

Title (en)

A rotating vane-pump or -motor.

Title (de)

Gleitschieber-Drehkolbenpumpe oder -motor.

Title (fr)

Pompe ou moteur rotatif à palettes.

Publication

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Application

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Abstract (en)

The invention discloses designmeasures to improve the (volumetric) efficiency of known rotating vane-type pumps or -motors. A control-means (12, 14) is disclosed which mechanically controls the radial inward and outward movements of each vane (10) in its slot (9) in the rotor (11) during its rotation along the cylindrical inner-running-surface (2) of the housing (1) of the machine, in addition to the normal centrifugal force acting on the vanes (10). Additional springs urging the vanes outward and appropriate wear-resisting running- and sealing inlays (42) for the vanes sliding over the housing and the endcovers are resealed as well. So are sealingrings (22) or -plates between the rotor-end faces and the endcovers. All the above measures reducing blow-by and wear.

IPC 1-7

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IPC 8 full level

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Citation (search report)

- GB 1553794 A 19791010 - NIPPON PISTON RING CO LTD, et al
- US 3167023 A 19650126 - FRANK SCOGNAMILLO
- US 4133618 A 19790109 - SMOLINSKI RONALD E
- US 2311162 A 19430216 - DU BOIS VIRGIL L
- DE 1811439 A1 19690703 - BOESCHEN MAGNUS
- DE 596625 C 19340507 - DIMITRI NICOLAS HAPKINS
- US 3167022 A 19650126 - FRANK SCOGNAMILLO
- FR 22604 E 19210804 - EMILE LOUIS MALLARD [FR]
- US 2672282 A 19540316 - VAZQUEZ NOVAS CAMILO
- FR 498952 A 19200128 - EDMOND GUSTAVE HENRY [FR]
- FR 2126668 A5 19721006 - PETERS AG CLAUDIUS
- GB 278382 A 19271222 - SWISS LOCOMOTIVE & MACHINE WORKS
- FR 2370185 A1 19780602 - NIPPON PISTON RING CO LTD [JP]
- GB 908722 A 19621024 - AMERICAN THERMOCATALYTIC CORP
- GB 135834 A 19200715 - SWARTLING HUGO LARS REINHOLD [SE]
- US 3256831 A 19660621 - KARL EICKMANN

Cited by

ITMI20111828A1; CN106401948A; FR2748068A1; EP0152395A1; DE4036251A1; EP0838594A1; FR2692009A1; CN106438350A; GB2448078A; US8011909B2; DE102008016212B4; WO2013050852A3; WO8503736A1; WO2022159479A1; WO0055478A1

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