

Title (en)  
FREEZING DEVICE

Title (de)  
TIEFKÜHLVORRICHTUNG

Title (fr)  
DISPOSITIF DE CONGÉLATION

Publication  
**EP 3264008 A4 20181010 (EN)**

Application  
**EP 15885373 A 20150313**

Priority  
JP 2015057591 W 20150313

Abstract (en)  
[origin: EP3264008A1] A controller of a refrigeration apparatus includes a temperature determination unit configured to determine whether a heat radiating unit temperature is within a target temperature range, a superheat degree calculation unit configured to calculate a degree of superheat of refrigerant flowing through an economizer from a state of refrigerant detected in a state detection unit, and an opening degree control unit configured, when the temperature determination unit determines that the heat radiating unit temperature is within the target temperature range, to control an opening degree of a flow rate regulation device so that the degree of superheat calculated in the superheat degree calculation unit reaches a target degree of superheat, and configured, when the temperature determination unit determines that the heat radiating unit temperature is outside the target temperature range, to control an opening degree of the flow rate regulation device so that the heat radiating unit temperature falls within the target temperature range.

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

CPC (source: EP)  
**F25B 1/00** (2013.01); **F25B 49/02** (2013.01); **F25B 2400/05** (2013.01); **F25B 2400/13** (2013.01); **F25B 2600/2509** (2013.01); **F25B 2700/2103** (2013.01); **F25B 2700/21154** (2013.01)

Citation (search report)

- [A] JP 2003021406 A 20030124 - KOBE STEEL LTD
- [A] JP 2006170537 A 20060629 - DAIKIN IND LTD
- [A] JP 2008057875 A 20080313 - MITSUBISHI ELECTRIC CORP
- [A] JP H08189719 A 19960723 - MITSUBISHI ELECTRIC CORP
- [A] US 2009090118 A1 20090409 - PHAM HUNG M [US], et al
- See references of WO 2016147275A1

Cited by  
EP4021156A4; EP3798538A4; US11668500B2; WO2019243566A1; WO2020182462A1

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

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DOCDB simple family (application)  
**EP 15885373 A 20150313**; JP 2015057591 W 20150313; JP 2017505889 A 20150313; TW 104113469 A 20150428