DEcision
of 14 October 2003

Case Number: T 0106/01 - 3.3.1
Application Number: 94202208.8
Publication Number: 0638630
IPC: C10M 105/32
Language of the proceedings: EN

Title of invention:
Esters as lubricants for a haloalkane refrigerant

Patentee:
ExxonMobil Chemicals Patents Inc.

Opponent:
RWE-DEA AG f.Mineraloel u. Chemie/FUCHS DEA Schmierstoffe GmbH & Co KG
The Lubrizol Corporation

Headword:
Lubricants/EXXONMOBIL

Relevant legal provisions:
EPC Art. 100(c)

Keyword:
"Amendments (not allowable) - undue generalisation of one example"

Decisions cited:
T 0288/92, T 0680/93

Catchword:
Case Number: T 0106/01 - 3.3.1

DECISION
of the Technical Board of Appeal 3.3.1
of 14 October 2003

Appellant I: RWE-DEA AG f.Mineraloel u. Chemie/FUCHS DEA
(Opponent I)
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Appellant II: The Lubrizol Corporation
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Respondent: ExxonMobil Chemical Patents Inc.
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Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted
27 November 2000 concerning maintenance of
European patent No. 0638630 in amended form.

Composition of the Board:

Chairman: A. J. Nuss
Members: R. Freimuth
S. U. Hoffmann
Summary of Facts and Submissions

I. The Appellants I and II (Opponents I and II) lodged appeals on 6 February and 22 January 2001, respectively, against the interlocutory decision of the Opposition Division, posted on 27 November 2000, which found that the European patent No. 638 630 in the form as amended in opposition proceedings according to the then pending main request did not satisfy the requirements of the EPC, but that it could be maintained in the form as amended according to the auxiliary request.

II. Notice of Opposition had been filed by the Appellants requesting revocation of the patent in suit in its entirety on the grounds of Article 100(a), (b) and (c) EPC, in particular on the grounds of extending the subject-matter beyond the content of the application as filed and of lack of sufficient disclosure, novelty and inventive step.

III. The decision under appeal was based on an amended set of eight claims according to the then auxiliary request, independent claim 1 thereof reading as follows:

"1. A method for the preparation of a refrigerant composition in which a lubricating oil is blended with R134a, wherein the lubricating oil comprises an ester of an organic carboxylic acid having a viscosity of 2 to 30 mm²/sec at 100°C, a volume resistivity of at least 1.1x10¹³ Ùcm at 25°C, a total acid number of 0.05 mg KOH/g or less, a peroxide number of 1 meq/kg or less, an aldehyde number of 1 mg KOH/g or less, a bromine number of 10 mg/100g or less, an ash content of 10 ppm or less and a moisture content of 200 ppm or less, the
lubricating oil being obtained by a) either selecting the ester in that viscosity range, or by mixing esters of different viscosity ranges, or by adjusting the viscosity of the ester by adding a polymer, and b) purifying the ester by contact processing."

The Opposition Division held that the subject-matter of the patent in suit as amended according to the auxiliary request did not extend beyond the content of the application as filed, that the invention was sufficiently disclosed and that the documents cited neither anticipated nor rendered obvious the claimed subject-matter. With respect to the amendments made to claim 1 of that request in examination proceedings the Opposition Division found that the lower limit of the volume resistivity of at least $1.1 \times 10^{13}$ $\Omega$cm was supported by "specimen oil 37" of the application as filed.

IV. The Respondent (Proprietor of the patent) defended the maintenance of the patent in suit on the basis of the amended set of claims submitted as auxiliary request before the Opposition Division.

V. The Appellants objected to the amendment in claim 1 requiring a minimum volume resistivity of $1.1 \times 10^{13}$ $\Omega$cm for the organic carboxylic acid esters which amendment was already comprised in granted claim 1. The specific resistivity value of $1.1 \times 10^{13}$ $\Omega$cm, which was disclosed in the original application solely for the particular "specimen oil 37", could not support that amendment generalising this particular value to become the critical lower limit for any ester covered by claim 1. Furthermore, it was not clearly and unambiguously
apparent whether that "specimen oil 37" exhibited a viscosity within the claimed range and, thus, whether that example was in fact covered by claim 1. The volume resistivity value quoted for this particular example could therefore not provide a proper basis for that amendment with the consequence that claim 1 extended beyond the content of the application as filed (Article 100(c) EPC).

VI. The Respondent acknowledged that the specific volume resistivity of "specimen oil 37" was in fact the basis for the lower limit of $1.1 \times 10^{13}$ $\Omega$cm of the volume resistivity of the organic carboxylic acid esters in claim 1. The issue addressed in the original application was to obtain lubricants having good electrical insulating properties. The original application stated that the values for the inventive oils in Table 10, including specimen oil 37, indicated high insulating properties thereby disclosing the aim at high volume resistivity. Therefore that amendment of claim 1 did not extend beyond the content of the application as filed.

VII. The Appellants requested that the decision under appeal be set aside and the patent be revoked.

The Respondent requested in writing that the appeals be dismissed and the patent be maintained in the form as amended according to the auxiliary request submitted on 12 July 2000 in oral proceedings before the Opposition Division.
VIII. Oral proceedings before the Board were held on 14 October 2003 in the absence of the Appellant I and the Respondent who, after having been duly summoned, did not attend. At the end of the oral proceedings the decision of the Board was given orally.

**Reasons for the Decision**

1. The appeal is admissible.

2. **Amendments (Article 100(c) EPC)**

2.1 The Appellants opposed the patent in suit on the ground that the subject-matter of that patent extended beyond the content of the application as filed. Therefore the amended claims comprised in the patent in suit must be fully examined by the Board as to whether or not that objection is well founded.

2.2 Claim 1 defines the organic carboxylic acid esters comprised in the refrigerant composition as having "a volume resistivity of at least $1.1 \times 10^{13} \, \Omega \text{cm at } 25^\circ \text{C}". The Appellants objected in particular to that feature resulting from an amendment of the claim as generating subject-matter extending beyond the content of the application as filed.

2.3 In order to determine whether or not the subject-matter of a claim in a patent 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 objectively and unambiguously derived from the application as filed.
(see decisions T 288/92, point 3.1 of the reasons; T 680/93, point 2 of the reasons; neither published in OJ EPO)

2.4 The Respondent and the Appellants referred in the application as filed exclusively to "specimen oil 37" as forming or not the basis for the minimum level of $1.1 \times 10^{13}$ $\Omega$cm of the volume resistivity of the organic carboxylic acid esters in claim 1.

It is true that this example "specimen oil 37" in Table 10 on page 31 of the application as filed is in fact the sole originally disclosed quotation of the specific value of $1.1 \times 10^{13}$ $\Omega$cm. Thus, it has to be established whether or not that particular individual "specimen oil" forms a proper basis for generalising that value to become the minimum level for any ester covered by claim 1.

However, the example "specimen oil 37" is not the only one but merely one arbitrary example singled out of a total of 46 examples comprised in the application as filed. In contrast to the Respondent's allegation, the original application indeed neither discloses any preference for any of those examples, let alone for the example "specimen oil 37", nor characterises any example as reflecting the limits of the invention.

It is a matter of course that the particular volume resistivity of $1.1 \times 10^{13}$ $\Omega$cm originally quoted for the "specimen oil 37" is closely related to the chemical structure of that particular specimen oil and to the further product parameters thereof indicated in Table 10 of the application as filed. With respect to
the chemical structure, "specimen oil 37" is the ester of pentaerythritol and a C₅–C₆ fatty acid contact processed with a zeolite (page 29, lines 8 to 11 of the application as filed). Table 10 of the application as filed indicates the further product parameters of "specimen oil 37", i.e. the total acid number of 0.05 mg KOH/g, the peroxide number of 0.6 meq/kg, the aldehyde number of 0.1 mg KOH/g, the bromine number of 7 mg/100g, the ash content of 4 ppm and the moisture content of 200 ppm. In the Board's judgement, the skilled person derives from that example "specimen oil 37" of the application as filed nothing more than the bare disclosure of the specific structural elements and the specific product parameters in their particular combination, namely that of a pentaerythritol ester of a C₅–C₆ fatty acid having the specific volume resistivity of $1.1 \times 10^{13}$ Ωcm and the further specific product parameters listed above.

Therefore, the original disclosure of that particular combination of specific structural elements and specific product parameters cannot support the generalisation indicated in claim 1 which results in covering any organic acid ester having any volume resistivity above the lower limit of $1.1 \times 10^{13}$ Ωcm and having any further product parameter within the claimed ranges. To dismantle that specific volume resistivity value of "specimen oil 37" from the specific structural elements and the further specific product parameters thereof, to generalise that value over the whole scope of claim 1 and, moreover, to transform that single value into the lower limit of an open ended range, provides the skilled person with technical information
which is not directly and unambiguously derivable from the application as filed.

Hence, in the context of claim 1 the feature defining a volume resistivity of at least $1.1 \times 10^{13}$ $\Omega$cm is an undue generalisation of a particular parameter of a single example which generates fresh subject-matter.

2.5 For these reasons, the Board concludes that claim 1 of the patent in suit extends the subject-matter claimed beyond the content of the application as filed, thus justifying the ground for opposition pursuant to Article 100(c) EPC.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: The Chairman:

N. Maslin A. Nuss