(11) **EP 1 258 608 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: **01.12.2004 Bulletin 2004/49**

(51) Int Cl.7: **F01P 7/16**, F01P 11/00

(43) Date of publication A2: **20.11.2002 Bulletin 2002/47**

(21) Application number: 02009169.0

(22) Date of filing: 24.04.2002

(84) Designated Contracting States:

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

Designated Extension States:

AL LT LV MK RO SI

(30) Priority: 15.05.2001 JP 2001145069

(71) Applicant: Honda Giken Kogyo Kabushiki Kaisha Minato-ku, Tokyo (JP)

(72) Inventors:

Yoshino, Kouji
 1-4-1 Chuo, Wako-shi, Saitama-ken (JP)

Amakawa, Yutaka
 1-4-1 Chuo, Wako-shi, Saitama-ken (JP)

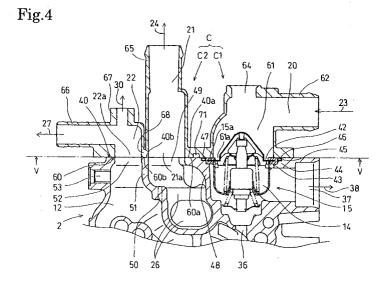
(74) Representative:

Prechtel, Jörg, Dipl.-Phys. Dr. et al Weickmann & Weickmann Patentanwälte Postfach 86 08 20 81635 München (DE)

(54) Engine having a cooling water port cover

(57) A cooling water inlet/outlet cover affixed to a side surface of a cylinder head 2 of an engine E includes a first cover portion C1 and a second cover portion C2. The first cover portion C1 defines an inflow path 20 for introducing cooling water from a radiator 25 to an inlet 42 communicating with a thermostat-type path opening/ closing mechanism 15. The second cover portion C2 defines an outflow path 21 for guiding cooling water from the outlet 49 to a radiator 25 and an outflow path 22 partitioned from the outflow path 21 by the partition wall

68 to guide cooling water from the outlet 52 to a heater core 29 and a throttle body 7. The cooling water inlet/outlet cover C further includes a reservoir portion 71 for holding an extruded part of a liquid packing 54 to be coated around the outlets 49, 52 to prevent the extruded part of the liquid packing 54 from spoiling an elastic material packing 46. This configuration contributes to facilitating connection of hoses to the cooling water inlet and outlets formed in the engine body, thereby facilitating assembly of the engine, and further reducing the number of parts.





EUROPEAN SEARCH REPORT

Application Number EP 02 00 9169

Category	Citation of document with indicatio of relevant passages	n, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)	
A	FR 2 663 988 A (RENAULT 3 January 1992 (1992-01- * page 4, line 20 - line figures *	-03)	to dam	F01P7/16 F01P11/00	
A,D	GB 2 348 485 A (HONDA) 4 October 2000 (2000-10- * figures *	-04)			
A	DE 19 16 640 A (VOLKSWA 8 October 1970 (1970-10 * figure *				
				TECHNICAL FIELDS SEARCHED (Int.CI.7)	
				F01P F02F	
	The present search report has been dr	rawn up for all claims			
	Place of search	Date of completion of the search	T	Examiner	
The Hague		11 October 2004		Kooijman, F	
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with ano document of the same category A: technological background		E : earlier patent docum after the filing date D : document cited in th L : document cited for o	T: theory or principle underlying the E: earlier patent document, but publ		

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

EP 02 00 9169

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.

11-10-2004

							11 10 2
	atent document d in search repor	t	Publication date		Patent family member(s)		Publication date
FR 2	2663988	Α	03-01-1992	FR	2663988	A1	03-01-199
GB 7	2348485	Α	04-10-2000	JP JP BR	3354519 2000282861 0001478	Α	09-12-200; 10-10-200; 17-10-200
DE	1916640	Α	08-10-1970	DE	1916640	A1	08-10-197

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