

Title (en)
ROTOR SLIDING-VANE MACHINE

Title (de)
ROTOR-GLEITFLÜGELMASCHINE

Title (fr)
MACHINE A PALETTES COULISSANTES DE ROTOR

Publication
EP 1880109 B1 20090923 (EN)

Application
EP 06733263 A 20060331

Priority
• RU 2006000162 W 20060331
• RU 2005113098 A 20050426

Abstract (en)
[origin: WO2006115434A1] A rotor sliding-vane machine comprises a rotor including working (1) and supporting parts (4) connected via force chambers (6) of variable length so that they rotate synchronously with a possibility of little reciprocal axial movements and tilts. The vanes (8) are located in vane chambers (7) of the working part (1) of the rotor and when the rotor is rotating they cyclically change the degree of protrusion into the annular groove (2) made on the face surface of the working part of the rotor. Between the supporting cover plate (5) of the housing and supporting part of the rotor there are supporting cavities hydraulically connected via the means of local pressures balancing to the force chambers of variable length and cavities of the working chamber in the annular groove of the working part of the rotor. Supporting cavities and force chambers of variable length are made so that pressure forces of the working fluid contained in the force chambers significantly balance pressure forces of the working fluid forcing out the working and supporting parts of the rotor from the working and supporting cover plates of the housing providing just a small tightening required for insulation.

IPC 8 full level
F04C 2/344 (2006.01)

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