

Title (en)

METHOD FOR OPERATING A MOTOR PUMP

Title (de)

VERFAHREN ZUM BETREIBEN EINES PUMPENAGGREGATS

Title (fr)

PROCEDE DE FONCTIONNEMENT D'UN GROUPE MOTOPOMPE

Publication

**EP 1343972 A1 20030917 (DE)**

Application

**EP 01991838 A 20011213**

Priority

- DE 10064717 A 20001222
- EP 0114656 W 20011213

Abstract (en)

[origin: WO02052156A1] The invention relates to a method for operating a pump unit provided with a centrifugal pump which is driven by an electric motor and which comprises a rotor (11) extending inside a collimator (10). The rotor chamber (17) is separated in a fluid-tight manner with respect to the stator (9). When said motor is actuated, to achieve an operational running speed, liquid which is situated in the rotor chamber (17) is evaporated as a result of the friction heat as the speed rises and is subsequently removed in order to enable the motor to function in a dry running mode.

IPC 1-7

**F04D 13/06**

IPC 8 full level

**F04D 13/08** (2006.01); **F04D 13/06** (2006.01); **F04D 29/58** (2006.01)

CPC (source: EP US)

**F04D 13/0626** (2013.01 - EP US); **F04D 13/0633** (2013.01 - EP US); **F04D 29/588** (2013.01 - EP US); **F05D 2260/6022** (2013.01 - EP US)

Citation (search report)

See references of WO 02052156A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

**WO 02052156 A1 20020704**; AT E421041 T1 20090115; CN 1238638 C 20060125; CN 1481478 A 20040310; DE 10064717 A1 20020711; DE 50114665 D1 20090305; EP 1343972 A1 20030917; EP 1343972 B1 20090114; JP 2004516422 A 20040603; JP 4195291 B2 20081210; US 2004052645 A1 20040318; US 7264450 B2 20070904

DOCDB simple family (application)

**EP 0114656 W 20011213**; AT 01991838 T 20011213; CN 01821025 A 20011213; DE 10064717 A 20001222; DE 50114665 T 20011213; EP 01991838 A 20011213; JP 2002553019 A 20011213; US 45077203 A 20031006