(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 1 930 576 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
13.04.2011 Bulletin 2011/15

(43) Date of publication A2:
11.06.2008 Bulletin 2008/24

(21) Application number: **07122156.8**

(22) Date of filing: **03.12.2007**

(51) Int Cl.:
F02D 41/24 *(2006.01)* ***F02D 41/32*** *(2006.01)*

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR
Designated Extension States:
AL BA HR MK RS

(30) Priority: **08.12.2006 JP 2006331988**

(71) Applicant: **Keihin Corporation**
Shinjuku-ku, Tokyo (JP)

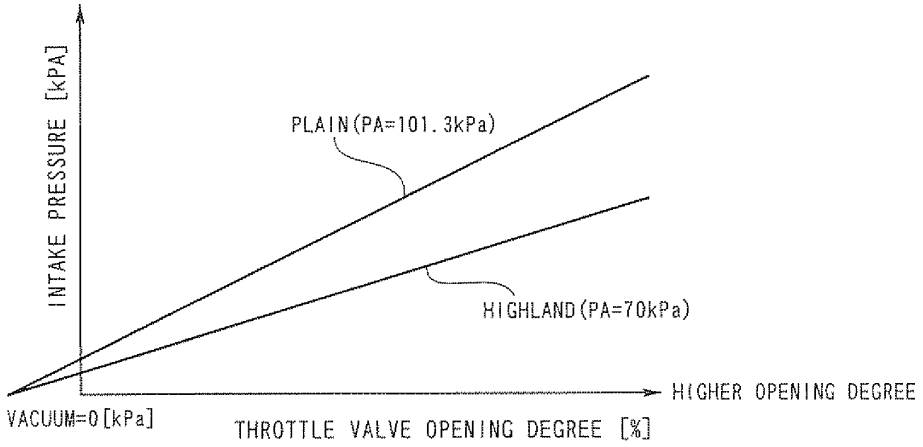
(72) Inventor: **Takahashi, Takeo,**
Keihin Corporation Kakuda R&D Center
Miyagi (JP)

(74) Representative: **Staudt, Hans-Peter**
Bittner & Partner
Intellectual Property Division
Donaustrasse 7
85049 Ingolstadt (DE)

(54) Control Apparatus and Method for Internal Combustion Engine

(57) A control apparatus for an internal combustion engine, which comprises storage means for storing a data map where a plurality of scale values for the intake pressure in the internal combustion engine are associated respectively with a plurality of control amounts for a predetermined control parameter of the internal combustion engine; and scale value rewriting means for rewriting each of the plurality of scale values corresponding to the plurality of control amounts in the data map with a value based on a detected value of the atmospheric pressure. The control amount in the data map corresponding to a detected value of the intake pressure is set as a control amount of the predetermined control parameter, and the control parameter of the internal combustion engine is controlled based on the set control amount, thus reducing the load of an arithmetic element that performs operations for setting the control amount of the engine in accordance with a detected value of an intake air amount.

Fig. 1



EP 1 930 576 A3

Europäisches Patentamt
European Patent Office
Office européen des brevets

EUROPEAN SEARCH REPORT

Application Number
EP 07 12 2156

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 4 864 998 A (ONISHI AKITO [JP]) 12 September 1989 (1989-09-12) * the whole document *	1-6	INV. F02D41/24 F02D41/32
A	JP 63 208641 A (JAPAN ELECTRONIC CONTROL SYST) 30 August 1988 (1988-08-30) * abstract *	1-6	
A,D	EP 1 431 551 A1 (DENSO CORP [JP]) 23 June 2004 (2004-06-23) * the whole document *	1-6	

TECHNICAL FIELDS SEARCHED (IPC)

F02D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	4 March 2011	Parmentier, Hélène

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 07 12 2156

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

04-03-2011

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4864998 A	12-09-1989	JP 1045939 A	20-02-1989
		JP 2535935 B2	18-09-1996
JP 63208641 A	30-08-1988	JP 8033130 B	29-03-1996
EP 1431551 A1	23-06-2004	CN 1476514 A	18-02-2004
		WO 03029636 A1	10-04-2003
		JP 4401635 B2	20-01-2010
		JP 2003172172 A	20-06-2003

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82