



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
03.11.2010 Bulletin 2010/44

(51) Int Cl.:
F01M 11/00 (2006.01)

(43) Date of publication A2:
29.09.2010 Bulletin 2010/39

(21) Application number: **10158500.8**

(22) Date of filing: **20.08.2007**

(84) Designated Contracting States:
DE FR GB
Designated Extension States:
AL BA HR MK RS

(30) Priority: **28.08.2006 JP 2006230199**
28.08.2006 JP 2006230200
28.08.2006 JP 2006230201
28.08.2006 JP 2006230202

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
07016291.2 / 1 903 191

(71) Applicant: **Honda Motor Co., Ltd.**
Tokyo 107-8556 (JP)

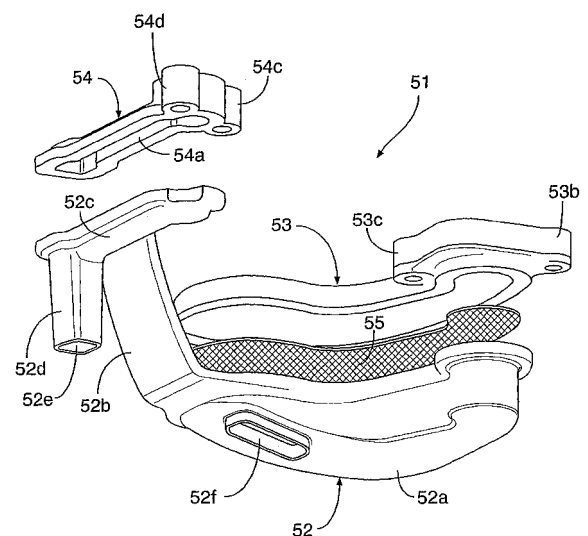
(72) Inventor: **Koyama, Yoshiaki**
Saitama 351-0193 (JP)

(74) Representative: **Trossin, Hans-Jürgen**
Weickmann & Weickmann
Postfach 860 820
81635 München (DE)

(54) **Oil strainer structure of engine and oil return structure of engine**

(57) An oil strainer 51 includes: a lower member 52 having an oil suction hole 52f opening in oil stored in an oil pan; an upper member 53 having an oil discharge hole 53a leading to an oil pump; and a strainer element 55. The lower member 52 and the upper member 53 are joined to each other with the strainer element 55 held between joint surfaces of the upper and lower members 52 and 53. Thus, it is possible to form the oil strainer 51 into a flat shape so as to be compactly arranged in a narrow space, and also maximize an area of the strainer element 55 to prevent clogging. Further, the lower member 52 and the upper member 53, which are die-molded articles, are highly flexible in their shapes, whereby the oil suction hole 52f and the oil discharge hole 53a can be arranged in the most suitable positions, and the cross-sectional area of oil flow can be sufficiently secured.

FIG.7





EUROPEAN SEARCH REPORT

Application Number
EP 10 15 8500

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	EP 0 789 164 A (HONDA MOTOR CO LTD [JP]) 13 August 1997 (1997-08-13) * the whole document *	1	INV. F01M11/00
A	US 4 517 951 A (OTAKA SHOICHI [JP] ET AL) 21 May 1985 (1985-05-21) * figure 1 *	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			F01M
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		28 September 2010	Mouton, Jean
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

2
EPO FORM 1503 03.82 (P04C01)

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

EP 10 15 8500

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.

28-09-2010

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0789164 A	13-08-1997	DE 69702622 D1	31-08-2000
		DE 69702622 T2	23-11-2000
		US 5743230 A	28-04-1998

US 4517951 A	21-05-1985	DE 3331095 A1	01-03-1984
		GB 2127096 A	04-04-1984
