

Title (en)
DEVICE FOR STIRRING OR PUMPING

Publication
EP 0179824 B1 19890125 (DE)

Application
EP 85901951 A 19850430

Priority
CH 220484 A 19840507

Abstract (en)
[origin: WO8505046A1] A magnetic rotor (3) supported so that it can rotate in a receptacle or in a tube and which is in indirect contact with the medium to be stirred or pumped, is made to rotate by a rotating magnetic field of an electromagnetic drive device (2). The rotating magnetic field is generated by several coil segments (6, 6', 6'', 6''') controlled by phase-shifted alternating currents (8, 8'). The coil segments are arranged on an annular core (4) of ferromagnetic material. With the appropriate arrangement and direct control of the coil segments, the rotor located in the region of the axis of the ring effects a very regular rotation, since the presence of the individual ferromagnetic poles is not required. The annular design of the core also enables stirring to be effected in a receptacle with a central outlet of the bottom. The electromagnetic drive system (2) with a core and winding, which only needs a cable lead to be connected to the power source (1), can be designed in a compact, leakproof and chemically resistant manner.

IPC 1-7
B01F 13/08; **B01L 11/00**

IPC 8 full level
F04D 27/00 (2006.01); **B01F 13/08** (2006.01); **B01L 99/00** (2010.01); **F04B 49/06** (2006.01); **F04D 3/00** (2006.01)

CPC (source: EP US)
B01F 33/452 (2022.01 - EP US); **Y10S 366/601** (2013.01 - EP US)

Cited by
CN103768987A; CN104930696A; DE102006024300A1; DE102006024300B4

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)
WO 8505046 A1 19851121; AT E40306 T1 19890215; CH 668919 A5 19890215; DE 3567817 D1 19890302; DE 3590188 D2 19860403; DE 8590060 U1 19860710; EP 0179824 A1 19860507; EP 0179824 B1 19890125; JP S61502039 A 19860918; US 4752138 A 19880621

DOCDB simple family (application)
CH 8500067 W 19850430; AT 85901951 T 19850430; CH 220484 A 19840507; DE 3567817 T 19850430; DE 3590188 T 19850430; DE 8590060 U 19850430; EP 85901951 A 19850430; JP 50182785 A 19850430; US 83432586 A 19860207