

Title (en)  
Centrifugal pump

Title (de)  
Kreispumpe

Title (fr)  
Pompe centrifuge

Publication  
**EP 1406017 A1 20040407 (EN)**

Application  
**EP 02425649 A 20021028**

Priority  
• EP 02425649 A 20021028  
• EP 02425599 A 20021003

Abstract (en)  
The pump has an impeller provided with one blading (2) suitable for sucking liquids from conduit and pumping them towards a manifold arranged around the impeller. The impeller has another blading (15) oriented in direction opposite to direction (3) of the blading (2) and is linked to a shaft by screw mechanism. The rotation of the shaft in the directions causes axial advancing or moving back, respectively of the impeller.

IPC 1-7  
**F04D 13/14**; **F04D 29/22**

IPC 8 full level  
**F04D 15/00** (2006.01); **F04D 29/22** (2006.01); **F04D 29/50** (2006.01)

CPC (source: EP)  
**F04D 15/0027** (2013.01); **F04D 29/042** (2013.01); **F04D 29/2283** (2013.01); **F04D 29/506** (2013.01)

Citation (search report)  
• [A] GB 1398148 A 19750618 - ESSWEIN SA  
• [A] US 4941801 A 19900717 - TAKAKURA YOSHINARI [JP]  
• [A] US 2916997 A 19591215 - FRANCOIS TERRIE PAUL  
• [A] EP 0465787 A1 19920115 - ZANUSSI ELETTRODOMESTICI [IT]

Cited by  
EP2955384A1; US10288072B2

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

DOCDB simple family (publication)  
**EP 1406017 A1 20040407**

DOCDB simple family (application)  
**EP 02425649 A 20021028**