (30), since claimed compositions were disclosed by the combined teaching of Claims 4, 5, 7 and 8 of document (5) and since compositions containing 1,1,1,2-tetrafluoroethane and a minor amount of pentaerythritol tetraheptanoate were disclosed in document (5). In this respect the Respondents submitted that excluding specific examples of document (5) by disclaimers was not sufficient for excluding the complete disclosure thereof.

Furthermore, the novelty of the claimed subject-matter over document

(2) US-A-2 807 155,

in combination with document

(3) US reissue-patent 19 265,

which was referred to in document (2), was contested.

Finally, the admissibility of the disclaimer was questioned in view of decision T 323/97 dated 17 September 2001 (OJ EPO 2002, 476).

V. The Appellant argued that Claims 4, 5, 7 and 8 of document (5) were not dependent on each other and that, therefore, the subject-matter of those claims could not be read together for challenging novelty. Moreover, he submitted that the subject-matter

disclosed in documents (5) and (30) was specifically excluded by the disclaimers (a), (b) and (c).

Moreover, the Appellant provided a copy of the minutes of the oral proceedings which took place on 12 June 2002 in decision T 507/99, wherein it was specified that the Board of Appeal 3.3.5 will refer a question concerning the allowability of disclaimers to the Enlarged Board of Appeal.

VI. The Appellant requested that the decision under appeal be set aside and that the matter be remitted to the first instance for further prosecution on the basis of the main request of Set B submitted with letter of 7 August 2002.

The Respondents requested that the appeal be dismissed.

Reasons for the decision

- 1. The appeal is admissible.
- 2.1 Amendments, disclaimers and Article 123(2) EPC
- 2.1.1 According to the established jurisprudence of the Boards of Appeal, it may be permissible and in accordance with Article 123(2) EPC in exceptional circumstances to exclude a specific prior art disclosure from the invention claimed in a particular claim by means of a disclaimer added to the claim, even if the original application did not itself provide a basis for such an exclusion, provided that:
- (1) But for the disclaimer the prior art document would destroy novelty of the claim. (cf. Case Law of the Boards of Appeal of the European Patent Office, 4th edition 2001, III.A.1.6.3, in particular, the cited decision T 1071/97 of 17 August 2000, point 3.2 of the reasons; decision T 934/97, point 2.3 of the reasons; and decision T 25/99 of 15 May 2002, point 2.3).

- (2) The wording of the disclaimer was based clearly and unambiguously on the disclosure of the prior art document. (See for example above-cited decision T 1071/97).
- (3) The prior art disclosure was accidental in the sense that after the disclaimer it would not remain relevant for inventive step. (See for example decisions T 170/87, OJ EPO 1989, 441, reasons point 8.4.4, and T 863/96 of 4 February 1999, point 3.2 of the reasons).
- (4) The disclaimer did not amount to the introduction of a feature providing a technical contribution, which would give an unwarranted advantage to a patentee, such as one creating an inventive selection. (See for example decisions T 25/99, and in particular G 1/93 (OJ EPO 1994, 541))
- 2.1.2 Disclaimers are not mentioned in the European Patent Convention, either in the Articles or the Rules. But the Convention was not intended to lay down an exhaustive code, rather the European Patent Office was left to develop its own practice in conformity with the European Patent Convention as interpreted by the Boards of Appeal. That the established jurisprudence allowing disclaimers to exclude specific prior art disclosures in the above narrowly defined exceptional circumstances is consistent with Article 123(2) EPC, was accepted by the Enlarged Board of Appeal in its decision G 1/93, where it is stated at points 16 and 17:
- "16. Whether or not the adding of an undisclosed feature limiting the scope of protection conferred by the patent as granted would be contrary to the purpose of Article 123(2) EPC to prevent an applicant from getting an unwarranted advantage by obtaining patent protection for something he had not properly disclosed and maybe not even invented on the date of filing of the application, depends on the circumstances. If such added feature, although limiting the scope of protection conferred by the patent, has to be considered as providing a technical contribution to the subject-matter of the claimed invention, it would, in the view of the Enlarged Board, give an unwarranted advantage to the

patentee contrary to the above purpose of Article 123(2) EPC. Consequently, such feature would constitute added subject-matter within the meaning of that provision. A typical example of this seems to be the case, where the limiting feature is creating an inventive selection not disclosed in the application as filed or otherwise derivable therefrom. If, on the other hand, the feature in question merely excludes protection for part of the subject-matter of the claimed invention as covered by the application as filed, the adding of such feature cannot reasonably be considered to give any unwarranted advantage to the applicant. Nor does it adversely affect the interests of third parties (cf. paragraph 12 above). In the view of the Enlarged Board, such feature is, on a proper interpretation of Article 123(2) EPC, therefore not to be considered as subject-matter extending beyond the content of the application as filed within the meaning of that provision. It follows that a patent containing such a feature in the claims can be maintained without violating Article 123(2) EPC or giving rise to a ground for opposition under Article 100(c) EPC. The feature being maintained in the claims, there can be no violation of Article 123(3) EPC either.

- 17. Whether or not a limiting feature is to be considered as added subject-matter within the meaning of Article 123(2) EPC, can, of course, only be decided on the basis of the facts of each individual case."
- 2.1.3 This board endorses the established jurisprudence in the form above stated in point 2.1.1 above, and considers this the appropriate interpretation of the EPC to be applied in the present case. Here the provisos (a), (b) and (c) in claim 1 are disclaimers intended to exclude from the scope of protection specific subject matter of document (5) which is only prior art for the purpose of Article 54(3) EPC, and which document is by Article 56 EPC second sentence not to be considered in deciding whether there has been an inventive step. It is in particular in respect of such Article 54(3) EPC documents that the Board sees a clear need for applicants to be able to re-establish novelty of the subject matter they claim by means of a disclaimer based only on the Article 54(3) EPC document and not on their own original disclosure. The later applicant will normally have had no knowledge of the earlier application deemed to be prior art by Article 54(3) EPC,

and cannot be expected to have appropriately delimited his application in respect of such unknown deemed prior art. To force him to rely only on some limitation originally disclosed in his own application in order to distinguish over this deemed prior art, would mean that the later applicant might well be unable to claim some of his original subject-matter, even though this was novel over the deemed prior art. Disclaimers may be a somewhat artificial remedy, but they seem the only appropriate solution to the artificial problem caused by the deemed prior art provisions of Article 54(3)(4) EPC.

- 2.1.4 As already remarked in decision T 351/98 of 15 January 2002, reasons point 45, a too literal insistence on a precise basis in the original disclosure for the purposes of Article 123(2) EPC, that is a prohibition of all disclaimers based on the prior art only, would have the effect of extending the deemed publication provisions of Article 54(3) EPC to matter which was not disclosed in the earlier applications. This does not appear to accord with the express intention of the legislator. Allowing disclaimers in this situation achieves a fairer balance between the requirements of Articles 54(3)(4) and 56 EPC on the one hand and Article 123(2) EPC on the other hand.
- 2.2 Reference of a question to the Enlarged Board of Appeal
- 2.2.1 The respondents have questioned the admissibility of the disclaimers (a), (b) and (c) in view of decision T 323/97. Unfortunately the legal message that decision seeks to convey does not emerge clearly. On the stated facts of the case before that board the prior art on which the disclaimer there was based was not novelty-destroying (see point 2.1 of T 323/97), and remained a document which had to be considered when assessing inventive step. According to the established jurisprudence a disclaimer based on such prior art is not permissible (see point 2.1.1 above). In so far as decision T 323/97 is merely saying that disclaimers based only on prior art are not allowable when such prior art is not novelty destroying and /or remains relevant for assessing inventive step, this Board agrees, but the decision is not relevant to the present case.

- 2.2.2 However section 2.4 of decision T 323/97 may also possibly be meant to be taken as putting forward the more general proposition of law that disclaimers based only on the prior art are in all circumstances in conflict with Article 123(2) EPC. Such a general prohibition seems to be in direct conflict with what is stated in the decision G 1/93 of the Enlarged Board (see points 16 and 17 of that decision quoted above), which clearly envisaged the possibility that some restrictions on claims not based on the original disclosure would nevertheless not fall foul of Article 123(2) EPC.
- 2.2.3 Decision T 323/97 purports to find support for its view in Enlarged Board of Appeal Opinion G 2/98 (OJ EPO 413, 2001) concerning the meaning of "same invention" for acknowledging priority under Article 87 EPC. But in the view of this board Opinion G 2/98 does not provide any such support. That Opinion in point 10 states:
- "10. In decision G 1/93 "Limiting feature/ADVANCED SEMICONDUCTOR PRODUCTS" (OJ EPO 1994, 541), relating to the conflicting requirements of Article 123(2) and (3) EPC, a distinction is made between features providing a technical contribution to the subject-matter of the claimed invention and features which, without providing such contribution, merely exclude protection for part of the subject-matter of the claimed invention as covered by the application as filed. Hence, decision G 1/93 deals with a completely different legal situation. "
- 2.2.4 Opinion G 2/98 does not appear to throw doubt on what is said in decision G 1/93, and states that it is dealing with a completely different legal situation to that of decision G 1/93. Decision G 1/93 while mainly concerned with possible conflict between the provisions of Articles 123(2) and (3) EPC respectively, certainly did contain statements (see citation of its points 16 and 17 above) relevant to disclaimers having no basis in the original application, while Opinion G 2/98 is concerned with a different legal situation. It takes an adventurous extrapolation of Opinion G 2/98 to find it of relevance to disclaimers, let alone more relevant than decision G 1/93, and this Board is not persuaded that such an interpretation is correct.

- 2.2.5 Further, decision T 323/97 contains no discussion of disclaimers relating to Article 54(3) EPC prior art documents, which even further reduces any persuasive force it might have. The existence of this decision gives this Board no reason to doubt the appropriateness or correctness of the established case law as set out in point 2.1.1 above, whose applicability will need to be decided on a case by case basis, as stated in Enlarged Board decision G 1/93. A general prohibition of disclaimers would not be fair to applicants faced with Article 54(3) EPC prior art. Given that the established case law, as sanctioned by the Enlarged Board of Appeal, already gives a clear answer, the Board sees no reason for a referral of any question of law to the Enlarged Board of Appeal in this case.
- 2.2.6 Even if, which is not the case, this Board were in favour of a departure from the established case law on disclaimer, it considers that it would be more appropriate for such departure to be brought about by the legislator who could regulate what law should be applicable in the numerous existing patents which have been granted with disclaimers based only on the prior art. To avoid a lengthy period of legal uncertainty, the very existence of this established practice seems a reason for not seeking to change it other than through the legislator.
- 2.2.7 Some, but not all, parties in this case favoured a reference of a question concerning disclaimers to the Enlarged Board. They did not, however, put forward any formulation of such question or any argumentation as to why such a reference was necessary under Article 112 EPC, let alone provide any legal analysis relevant to the question.

There is also no other procedural reason why a reference of a question of law on disclaimers might be appropriate at this stage of the present case.

2.2.8 The parties referred the Board to the minutes of the oral proceedings in case T 507/99 pending before another Board, in which it is stated: "The Board will refer a question concerning the allowability of "disclaimers" to the Enlarged Board of Appeal."

At the time of the oral proceedings before this Board no decision had yet issued in case T 507/99, so that the question to be asked and the viewpoint that Board would take was not known. Given this Board's own views approving the established jurisprudence, this pending case was not seen as any adequate reason for this Board itself to refer a question of law, or to suspend proceedings until at least the formulation of such question was known.

- 3. Claim 1 according to the main request of Set B
- 3.1 Clarity
- 3.1.1 The Respondents contested that Claim 1 met the requirement of clarity according to Article 84 EPC, due to the presence of trade designations and the viscosity data present in the wording of Claim 1.

In particular, the Respondents submitted that in order to be able to determine whether a particular prior art composition is within the scope of the corresponding disclaimer, it is of critical importance to know how the viscosity had been measured. As the patent in suit did not indicate how the viscosity data of the disclaimed compositions had been measured, they alleged that it was not possible to define the extent of the claimed subject-matter.

3.1.2 Those viscosity data are the ones given for controls A, B, I and J and examples 1 to 11 in document (5). Though this document (5) is silent on how the viscosity data in SI units were measured, the Board is not convinced that the Respondent's objection is to be considered as pertinent, as it remained uncontested that these units are recognised in international practice. Rule 35(12) EPC does not require more. In addition, during the oral proceedings the Respondents had to admit that they did not have any proof that, in the absence of any indication how the viscosities are to be measured, a skilled person was unable to define which compositions are disclaimed and which not. As it is up to the Party which makes an allegation to prove that such allegation is correct, the Board finds

that such unsubstantiated allegation is not to be considered. Therefore, the clarity objection in respect of the viscosity data cannot be accepted.

- 3.1.3 Making reference to decision T 480/98, the Respondents also submitted that the presence of trade designations were not allowable in the wording of a claim, since they rendered its wording unclear. In particular, they submitted that Mobil P51 was commercially available at the filing date of the patent in suit in two different versions and, that, consequently, the term "Mobil P51" was ambiguous.
- 3.1.4 In the particular case of decision T 480/98, however, the competent Board found that the used trade designation did not have a clear technical meaning and that it was not clear how some material defined only by the trade designation differed from any other material. As the trade designation thus did not have an unequivocally clear technical meaning, the competent Board found the presence of the trade designation in a claim to be unallowable.

In the present case, the compositions excluded by the disclaimer (a) are not only defined by the particular trade designations Mobil P51 and Mobil P41, but also by the chemical nature of the ester contained therein and by their viscosity data. In disclaimers (b) and (c) the excluded compositions are not only defined by the trade designations Mobil P51 and Mobil P41, and thus implicitly by the chemical nature of the ester contained therein and by their viscosity data, but also by the chemical nature of the products designated as P-2000, CP700, EDA 511 and CP1406 as well as by the final viscosity data of the mixtures of Mobil P51 or Mobil P41 with P-2000, CP700, EDA 511 and CP1406.

Thus, the compositions to be excluded by the disclaimers are indeed not merely defined by their trade designations but additionally by their chemical nature and by their viscosity data. In particular, in defining which of the two versions of Mobil P51 is to be excluded by the disclaimer, namely the one mentioned in document (5), the corresponding indications concerning the chemical nature and the viscosity are to be

associated with the trade designation Mobil P51 in order to unambiguously define those compositions disclosed in document (5).

Therefore, the present case is not comparable with the one decided in decision T 480/98 but rather with the case decided in T 623/91, where the competent Board came to the conclusion that a trade designation did not introduce uncertainty under the circumstances prevailing in that case. The question whether trade designations are allowable in the wording of a claim is a question of fact that can only be answered on a case by case basis.

3.2 Novelty

3.2.1 Document (5), which uncontestedly belonged to the state of the art according to Article 54(3) EPC, describes lubricant compositions that are miscible in hydrofluorocarbon and hydrochlorofluorocarbon refrigerants and that consist of a polyether polyol and an ester made from polyhydric alcohols with alkanoic acids or from alkanedioic acids with alkanols (see page 2, lines 32 to 51).

The controls A, B, I and J in Table I and the examples 1 to 11 in Table II indisputably disclose compositions of 1,1,1,2-tetrafluoroethane with specific lubricants, which are embraced within the general scope of Claim 1, but are specifically excluded by the disclaimers (a), (b) and (c) as set out above in detail. A successful novelty attack is thus no longer possible on the basis of these specific prior art compositions.

3.2.1.1 The Respondents argued that Claims 4, 5, 7 and 8 of document (5) are to be considered together in the assessment of novelty and that the combined teaching of those claims discloses compositions containing a major amount of 1,1,1,2-tetrafluoroethane (specifically mentioned in Claim 7) and a minor amount of pentaerythritol tetraester of a mixture of alkanoic acids having 7 to 9 carbons (specifically mentioned in Claim 8).

However, in accordance with the established jurisprudence, the disclosure of a patent document does not embrace the combination of individual features claimed in separate dependent claims if such combination is not supported by the description (see decision T 42/92, reason 3.4 for the decision).

In the present case, Claim 7 and Claim 8 are each dependent on Claim 4 without any reference between Claim 7 and Claim 8 and in the description there is only a general statement on page 3, lines 31 to 33, that the preferred ester is a pentaerythritol tetraester of a mixture of alkanoic acids having 7 to 9 carbons, without giving any indication whether such ester is suitable as lubricant for hydrofluorocarbon refrigerants or for hydrochlorofluorocarbon refrigerants. Therefore, in the absence of any support in the description for combining the subject matter of Claim 7 with that of Claim 8, a presently claimed composition is not disclosed by Claims 4, 5, 7 and 8.

3.2.1.2 The Respondents also argued, that from the general teaching on page 2, lines 32 to 51, of document (5) it clearly followed that any ester made from polyhydric alcohols with alkanoic acids or from alkanedioic acids with alkanols would be suitable as lubricants for hydrofluorocarbon refrigerants. As there was a clear overlap between the esters cited on page 2, line 52 to page 3, line 2 and the esters of formula (I) in present Claim 1 and as trimethylolpropane triheptonate and pentaerythritol tetraheptonate were specifically cited there, they submitted that present Claim 1 lacked novelty.

In the judgment of the Board, in order to be novelty destroying the overlap between the disclosures must be the result of an intersection of the same subject-matter; it is not sufficient that the overlap is merely a hypothetical or virtual one in the sense that a specific disclosure is merely covered or encompassed by some broader one. In assessing novelty in the present case, it is thus not relevant whether there is a hypothetical or virtual overlap of the general description of the esters disclosed in document (5) with the esters of formula (I) according to present Claim 1. In other words, in order to be novelty destroying, all the features in the claimed combination must be directly and unambiguously derivable from the teaching of document (5).

However, in order to come to the claimed compositions, a number of independent choices must be made amongst mutually independent options, namely (i) the choice of a fluorine-containing hydrocarbon containing 1 or 2 carbon atoms wherein fluorine is the only halogen among hydrofluorocarbons and hydrochlorofluorocarbons (see document (5), page 2, lines 32 and 33) and (ii) the choice of an ester made from polyhydric alcohols with alkanoic acids having 4 to 18 carbon atoms (see document (5), page 2, line 55 and page 3, line 1), followed by the subsequent choice within this group of esters of the ones which meet the requirement that at least one R¹ is hydrogen, a lower straight chain hydrocarbyl containing up to 7 carbon atoms or a branched chain hydrocarbyl group containing up to 20 carbon atoms, or a carboxylic acid- or carboxylic acid ester-containing hydrocarbyl group.

Therefore, the claimed combination is not directly and unambiguously derivable from the general disclosure of document (5).

3.2.1.3 Referring to the principle described in T 188/83 (OJ EPO 1984, 555), the Respondents further submitted that Claim 1 was not rendered novel by only disclaiming the specifically exemplified compositions.

In the case underlying T 188/83, however, the claimed chemical production process was identical with the one described in a prior art document in respect of all the features except the selection of a narrower range for one feature. As in the prior art document several processes were exemplified falling within this narrower range, the competent Board came to the conclusion that the novelty of the newly claimed range was destroyed.

That case is not comparable with the present one, where the claimed compositions do not only differ in the selection of a narrower range of one feature, but where a number of independent choices must be made in document (5) in order to come to the claimed compositions (see point 3.2.1.2 above). As the claimed compositions, in their general

definition, may not be directly and unambiguously derived from the general teaching of document (5), Claim 1 can be made novel over the teaching thereof by only disclaiming the specifically exemplified compositions.

Consequently, in the present case, by disclaiming the specific compositions defined as controls A, B, I and J in Table I and as examples 1 to 11 in Table II of document (5), Claim 1 is novel over the disclosure of document (5).

- 3.2.2 Document (30), which was also not contested to belong to the state of the art according to Article 54(3) EPC, describes lubricating oils I to VI compatible with hydrogen-containing fluorine-containing hydrocarbons, such as 1,1,1,2-tetrafluoroethane, 1,1-dichloro-2,2,2-trifluoroethane, 1-chloro-1,1-difluoroethane, 1,1-difluoroethane, chlorodifluoromethane and trifluoromethane (see page 2, lines 6 to 12, page 3, line 49, and page 15, lines 15 to 19).
- 3.2.2.1 Although it was not contested that a claimed composition was not specifically described in one of the examples, the Respondents submitted that, nevertheless, document (30) was novelty destroying for Claim 1, since some of the lubricating oils I to VI contained carboxylic esters of formula (I) according to present Claim 1 and it was clear from, for example, page 3, lines 39 to 41, that each lubricating oil described therein could be combined with hydrogen-containing flon compounds such as 1,1,1,2-tetrafluoroethane.

In particular, the Respondents submitted that claimed compositions were directly and unambiguously derivable from page 14, lines 37 to 39, where trimethylol propane caproic acid ester, pentaerythritol propionic acid ester, pentaerythritol caproic acid ester and trimethylol propane adipic acid ester were specifically described as suitable components of lubricating oil VI.

3.2.2.2 However, on page 15, lines 15 to 20, it is stated that the lubricating oils have good compatibility with hydrogen-containing flon compounds (hydrogen-containing

fluoroalkanes), whereby besides hydrocarbons that contain as halogen only fluorine also hydrocarbons that contain chlorine besides fluorine are listed as examples thereof. Therefore, the disclosure of document (30) is not restricted to lubricating oils suitable for hydrogen-containing flon compounds wherein fluorine is the only halogen.

Moreover, in order to come to a composition according to Claim 1 several choices had to be made, namely i) from the fluorine-containing hydrocarbons such one had to be chosen wherein fluorine is the only halogen, ii) oil VI had to be chosen from six generally defined classes of suitable lubricating oils and iii) within the generally defined class of oils VI those had to be picked out which contain the esters described on page 14, lines 37 to 39.

As, thus, a number of independent choices would have to be made amongst mutually independent options, the claimed combination is not directly and unambiguously derivable from the disclosure relied upon by the Respondents.

In this respect, the Respondents referred to the principles described in T 12/90. Therein, however, it was the essence that the complete teaching overlapping with the claims had to be removed, since the specific combination of substituents, as defined in the claim underlying that decision, was disclosed in a prior art document. As in the present case the claimed compositions are not directly and unambiguously derivable from document (30), the case to be decided in T 12/90 was not comparable with the present one.

3.2.2.3 The Respondents also submitted that by the polyoxyalkyleneglycol derivatives of formula (I) in lubricating oil I described on page 3, line 54 to page 4, line 2, inclusive the disclosure of polyoxyalkyleneglycol derivatives of formula (C₂) described on page 7, lines 6 to 9, and by the polyoxyalkyleneglycol derivatives of formula (IX) or (X) described on page 12, line 51 to page 13, line 45 esters of formula (I) according to present Claim 1 were disclosed.

However, already for the same reasons as mentioned in point 3.2.1.2 above, esters according to present Claim 1 wherein at least one R¹ group is hydrogen, a lower straight chain hydrocarbyl containing up to 7 carbon atoms or a branched chain hydrocarbyl group containing up to 20 carbon atoms, or a carboxylic acid- or carboxylic acid estercontaining hydrocarbyl group are not directly and unambiguously derivable therefrom.

Therefore, the claimed combination is not directly and unambiguously derivable from the disclosure of document (30) relied upon by the Respondents.

3.2.3 Document (2) describes a working fluid for a refrigeration apparatus which includes a fluoro halo substituted aliphatic hydrocarbon, as a refrigerant, and a lubricant comprising an organic acid ester of pentaerythritol (see column 1, lines 37 to 43). Furthermore, in column 2, lines 23 to 29, it is stated that the refrigerant preferably comprises a fluoro halo derivative of an aliphatic hydrocarbon of the character disclosed in document (3), as, for example, trichlorofluoromethane, dichlorodifluoromethane and difluoromonochloroethane.

In the presently claimed compositions, to the contrary, fluorine is the only halogen in the fluorine-containing hydrocarbon.

Nevertheless, the Respondents were of the opinion that the claimed compositions were disclosed in document (2), since esters and fluorine-containing hydrocarbons according to present Claim 1 are both disclosed therein. It was namely stated in column 3, lines 24 to 30 of document (2) that the esters may be formed by reacting the pentaerythritol compound with organic acids, such as n-butyric acid, n-valeric acid and caprylic acid and from page 1, lines 31 to 54, in combination with the data presented in figures 1 and 2 of document (3), which is explicitly referred to in document (2), it was known that by a fluoro halo derivative of an aliphatic hydrocarbon derivatives were meant containing more than one fluorine atom with or without other halogen atoms and that hydrocarbons containing no other halogen than fluor had advantageous properties.

Document (2), however, cites only hydrocarbons containing both fluorine and chlorine (see column 2, lines 23 to 29, and column 4, lines 15 to 23) and nowhere fluoro halo substituted aliphatic hydrocarbons wherein fluorine is the only halogen are mentioned. Already for that reason alone compositions containing a carboxylic acid ester according to present Claim 1 and a fluorine-containing hydrocarbon wherein fluorine is the only halogen are not disclosed in document (2), which can, consequently, not be considered to be novelty destroying for present Claim 1.

Moreover, by the fact that in document (3) also fluorine-containing hydrocarbons wherein fluorine is the only halogen are described as one out of several alternatives, it may not be concluded that the combination of a carboxylic ester according to present Claim 1 with a fluorine-containing hydrocarbon wherein fluorine is the only halogen is directly and unambiguously derivable from the teaching of document (2).

4. Claim 13 according to the main request of set B

For the same reasons as for Claim 1 of the main request, the Board comes to the conclusion that the requirement of clarity is met and that its subject-matter is novel over the teachings of any of documents (2), (5) and (30).

Order

For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The matter is remitted to the first instance for further prosecution on the basis of the main request of Set B submitted with letter of 7 August 2002.