

Title (en)  
CYLINDER HEAD FOR A FOUR-STROKE INTERNAL-COMBUSTION ENGINE

Publication  
**EP 0113450 B1 19860910 (DE)**

Application  
**EP 83112438 A 19820618**

Priority  
DE 3125077 A 19810626

Abstract (en)  
[origin: WO8300188A1] The engine (1) comprises, for each cylinder (32), a camshaft (14) arranged horizontally in the upper portion of the cylinder heads (33) for driving the valves (37, 38) arranged according to a standing V. The camshafts (14) are driven each by an intermediary shaft (4) controlled from the crankshaft (3) in a ratio 1:2, arranged in parallel below the crankshaft (3), driven by its front end - when looking in the running direction - , carrying the rotor (12') of a lubricating oil pump (12) and provided at its rear end with two gears 1:1 (13) for the camshafts (14), which pass through a tunnel (36) through the cylinders (32) and the cylinder heads (33). The camshafts (14) are located in the V-chamber of the valves (37, 38) and control the latter by means of rockers (39). The suction connection pipes (28') and the exhaust gas conduits (53) are connected vertically respectively to the top or the bottom of the cylinder heads (33).

IPC 1-7  
**F02B 75/24**; **F01L 1/12**; **F01L 1/26**; **F02B 61/02**; **F02F 1/42**

IPC 8 full level  
**F02B 67/06** (2006.01); **F01L 1/00** (2006.01); **F01L 1/02** (2006.01); **F01L 1/12** (2006.01); **F01L 1/26** (2006.01); **F02B 61/02** (2006.01); **F02B 75/22** (2006.01); **F02B 75/24** (2006.01); **F02F 1/42** (2006.01); **G01L 1/26** (2006.01); **F02B 1/04** (2006.01); **F02B 75/02** (2006.01); **F02B 75/18** (2006.01); **F02F 1/24** (2006.01)

CPC (source: EP US)  
**F01L 1/02** (2013.01 - EP US); **F01L 1/022** (2013.01 - EP US); **F01L 1/024** (2013.01 - EP US); **F01L 1/12** (2013.01 - EP US); **F01L 1/26** (2013.01 - EP US); **F02B 61/02** (2013.01 - EP US); **F02B 75/22** (2013.01 - EP US); **F02B 75/243** (2013.01 - EP US); **F02F 1/4214** (2013.01 - EP US); **F01L 2001/0535** (2013.01 - EP US); **F01L 2003/25** (2013.01 - EP US); **F02B 1/04** (2013.01 - EP US); **F02B 2075/027** (2013.01 - EP US); **F02B 2075/1808** (2013.01 - EP US); **F02B 2275/20** (2013.01 - EP US); **F02F 2001/245** (2013.01 - EP US)

Citation (examination)  
• DE 708283 C 19410717 - MESSERSCHMITT BOELKOW BLOHM  
• DE 1127144 B 19620405 - RUDOLPH DAUB  
• DE 2919213 A1 19801120 - DAIMLER BENZ AG

Cited by  
GB2225610A; EP0235121A1; US4622941A; US5553580A; DE19806272C1

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 0113450 A1 19840718**; **EP 0113450 B1 19860910**; DE 3125077 A1 19830113; DE 3262212 D1 19850321; DE 3273260 D1 19861016; EP 0068336 A1 19830105; EP 0068336 B1 19850206; JP S58501045 A 19830630; JP S6127569 B2 19860626; US 4558676 A 19851217; WO 8300188 A1 19830120

DOCDB simple family (application)  
**EP 83112438 A 19820618**; DE 3125077 A 19810626; DE 3262212 T 19820618; DE 3273260 T 19820618; EP 8200133 W 19820624; EP 82105324 A 19820618; JP 50194082 A 19820624; US 47459583 A 19830225