

Title (en)  
HEAT PUMP WATER HEATER

Title (de)  
WÄRMEPUMPENWASSERERHITZER

Title (fr)  
CHAUFFE-EAU À POMPE À CHALEUR

Publication  
**EP 4365507 A1 20240508 (EN)**

Application  
**EP 21948258 A 20210628**

Priority  
JP 2021024402 W 20210628

Abstract (en)  
A heat pump water heater includes a heat pump unit (101) a hot water storage tank (108) including a high temperature part and a low temperature part; a water inlet pipe (117) for supplying water from the low temperature part to the heat pump unit (101); a heat storage unit (109) that absorbs heat from water flowing through the water inlet pipe (117) and stores the heat; a first branch valve (110) provided between the low temperature part and the heat storage unit (109) to switch a flow path in the water inlet pipe (117); and a first bypass pipe (115) connecting a part between the heat storage unit (109) and the heat pump unit (101) to the first branch valve (110).

IPC 8 full level  
**F24H 4/02** (2022.01); **F24H 1/18** (2022.01); **F24H 4/04** (2006.01)

CPC (source: EP US)  
**F24D 11/0214** (2013.01 - EP); **F24D 19/1054** (2013.01 - EP); **F24H 1/18** (2013.01 - EP); **F24H 4/02** (2013.01 - EP); **F24H 4/04** (2013.01 - EP US); **F24H 7/04** (2013.01 - EP); **F24H 15/156** (2022.01 - US); **F24H 15/174** (2022.01 - US); **F24H 15/219** (2022.01 - EP); **F24H 15/223** (2022.01 - EP); **F24H 15/315** (2022.01 - EP US); **F24H 15/325** (2022.01 - US); **F28D 20/0039** (2013.01 - EP); **F24D 17/02** (2013.01 - EP); **F24D 2200/123** (2013.01 - EP); **F24D 2220/0235** (2013.01 - EP); **F24D 2220/08** (2013.01 - EP)

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

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4365507 A1 20240508**; **EP 4365507 A4 20240731**; JP WO2023275946 A1 20230105; US 2024328672 A1 20241003; WO 2023275946 A1 20230105

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**EP 21948258 A 20210628**; JP 2021024402 W 20210628; JP 2023531161 A 20210628; US 202118555967 A 20210628