

Title (en)

Centrifugal pump with self-balancing axial drive

Title (de)

Kreiselpumpe mit selbstausgleichendem Axialantrieb

Title (fr)

Pompe centrifuge avec commande axiale auto-équilibrante

Publication

**EP 1247990 A1 20021009 (EN)**

Application

**EP 02076078 A 20020320**

Priority

IT MI20010593 A 20010321

Abstract (en)

The pump has a body (1) with a removable cover (2) holding a rotor (4) on a shaft (3) that connects to a driving shaft (33). Body and rotor sealing is by means of fixed rings (7,8) attached to the casing and facing rings (6,6bis) fixed to the rotor. The rotor fits onto the shaft (3) through a grooved profile (20) that is not restricted in the axial direction. The rotor floats on the liquid pumped by rotation of the drive shaft (33). Through holes (27) in the rotor body open into the upper chamber (23) of the rotor under the cover (2) to balance the axial pressure on the rotor.

IPC 1-7

**F04D 29/22**; **F04D 29/04**

IPC 8 full level

**F04D 29/04** (2006.01); **F04D 29/041** (2006.01); **F04D 29/22** (2006.01)

CPC (source: EP)

**F04D 29/0413** (2013.01); **F04D 29/042** (2013.01); **F04D 29/2266** (2013.01)

Citation (search report)

- [X] DE 2640990 A1 19780316 - KLEIN SCHANZLIN & BECKER AG
- [DX] US 4242039 A 19801230 - BERTHEREAU GILBERT [FR], et al
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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 1247990 A1 20021009**; IT MI20010593 A0 20010321; IT MI20010593 A1 20020921

DOCDB simple family (application)

**EP 02076078 A 20020320**; IT MI20010593 A 20010321