

Title (en)

HOT WATER STORAGE-TYPE HOT WATER SUPPLY DEVICE

Title (de)

HEISSWASSERVERSORGUNGSVORRICHTUNG MIT HEISSWASSERSPEICHER

Title (fr)

DISPOSITIF D'ALIMENTATION EN EAU CHAUDE DE TYPE À STOCKAGE D'EAU CHAUDE

Publication

EP 4151924 A4 20231101 (EN)

Application

EP 21818875 A 20210601

Priority

- JP 2020096277 A 20200602
- JP 2021020870 W 20210601

Abstract (en)

[origin: EP4151924A1] A hot water storage-type hot water supply device performs a first heating-up operation in which water in a hot water storage tank (11) is heated at a first heating capacity using electric power supplied from a commercial power supply in a first time zone, and a second heating-up operation in which water in the hot water storage tank (11) is heated using surplus electric power obtained by subtracting electric power consumed by other appliances from electric power supplied from a natural energy power generation device in a second time zone, which is a time zone other than the first time zone. A first amount of hot water to be produced in the first heating-up operation is set equal to a hot water amount obtained by subtracting a second amount of hot water to be produced in the next second heating-up operation from a predetermined necessary hot water amount per day. In the second heating-up operation, when the surplus electric power is less than electric power that exhibits the first heating capacity, a control unit controls a heating unit (2) to heat water in the hot water storage tank (11) using the surplus electric power at the second heating capacity less than the first heating capacity.

IPC 8 full level

F24H 15/269 (2022.01); **F24D 11/02** (2006.01); **F24D 19/10** (2006.01); **F24H 15/152** (2022.01); **F24H 15/164** (2022.01); **F24H 15/277** (2022.01); **F24H 15/429** (2022.01)

CPC (source: EP)

F24D 19/1054 (2013.01); **F24D 19/106** (2013.01); **F24D 19/1063** (2013.01); **F24H 15/152** (2022.01); **F24H 15/164** (2022.01); **F24H 15/269** (2022.01); **F24H 15/277** (2022.01); **F24H 15/429** (2022.01); **F24D 2200/02** (2013.01); **F24D 2200/12** (2013.01); **F24D 2220/08** (2013.01)

Citation (search report)

- [X] JP 2017089970 A 20170525 - CHOFU SEISAKUSHO CO LTD
- [X] EP 3064858 A1 20160907 - TUXHORN GMBH & CO KG GEB [DE]
- [X] EP 2610999 A2 20130703 - SCHMID WERNER [DE]
- [X] JP 2013148287 A 20130801 - MITSUBISHI ELECTRIC CORP
- [A] US 2012232706 A1 20120913 - HAYASHIDA GAKU [JP]
- See also references of WO 2021246406A1

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 4151924 A1 20230322; **EP 4151924 A4 20231101**; JP 2021191991 A 20211216; JP 7108220 B2 20220728; WO 2021246406 A1 20211209

DOCDB simple family (application)

EP 21818875 A 20210601; JP 2021020870 W 20210601; JP 2021083635 A 20210518