

Title (en)
A VALVE OPERATING MECHANISM FOR AN INTERNAL COMBUSTION ENGINE

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EP 0474217 A3 19921125 (EN)

Application
EP 91114944 A 19910904

Priority
JP 23526890 A 19900904

Abstract (en)
[origin: EP0474217A2] The present invention relates to a self-operating mechanism for a 4-cycle internal combustion engine comprising more than two intake valves and a plurality of exhaust valves, specifically to a 5-valve engine. In order to provide sufficient space for the cooling jacket on the exhaust side of the cylinder head and/or increasing the valve lift of the exhaust valves without increasing the total height of the engine, the valve spring retainers of the exhaust valves together with the upper ends of the associated exhaust valve springs are accommodated inside the exhaust valve lifters, respectively, while the valve spring retainers of the intake valves are disposed adjacent to a lower end of the associated intake valve lifters. <IMAGE>

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Citation (search report)
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• [Y] US 4615309 A 19861007 - YOSHIKAWA MASAOKI [JP]
• [E] PATENT ABSTRACTS OF JAPAN vol. 015, no. 497 (M-1192)16 December 1991 & JP-A-03 217 606 (YAMAHA MOTOR CO LTD) 25 September 1991
• [A] PATENT ABSTRACTS OF JAPAN vol. 014, no. 355 (M-1004)31 July 1990 & JP-A-2 123 207 (YAMAHA MOTOR CO LTD) 10 May 1990
• [A] PATENT ABSTRACTS OF JAPAN vol. 011, no. 323 (M-634)21 October 1987 & JP-A-62 107 211 (YAMAHA MOTOR CO LTD) 18 May 1987

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