

Title (en)
Centrifugal pump with venting

Title (de)
Kreiselpumpe mit Entlüftung

Title (fr)
Pompe centrifuge avec déaération

Publication
EP 0735272 A1 19961002 (DE)

Application
EP 96104659 A 19960323

Priority
DE 19511027 A 19950328

Abstract (en)

The pump has a housing and a removable insert with intake and outlet. A ventilation device (9) is fastened to the top outer edge of the housing (3). The insert (13) is located below the device, and has passage apertures (14) in the area of the device. The insert has a flange (4), which engages on the housing, and seals the pump against the heating system. The insert contains a hydraulic unit (15), forming a water-containing spiral channel. It also has channels, separated by a valve.

Abstract (de)

Kreiselmotorpumpe mit einer eine Entlüftungsvorrichtung 9 und mit einem in einem Gehäuse 3 angeordneten auswechselbaren Einsatz 13, der einen Einlaß 8 und einen Auslaß 7 aufweist, die in einer seitlichen flachen und offenen Seitenwand 10 des Gehäuses 3 liegen. <IMAGE>

IPC 1-7
F04D 9/00; F04D 29/44; F04D 29/42

IPC 8 full level
F04D 9/00 (2006.01); **F04D 29/42** (2006.01); **F04D 29/44** (2006.01)

CPC (source: EP)
F04D 9/003 (2013.01); **F04D 29/4273** (2013.01); **F04D 29/445** (2013.01)

Citation (search report)

- [Y] FR 1532578 A 19680712 - CHAFFOTEAUX ET MAURY
- [DY] DE 3624917 A1 19870326 - OPLAENDER WILO WERK GMBH [DE]
- [X] DE 9416551 U1 19941201 - WILO GMBH [DE]
- [A] EP 0464355 A2 19920108 - OPLAENDER WILO WERK GMBH [DE]
- [A] DE 9208801 U1 19920903
- [A] GB 1458192 A 19761208 - SEALED MOTOR
- [A] US 4447189 A 19840508 - JENSEN NIELS D [DK], et al

Cited by
EP2990651A1; CN105387000A; EP3364043A1; EP2990651B1

Designated contracting state (EPC)
BE DE FR GB IT

DOCDB simple family (publication)
EP 0735272 A1 19961002; EP 0735272 B1 19990602; DE 19511027 A1 19961002; DE 59602046 D1 19990708

DOCDB simple family (application)
EP 96104659 A 19960323; DE 19511027 A 19950328; DE 59602046 T 19960323