

Title (en)
COMPRESSED-AIR ENGINE WITH INTEGRATED ACTIVE CHAMBER AND ACTIVE DISTRIBUTION WITH BALANCED VALVE

Title (de)
DRUCKLUFTMOTOR MIT INTEGRIERTER AKTIVER KAMMER UND AKTIVER VERTEILUNG MIT AUSGEGLICHENEM VENTIL

Title (fr)
MOTEUR À AIR COMPRIMÉ À CHAMBRE ACTIVE INCLUSE ET À DISTRIBUTION ACTIVE À SOUPAPE ÉQUILIBRÉE

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Application
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Abstract (en)
[origin: WO2022100810A1] The invention relates to an engine with an active chamber (CA) comprising a cylinder (1) supplied with compressed air, a piston (2), a cylinder head (6) that comprises an intake pipe (8), an intake opening (7), an intake valve (9), in which the volume of the cylinder (1) is divided into an integrated active chamber (CA) and an expansion chamber (CD) and the torque and the speed of the engine are controlled by the opening and the closing of the intake valve (9), characterised in that, in its opening direction, the intake valve (9) moves in the opposite direction to the flow of the pressurised gas stream and, in its closed position, it is held closed on a seat (20) by a return spring (13), and in that the axial forces exerted on the intake valve (9) which result from the pressure prevailing in the intake pipe (8) and in the cylinder (1) are permanently balanced.

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