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# Datasheet for the decision of 20 February 2008

T 1410/05 - 3.3.10 Case Number:

Application Number: 96931289.1

Publication Number: 0903335

IPC: C07C 69/28

Language of the proceedings: EN

## Title of invention:

Use of ester compounds in lubricating oil compositions

#### Patentee:

KAO CORPORATION

#### Opponents:

The Lubrizol Corporation Imperial Chemical Industries PLC

# Headword:

# Relevant legal provisions:

EPC Art. 123(2)

# Relevant legal provisions (EPC 1973):

#### Keyword:

"Added subject-matter (yes) - novel combination of technical characteristics"

# Decisions cited:

T 0288/92, T 0680/93

#### Catchword:



# Europäisches Patentamt

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Boards of Appeal

Chambres de recours

Case Number: T 1410/05 - 3.3.10

DECISION

of the Technical Board of Appeal 3.3.10 of 20 February 2008

Appellant:

KAO CORPORATION

(Patent Proprietor)

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(Opponent 1)

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Decision under appeal:

Decision of the Opposition Division of the European Patent Office posted 13 September 2005 revoking European patent No. 0903335 pursuant

to Article 102(1) EPC 1973.

Composition of the Board:

Chairman: R. Freimuth Members: P. Gryczka

D. S. Rogers

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# Summary of Facts and Submissions

- I. Two notices of opposition were filed in which revocation of the European patent 0 903 335 in its entirety was requested on the grounds of lack of novelty and inventive step, insufficiency of disclosure and added subject-matter (Article 100(a), (b) and (c) EPC).
- II. In a decision issued in writing on 13 September 2005 the Opposition Division revoked the patent.

The Opposition Division came to the conclusion that the invention was sufficiently disclosed, that the claims of the then pending main request and auxiliary request fulfilled the requirements of Article 123(2) EPC, that the claimed subject-matter was novel but did not involve an inventive step.

III. The Appellant (Proprietor of the patent in suit) lodged an appeal against the above decision. With a letter dated 21 December 2006, he filed two sets of amended claims as main and auxiliary requests. With a letter dated 18 January 2008 he requested that the patent be maintained only on the basis of the auxiliary request submitted on 21 December 2006 which became thus his sole request.

Claim 1 of said request read as follows:

"1. Use of an ester compound as a base oil of a lubricating oil in the presence of hydrofluorocarbons containing difluoromethane for a rotary compressor for a refrigerating machine or a scroll compressor for a

refrigerating machine, thereby maintaining thermal stability of a lubricating oil in the presence of a metal, wherein said ester compound is formed between pentaerythritol and a carboxylic acid mixture of 2ethylhexanoic acid and 3,5,5-trimethylhexanoic acid, the mixing ratio of 2-ethylhexanoic acid to 3,5,5trimethylhexanoic acid being 80/20 to 35/65 (molar ratio), wherein the kinematic viscosity at 40°C of the ester compound is 55 to 90 mm<sup>2</sup>/s, wherein the hydroxyl value of the ester compound is 0.01 to 5 mg KOH/g, and the acid value of the ester compound is 0.03 mg KOH/g or less (measured in accordance with JIS K-2501), and wherein the acid value of the ester compound is not more than 2 mg KOH/g as measured after carrying out the steps comprising adjusting the water concentration of 5 g of said ester compound to not more than 10 ppm, placing the ester compound, along with iron, copper and aluminum pieces each having a diameter of 1.6 mm and a length of 100 mm, in a glass vessel with an inner volume of about 15 ml, degassing the vessel to a pressure of not more than 1.3 Pa, placing 1 g of a difluoromethane/pentafluoroethane/1,1,1,2tetrafluoroethane mixture at a weight ratio of 23:25:52, sealing the vessel, and keeping the vessel standing at 250 °C for 3 days."

IV. According to the Appellant, the use of the ester as now defined in claim 1 as well as each of the specific ranges introduced in the claim to define its viscosity, hydroxyl value and acid values were based on the application as filed. Since the viscosity, the acid values and the hydroxyl value introduced in claim 1 corresponded to preferred values disclosed in the application as filed, the fact that these

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characteristics were combined in the amended claim 1 did not amount to added subject-matter. Therefore, the amendments to claim 1 fulfilled the requirements of Article 123 (2) EPC.

- V. The Respondents 1 and 2 (respectively Opponents 1 and 2) considered that the amendments to claim 1 did not fulfil the requirements of Article 123(2) EPC since they resulted in a combination of features which was not disclosed in the application as filed. By this combination of features a selection was operated within the original disclosure resulting in claiming the use of a particular class of esters which were not disclosed as such in the application as filed.
- VI. The Appellant requested that the decision under appeal be set aside and that the patent be maintained on the basis of the auxiliary request filed with the letter dated 21 December 2006.
- VII. The Respondents requested that the appeal be dismissed.
- VIII. At the end of the oral proceedings held in front of the Board on 20 February 2008, the decision of the Board was announced.

# Reasons for the Decision

1. The appeal is admissible.

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#### 2. Amendments

- 2.1 Article 123(2) EPC prohibits amendments generating "subject-matter which extends beyond the content of the application as filed ". In order to determine whether or not the subject-matter of an amended claim satisfies this requirement it has to be examined whether that amended claim comprises technical information which a skilled person would not have objectively and unambiguously derived from the application as filed (see decisions T 288/92, point 3.1 of the reasons and T 680/93, point 2 of the reasons, neither published in OJ EPO).
- 2.2 Claim 1 has been amended in that the original product claim 1 has been changed into a "use type" claim and in that the ester compound used is precisely defined by the combination of technical features requiring that:
  - a) it is formed between pentaerythritol and a carboxylic acid mixture of 2-ethylhexanoic acid and 3,5,5-trimethylhexanoic acid, the mixing ratio of 2-ethylhexanoic acid to 3,5,5-trimethylhexanoic acid being 80/20 to 35/65 (molar ratio); and
  - b) its kinematic viscosity at  $40\,^{\circ}\text{C}$  is 55 to 90  $\text{mm}^2/\text{s}$ ; and
  - c) its hydroxyl value is 0.01 to 5 mg KOH/g; and
  - d) its acid value is 0.03~mg KOH/g or less (measured in accordance with JIS K-2501); and

- e) its acid value is not more than 2 mg KOH/g as measured after carrying out the steps defined in claim 1.
- 2.3 The Appellant submitted that the amendments to claim 1 defining the ester compound were based on the application as filed on page 43, lines 1 to 4 disclosing the nature of the ester and the molar ratio of pentaerythritol to the acids, on page 26, line 16, disclosing the range of hydroxyl values, on page 26, line 2, disclosing the range of acid values, on page 48, line 4, defining the measurement method of the acid value, on page 27, line 8 disclosing the range of acid values after carrying out the steps defined in claim 1 and finally on page 24, lines 22 and 23, disclosing both limits of the viscosity range.

It is not disputed that each of these individual amendments finds a support in the application as filed. However, in the amended claim 1 the features defining the ester compound are claimed in combination and not separately since the ester compound is defined by the combination of these features which have to be fulfilled all together. However, the passages cited by the Appellant as support for the amendments provide only a basis for each individual feature taken in isolation but not in combination since they do not disclose the chemical structure of the ester in combination with those four particular parameters required by claim 1, namely a specific hydroxyl value range, a specific viscosity range, a specific acid value range and a specific acid value range as measured after carrying out the steps defined in claim 1. Thus, the fresh combination of features required by the

amended claim 1 results in the defining of a particular group of ester compounds which was not identified originally. Therefore, claim 1 contains technical information that a skilled person would not have objectively and unambiguously derived from the application as filed.

Hence, claim 1 does not fulfill the requirements of Article 123(2) EPC.

2.4 According to the Appellant, ranges for the viscosity, the acid and hydroxyl values of the ester were already disclosed in combination, although with broader ranges than those now claimed, in the "use type" claim 22 as filed since that claim referred back by reference to the claims directed to the ester compounds where these parameters were defined. However, the Board cannot follow this argumentation since use claim 22 as filed comprises a blending step and can thus not be a basis for the present use claim 1 which does not comprise such step. In addition, in the other passage of the application as filed referred to by the Appellant as a basis for the use in accordance with the amended claim 1, namely page 32, lines 7 to 12, the ester is not defined by the combination of the features introduced in claim 1. Consequently, also this part of the original application cannot support the combination of features required by present claim 1.

The Appellant also put forward that the original application implicitly disclosed the combination of the preferred ranges of viscosity, hydroxyl and acid values, since a skilled person would always combine different preferred features of an invention. However, the

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application is at variance with this argumentation since the examples show that preferred parameters are also combined with less preferred parameters (see examples 24 to 27 combining the viscosity range and acid value required by present claim 1 with a hydroxyl value outside the claimed range). That all preferred features of the invention are automatically to be read in combination is thus, neither explicitly, nor implicitly, disclosed in the application as filed. Therefore, this line of argumentation must also be rejected.

2.5 For these reasons, the sole request submitted by the Appellant is not allowable.

#### Order

# For these reasons it is decided that:

The appeal is dismissed.

The Registrar

The Chairman

P.Cremona

R. Freimuth