

Title (en)
CENTRIFUGAL PUMP ASSEMBLY

Title (de)
KREISELPUMPENAGGREGAT

Title (fr)
UNITÉ DE POMPAGE CENTRIFUGE

Publication
EP 3156663 A1 20170419 (DE)

Application
EP 15189912 A 20151015

Priority
EP 15189912 A 20151015

Abstract (en)
[origin: US2017108007A1] A water supply system (1) includes an electric motor (8) and a centrifugal pump (7) which is driven by the electric motor (8) and with at least one impeller (10) which produces a main delivery flow (29) through an annular space (12) as well as a cooling fluid delivery flow (30) through a space (28) surrounding the motor (8). The annular space (12) is divided by two guide vanes into part-annular-spaces (23, 24) which have a different pressure level on operation. Each part-annular-space (23, 24) is conductively connected to the space (28) which surrounds the motor (8) and through which the cooling fluid runs.

Abstract (de)
Das Hauwasserwerk (1) weist einen Elektromotor (8) und eine davon angetriebene Kreiselpumpe (7) mit mindestens einem Kreisrad (10) auf, welche einen Hauptförderstrom (29) durch einen Ringraum (12) sowie einen Kühlflüssigkeitsstrom (30) durch einen den Motor (8) umgebenden Raum (28) erzeugt. Der Ringraum (12) wird durch zwei Leitschaufeln in Teilringräume (23, 24) unterteilt, die im Betrieb unterschiedliche Druckniveaus aufweisen. Jeder Teilringraum (23, 24) ist mit dem den Motor (8) umgebenden Raum (28) verbunden, durch den der Kühlflüssigkeitsstrom läuft. (Fig. 5)

IPC 8 full level
F04D 29/44 (2006.01); **F04D 13/06** (2006.01); **F04D 29/58** (2006.01); **F04D 1/06** (2006.01)

CPC (source: CN EP US)
F04D 1/06 (2013.01 - EP US); **F04D 13/06** (2013.01 - CN EP US); **F04D 29/426** (2013.01 - EP US); **F04D 29/445** (2013.01 - EP US); **F04D 29/448** (2013.01 - CN US); **F04D 29/5806** (2013.01 - CN EP US); **F04D 29/588** (2013.01 - CN); **F04D 1/06** (2013.01 - CN); **F05D 2250/52** (2013.01 - EP US)

Citation (search report)

- [X] DE 69406259 T2 19980507 - EBARA CORP [JP]
- [X] JP S51154703 U 19761209
- [I] EP 0831236 A2 19980325 - WILO GMBH [DE]
- [I] EP 1217217 A1 20020626 - GRUNDFOS AS [DK]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3156663 A1 20170419; **EP 3156663 B1 20190724**; CN 107013469 A 20170804; CN 107013469 B 20200317; RU 2641328 C1 20180117; US 10400792 B2 20190903; US 2017108007 A1 20170420

DOCDB simple family (application)
EP 15189912 A 20151015; CN 201610899949 A 20161014; RU 2016140464 A 20161014; US 201615294020 A 20161014