Title (en)

ELECTROMAGNETIC-VALVE CONTROL DEVICE FOR REFRIGERATOR, REFRIGERATOR, AND METHOD FOR CONTROLLING REFRIGERATOR

Title (de)

ELEKTROMAGNETISCHE VENTILSTEUERUNGSVORRICHTUNG FÜR KÜHLSCHRANK, KÜHLSCHRANK UND VERFAHREN ZUR STEUERUNG EINES KÜHLSCHRANKS

Title (fr)

DISPOSITIF DE COMMANDE À SOUPAPE ÉLECTROMAGNÉTIQUE POUR RÉFRIGÉRATEUR, RÉFRIGÉRATEUR ET PROCÉDÉ DE COMMANDE DE RÉFRIGÉRATEUR

Publication

EP 3015797 A1 20160504 (EN)

Application

EP 15191999 A 20151029

Priority

JP 2014222898 A 20141031

Abstract (en)

A refrigerator (10) has a compressor (12), a gas cooler (14), an expansion valve (16), and an evaporator (18) connected in this order by a refrigerant pipe (20) and opens and closes an electromagnetic valve (26) provided in a bypass pipe (22) serving as a bypass section that connects the outlet side and the inlet side of the compressor (12). An electromagnetic-valve control device (30) opens the electromagnetic valve (26) if the pressure of a refrigerant at the outlet of the evaporator (18) during operation of the compressor (12) becomes lower than or equal to an ON threshold value set with reference to the triple point of the refrigerant. Accordingly, the electromagnetic-valve control device (30) can allow the refrigerator (10) to continue operating without having to stop the compressor (12) even when a physical quantity of the refrigerant approaches the triple point.

IPC 8 full level

F25B 49/00 (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP)

F25B 49/005 (2013.01); **F25B 49/022** (2013.01); F25B 47/006 (2013.01); F25B 2309/061 (2013.01); F25B 2600/0261 (2013.01); F25B 2600/0272 (2013.01); F25B 2700/1933 (2013.01)

Citation (applicant)

JP 2792265 B2 19980903

Citation (search report)

- [X] WO 2011066214 A1 20110603 - CARRIER CORP [US], et al
- [I] US 2002174665 A1 20021128 - PRITCHARD BRIAN W [US], et al
- [I] US 2011132006 A1 20110609 - MILTON SCOTT C [US], et al

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3015797 A1 20160504; JP 2016090103 A 20160523

DOCDB simple family (application)

EP 15191999 A 20151029; JP 2014222898 A 20141031