

Title (en)
WATER SUPPLY DEVICE

Title (de)
WASSERVERSORGUNGSVORRICHTUNG

Title (fr)
DISPOSITIF DE FOURNITURE D'EAU

Publication
EP 2667033 A4 20180124 (EN)

Application
EP 12736816 A 20120120

Priority
• JP 2011010432 A 20110121
• JP 2012051196 W 20120120

Abstract (en)
[origin: EP2667033A1] A water supply apparatus is configured to meet energy-saving demands by controlling a pump so that the rotational speed of the pump is lowered while keeping a constant flow rate. The water supply apparatus includes a pump for pressurizing and delivering water, a frequency converter for supplying electric power to the pump to operate the pump at a variable rotational speed, a discharge-side pressure sensor for detecting a pressure at a discharge side of the pump, and a controller (15) for controlling the rotational speed of the pump. The controller (15) stores a plurality of control head curves (B, C 1 , C 2 , C 3) representing different relationships between flow rates (Q) and heads (H), and controls the rotational speed of the pump based on an alternatively selected one of the control head curves (B, C 1 , C 2 , C 3).

IPC 8 full level
F04D 15/00 (2006.01)

CPC (source: EP KR US)
F04D 15/00 (2013.01 - KR); **F04D 15/0066** (2013.01 - EP US); **F04D 15/0088** (2013.01 - EP); **F05D 2270/3013** (2013.01 - EP)

Citation (search report)
• [XAI] JP 2010209698 A 20100924 - TOSHIBA MITSUBISHI ELEC INC
• [XA] JP 2005351252 A 20051222 - NIKKISO CO LTD, et al
• See references of WO 2012099242A1

Cited by
CN108825520A

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

DOCDB simple family (publication)
EP 2667033 A1 20131127; EP 2667033 A4 20180124; EP 2667033 B1 20191023; CN 103314217 A 20130918; CN 103314217 B 20151223; JP 5914365 B2 20160511; JP WO2012099242 A1 20140630; KR 101760547 B1 20170721; KR 20140007838 A 20140120; US 2014044560 A1 20140213; WO 2012099242 A1 20120726

DOCDB simple family (application)
EP 12736816 A 20120120; CN 201280005545 A 20120120; JP 2012051196 W 20120120; JP 2012553784 A 20120120; KR 20137021450 A 20120120; US 201213980259 A 20120120