

Title (en)

CONTROL SYSTEM FOR REFRIGERATING MACHINE EMPLOYING NON-AZEOTROPIC REFRIGERANT

Title (de)

STEUERVORRICHTUNG FÜR EINE EIN NICHT AZEOTROPES KÄLTEMITTEL EINSETZENDE KÄLTEMASCHINE

Title (fr)

SYSTÈME DE COMMANDE POUR MACHINE RÉFRIGÉRANTE EMPLOYANT UN RÉFRIGÉRANT NON AZÉOTROPE

Publication

EP 1923645 A1 20080521 (EN)

Application

EP 06766729 A 20060614

Priority

- JP 2006311961 W 20060614
- JP 2005260151 A 20050908

Abstract (en)

Issues to be solved On a refrigerator using non-azeotropic refrigerants, its cooling-capability is improved at starting up and/or at going up interior room temperature. Means as solution On a single-stage type refrigerating system using non-azeotropic refrigerant, composing with a compressor (1), a condenser (2), and an evaporator (10), heat exchanging between returned-refrigerant from evaporator and high-pressure refrigerant toward evaporator, electromagnetic valves (5-1 to 5-4) of capillary tubes (6-1 to 6-4) as expansion valves of evaporator are fully open, at moments of large load needed such as at starting up, the system is controlled flux of refrigerant gas and pressure of it by closing them one by the other corresponding to going down of interior room temperature. As the state of interior room temperature is high and low boiling point constituent is not condensed, cooling capability of high boiling point refrigerant performs in maximum.

IPC 8 full level

F25B 1/00 (2006.01)

CPC (source: EP KR US)

F25B 1/00 (2013.01 - KR); **F25B 9/006** (2013.01 - EP US); **F25B 41/385** (2021.01 - EP KR US); **F25B 40/00** (2013.01 - EP US); **F25B 2500/26** (2013.01 - EP US); **F25B 2600/2513** (2013.01 - EP US); **F25B 2700/2104** (2013.01 - EP US)

Cited by

EP2645018A3; EP2008035A4

Designated contracting state (EPC)

AT CH DE DK GB LI

DOCDB simple family (publication)

EP 1923645 A1 20080521; **EP 1923645 A4 20090218**; CN 101128707 A 20080220; JP 2007071468 A 20070322; KR 20080042035 A 20080514; TW 200710355 A 20070316; TW I310827 B 20090611; US 2008302116 A1 20081211; WO 2007029390 A1 20070315

DOCDB simple family (application)

EP 06766729 A 20060614; CN 200680006182 A 20060614; JP 2005260151 A 20050908; JP 2006311961 W 20060614; KR 20077018676 A 20070814; TW 95128054 A 20060801; US 65818206 A 20060614