

Title (en)  
Heat pump hydronic heater

Title (de)  
Hydronischer Wärmepumpenheizer

Title (fr)  
Dispositif de chauffage hydronique à pompe thermique

Publication  
**EP 2530399 A2 20121205 (EN)**

Application  
**EP 12153145 A 20120130**

Priority  
JP 2011122003 A 20110531

Abstract (en)  
The heat pump hydronic heater of the invention includes a heat pump circuit and a hot water tank circuit, the heat pump circuit and the hot water tank circuit are accommodated in one casing 50, and a hermetic expansion tank 37 is connected to a hot water tank 7 and the heat pump hydronic heater can absorb expansion of water in a circulation path when hot water in a hot water tank 7 is circulated through heat a floor or supply hot water.

IPC 8 full level  
**F24H 4/04** (2006.01); **F24H 9/02** (2006.01); **F24H 9/06** (2006.01)

CPC (source: EP US)  
**F24H 4/04** (2013.01 - EP US); **F24H 9/02** (2013.01 - EP US); **F24H 9/06** (2013.01 - EP US)

Citation (applicant)

- JP 2008039305 A 20080221 - DAIKIN IND LTD
- JP 2003404907 A 20031203
- JP 2007155257 A 20070621 - MATSUSHITA ELECTRIC IND CO LTD

Cited by  
EP2933580A1; CN106391417A; GB2497171A; GB2497171B

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 2530399 A2 20121205; EP 2530399 A3 20140423; EP 2530399 B1 20160928**; CN 102809185 A 20121205; JP 2012247175 A 20121213; JP 5884042 B2 20160315; US 2012304677 A1 20121206

DOCDB simple family (application)  
**EP 12153145 A 20120130**; CN 201210023799 A 20120203; JP 2011122003 A 20110531; US 201113340250 A 20111229