

Title (en)  
INTERNAL COMBUSTION ENGINE

Publication  
**EP 0030832 B1 19840307 (EN)**

Application  
**EP 80304401 A 19801205**

Priority  
GB 7943027 A 19791213

Abstract (en)  
[origin: EP0030832A1] An internal combustion engine operating on a two-stroke cycle and including a piston 1 reciprocable in a cylinder 2 to drive a crank shaft and also to inhale and compress a volume of air is characterised by a second piston 15 working in a separate cylinder 13 co-axial with and opposed to the first cylinder 2, the piston 15 being synchronised with the first piston 1. The second piston 15 acts to introduce a compressed charge of mixture of air and fuel through a non-return valve 30 into a relatively small ignition chamber 34 including a sparking plug 35 and communicating with a combustion chamber 11 in the head of the cylinder 1. The piston 15 draws air/fuel mixture along an inlet passage 20, past a non-return reed valve 21 and into a crank case 22. On the return stroke of the piston 15 the mixture passes through passages 23 in the piston controlled by a non-return valve 24 and also along passages 14 and around the piston. The next stroke of the piston 15 compresses the charge of mixture and forces it through the valve 30 which generates turbulence prior to ignition.

IPC 1-7  
**F02B 75/28**; F02B 41/00; F02B 33/08

IPC 8 full level  
**F01B 7/14** (2006.01); **F02B 33/08** (2006.01); **F02B 41/00** (2006.01); **F02B 75/28** (2006.01)

CPC (source: EP)  
**F01B 7/14** (2013.01); **F02B 33/08** (2013.01); **F02B 41/00** (2013.01); **F02B 75/28** (2013.01)

Cited by  
US4981114A; US5713521A; AU599356B2; US2014158083A1; CN103867287A; FR2639998A1; EP0156543A1; EP0514982A1; US5271372A; WO9907984A1

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