

Title (en)

Device for pumping liquid, and apparatus fitted with such a device.

Title (de)

Gerät zum Pumpen einer Flüssigkeit und Maschine, versehen mit einem solchen Gerät.

Title (fr)

Dispositif de pompage de liquide, et appareil muni d'un tel dispositif.

Publication

**EP 0076739 A1 19830413 (FR)**

Application

**EP 82401757 A 19820928**

Priority

FR 8118640 A 19811002

Abstract (en)

1. An apparatus for pumping liquids, comprising at least a centrifugal pump (9) including an impeller (15) having radial blades axially delimited by an end flange, said impeller being driven by a bidirectional motor (12), and including an air supply duct (18) in communication with the interior of the housing of said pump, characterised in that the impeller (15) carries main blades (21) which are radially oriented in a predetermined sense and axially delimited by at least one end flange (22, 23) and adapted to deliver the liquid upon rotation of the motor (12) in a predetermined sense, and the impeller is provided with auxiliary blades (24) which are formed on the outer surface of said flange (22) and are radially oriented in a sense opposite to that of the main blades (21) and adapted to supply air about the entire periphery of said impeller (15) to thereby rapidly drain the pump upon rotation of the motor (12) in an opposite direction, and characterised in that the air supply duct (18) is coaxial with the impeller (15) and has a first end which is in communication with the interior of the housing (14) of the pump (9) and is disposed on the side of the auxiliary blades (24) of the impeller (15), and has a second end (19) which extends upwardly beyond the maximum level of the pumped liquid and is open to the air.

Abstract (fr)

Dispositif de pompage (8) ayant d'une part une pompe centrifuge (9) dont la roue (15) comprend des aubes principales (21) orientées radialement dans un sens prédéterminé et délimitées axialement à leurs extrémités par deux flasques (22, 23) et des aubes auxiliaires (24) réalisées sur la surface extérieure de l'un (22) de ces flasques et orientées radialement dans un sens opposé à celui de ces aubes principales (21), et d'autre part une cheminée de prise d'air (18) en communication avec l'intérieur du corps (14) de cette pompe (9), à proximité des aubes auxiliaires de la roue (15). Application à un appareil tel qu'un lave-vaisselle.

IPC 1-7

**A47L 15/42; F04D 13/12; F04D 29/18**

IPC 8 full level

**A47L 15/42 (2006.01); F04D 13/12 (2006.01); F04D 29/18 (2006.01)**

CPC (source: EP)

**A47L 15/4225 (2013.01); F04D 13/12 (2013.01); F04D 29/185 (2013.01); A47L 15/4206 (2013.01)**

Citation (search report)

- [Y] US 3294102 A 19661227 - RUSPINO JAMES G, et al
- [Y] US 3973866 A 19760810 - VAUGHAN JAMES E
- [A] FR 2194395 A1 19740301 - BOSCH HAUSGERAETE GMBH [DE]
- [A] DE 1933672 A1 19710114 - MOCZALA DR ING HELMUT, et al

Cited by

EP0268835A3; EP1973459A4; US5470142A; US5709237A; US5755244A; WO2007066968A1

Designated contracting state (EPC)

AT BE CH DE GB IT LI LU NL SE

DOCDB simple family (publication)

**EP 0076739 A1 19830413; EP 0076739 B1 19850605; AT E13628 T1 19850615; DE 3264062 D1 19850711; DK 429982 A 19830403; FR 2514082 A1 19830408; FR 2514082 B1 19851206**

DOCDB simple family (application)

**EP 82401757 A 19820928; AT 82401757 T 19820928; DE 3264062 T 19820928; DK 429982 A 19820928; FR 8118640 A 19811002**