

Title (en)
Pump impeller with valve function

Title (de)
Laufgrad mit Ventilfunktion

Title (fr)
Rouet de pompe avec fonction de clapet anti-retour intégré

Publication
EP 1293678 B1 20071010 (DE)

Application
EP 02013218 A 20020615

Priority
DE 10145411 A 20010914

Abstract (en)
[origin: EP1293678A2] The running wheel (6) of a rotary pump, mounted on a shaft, has a central suction opening as the entry port. When the running wheel is at rest, the leakage flow is blocked by a valve action through a sliding movement of the running wheel within the pump housing. The entry (20) and/or outflow (14) openings in the running wheel are blocked by the valve action. The inner wall has a cylindrical holder, to take the running wheel with an axial movement, and the wheel has an edge (13) which lies directly or indirectly at a sealing surface (18) of the holder when the wheel is pushed back.

IPC 8 full level
F04D 15/00 (2006.01); **F04D 29/04** (2006.01); **F04D 29/14** (2006.01); **F04D 29/16** (2006.01); **F04D 29/22** (2006.01)

CPC (source: EP)
F04D 15/0038 (2013.01); **F04D 29/042** (2013.01); **F04D 29/146** (2013.01); **F04D 29/167** (2013.01)

Cited by
DE102009011946A1; EP1767788A1; FR2870898A1; DE102007052082A1; EP2055958A3; EP2228891A3; EP4390137A1; BE1031160B1; EP2228891A2

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DE FR GB IT

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