

Title (en)
FLASH DEFROST SYSTEM

Title (de)
BLITZABTAUSYSTEM

Title (fr)
SYSTÈME DE DÉGIVRAGE ÉCLAIR

Publication
EP 2673578 A2 20131218 (EN)

Application
EP 12709685 A 20120210

Priority
• GB 201102485 A 20110211
• GB 2012050293 W 20120210

Abstract (en)
[origin: GB2487975A] A vapour compression refrigeration system has a fluid circuit which includes a compressor 1, a condenser 2, an expansion device 4 and an evaporator 5, all through which a refrigerant is circulated. The circuit further includes a defrost receiver 6 for receiving hot refrigerant which is used to provide defrosting of the evaporator by connecting the receiver to the evaporator via a defrost circuit and valve arrangement 9, 10. Prior to the defrost procedure, the circuit permits the compressor to at least partially evacuate the evaporator before the evaporator is connected to the defrost receiver. The defrost receiver may include a thermal store, such as a phase change material 11. Alternatively, the defrost receiver may be in thermal communication with a fluid-to-fluid heat exchanger (15 fig 4) which is provided with heat storage fluid from a reservoir (17 fig 4). The partial evacuation process ensures that flash flooding of the evaporator with hot vapour occurs and reduces the time period for defrosting.

IPC 8 full level
F25B 47/02 (2006.01); **F25B 41/04** (2006.01)

CPC (source: EP GB KR US)
F25B 47/02 (2013.01 - EP KR US); **F25B 47/022** (2013.01 - GB); **F25D 21/00** (2013.01 - GB); **F25D 21/06** (2013.01 - US);
F25B 2400/0411 (2013.01 - EP KR US); **F25B 2400/16** (2013.01 - EP KR US)

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)
GB 201102485 D0 20110330; GB 2487975 A 20120815; AU 2012215130 A1 20130926; AU 2012215130 B2 20170727;
BR 112013020258 A2 20161018; CA 2827053 A1 20120816; CN 103429974 A 20131204; EP 2673578 A2 20131218;
GB 201301403 D0 20130313; GB 2495672 A 20130417; GB 2495672 B 20131225; JP 2014505230 A 20140227; JP 5934257 B2 20160615;
KR 20140007891 A 20140120; MX 2013009155 A 20131206; NZ 615009 A 20140926; RU 2013141537 A 20150320; RU 2582729 C2 20160427;
US 2013312437 A1 20131128; WO 2012107773 A2 20120816; WO 2012107773 A3 20121129; WO 2012107773 A4 20130228

DOCDB simple family (application)
GB 201102485 A 20110211; AU 2012215130 A 20120210; BR 112013020258 A 20120210; CA 2827053 A 20120210;
CN 201280008517 A 20120210; EP 12709685 A 20120210; GB 2012050293 W 20120210; GB 201301403 A 20120210;
JP 2013553027 A 20120210; KR 20137023933 A 20120210; MX 2013009155 A 20120210; NZ 61500912 A 20120210;
RU 2013141537 A 20120210; US 201213983794 A 20120210