

Title (en)
REFRIGERATION DEVICE

Title (de)
KÜHLVORRICHTUNG

Title (fr)
DISPOSITIF DE RÉFRIGÉRATION

Publication
EP 3333503 A4 20190403 (EN)

Application
EP 16834816 A 20160805

Priority
• JP 2015157590 A 20150807
• JP 2016003624 W 20160805

Abstract (en)
[origin: EP3333503A1] The compressor control section (83) controls an operation frequency (FQ) of a compressor (21a) so that in a cooling mode, a temperature of a refrigerant sucked into the compressor (21a) is equal to a target evaporation temperature (Te). A target temperature setting section (84) sets the target evaporation temperature (Te) to be equal to a reference temperature (Teref) lower than a set internal temperature (Tset) during a pull-down period (PD) for reducing the internal temperature (Tr), which has elapsed since the start of the cooling mode. The target temperature setting section (84) corrects the target evaporation temperature (Te) so that if, after the pull-down period (PD) has elapsed, a frequency index value (FQi) dependent on the operation frequency (FQ) of the compressor (21a) during a period of time during which the utilization-side unit (12) is placed in the cooling state is above a predetermined reference value (FQref), the target evaporation temperature (Te) is higher than the reference temperature (Teref).

IPC 8 full level
F25B 1/00 (2006.01); **F25B 49/02** (2006.01); **F25D 11/00** (2006.01)

CPC (source: EP)
F25B 49/022 (2013.01); **F25B 2313/02741** (2013.01); **F25B 2400/0751** (2013.01); **F25B 2600/025** (2013.01); **F25B 2600/2509** (2013.01);
F25B 2700/1933 (2013.01); **F25B 2700/2104** (2013.01); **F25B 2700/21151** (2013.01)

Citation (search report)
• [I] EP 2767779 A1 20140820 - DAIKIN IND LTD [JP]
• [I] EP 2873928 A1 20150520 - DAIKIN IND LTD [JP], et al
• [I] US 2010300125 A1 20101202 - CIKANEK SUSAN REBECCA [US], et al
• [I] US 2015135751 A1 20150521 - TAMAKI SHOGO [JP], et al
• [A] US 2013319018 A1 20131205 - LIM BYOUNG GUK [KR], et al
• See also references of WO 2017026115A1

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)
EP 3333503 A1 20180613; EP 3333503 A4 20190403; EP 3333503 B1 20240515; CN 107850347 A 20180327; CN 107850347 B 20200710;
JP 2017036872 A 20170216; JP 6048549 B1 20161221; WO 2017026115 A1 20170216

DOCDB simple family (application)
EP 16834816 A 20160805; CN 201680046138 A 20160805; JP 2015157590 A 20150807; JP 2016003624 W 20160805