

Title (en)

HEAT PUMP SYSTEM AND METHOD OF OPERATING

Title (de)

WÄRMEPUMPENSYSTEM UND BETRIEBSVERFAHREN

Title (fr)

SYSTÈME DE POMPE À CHALEUR ET PROCÉDÉ DE FONCTIONNEMENT

Publication

**EP 2347196 A1 20110727 (EN)**

Application

**EP 08878058 A 20081111**

Priority

CN 2008001866 W 20081111

Abstract (en)

[origin: WO2010054498A1] A heat pump system operable in a cooling mode, a heating mode and a defrost mode includes a refrigerant compressor (20), a reversing valve (30), a first heat exchanger (40) and a second heat exchanger (50) disposed in a refrigerant circuit, and a primary expansion valve (45) disposed in the refrigerant circuit between said first heat exchanger (40) and said second heat exchanger (50); said reversing valve (30) is positionable in a first position for operation of said heat pump system in the cooling mode or defrost mode and is positionable in a second position for operation of said heat pump system in the heating mode; a refrigerant bypass circuit establishes a refrigerant flow path from the refrigerant circuit at a first location upstream of said primary expansion valve (45) and downstream of said first heat exchanger (40) with respect to refrigerant flow in the defrost mode to a liquid reservoir (70) disposed in the refrigerant circuit at a second location downstream of said primary expansion valve (45) with respect to refrigerant flow in the defrost mode.

IPC 8 full level

**F25B 13/00** (2006.01); **F25B 9/00** (2006.01); **F25B 30/02** (2006.01); **F25B 47/02** (2006.01)

CPC (source: EP US)

**F25B 13/00** (2013.01 - EP US); **F25B 47/025** (2013.01 - EP US); **F25B 2313/02741** (2013.01 - EP US); **F25B 2400/0411** (2013.01 - EP US);  
**F25B 2400/13** (2013.01 - EP US); **F25B 2400/19** (2013.01 - EP US)

Citation (search report)

See references of WO 2010054498A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**WO 2010054498 A1 20100520**; CN 102216700 A 20111012; CN 102216700 B 20140402; EP 2347196 A1 20110727;  
US 2011203299 A1 20110825

DOCDB simple family (application)

**CN 2008001866 W 20081111**; CN 200880131928 A 20081111; EP 08878058 A 20081111; US 200813126046 A 20081111