

Title (en)
Variable-displacement sliding-vane pump.

Title (de)
Flügelzellenpumpe mit verstellbarem Fördervolumen.

Title (fr)
Pompe à palettes coulissants à déplacement variable.

Publication
EP 0049838 A1 19820421 (EN)

Application
EP 81107873 A 19811002

Priority
JP 13790080 A 19801002

Abstract (en)
A variable-displacement sliding vane pump in which a generally cylindrical cam member (49) formed with an axial bore (50) is positioned in a cavity (35) in a pump housing (34) and is rockable about an axis (54) fixed with respect to the pump housing (34) and in which a cylindrical rotor (55) is rotatable in the axial bore (50) in the cam member (49) about an axis (Or) fixed with respect to the pump housing (34) and offset from the center axis (Oc) of the axial bore (50) in the cam member (49) and is formed with radial slots (57) having vanes (58) slidably received in the slots (57), respectively, wherein a pressure-acting member (60) responsive to variation in the pressure of the fluid delivered from the pump chamber (56) formed between the rotor (55) and the cam member (49) is operative to drive the cam member (49) to turn about the axis (54) of rocking motions of the cam member (49) in a direction to reduce the amount of eccentricity between the axis (Or) of rotation of the rotor (55) and the center axis (Oc) of the cam member (49) in response to an increase in the fluid pressure, the pressure-acting member (60) being constructed separately of the pump housing (34) and being urged to turn the cam member (49) about the axis (54) of rocking motions thereof in a direction to increase the aforesaid amount of eccentricity.

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F04C 15/04

IPC 8 full level
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CPC (source: EP)
F04C 14/226 (2013.01)

Citation (search report)
• US 3334590 A 19670808 - CLIVE WADDINGTON
• DE 1403890 A1 19690703 - PACIFIC PRESS & SHEAR CORP
• FR 981234 A 19510523
• DE 513440 C 19301127 - KARL STRECKERT DIPL ING

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