

Internal distribution code:

- (A) [] Publication in OJ
(B) [] To Chairmen and Members
(C) [X] To Chairmen

D E C I S I O N
of 2 March 1995

Case Number: T 0191/94 - 3.2.1

Application Number: 88906877.1

Publication Number: 0328675

IPC: F16J 15/12, F02F 11/00, C09K 3/10

Language of the proceedings: EN

Title of invention:
Gasket for internal combustion engine

Patentee:
NIPPON CARBON CO., LTD.

Opponent:
Goetze Vermögensverwaltungs-GmbH

Headword:

Relevant legal provisions:
EPC Art. 111(1)

Keyword:
"Decision re appeals - remittal (yes)"

Decisions cited:
T 0611/90, T 0536/88

Catchword:



Case Number: T 0191/94 - 3.2.1

D E C I S I O N
of the Technical Board of Appeal 3.2.1
of 2 March 1995

Appellant:
(Opponent)

Goetze Vermögensverwaltungs-GmbH
Bürgermeister-Schmidt-Strasse 17
D-51399 Burscheid (DE)

Representative:

Respondent:
(Proprietor of the patent)

Nippon Carbon Co., Ltd.
6-1, Hacchobori 2-chome
Chuo-Ku
Tokyo 104 (JP)

Representative:

Kraus, Walter, Dr.
Patentanwälte Kraus, Weisert & Partner
Thomas-Wimmer-Ring 15
D-80539 München (DE)

Decision under appeal:

Interlocutory decision of the Opposition Division
of the European Patent Office dated 5 January 1994
concerning maintenance of European patent
No. 0 328 675 in amended form.

Composition of the Board:

Chairman: F. Gumbel
Members: S. Crane
J-C. Saisset

Summary of Facts and Submissions

- I. European patent No. 0 328 675 was granted on 18 March 1992 on the basis of European patent application No. 88 906 877.1.
- II. The granted patent was opposed by the Appellants on the grounds that its subject-matter lacked novelty and/or inventive step with respect to the state of the art. They requested that the patent be revoked in its entirety.

The following prior art documents were relied upon:

- (D1) DE-A-3 244 595
- (D2) FR-A-2 379 737

- III. With its decision dated 5 January 1994 the Opposition Division held that the patent was to be maintained in amended form on the basis of a new Claim 1 filed with letter dated 13 May 1993.

This claim reads as follows:

"A gasket for use in internal combustion engines which comprises expanded graphite, a sheet-like core and a binder, characterized by having formed on one or both surfaces of the core a coat layer of a thickness of from 10 to 300 μm composed of a coating material comprising from 20 to 60% by weight of expanded graphite having a specific volume of from 10 to 300 cc/g and from 40 to 80% by weight of a binder, the coat layer being formed by applying said coating material to said sheet-like core by coating, printing, dipping or spraying, followed by curing the applied coating material."

Dependent Claims 2 to 6 relate to preferred embodiments of the gasket according to claim 1.

IV. An appeal against this decision was filed on 4 March 1994 and the fee for appeal filed on the same day.

The Appellants requested that the contested decision be set aside and the patent revoked in its entirety. They also made an auxiliary request for oral proceedings.

In the Statement of Grounds of Appeal filed on 22 April 1994 the Appellants referred to the three new prior art documents:

(D3) US-A-3 740 062

(D4) US-A-4 234 638

(D5) MTZ Motortechnische Zeitschrift 48 (1987) 9,
page 1.

They argued in particular that the subject-matter of Claim 1 lacked inventive step with respect to the teachings of documents D3 and D4.

V. With a letter dated 7 September 1994 the Respondents, referring in particular to decision T 611/90 (OJ EPO 1993, 50), requested that the case be remitted to the Opposition Division to consider the new attack made by the Appellants on the question of inventive step.

VI. In a communication pursuant to Article 110(2) EPC dated 25 November 1994 the Board expressed its view that document D4 represented the closest state of the art and that this document had to be taken into account when assessing patentability. The Board therefore intended to remit the case to the Opposition Division for further examination.

- VII. With a letter dated 5 January 1995 the Appellants withdrew their request for oral proceedings.
- VIII. In a letter dated 26 January 1995 the Respondents explained how in their opinion the subject-matter of the patent was distinguished from the disclosure of document D4. In particular they argued that in the composite sheet of document D4 the binder played only a small role in giving strength to the composite sheet, this strength instead being obtained by use of a metallic reinforcing sheet. Furthermore, this metallic reinforcing sheet was not provided with coat layers as required by Claim 1 but instead, by virtue of its special form, was exposed at the surfaces of the composite sheet.

Reasons for the Decision

1. The appeal complies with the requirements of Articles 106 to 108 and Rules 1(1) and 64 EPC. It is therefore admissible.
2. Present Claim 1 combines the features of granted Claims 1 and 7, those claims in turn corresponding in substance to the original Claims 1 and 7. Present dependent Claims 2 to 6 correspond to the original dependent Claims 2 to 6. The amendments made to the description do not go beyond those necessary to adapt this to the terms of the claims. There are therefore no objections under Articles 123(2) and (3) EPC to the amendments made.
3. Document D4 relates to a composite sheet material for use in particular in the making of gaskets. The material comprises expanded graphite bonded to a core in the form of a metallic sheet. The metallic sheet may be a wire

net (Figs. 1 to 3), a flat sheet (Fig. 4) or a corrugated sheet (Fig. 5). More preferably however, the sheet is formed with "hooks" and perforations prepared by cutting through the sheet and bending the cut portions upwards or downwards (Figs. 6 to 13). With respect to the wire nets it is stated at lines 65 and 66, column 4 that the preferred wire diameter size is 0.01 to 10.5 mm. (In the context the second figure is presumably a clerical or printer's error.) In column 6, lines 30 to 43 the wire diameters used according to the examples range from 0.11 to 0.30 mm. With respect to the hooked metal sheets it is stated in column 5, lines 3 to 15, that they are preferably 0.01 to 1 mm, more preferably 0.05 to 0.5 mm thick and that the hooks are preferably 0.1 to 2 mm high.

The expanded graphite is prepared by a process described at column 1, line 54 to column 2, line 5 and which is substantially identical to that described in the present patent specification at page 3, lines 1 to 12. The process variables are chosen to give an expansion of 10 to 300 times which as stated in the patent specification leads to an expanded graphite with a specific volume of 10 to 300 cc/g. The expanded graphite is mixed with an inorganic or synthetic resin binder such as oxidized graphite (3 to 40 wt% used) or a fluorine resin (1 to 50% used), see column 2, lines 23 to 27. According to Table 1 in column 7 particular example 2-8 comprises 40 wt% of polytetrafluoroethylene.

The composite sheet material may be formed by inserting the sheet-like metallic core into the mixture of expanded graphite and binder and compression moulding the whole at ambient or elevated temperatures, or alternatively by preforming sheets of the expanded graphite and binder and then compression moulding these sheets with the metallic core sandwiched in between, see

column 5, lines 15 to 40. The metallic core and the expanded graphite/binder should be contained in a ratio of from 1:99 to 50:50 in the composite sheet, see column 6, lines 8 to 12.

4. Document D4 is mentioned in the description of the present patent specification and constitutes the basis for the preamble of present Claim 1. It represents the closest state of the art which must be taken into account when evaluating patentability (cf. decision T 536/88, OJ EPO 1992, 638).

In situations such as the present where the Appellants effectively present an entirely fresh case on appeal it belongs to the published jurisprudence of the Boards of Appeal that normally the case should be remitted to the first instance to ensure fairness to both parties, see for example T 611/90 (supra).

In the course of the further examination the Opposition Division should establish by what features the subject-matter of present Claim 1 is distinguished from the closest state of the art, what technical effects those features have, and whether the incorporation of those features was obvious in the light of the other state of the art documents and common general knowledge.

Order

For these reasons it is decided that:

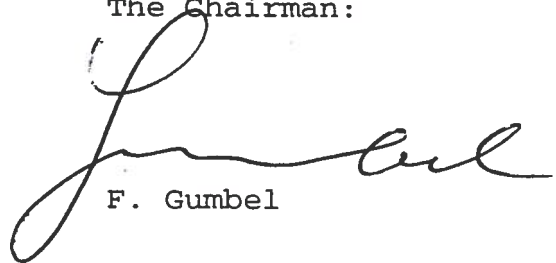
1. The contested decision is set aside.
2. The case is remitted to the first instance for further examination.

The Registrar:



S. Fabiani

The Chairman:



F. Gumbel