

Title (en)
REFRIGERATING/AIR-CONDITIONING DEVICE

Title (de)
KÜHL-/KLIMAANLAGENVORRICHTUNG

Title (fr)
DISPOSITIF DE RÉFRIGÉRATION/CLIMATISATION

Publication
EP 3130870 A1 20170215 (EN)

Application
EP 16183268 A 20160808

Priority
JP 2015158200 A 20150810

Abstract (en)
In a refrigeration / air-conditioning device including a refrigeration cycle (29), and an expansion valve control means (35), the expansion valve control means (35) includes a target value switching means (36) which adopts the lower one of a target degree of discharge superheat TdSH plus a high pressure saturation temperature and an upper-limit value of the discharge temperature Td as a target value, or compares a target discharge temperature Td obtained by calculation from the rotational speed of a compressor and the high pressure saturation temperature with an upper-limit value and adopts the lower one of the target discharge temperature Td and the upper-limit value as the target discharge temperature Td while performing the control at the predetermined degree of discharge superheat TdSH or the control at the predetermined discharge temperature Td.

IPC 8 full level
F25B 49/02 (2006.01)

CPC (source: EP)
F25B 49/02 (2013.01); **F25B 2600/2513** (2013.01); **F25B 2700/21151** (2013.01); **F25B 2700/21152** (2013.01)

Citation (applicant)
• JP 2001174075 A 20010629 - DAIKIN IND LTD
• JP 2014190632 A 20141006 - HITACHI APPLIANCES INC

Citation (search report)
• [A] WO 2014203364 A1 20141224 - MITSUBISHI ELECTRIC CORP [JP] & US 2015247660 A1 20150903 - NAKAJIMA KOMEI [JP], et al
• [AD] JP 2014190632 A 20141006 - HITACHI APPLIANCES INC
• [AD] JP 2001174075 A 20010629 - DAIKIN IND LTD

Cited by
CN109798626A; CN111566422A; CN115930392A; CN112710071A; US2019248209A1; US10870332B2; EP3730875A4; US11340002B2; CN111664559A; EP3825630A1; IT201900021534A1; US11428447B2; US10955179B2; WO2019113094A1; TWI801460B; WO2019133720A1; WO2023010931A1

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 3130870 A1 20170215; EP 3130870 B1 20180509; AU 2016213701 A1 20170302; AU 2016213701 B2 20171130; JP 2017036881 A 20170216; JP 6594698 B2 20191023

DOCDB simple family (application)
EP 16183268 A 20160808; AU 2016213701 A 20160808; JP 2015158200 A 20150810