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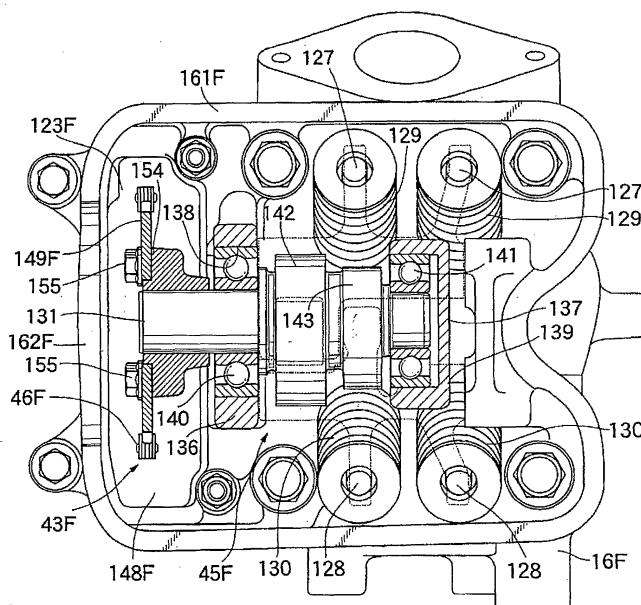
(54) **Overhead cam engine**

(57) To compact a combustion chamber and down-size a cylinder head (16F) in an overhead cam engine, wherein a cam shaft (131) is provided between intake and exhaust valve springs (129, 130) and is rotatably supported by the cylinder head (16F); and wherein the cam shaft (131) is provided with a first cam (142) to drive one of an intake valve (127) and an exhaust valve (128) and is provided with a second cam (143) to drive the other of the intake valve (127) and the exhaust valve

(128).

A cylinder head (16F) supports a cam shaft (131) with its axis line approximately disposed above a cylinder axis line. A second cam (143) is disposed between intake and exhaust valve springs (129, 130) and is formed to be smaller than a first cam (142). The first cam (142) is disposed farther from the position between the intake and exhaust valve springs (129, 130) along the direction of the axis line of the cam shaft (131).

FIG. 6





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EUROPEAN SEARCH REPORT

Application Number
EP 04 10 0944

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	EP 0 607 918 A (HONDA GIKEN KOGYO KABUSHIKI KAISHA) 27 July 1994 (1994-07-27) * column 4, line 16 - column 8, line 7; figures 2,3 *	1-5	F01L1/053 F02F1/38
A	EP 0 422 277 A (YAMAHA MOTOR CO., LTD) 17 April 1991 (1991-04-17) * column 8, line 32 - column 10, line 33; figures 6,7 *	1	
A	US 3 412 720 A (BINDER ROBERT) 26 November 1968 (1968-11-26) * column 2, line 39 - line 69; figures 1,2 *	1	
A	US 5 988 129 A (PRIOR ET AL) 23 November 1999 (1999-11-23) * column 1, line 49 - column 2, line 16; figures 1,2 *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			F01L F02F
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 4 July 2005	Examiner Tietje, K
<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>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 04 10 0944

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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