

Title (en)
HOT-WATER HEATING APPARATUS

Title (de)
WARMWASSERERWÄRMUNGSVORRICHTUNG

Title (fr)
DISPOSITIF DE CHAUFFAGE D'EAU

Publication
EP 3336445 A1 20180620 (EN)

Application
EP 17191657 A 20170918

Priority
JP 2016243915 A 20161216

Abstract (en)
A hot-water heating apparatus includes a heater incorporating a heat pump cycle and a heating cycle in which hot water is circulated through the heater and a heating terminal unit, the hot water being obtained by heating water by the heater. The heating apparatus further includes a circulation pump circulating the hot water in the heating cycle, a circulation quantity detector configured to detect a quantity of the hot water circulated in the heating cycle, and a controller. A determiner determines a quantity level of the hot water circulated in the heating cycle and sends a result of the determined quantity level to a control terminal slave via a network.

IPC 8 full level
F24H 4/02 (2006.01); **F24D 19/00** (2006.01); **F24D 19/10** (2006.01); **F24H 9/00** (2006.01)

CPC (source: EP US)
F24D 19/0092 (2013.01 - EP); **F24D 19/1039** (2013.01 - EP US); **F24D 19/1048** (2013.01 - EP US); **F24H 4/02** (2013.01 - EP); **F24H 9/0042** (2013.01 - EP); **F24D 2200/123** (2013.01 - EP)

Citation (applicant)
JP 2005121251 A 20050512 - NIPPON ITOMIC CO LTD

Citation (search report)

- [Y] EP 2922129 A1 20150923 - AISIN SEIKI [JP]
- [YD] JP 2005121251 A 20050512 - NIPPON ITOMIC CO LTD
- [Y] JP 2011220676 A 20111104 - MITSUBISHI ELECTRIC CORP
- [Y] JP 2005160745 A 20050623 - YAMAHA LIVING TEC
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EP3438557A1; CN109654777A

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 3336445 A1 20180620; **EP 3336445 B1 20200520**; DK 3336445 T3 20200824; JP 2018096654 A 20180621

DOCDB simple family (application)
EP 17191657 A 20170918; DK 17191657 T 20170918; JP 2016243915 A 20161216