

(11) **EP 1 939 423 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 02.04.2014 Bulletin 2014/14

(51) Int Cl.: **F02B 61/02** (2006.01)

F01L 1/053 (2006.01)

(43) Date of publication A2: 02.07.2008 Bulletin 2008/27

(21) Application number: 07254753.2

(22) Date of filing: 07.12.2007

(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: 27.12.2006 JP 2006350779

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

(72) Inventors:

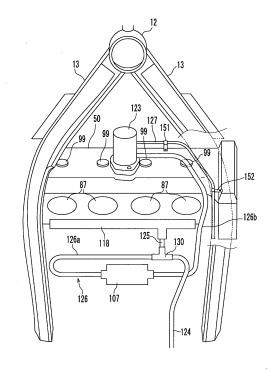
 Harada, Keiichi Iwata-shi Shizuoka-ken 438-8501 (JP)

 Ema, Heiji Iwata-shi Shizuoka-ken 438-8501 (JP)

(74) Representative: Zimmermann, Tankred Klaus et al Schoppe, Zimmermann Stöckeler & Zinkler & Partner Patentanwälte Postfach 246 82043 Pullach bei München (DE)

(54) Straddle-type vehicle

(57)A straddle-type vehicle, for example a motorcycle, having an in-cylinder injection injector directly injecting a fuel into a combustion chamber has compact dimensions and good fuel injection. A low pressure pump carries fuel from a fuel tank, and a high pressure pump 123 pressurizes the fuel from the low pressure pump. The high pressure pump 123 is connected with each incylinder injection injector through a delivery pipe. The low pressure pump is connected with each in-pipe injection injector through the delivery pipe 118. The high pressure pump 123 is fixed to a cylinder head cover 50. At least one part of the high pressure pump 123 is disposed between left and right main frames 13. A high pressure fuel piping 127 is connected to the delivery pipe while passing above a right end part of the cylinder head cover 50 from the high pressure pump 123.





EUROPEAN SEARCH REPORT

Application Number

EP 07 25 4753

	DOCUMENTS CONSID	ERED TO B	E RELEVANT		
Category	Citation of document with in of relevant pass:		appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Υ	GB 2 288 852 A (NIF 1 November 1995 (19 * page 14, line 5 - figures 5,6 *	95-11-01)		1-10	INV. F02B61/02 F01L1/053
Y	EP 1 650 122 A2 (YA 26 April 2006 (2006 * abstract; figures	5-04-26)	R CO LTD [JP])	1-10	
A	GB 2 265 943 A (DAI 13 October 1993 (19 * abstract; figure	93-10-13)	AG [DE])	1	
					TECHNICAL FIELDS SEARCHED (IPC)
	The present search report has	been drawn up fo	or all claims		
	Place of search	Date o	f completion of the search	<u> </u>	Examiner
	The Hague	25	February 2014	Mou	ıton, Jean
X : parti Y : parti docu A : tech O : non	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anot iment of the same category inclogical background written disclosure rmediate document	her	T: theory or principle E: earlier patent doc after the filing date D: document cited in L: document cited fo &: member of the sa	ument, but public the application rother reasons	shed on, or

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

EP 07 25 4753

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.

25-02-2014

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
GB 2288852	A	01-11-1995	DE GB JP JP US	19515191 A1 2288852 A 3077738 B2 H0814140 A 5603303 A	02-11-1 01-11-1 14-08-2 16-01-1 18-02-1
EP 1650122	A2	26-04-2006	EP ES JP JP US	1650122 A2 2441517 T3 4936693 B2 2006143177 A 2006094567 A1	26-04-2 04-02-2 23-05-2 08-06-2 04-05-2
GB 2265943	Α	13-10-1993	DE FR GB IT US	4212255 A1 2689937 A1 2265943 A 1261785 B 5390642 A	14-10-1 15-10-1 13-10-1 03-06-1 21-02-1
			ΙT	1261785 B	03-06-1
nore details about this annex					