

Title (en)

AXIAL PISTON ENGINE WITH A COOLING CIRCUIT FOR THE CYLINDERS AND PISTONS

Title (de)

AXIALKOLBENMASCHINE MIT EINEM KÜHLKREISLAUF FÜR DIE ZYLINDER UND KOLBEN

Title (fr)

MOTEUR A PISTONS AXIAUX POURVU D'UN CIRCUIT DE REFROIDISSEMENT POUR LES CYLINDRES ET LES PISTONS

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Application

EP 95921838 A 19950607

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Abstract (en)

[origin: DE4423023A1] The invention relates to an axial piston engine with a casing (1), the inside of which contains a leakage chamber (37) and an eccentric disc (3) and a rotatably fitted cylinder drum (6) with cylinders (26,28) and pistons (29) reciprocating therein, the ends of which projecting from the cylinders (26, 28) are supported on the eccentric disc (3). To prevent the cylinders from seizing while maintaining the efficiency of the axial piston engine, the invention provides for a cooling circuit (7.1 to 7.4) which comprises a leakage fluid catchment chamber (25) connected to the leakage chamber (37) and formed in the part of the cylinder drum (6) surrounded by the cylinders (26, 28); inlet and outlet channels (40, 41), at least one radial component of which runs through the cylinder drum (6); and cooling regions (43, 44, 46) running around the cylinders (26, 28), which are connected to the leakage fluid catchment chamber (25) and open via the outlet channels (41) into the leakage chamber (37) at an outer limiting surface (42) of the cylinder drum (6).

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