

Title (en)
Centrifugal pump with magnetic coupling

Title (de)
Kreiselpumpe mit Magnetkupplung

Title (fr)
Pompe centrifuge à accouplement magnétique

Publication
EP 1719914 A2 20061108 (DE)

Application
EP 06015105 A 20010403

Priority
• EP 01108334 A 20010403
• DE 10024953 A 20000522

Abstract (en)
The pump has a housing plate having a front face and a back face, a housing can fixed to the plate and defining a chamber on the back face, a bearing sleeve in the can fixed to the plate and extending rearward from the back face along an axis, and a rotor shaft extending axially through the sleeve and having a front end and a rear end. Bearings support the rotor shaft in the sleeve for rotation about the axis. The shaft has an outer surface spaced a predetermined inner radial distance from an inside surface of the bearing sleeve. An impeller is carried on the rotor-shaft front end in a pump chamber at the front face of the housing plate. A rotor body fixed to the shaft rear end extends axially forward in the can around the bearing sleeve. The rotor body has an outer surface spaced a predetermined outer radial distance from an inside surface of the can. The inner radial dimension is smaller than the outer radial dimension.

IPC 8 full level
F04D 13/02 (2006.01); **F04D 13/06** (2006.01); **F04D 29/04** (2006.01); **F04D 29/041** (2006.01); **F04D 29/046** (2006.01); **F04D 29/047** (2006.01)

CPC (source: EP US)
F04D 13/026 (2013.01 - EP US); **F04D 29/0413** (2013.01 - EP US); **F04D 29/0465** (2013.01 - EP US); **F04D 29/047** (2013.01 - EP US)

Citation (applicant)
• DE 3715484 A1 19881117 - KLAUS UNION ARMATUREN [DE]
• EP 0398175 A1 19901122 - RHEINHUETTE GMBH & CO [DE]
• US 4812108 A 19890314 - KOTERA MASAYUKI [JP]
• US 5160246 A 19921103 - HORIUCHI KOREJIRO [JP]

Cited by
DE102011114191A1; CN103410739A; CN102465884A; WO2013041161A2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
EP 1158174 A2 20011128; **EP 1158174 A3 20050907**; **EP 1158174 B1 20070314**; AT E356937 T1 20070415; AT E486219 T1 20101115; DE 10024953 A1 20011129; DE 50112181 D1 20070426; DE 50115684 D1 20101209; EP 1719914 A2 20061108; EP 1719914 A3 20061115; EP 1719914 B1 20101027; US 2001043865 A1 20011122; US 6554576 B2 20030429

DOCDB simple family (application)
EP 01108334 A 20010403; AT 01108334 T 20010403; AT 06015105 T 20010403; DE 10024953 A 20000522; DE 50112181 T 20010403; DE 50115684 T 20010403; EP 06015105 A 20010403; US 86252601 A 20010522