

Title (en)

Pump with magnetic device

Title (de)

Pumpe mit magnetischem Antrieb

Title (fr)

Pompe à entraînement magnétique

Publication

**EP 0692632 A3 19961204 (DE)**

Application

**EP 95104900 A 19950401**

Priority

DE 4421431 A 19940618

Abstract (en)

[origin: JPH084664A] PURPOSE: To provide an improved laboratory pump capable of being easily installed in a laboratory without requiring inherent driving means, large structure, and wiring. CONSTITUTION: This laboratory pump 1 has a pump casing 2 with an inlet opening 3 and an outlet opening 4, while a pump rotor 5 rotates inside the pump casing 2. The pump rotor 5 has a magnet 6 and is magnetically coupled with a drive magnet 7 of a magnetic stirrer 8. The drive magnet 7 is disposed at the free end part of a drive shaft 9 of a drive motor 10 of the magnetic stirrer 8, while rotating adjacently to a placing-on surface 11 of the magnetic stirrer 8 around a vertical axis 12 of the drive shaft 9 aligned perpendicular to the placing-on surface 11. The drive magnet 7 is aligned such that a vertical axis of the drive magnet 7 disposed at the center to the drive shaft 9 is perpendicular to the vertical axis 12 of the drive shaft 9. Thereby, the free end parts (i.e., magnetic poles) of the drive magnet 7 rotate on a circular track parallel to the placing-on surface 11.

IPC 1-7

**F04C 15/00**

IPC 8 full level

**F04C 15/00** (2006.01); **F04D 13/02** (2006.01)

CPC (source: EP US)

**F04C 2/18** (2013.01 - EP); **F04C 15/008** (2013.01 - EP US); **F04D 13/024** (2013.01 - EP US)

Citation (search report)

- [XY] US 4266914 A 19810512 - DICKINSON DAVID G
- [YA] GB 2047810 A 19801203 - NORDSON CORP
- [Y] US 4747744 A 19880531 - DOMINIQUE ALEXANDER L [US], et al
- [A] US 4846641 A 19890711 - PIETERS FERDINANDUS A [US], et al
- [A] EP 0334646 A1 19890927 - NGK INSULATORS LTD [JP]
- [A] US 4927337 A 19900522 - LUSTWERK FERDINAND [US]
- [A] FR 1540100 A 19680920 - ITT
- [A] US 4643641 A 19870217 - CLAUSEN EARL W [US], et al
- [A] DE 4305023 A1 19930819 - OKEN SEIKO KK [JP]
- [A] WO 8101727 A1 19810625 - MCCOY L
- [A] US 3771906 A 19731113 - BOURKE J
- [A] US 3493036 A 19700203 - GOOD ALFRED NELSON, et al
- [A] DE 753585 C 19530504 - IG FARBENINDUSTRIE AG

Designated contracting state (EPC)

CH DE FR GB IT LI

DOCDB simple family (publication)

**DE 4421431 A1 19951221; DE 4421431 C2 19970717;** EP 0692632 A2 19960117; EP 0692632 A3 19961204; JP H084664 A 19960109;  
US 5692885 A 19971202

DOCDB simple family (application)

**DE 4421431 A 19940618;** EP 95104900 A 19950401; JP 14787895 A 19950614; US 49022095 A 19950614