

Title (en)

GAS EXCHANGE CONTROL MECHANISM FOR AN OPPOSED-PISTON ENGINE

Title (de)

GASWECHSELSTEUERUNG FÜR GEGENKOLBENMOTOREN

Title (fr)

COMMANDE DE RENOUVELLEMENT DES GAZ POUR MOTEUR A PISTONS OPPOSES

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2006002982A1] The invention relates to a gas exchange control mechanism for an opposed-piston engine and allows to open and close annular inlet and outlet slots provided in the cylinder irrespective of the position of the pistons. For this purpose, the opposed pistons (7 and 8) shown in Fig. 2 at the internal dead center including the combustion chamber (17) are guided completely or partially during stroke in sliding sleeves (9 and 10) during operation of the engine so as to reciprocate mechanically, electrically, pneumatically or hydraulically in a linear manner. Said sliding sleeves are adapted to open and close the gas guide channels (13 and 14) located in the housing receiving the sliding sleeves. As shown here, the piston rings never travel across the gap of the sliding sleeve, or only when the slots are closed, depending on the position of the gas exchange channels in the area of the internal or external dead centers. The inventive arrangement avoids the problems known for piston port-controlled engines, e.g. oil being stripped off into the slots and piston rings bursting open.

IPC 8 full level

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