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(71) Applicant (for all designated States except US): **TOYOTA JIDOSHA KABUSHIKI KAISHA** [JP/JP]; 1, Toyota-cho, Toyota-shi, Aichi-ken 471-71 (JP).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **NOGAWA, Shinichiro** [JP/JP]; c/o Toyota Jidosha Kabushiki Kaisha, of 1, Toyota-cho. Toyota-shi, Aichi-ken 471-8571 (JP).

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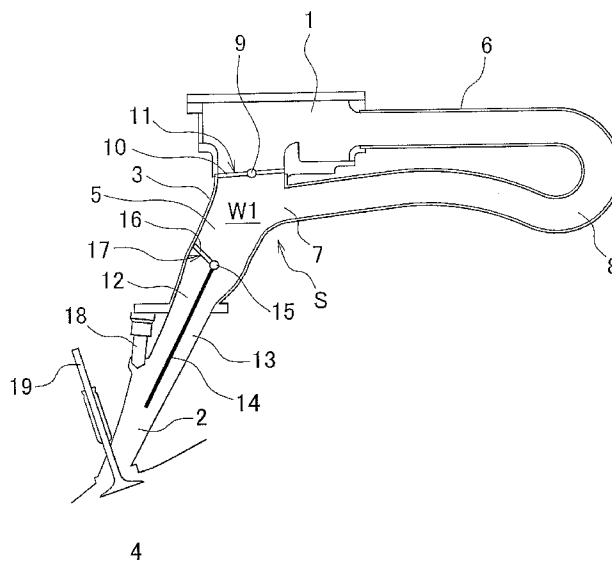
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(54) Title: INTAKE CONTROL DEVICE FOR INTERNAL COMBUSTION ENGINE



(57) Abstract: An intake control device for an internal combustion engine having a first intake passage (5); a second intake passage (8); an intake passage length-changing valve (11); a partition (14) that partitions the intake passage into two partitioned intake passages (12, 13); and a tumble control valve (17). When one of the partitioned intake passages (12) is closed by the tumble control valve (17), air drawn into a combustion chamber through the open partitioned intake passage (13) forms a tumble flow. The length of the second intake passage (8) is longer than the length of the first intake passage (5) from a surge tank (1) to the connection point (S) between the second intake passage (8) and the first intake passage (5), and the passage cross-sectional area of the second intake passage (8) is smaller than the passage cross-sectional area of the first intake passage (5) from the surge tank to the connection point (S).

WO 2007/132311 A3

INTERNATIONAL SEARCH REPORT

International application No

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A. CLASSIFICATION OF SUBJECT MATTER
INV. F02B27/02 F02B31/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
F02B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2004/107934 A1 (BUCKNELL JOHN R [US] ET AL BUCKNELL JOHN R [US] ET AL) 10 June 2004 (2004-06-10) paragraph [0016] - paragraph [0020]; figures 1-5	1-13
A	DE 199 54 455 A1 (FEV MOTORENTECH GMBH [DE]) 17 May 2001 (2001-05-17) column 5, line 43 - column 7, line 12; figures 1-15	1-13
A	JP 07 197823 A (YAMAHA MOTOR CO LTD) 1 August 1995 (1995-08-01) cited in the application abstract	

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Raposo, Jorge

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2004107934 A1	10-06-2004	NONE	
DE 19954455 A1	17-05-2001	WO 0136795 A1 EP 1144820 A1 JP 2003515026 T	25-05-2001 17-10-2001 22-04-2003
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