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(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.

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EUROPEAN SEARCH REPORT

Application Number
EP 07 01 6291

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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A		3,4	
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 20 May 2009	Examiner Mouton, Jean
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			

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EPO FORM 1503 03.82 (P04C01)



EUROPEAN SEARCH REPORT

Application Number
EP 07 01 6291

DOCUMENTS CONSIDERED TO BE RELEVANT			
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 20 May 2009	Examiner Mouton, Jean
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			

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1,2

an high-performance oil strainer structure

2. claims: 3,4

an oil strainer structure and an oil return structure

3. claims: 5,6,7

an oil strainer structure which functions as a baffle plate

4. claim: 8

an oil return structure

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

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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
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20-05-2009

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