

Title (en)
INTERNAL AXIS ROTARY PISTON ENGINE

Publication
EP 0337950 B1 19920708 (DE)

Application
EP 89810265 A 19890406

Priority
DE 3812637 A 19880415

Abstract (en)
[origin: US4960370A] The rotary piston machine has two internal rotors (2, 3) fixed to a common shaft (12) and two external rotors (4, 5) rigidly interconnected by means of an annular rotor disk (9). The working spaces (16) between the engagement parts of both external rotors (4, 5) extend a maximum extension (19) radially inward past the inner boundary of rotor disk (9). For the axial sealing of the working spaces (16), also in the area of said extension (19), the rotor disk (9) encloses a partition body (15), which surrounds the shaft (12) of the internal rotors (2, 3) by means of a bearing (43). A further bearing (13) is provided between rotor disk (9) and partition body (15). Partition body (15) is prevented from concomitant rotation with one of the two rotary machine parts (9, 12) adjacent thereto as a result of the radial displacement of the shaft (12) engaging therein relative to the rotation axis of rotor disk (9). Partition body (15) permits the axial subdivision of the machine into a low pressure part (22) and a high pressure part (23), accompanied by a reinforcement of the engagement parts of the external rotor (4, 5) by its rigid connection to the rotor disk (9).

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F01B 13/02; F01C 1/10; F01C 11/00

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