Title (en)

RADIAL PISTON COMPRESSOR

Publication

EP 0069845 A3 19840222 (DE)

Application

EP 82104321 A 19820517

Priority

DE 3120812 A 19810525

Abstract (en)

[origin: US4465436A] Improvements are disclosed in a radial piston compressor having pistons reciprocally disposed in the piston spaces of a cylinder block rotatably supported on a stationary shaft. The radial motion of the pistons is controlled by a rotatable guide which is arranged with its axis of rotation eccentrically to the axis of rotation of the cylinder block. The portion of the stationary shaft covered by the cylinder block includes a suction slot and a pressure slot extending along a portion of the circumference of the stationary shaft. Oil for sealing the cylinder block and the stationary shaft is introduced into the gap between the cylinder block and the stationary shaft. Due to the rotation of the cylinder block, the piston spaces are communicated alternatingly with the suction slot and the pressure slot through an opening provided in the bottom of the piston spaces. In order to obtain good sealing of the gap between the cylinder block and the stationary shaft by the oil contained in this gap, the gap is provided with a cross section which decreases from the suction slot toward the pressure slot, the oil being introduced into the gap in the vicinity of the largest gap cross section.

IPC 1-7

F04B 27/06

IPC 8 full level

F04B 27/04 (2006.01); F04B 27/06 (2006.01)

CPC (source: EP US)

F04B 27/0423 (2013.01 - EP US); F04B 27/0456 (2013.01 - EP US); F04B 27/0619 (2013.01 - EP US)

Citation (search report)

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- [X] US 3357361 A 19671212 SCOTT ROBERT W
- [A] DE 2832017 A1 19800131 SIEMENS AG
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- [A] DE 2248312 A1 19740411 BOSCH GMBH ROBERT

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EP3489511A1; DE3431158A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

**US** 4465436 A 19840814; AT E29769 T1 19871015; DE 3120812 A1 19821223; DE 3120812 C2 19840419; DE 3277321 D1 19871022; DK 151146 B 19871109; DK 151146 C 19880718; DK 232082 A 19821126; EP 0069845 A2 19830119; EP 0069845 A3 19840222; EP 0069845 B1 19870916; IE 53119 B1 19880706; IE 821236 L 19821125; JP S57200688 A 19821208

DOCDB simple family (application)

**US 37955382** A 19820518; AT 82104321 T 19820517; DE 3120812 A 19810525; DE 3277321 T 19820517; DK 232082 A 19820524; EP 82104321 A 19820517; IE 123682 A 19820524; JP 8872182 A 19820525