

Title (en)
REFRIGERATION CYCLE DEVICE

Title (de)
KÄLTEKREISLAUFVORRICHTUNG

Title (fr)
DISPOSITIF À CYCLE FRIGORIFIQUE

Publication
EP 3348939 A4 20190417 (EN)

Application
EP 16843748 A 20160810

Priority
• JP 2015178773 A 20150910
• IB 2016054799 W 20160810

Abstract (en)
[origin: EP3348939A1] A refrigeration cycle device, provided with: a compressor (14); a condenser (11); an evaporator (21); a pressure reducer (23); a subcooler (16) performing subcooling on a refrigerant passing through the condenser (11); a subcooling degree calculation unit (114) estimating a suitable subcooling degree of the refrigerant of an outlet of the subcooler (16) on the basis of a refrigerant cycle amount of a portion from the compressor (14) via the condenser (11) and the subcooler (16), and calculating, on the basis of the estimated suitable subcooling degree, a determination threshold value used for determining a refrigeration measurement; a refrigerant determination unit (115) comparing a measured subcooling degree and the determination threshold value, and thereby determining a refrigerant amount.

IPC 8 full level
F25B 49/02 (2006.01); **F24F 11/36** (2018.01); **F24F 11/52** (2018.01); **F24F 11/64** (2018.01); **F25B 40/02** (2006.01)

CPC (source: EP)
F24F 11/36 (2017.12); **F24F 11/52** (2017.12); **F24F 11/64** (2017.12); **F25B 40/02** (2013.01); **F25B 49/02** (2013.01); **F25B 2500/05** (2013.01); **F25B 2500/19** (2013.01); **F25B 2500/24** (2013.01); **F25B 2700/21163** (2013.01)

Citation (search report)
• [XAYI] WO 2015056704 A1 20150423 - TOSHIBA CARRIER CORP [JP]
• [XAYI] WO 2015053178 A1 20150416 - DAIKIN IND LTD [JP]
• [Y] EP 2264379 A1 20101222 - DAIKIN IND LTD [JP]
• See references of WO 2017042649A1

Cited by
EP4130475A4; US2019323917A1; US11079300B2; EP4030122A4; US11260728B2; US11971203B2; US11549735B2; US11959677B2

Designated contracting state (EPC)
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