

Title (en)
PUMP AND PUMPING SYSTEM UTILIZING THE SAME

Title (de)
PUMPE UND PUMPENSYSTEM DAMIT

Title (fr)
POMPE ET SYSTÈME DE POMPAGE FAISANT APPEL À CETTE POMPE

Publication
EP 1974144 A4 20120314 (EN)

Application
EP 07708436 A 20070105

Priority
• KR 2007000084 W 20070105
• KR 20060001913 A 20060106

Abstract (en)
[origin: WO2007078175A1] Provided are a pumping device and a pumping system utilizing the same. The pumping system includes: a tower, installed at a water intake place, having an internal space section and a water-bearing section disposed on the internal space section; an outlet pipe connecting the water-bearing section and a reservoir installed on land; an intake pipe which communicates with the internal space section, extends to the water intake place from a lower portion of the tower, and has an upward folded end, a hood being installed at the upward folded end; and a pumping device, installed in the tower, pumping water entered into the internal space section via the intake pipe to the water-bearing section and including: a rotary shaft vertically installed in the tower; a rotor including a screw pumping unit and a centrifugal pumping unit disposed on the screw pumping unit, the screw pumping unit including an inner body installed slidably along the rotary shaft and having a shaft bearing and a buoyancy space, an outer body separated from the inner body by a predetermined distance to surround the inner body, and a plurality of wings installed between the inner body and the outer body to form a spiral pumping passage, and the centrifugal pumping unit radially ejecting water pumped by the screw pumping unit under a centrifugal force; and a driver installed in the tower to drive the rotor.

IPC 8 full level
F04C 18/16 (2006.01); **F04D 3/02** (2006.01)

CPC (source: EP KR US)
B05B 1/12 (2013.01 - KR); **B05B 1/18** (2013.01 - KR); **B05B 9/007** (2013.01 - KR); **B05B 9/03** (2013.01 - KR); **B05B 12/002** (2013.01 - KR); **B05B 13/0278** (2013.01 - KR); **F04D 1/025** (2013.01 - EP US); **F04D 3/02** (2013.01 - EP US)

Citation (search report)
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Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2007078175 A1 20070712; AU 2007203871 A1 20070712; AU 2007203871 B2 20110421; CN 101365881 A 20090211; EP 1974144 A1 20081001; EP 1974144 A4 20120314; JP 2009522501 A 20090611; KR 100731838 B1 20070622; RU 2008132329 A 20100220; RU 2435075 C2 20111127; US 2009003986 A1 20090101

DOCDB simple family (application)
KR 2007000084 W 20070105; AU 2007203871 A 20070105; CN 200780001876 A 20070105; EP 07708436 A 20070105; JP 2008549425 A 20070105; KR 20060001913 A 20060106; RU 2008132329 A 20070105; US 16010507 A 20070105