Title (en)

Magnet driven vane pump

Title (de)

Magnetgetriebene Flügelzellenpumpe

Title (fr)

Pompe à ailettes à entraînement magnétique

Publication

EP 1967733 A2 20080910 (EN)

Application

EP 08003181 A 20080221

Priority

JP 2007056122 A 20070306

Abstract (en)

A magnet drive rotary vane pump has a casing (10) with a pump cavity (12). A rotor (40) carrying a plurality of vanes (50) is disposed within the pump cavity to be rotatable about an eccentric axis with respect to the pump cavity for drawing the fluid into the pump cavity and expelling it out of the pump cavity. The rotor (40) is configured to have a rotor magnet (60) which is magnetically coupled to a stator magnet (70) mounted on the casing outwardly of the pump cavity for driving the rotor. The rotor magnet (60) is configured to have its major portion disposed in an overlapping relation with the stator magnet (70). Thus, the rotor magnet (60) can be mechanically isolated from the stator magnet (70) disposed outside of the casing to establish a sealless coupling therebetween for realizing leakage free pump.

IPC 8 full level

F04C 2/344 (2006.01); **F04C 15/00** (2006.01)

CPC (source: EP)

F04C 2/3442 (2013.01); **F04C 15/008** (2013.01)

Citation (applicant)

JP S532704 A 19780111 - AISIN SEIKI

Cited by

EP2888483A4; WO2016096340A1; WO2013037540A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 1967733 A2 20080910; JP 2008215262 A 20080918; JP 4791987 B2 20111012; KR 100965475 B1 20100624; KR 20080081862 A 20080910; TW 200839098 A 20081001; US 2008219875 A1 20080911

DOCDB simple family (application)

EP 08003181 A 20080221; JP 2007056122 A 20070306; KR 20080020872 A 20080306; TW 97105317 A 20080215; US 7330308 A 20080304