

Title (en)
HEAT PUMP HOT-WATER SUPPLY DEVICE

Title (de)
HEISSWASSERZUFUHRVORRICHTUNG FÜR WÄRMEPUMPE

Title (fr)
DISPOSITIF D'ALIMENTATION EN EAU CHAUDE DE POMPE A CHALEUR

Publication
EP 1965145 A1 20080903 (EN)

Application
EP 06833808 A 20061130

Priority
• JP 2006324005 W 20061130
• JP 2005354229 A 20051208
• JP 2006055133 A 20060301

Abstract (en)
In a heat pump water heater, a water-cooling heat exchanger is comprised for preliminarily cooling water, that flows into a water-heating heat exchanger for heating the water by a heat exchange with a refrigerant, by performing a heat exchange with a refrigerant, to prevent water from freezing in the water-cooling heat exchanger. A refrigerant temperature sensor 13 for detecting the temperature of the refrigerant discharged from a water-heating heat exchanger 3, and a water-cooling heat exchanger 5 for performing the heat exchange between the refrigerant flowing from an expander 15 toward a compressor 11 and the water supplied from a storage tank 4 are comprised, so that the flow amount of the refrigerant toward the water-cooling heat exchanger 5 is adjusted on the basis of the refrigerant temperature detected by the refrigerant temperature sensor 13. For example, the expander 15 is closed when the temperature detected by the refrigerant temperature sensor 13 is lower than a prescribed temperature.

IPC 8 full level
F24H 1/00 (2006.01); **F24H 1/18** (2006.01)

CPC (source: EP)
F24D 3/08 (2013.01); **F24D 11/0214** (2013.01); **F25B 30/02** (2013.01); **F25B 5/02** (2013.01); **F25B 2339/047** (2013.01); **F25B 2700/21161** (2013.01); **F25B 2700/21174** (2013.01)

Cited by
EP2860469A1; EP3623724A1; WO2015053630A1

Designated contracting state (EPC)
DE ES FR IT SE

DOCDB simple family (publication)
EP 1965145 A1 20080903; EP 1965145 A4 20130925; WO 2007066579 A1 20070614

DOCDB simple family (application)
EP 06833808 A 20061130; JP 2006324005 W 20061130