

Title (en)
Vane pump

Title (de)
Flügelzellenpumpe

Title (fr)
Pompe rotative à palettes

Publication
EP 1471255 A1 20041027 (DE)

Application
EP 03400016 A 20030424

Priority
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Abstract (en)

A vane pump assembly has a rotor pump (2) with a pump housing (10), and a pump zone (12). A rotor (16) rotates within the pump zone, with sliding vanes (18) against the inner peripheral wall (34) to divide the pump zone into two chambers. The vane pump assembly has a rotor pump (2) with a pump housing (10), and a pump zone (12). A rotor (16) rotates within the pump zone, with sliding vanes (18) against the inner peripheral wall (34) to divide the pump zone into two chambers. The vanes have a relative movement in relation to the rotor and the inner wall, and at least one of the moving components has an insert (20,22) forming a mounting, of metal, ceramics, a sintered material or a plastics. The rotor and/or the vane and or the inner wall of the pump zone are of a plastics material.

Abstract (de)

Die Erfindung betrifft eine Rotorpumpe (2) mit einem Pumpengehäuse (10) mit einem Pumpenraum (12), eine im Pumpenraum drehbargelagerten Rotor (16), einen im Rotor verschieblich gelagerten Flügel (18), der den Pumpenraum in zwei Kammern unterteilt und an der Innenumfangswand (34) des Pumpenraums anliegt, sodass der Flügel bezüglich des Rotors und bezüglich der Innenumfangswand eine Relativbewegung ausführt, wobei wenigstens ein Teil der zueinander relativbewegungen ausführenden Bauteile mit einer ein Lager bildenden Einlage (20,22,38,40) versehen ist.
<IMAGE>

IPC 1-7

F04C 2/344; F04C 15/00; F01C 21/08

IPC 8 full level

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CPC (source: EP)

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F05C 2225/12 (2013.01)

Citation (search report)

- [X] US 2903971 A 19590915 - COLLINS LOWELL J
- [X] FR 2175295 A5 19731019 - REICH FA WILHELM [DE]
- [X] US 2410596 A 19461105 - BRADFORD AARON C
- [X] US 2679973 A 19540601 - BERG JOHN W
- [A] EP 1113175 A1 20010704 - EBARA CORP [JP]
- [A] WO 0225113 A1 20020328 - BOSCH GMBH ROBERT [DE], et al
- [A] EP 1134417 A2 20010919 - JOMA HYDROMECHANIC GMBH [DE]

Cited by

WO2007054155A1; WO2007042134A1; DE102006016244A1; DE102005015721B3; DE102005031589A1; DE102006034758B4;
DE102004053521A1; US8246332B2; WO2008011934A1; EP1707816A1; WO2006048055A1; WO2007054163A1; WO2007115782A1;
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