

Title (en)

AIR-COOLED FOUR-STROKE INTERNAL-COMBUSTION ENGINE WITH ROTARY SLIDE VALVE

Publication

EP 0016381 B1 19830601 (DE)

Application

EP 80101145 A 19800306

Priority

DE 2910822 A 19790320

Abstract (en)

[origin: EP0016381A1] 1. Air-cooled four-stroke internal-combustion engine which is controlled by a rotary valve, with a cylinder liner, mounted in a bearing-bore in the cylinder block, in a manner permitting rotation about its axis, with a fixedly attached bottom which bears against the cylinder head in a manner effecting sealing, and forms the rotary valve, the liner being driven from the crankshaft via a gearwheel-drive in the ratio 1:2, wherein the bottom has a passage port and the cylinder head has at least one inlet port and at least one exhaust port, all three ports being located on the same diameter, (14, 26) is provided in the cylinder block (2), contiguous in a manner known per se with the outer wall (3a) of the cylinder liner (3), and extending from the crankcase (9) essentially up to the cylinder head (6), and opening, at the end adjacent to the cylinder head (6), into a second passage (17), and in that the crankcase (9), which is otherwise closed on all sides, communicates with the outside air via an inlet passage (19, 20; 27) and an automatic valve arrangement (20, 21; 28), which permits outside air to flow into the crankcase (9) during the upward movement of the piston (22) from its lower to its upper dead centre, and closes the inlet passage (19, 20; 27) during the downward movement of the piston (22), so that the air which has been drawn into the crankcase (9) is displaced through the first and second passages (14, 26, 17) for cooling.

IPC 1-7

F01L 7/04; **F01L 7/16**; **F02B 75/34**

IPC 8 full level

F01B 15/00 (2006.01); **F01L 7/04** (2006.01); **F01L 7/16** (2006.01); **F02B 75/34** (2006.01); **F02B 75/02** (2006.01)

CPC (source: EP)

F01B 15/007 (2013.01); **F01L 7/04** (2013.01); **F01L 7/16** (2013.01); **F02B 75/34** (2013.01); **F02B 2075/027** (2013.01)

Cited by

US6386152B1; DE10222751A1; DE10222751B4; EP0877154A3; EP0644319A1; US5482011A; US7131405B2; US7406938B2; WO9803781A1; WO2005031119A3; WO0227165A1; WO0060217A1

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