

Title (en)
Canned motor pump

Title (de)
Spaltrohrmotorpumpe

Title (fr)
Pompe avec moteur électrique à rotor noyé

Publication
EP 1477683 B1 20120125 (DE)

Application
EP 04008290 A 20040406

Priority
DE 10322464 A 20030516

Abstract (en)
[origin: EP1477683A2] The centrifugal pump (1) has a rotor (7) with curved blades, an axial inlet and a tangential outlet (18). There are additional narrow blades (17) on the flat back of the pump rotor to fling fluid away from the pump and motor (2) bearing (10). This bearing is a ceramic friction bearing with a pair of thrust bearings (11,12). There is a bearing ring (13) in contact with the motor shaft (6). The cooling system has a heat exchanger (3) with a pipe (5) feeding fluid into a central bore in the motor shaft. Fluid may circulate through the bearing and an impeller pump (14) on the bearing returns cooling fluid through a pipe (4) to the heat exchanger. A labyrinth seal and a slinger ring (19) prevent ingress of solid particles into the bearing and motor.

IPC 8 full level
F04D 13/06 (2006.01); **F04D 29/58** (2006.01)

CPC (source: EP)
F04D 13/0613 (2013.01); **F04D 29/588** (2013.01)

Cited by
DE102011119626A1; DE102011119625A1; CN102297143A; CN104006001A; CN107288789A; CN103775347A; US2013227931A1; US9435347B2; WO2013079179A2; WO2013079178A2

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DOCDB simple family (publication)
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