

Title (en)  
Centrifugal pump

Title (de)  
Kreispumpe

Title (fr)  
Pompe centrifuge

Publication  
**EP 1387086 A1 20040204 (EN)**

Application  
**EP 02425599 A 20021003**

Priority  
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Abstract (en)  
A centrifugal pump comprising an impeller (1) provided with a first blading (2) suitable for sucking liquids from at least one inlet conduit (4) and pumping them towards a manifold (5) arranged around the impeller (1), the blades of this first blading (2) being oriented for pumping according to a rotation direction (3) of the impeller (1), which is mechanically linked to a shaft (7) which can be driven by a motor (8), is provided with a second blading (15) oriented in the direction opposite to the direction of the first blading (2) and is linked to the shaft (7) by means of a screw mechanism (9, 11, 12) so that the rotation of the shaft (7) in one direction (3) or in the other one (18) causes the axial advancing or moving back, respectively, of the impeller (1) in a housing (13) obtained in the body of the pump and the consequent arrangement of the blading (2, 15) suitable for pumping according to the rotation direction (3, 18) of the shaft (7) close to at least one opening (17) which connects the housing (13) of the impeller (1) to the manifold (5). <IMAGE>

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 29/2261** (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  
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