

Title (en)
HYDRAULIC AXIAL-PISTON ENGINE

Publication
EP 0428574 B1 19921028 (DE)

Application
EP 89908962 A 19890809

Priority
DE 3827365 A 19880812

Abstract (en)
[origin: WO9001637A1] The rotor (18) of an axial piston engine (10) is connected to the engine shaft (16) so as to remain fixed during rotation and during sliding and is supported on the engine housing (91) without play in the axial direction. The cross-sections of control passages (96) alternatively overlap with the control chambers (99) of the engine housing (91), which are put under pressure or relieved of pressure, thus causing the driving pressure chambers (37) of the rotor (18) to be alternately pressurized and depressurized. Said control channels (96) are arranged on a control disk (88), which is linked in a rotationally fixed manner with the driving part (19) of the rotor (18) that delimits the driving pressure chambers (37) but can for compensation sway or be axially shifted relative to said part. Said control disk (88) has a metallic sealing surface (118), inside which the outlet openings (98) of its control channels (96) are situated, and with which it slidably and sealingly rests against a sealing surface situated on the housing side, inside which the outlet openings (98) of the control chambers (99) are situated. Said control disk is forced to rest against the sealing surface (114), situated on the housing side, by elastic sealing elements (34), which ensure the sealing contact of the driving pressure chambers (37) with the housing chamber containing the rotor (18), whereby said sealing elements (34) are thus strongly pre-loaded in the axial direction.

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IPC 8 full level
F03C 1/06 (2006.01)

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F03C 1/0671 (2013.01); **F03C 1/0676** (2013.01)

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