

Title (en)
REFRIGERATING DEVICE

Title (de)
KÜHLVORRICHTUNG

Title (fr)
DISPOSITIF RÉFRIGÉRANT

Publication
EP 1790919 A1 20070530 (EN)

Application
EP 05783172 A 20050913

Priority
• JP 2005016830 W 20050913
• JP 2004265548 A 20040913

Abstract (en)
When a guard timer of a compressor (141) expires, an R2 signal from a control section (140) of an outdoor unit is turned on (Action I). If a control section (120) of a freezer unit recognizes from an inside temperature detected by a temperature sensor (124) that the R2 signal is turned on and a request for a shift to a freezer thermo-on state is raised (Action II), a freezer electromagnetic valve (121) is opened (Action III). In general, when the electromagnetic valve (121) is opened, it is supposed that an increase in refrigerant suction pressure is detected by a pressure sensor (146) and then the compressor (141) is actuated. However, if an outside air temperature is low, the refrigerant suction pressure remains lower than a predetermined value. Therefore, the control section (120) actuates a booster compressor (131) (Action IV) to raise the refrigerant suction pressure of the compressor (141).

IPC 8 full level
F25B 1/00 (2006.01)

CPC (source: EP US)
F25B 1/10 (2013.01 - EP US); **F25B 5/02** (2013.01 - EP US); **F25B 2400/22** (2013.01 - EP US); **F25B 2500/31** (2013.01 - EP US); **F25B 2600/01** (2013.01 - EP US); **F25B 2700/1933** (2013.01 - EP US); **F25D 2700/12** (2013.01 - EP US)

Citation (search report)
See references of WO 2006030776A1

Cited by
EP3168551A1; WO2013050036A1; EP2623901A1; US9551335B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1790919 A1 20070530; AU 2005283464 A1 20060323; AU 2005283464 B2 20080228; CN 100390474 C 20080528; CN 1906450 A 20070131; TW 200619578 A 20060616; TW I272365 B 20070201; US 2007137231 A1 20070621; US 2009120113 A1 20090514; WO 2006030776 A1 20060323

DOCDB simple family (application)
EP 05783172 A 20050913; AU 2005283464 A 20050913; CN 200580001584 A 20050913; JP 2005016830 W 20050913; TW 94131507 A 20050913; US 35232709 A 20090112; US 58033505 A 20050913