

Title (en)

HEAT EXCHANGE SYSTEM AND SCALE SUPPRESSION METHOD FOR HEAT EXCHANGE SYSTEM

Title (de)

WÄRMEAUSTAUSCHSYSTEM UND KESSELSTEINUNTERDRÜCKUNGSVERFAHREN FÜR WÄRMEAUSTAUSCHSYSTEM

Title (fr)

SYSTÈME D'ÉCHANGE DE CHALEUR ET PROCÉDÉ DE SUPPRESSION DE TARTRE POUR SYSTÈME D'ÉCHANGE DE CHALEUR

Publication

EP 3412991 A4 20190320 (EN)

Application

EP 16894555 A 20161128

Priority

- JP 2016052875 A 20160316
- JP 2016085106 W 20161128

Abstract (en)

[origin: EP3412991A1] A heat exchange system includes a first circulation circuit annularly provide to allow a first liquid to be circulated therein, a second circulation circuit annularly provided to allow a second liquid to be circulated therein, a heat exchanger configured to perform heat exchange between the first liquid and the second liquid, a pressure retention unit configured to pressurize and retain a portion of the second liquid, an opening and closing mechanism unit disposed on an inlet side of the heat exchanger, into where the second liquid is to flow, the opening and closing mechanism unit being provided to switch the second liquid to be made to flow into the heat exchanger, between the second liquid from the second circulation circuit and the second liquid from the pressure retention unit, and a controller which controls the amount of pressure to be applied to the second liquid retained by the pressure retention unit, and controls the switching operation of the opening and closing mechanism unit.

IPC 8 full level

B08B 9/027 (2006.01); **F24D 17/02** (2006.01); **F24D 19/00** (2006.01); **F24H 4/02** (2006.01); **F24H 9/00** (2006.01); **F28F 19/00** (2006.01); **F28G 13/00** (2006.01)

CPC (source: EP)

B08B 9/0325 (2013.01); **F24D 17/02** (2013.01); **F24D 19/0092** (2013.01); **F24H 9/0042** (2013.01); **F28F 19/00** (2013.01); **F28G 13/00** (2013.01)

Citation (search report)

- [A] EP 2980584 A1 20160203 - MITSUBISHI ELECTRIC CORP [JP]
- [A] JP 2013253745 A 20131219 - MITSUBISHI ELECTRIC CORP
- [A] WO 2012137281 A1 20121011 - MITSUBISHI ELECTRIC CORP [JP], et al
- [A] US 2008087749 A1 20080417 - RUSKIN RODNEY [US], et al
- [A] EP 1731849 A1 20061213 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- [A] JP 2012207846 A 20121025 - MITSUBISHI ELECTRIC CORP
- See references of WO 2017158938A1

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 3412991 A1 20181212; **EP 3412991 A4 20190320**; **EP 3412991 B1 20200422**; JP 6239199 B1 20171129; JP WO2017158938 A1 20180322; WO 2017158938 A1 20170921

DOCDB simple family (application)

EP 16894555 A 20161128; JP 2016085106 W 20161128; JP 2017524492 A 20161128