



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
14.04.2010 Bulletin 2010/15

(51) Int Cl.:
F01L 1/18 (2006.01) **F01L 1/053** (2006.01)
F01L 1/46 (2006.01) **F01L 1/20** (2006.01)

(43) Date of publication A2:
04.03.2009 Bulletin 2009/10

(21) Application number: **08252811.8**

(22) Date of filing: **22.08.2008**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR
Designated Extension States:
AL BA MK RS

(71) Applicant: **Yamaha Hatsudoki Kabushiki Kaisha Iwata-shi, Shizuoka-ken 438-8501 (JP)**

(72) Inventor: **Onimura, Naoki Iwata-shi, Shizuoka-ken 438-8501 (JP)**

(74) Representative: **Harris, Ian Richard D Young & Co 120 Holborn London EC1N 2DY (GB)**

(30) Priority: **31.08.2007 JP 2007226672**

(54) **Engine and vehicle**

(57) To provide a structure for determining a position of a rocker arm (412,413) that allows easy maintenance, an engine (100) has a cylinder head (113) in which a valve drive mechanism (400) is provided. The valve drive mechanism (400) includes rocker arm shafts (414,415) that are fitted to the cylinder head (113); rocker arms (412,413) that are fitted to the rocker arm shafts (414,415) so as to be moveable in the axial direction; and a head cover (114) (an upper arranging member) that is attached to the cylinder head (113). The head cover (114) is provided with guide members (731,732) that engage with the rocker arms (412,413), and guide the rocker arms (412,413) to determined positions on the rocker arm shafts (414,415) when the head cover (114) is attached to the cylinder head (113).

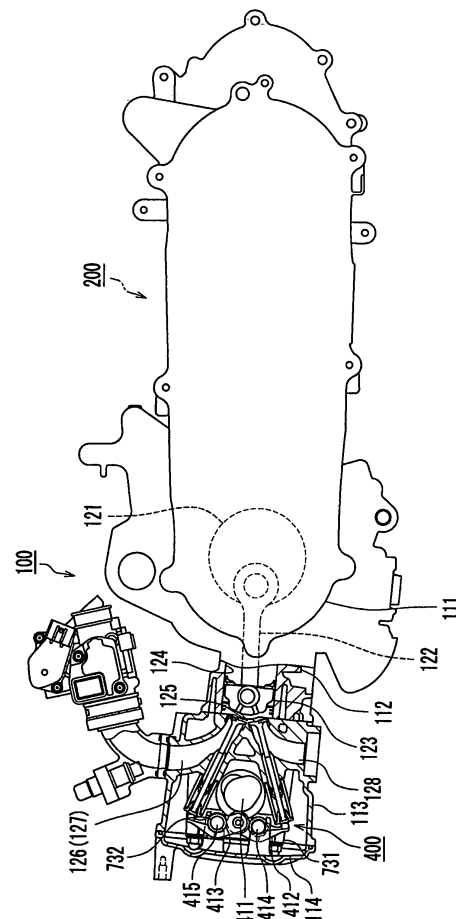


FIG. 2



EUROPEAN SEARCH REPORT

Application Number
EP 08 25 2811

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 2005/061274 A1 (NAKAHIRA YASUYUKI [JP]) 24 March 2005 (2005-03-24) * the whole document *	1	INV. F01L1/18 F01L1/053 F01L1/46 F01L1/20
A	US 4 724 805 A (WIRTH RICK C [US] ET AL) 16 February 1988 (1988-02-16) * the whole document *	1	
A	US 4 724 804 A (WIRTH RICK C [US]) 16 February 1988 (1988-02-16) * the whole document *	1	
A	JP 63 124812 A (FUJI HEAVY IND LTD) 28 May 1988 (1988-05-28) * the whole document *	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			F01L
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		3 March 2010	Klinger, Thierry
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			

 1
EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 08 25 2811

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.

03-03-2010

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2005061274 A1	24-03-2005	CN 1601058 A	30-03-2005
		JP 4361772 B2	11-11-2009
		JP 2005098140 A	14-04-2005

US 4724805 A	16-02-1988	CA 1309625 C	03-11-1992
		DE 3805590 A1	01-09-1988
		GB 2201461 A	01-09-1988
		JP 63227913 A	22-09-1988

US 4724804 A	16-02-1988	CA 1290634 C	15-10-1991
		DE 3805588 A1	01-09-1988
		GB 2201460 A	01-09-1988
		JP 1832869 C	29-03-1994
		JP 5041801 B	24-06-1993
		JP 63227912 A	22-09-1988

JP 63124812 A	28-05-1988	NONE	
