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D E C I S I O N
of 22 May 1995

Case Number: T 0186/93 - 3.2.4

Application Number: 88106047.9

Publication Number: 0296323

IPC: F02D 31/00

Language of the proceedings: EN

Title of invention:
Engine control method

Patentee:
HITACHI, LTD.

Opponent:
Robert Bosch GmbH

Headword:
-

Relevant legal provisions:
EPC Art. 123(2) and (3), 111(1)

Keyword:
"Amendments - substantive"
"Decision reappeals - remittal (yes)"

Decisions cited:
T 0063/86

Catchword:
-

Case Number: T 0186/93 - 3.2.4

D E C I S I O N
of the Technical Board of Appeal 3.2.4
of 22 May 1995

Appellant: HITACHI. LTD.
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Representative: Patentanwälte
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Respondent: Robert Bosch GmbH
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Representative: -

Decision under appeal: Decision of the Opposition Division of the European Patent Office dated 25 November 1992, with written reasons posted on 9 December 1992 revoking European patent No. 0 296 323 pursuant to Article 102(1) EPC.

Composition of the Board:

Chairman: C. A. J. Andries
Members: P. Alting van Geusau
J. P. B. Seitz

Summary of Facts and Submissions

I. European patent No. 0 296 323 was granted on the basis of European divisional patent application No. 88 106 047.9, deemed to have been filed on 23 November 1983 (Article 76(1) EPC).

II. In a Notice of Opposition the Respondent (Opponent) requested revocation of the patent in its entirety on the grounds of non-compliance with the provisions of Article 100(a) EPC.

In respect of an alleged lack of novelty and inventive step the opposition was based on

D1: GB-A-2 085 619

III. By a decision given at oral proceedings held on 25 November 1992, with written reasons posted on 9 December 1992, the Opposition Division revoked the patent.

The Opposition Division held that the subject-matter of the claim in accordance with a main request filed at the oral proceedings lacked novelty with regard to D1 and that the subject-matter of the claim in accordance with an auxiliary request filed at the oral proceedings was novel but, when starting from D1, would be arrived at by a skilled person without requiring any inventive activity.

IV. An appeal was lodged against this decision on 16 February 1993, with payment of the appeal fee on the same day. The Statement of Grounds of Appeal was filed

on 19 April 1993 and contained amended patent documents comprising a new claim and an adapted description.

The new claim reads as follows:

"In an engine control system comprising

- (A) a throttle valve (16) provided in an intake path (6) for controlling a flow rate of intake air being introduced into the engine,
- (B) a bypass (26) provided in parallel with the throttle valve (16),
- (C) a bypass valve (62) for controlling a flow rate of auxiliary intake air being introduced into the engine,
- (D) a plurality of sensors including a throttle opening sensor (idle switch 148) for detecting the closed state of said throttle valve (16),
- (E) central processing means (64) for computing a value of a duty factor of said bypass valve (62) in accordance with a real engine speed in order to keep the engine speed at a predetermined value,
- (F) a pulse generating circuit (42) for generating pulses in accordance with the value of said duty factor computed by said central processing means (64),

an engine control method comprising the steps of

- (G) judging whether the engine speed has decreased or not to a predetermined engine speed ($N_1 = \Delta N_0 + N_{REF}$) which is higher than a desired engine speed (N_1) in an engine idle operation, when said throttle valve (16) has been closed and
- (H) in case that it is judged that the engine speed has decreased to said predetermined engine speed (N_1), the duty cycle of said bypass valve (62)

being controlled in accordance with the actual engine speed and in case that it is judged that the engine speed is greater than said predetermined engine speed (N_1), the duty cycle of said bypass valve (62) being controlled in an open loop manner,

characterised in that said method further comprises the steps of

- (I) detecting a changing ratio of the engine speed immediately after the closure of said idle switch (148) and
- (J) in a case that it is judged that the changing ratio is smaller than a predetermined ratio, setting the changing ratio (ΔD) of the duty cycle in the closed loop control to a fixed minimum value."

V. In a communication dated 22 November 1994 the Board drew attention to the fact that the whole granted claim now formed the precharacterising part of the new claim contained in the Appellant's request for maintenance of the patent in amended form and that, since the characterising features of that new claim related to particular details of the control disclosed in the description of the patent in relation to a particular driving condition only, it was possible that this subject-matter had not been included in the European search.

Under these circumstances the Board considered it appropriate to send the case back to the first instance for further prosecution.

- VI. By a letter dated 27 March 1995 the Appellant (Proprietor) submitted that only in the event that neither the appeal were accepted nor the case remitted to the first instance for further prosecution would his auxiliary request for oral proceedings be maintained.
- VII. Neither a request nor a response was filed by the Respondent.

Reasons for the Decision

1. The appeal is admissible.
2. *Amendments to the claim*
 - 2.1 The new claim is based on the granted claim, the features of which now form the precharacterising part of the new claim, and on the subject-matter disclosed in relation to the second preferred embodiment shown in Figures 4 (C) and (D) of the patent discussed in column 8, lines 19 to 30 and column 10, lines 26 to 43, respectively page 16, lines 8 to 20 and page 20, line 15 to page 21, line 3 of the application as originally filed.
 - 2.2 In view of these considerations, no objections under Article 123(2) EPC arise against the new claim.
 - 2.3 Since the subject-matter of the new claim is of more limited scope when compared to the granted claim, the provisions of Article 123(3) EPC are also complied with.

3. *Procedural considerations*

3.1 It is to be noted that the whole granted single claim now forms the precharacterising part of the new claim and that the characterising features relate to particular details of the engine control disclosed in the description in relation to a preferred embodiment of the engine control.

Although the subject-matter of the new claim bears some resemblance to the subject-matter of Claim 1 of the auxiliary request submitted in the opposition proceedings, the new claim is now further restricted to setting the changing ratio of the bypass valve duty cycle to a fixed minimum value during the closed loop stage of the speed control.

3.2 If a request is filed during the appeal proceedings with amended claims, then in accordance with the jurisprudence of the Boards the case is normally remitted if the amendments are substantial and require further substantive examination (see for example T 63/86, OJ EPO 1988, 224).

3.3 In the present case the amendment is considered to be substantial because the claim now relates to subject-matter claimed for the first time in the proceedings.

Furthermore, the question arises whether the subject-matter of the new claim has been included in the European search and therefore whether there is a sufficient basis for the assessment of novelty and inventive step of this newly claimed subject-matter.

In such an exceptional case it should be verified whether or not the search has already taken into account the additional features and if this was not the case it should be ensured that an additional search is carried out first before the substantive examination of the subject-matter of this new claim takes place (cf. Guidelines for examination, D-VI, 5)

- 3.4 Under these circumstances, the Board considers that it has to make use of its power under Article 111(1) EPC to remit the case to the first instance for further prosecution on the basis of newly filed documents (letter dated 19 April 1993) and taking into account the amendments suggested in the letter dated 27 March 1995. Consideration should also be given as to whether an additional search has to be made and whether the subject-matter of the new claim involves an inventive step. Further corrections of the patent, if necessary, can be effected during this further prosecution.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the first instance for further prosecution.

The Registrar:

The Chairman:

N. Maslin

C. Andries