

Title (en)  
Cylinder head for internal-combustion engine.

Title (de)  
Zylinderkopf einer Brennkraftmaschine.

Title (fr)  
Culasse pour moteur à combustion interne.

Publication  
**EP 0436779 A1 19910717 (DE)**

Application  
**EP 90116952 A 19900904**

Priority  
DE 3940845 A 19891211

Abstract (en)  
[origin: DE3943729A1] The cylinder head (1) and valve gear assembly is for a multicylinder IC engine. There may be four valves (7) per cylinder, arranged in a converging position with the sparking plug (27) between them. A tube (26) running vertically through the valve cover (39) and an opening (25) in a carrier block (4) gives access to the spark plug for tightening and removal. The angled guides (17) for the valve tappets (11) are formed in the carrier block (4) which may be integral with the cover (39) and which is bolted in place. The valve guides are formed in the cylinder head. The camshaft bearings are formed by cutouts in the piece of metal (4) including the tappet guides, with bearing top pieces bolted to this piece. USE/ADVANTAGE - Simple cylinder arrangement for IC engine with four valves per cylinder.

Abstract (de)  
Der Zylinderkopf (1) einer Brennkraftmaschine umfaßt einen horizontal geteilten (4) Träger, in dem Nockenwellenlager (6) sowie Aufnahmen (7) für Tassenstößel angeordnet sind. Die Anordnung ist durch Längs- (14) und Querstege (19) steif ausgeführt und ermöglicht durch das Herauslösen der Aufnahmen aus dem Zylindergehäuse ein einfaches Gußverfahren für das Zylinderkopfgehäuse. <IMAGE>

IPC 1-7  
**F01L 1/04; F02F 1/42**

IPC 8 full level  
**F01L 1/04** (2006.01); **F01L 1/053** (2006.01); **F01L 1/14** (2006.01); **F01L 1/26** (2006.01); **F01M 9/10** (2006.01); **F01M 11/02** (2006.01); **F02F 1/24** (2006.01); **F02F 1/42** (2006.01); **F02F 7/00** (2006.01); **F02B 1/04** (2006.01); **F02B 3/06** (2006.01)

CPC (source: EP US)  
**F01L 1/053** (2013.01 - EP US); **F01L 1/143** (2013.01 - EP US); **F01L 1/262** (2013.01 - EP US); **F01M 9/102** (2013.01 - EP US); **F01M 9/104** (2013.01 - EP US); **F01M 11/02** (2013.01 - EP US); **F02F 1/242** (2013.01 - EP US); **F02F 1/4214** (2013.01 - EP US); **F02F 7/006** (2013.01 - EP US); **F01L 2001/0476** (2013.01 - EP US); **F01L 2001/0537** (2013.01 - EP US); **F01L 2003/256** (2013.01 - EP US); **F02B 1/04** (2013.01 - EP US); **F02B 3/06** (2013.01 - EP US); **F02B 2275/02** (2013.01 - EP US); **F02B 2275/18** (2013.01 - EP US); **F02F 2001/104** (2013.01 - EP US); **F02F 2001/245** (2013.01 - EP US); **F02F 2001/246** (2013.01 - EP US)

Citation (search report)  
• [X] US 4612885 A 19860923 - YOSHIKAWA MASAOKI [JP]  
• [Y] US 4641609 A 19870210 - TANAKA YOSHIMICHI [JP]  
• [Y] FR 2580335 A1 19861017 - DAIMLER BENZ AG [DE]  
• [A] DE 3641129 C1 19870730 - DAIMLER BENZ AG  
• [A] EP 0262250 A1 19880406 - AUDI AG [DE]

Cited by  
EP1336725A3; DE4410122A1; DE4410122C2

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**DE 3943729 A1 19940217; DE 3943729 C2 19950713**; DE 3940845 C1 19900809; DE 3943727 A1 19940210; DE 3943727 C2 19950713; DE 3943728 A1 19940210; DE 3943728 C2 19950713; DE 59004034 D1 19940210; EP 0436779 A1 19910717; EP 0436779 B1 19931229; ES 2047785 T3 19940301; JP H0491351 A 19920324; US 5080057 A 19920114

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