

Title (en)
Internal combustion engine

Title (de)
Brennkraftmaschine

Title (fr)
Moteur à combustion interne

Publication
EP 1355050 A1 20031022 (FR)

Application
EP 02405309 A 20020416

Priority
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Abstract (en)
The internal combustion engine cylinder includes one piston mounted conventionally, linked to a crank shaft, and a second piston mounted within the same cylinder. This piston is supported on a tubular shaft, extending through the closed end of the cylinder. The second piston is controlled by a solenoid, and is used to assist in the complete removal of exhaust gases from the cylinder after combustion. The internal combustion engine includes a driving piston (2) associated with a crank mechanism, and a second piston (3) moving within the same cylinder, solidly attached to the end of a tubular element (4) which passes through the end of the cylinder opposite the crank mechanism. A variable volume is defined between the two piston (2,3). The fuel inlet system is associated with the tube (4) with an aperture (4c) adjacent to the second piston (3). A plug (8) is provided for ignition and a valve (6,7) for removal of exhaust gases. The tubular element (4) extends beyond the end of the cylinder, and is linked to a solenoid (11).

Abstract (fr)
Ce moteur à combustion interne comprend un cylindre, un piston moteur (2) associé à un système bielle manivelle, un second piston (3), solidaire d'une extrémité d'un élément tubulaire axial (4), un volume variable (14) formé entre les pistons (2, 3), des moyens d'admission (4b) d'un mélange combustible, associés audit élément tubulaire axial (4) muni d'au moins une ouverture latérale (4c), adjacente au second piston (3), des moyens (8) pour l'allumage de ce mélange combustible et des moyens (1a, 6, 22d) pour l'évacuation des gaz brûlés. L'élément tubulaire axial (4) s'étend à l'extérieur du volume variable (14) formé entre les pistons (2, 3) et traverse l'espace cylindrique (15) dans lequel se trouvent les moyens d'allumage (8). Une ouverture centrale (4b) du second piston (3) fait communiquer l'élément tubulaire (4) avec le volume variable (14). L'élément tubulaire (4) et l'obturateur (5) sont associés à des moyens de déplacement (4a, 9, 5a, 11). <IMAGE>

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Citation (applicant)
WO 9826166 A1 19980618 - BOON JULIA [CA], et al

Citation (search report)
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• [A] WO 9849434 A1 19981105 - MITCHELL WILLIAM RICHARD [AU]
• [A] PATENT ABSTRACTS OF JAPAN vol. 006, no. 045 (M - 118) 20 March 1982 (1982-03-20)

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