

Title (en)  
INTERNAL COMBUSTION ENGINE

Title (de)  
VERBRENNUNGSMOTOR

Title (fr)  
MOTEUR À COMBUSTION INTERNE

Publication  
**EP 3760833 A1 20210106 (EN)**

Application  
**EP 19461553 A 20190703**

Priority  
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Abstract (en)  
The subject of the present invention is an internal combustion engine comprising at least one cylinder (1) containing at least one piston (2) inside, which piston (2) together with the cylinder (1) and a closing surface form a combustion chamber (1a). At least one fuel valve (5a) and at least one exhaust valve (5b) are lead to the cylinder. The engine includes a control of the fuel valve (5a) and the exhaust valve (5b), and the piston (2) comprising a head section (2a) and an arm (2b) that are permanently connected to each other and fixed to each other, as well as an lubrication system and an oil sump (18). The engine further comprises rings (3) pivotally connected to the piston (2) arms (2b), the arm (2b) of each piston (2) being connected to a separate ring (3), the each ring (3) being located in a circular opening in a rim (4) separate for each ring (3), where the opening is offset relative to the symmetry axis of the rim (4), the rim (4) and the ring (3) being slidably connected to each other. The cylinder (1) is inside the area defined by the ring (3), and all the rims (4) are connected to each other.

IPC 8 full level  
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Citation (search report)  
• [A] US 6904877 B2 20050614 - STOKES WARWICK JAMES [AU]  
• [A] US 1087240 A 19140217 - KELLINGTON JOHN [CA]  
• [A] GB 309587 A 19300529 - CENTRA HANDELS UND IND A G  
• [A] GB 366265 A 19320204 - FRANCIS MCKENNERY DAINTON  
• [A] GB 286778 A 19280308 - CHARLES AMHERST VILLIERS

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