

Title (en)  
Four-stroke internal combustion engine.

Title (de)  
Viertakt Verbrennungsmaschine.

Title (fr)  
Moteur à combustion interne à quatre temps.

Publication  
**EP 0631040 A1 19941228 (EN)**

Application  
**EP 94106092 A 19940420**

Priority  
• US 8267793 A 19930625  
• US 21916494 A 19940401

Abstract (en)  
A four-stroke engine comprising an engine frame including a block (111) and a head (113), the block forming at least one cylinder (114) and a crankcase (112). A piston (116) is mounted for reciprocation in the cylinder (114), and a crank (117) and connecting rod (118) are mounted in the crankcase (112) and connected to the piston (116). The crankcase (112) includes a fuel inlet port (128) and an outlet port, and a duct connects the outlet port (131) to an intake passage (132) in the head. The inlet port (128) is connected to a supply of a combustible mixture comprising fuel, lubricating oil and air. During engine operation, the mixture flows through the crankcase (112), the duct (132), and the air intake passage (128) to the cylinder (114). Valves (119,120) and valve actuating mechanisms control the flow of the mixture to the cylinder (114) and the flow of exhaust from the cylinder. The oil in the mixture lubricates the engine parts in the crankcase (112), the valves (119,120) and the valve actuating mechanisms. The duct (132) preferably forms a plenum or surge tank containing the mixture under pressure. The engine may include more than one cylinder and piston, such as a two-cylinder engine having pistons which move in synchronism to produce crankcase compression. <IMAGE>

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IPC 8 full level  
**F01B 7/04** (2006.01); **F01B 23/06** (2006.01); **F01M 3/00** (2006.01); **F01M 3/04** (2006.01); **F02B 33/26** (2006.01); **F02B 63/02** (2006.01); **F02B 75/02** (2006.01); **F02B 75/16** (2006.01); **F02B 75/24** (2006.01); **F02B 75/34** (2006.01); **F02B 75/18** (2006.01)

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• [A] PATENT ABSTRACTS OF JAPAN vol. 10, no. 207 (M - 500) 19 July 1986 (1986-07-19)  
• [A] PATENT ABSTRACTS OF JAPAN vol. 8, no. 186 (M - 320) 25 August 1984 (1984-08-25)

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