

Title (en)

REFRIGERATION DEVICE AND COOLING AND HEATING DEVICE

Title (de)

KÜHLVORRICHTUNG SOWIE KÜHL- UND ERHITZUNGSVORRICHTUNG

Title (fr)

DISPOSITIF DE RÉFRIGÉRATION ET DISPOSITIF DE REFROIDISSEMENT ET DE CHAUFFAGE

Publication

EP 2578966 A4 20151209 (EN)

Application

EP 11786271 A 20110422

Priority

- JP 2010121096 A 20100527
- JP 2011002369 W 20110422

Abstract (en)

[origin: EP2578966A1] When an indoor heat exchanger serves as an evaporator, the indoor heat exchanger is made up of an inlet region, an intermediate region and an outlet region along a flow of refrigerant. A mass speed per unit capacity of the refrigerant flowing through heat-transfer tubes in the inlet region, the intermediate region and the outlet region is greater than or equal to 0.44 g/mm² hW and less than 0.50 g/mm² hW, greater than or equal to 0.14 g/mm² hW and less than 0.16 g/mm² hW, and greater than or equal to 0.13 g/mm² hW and less than 0.15 g/mm² hW, respectively.

IPC 8 full level

F25B 39/00 (2006.01); **F25B 1/00** (2006.01); **F28D 1/04** (2006.01); **F28D 1/047** (2006.01); **F28F 1/32** (2006.01)

CPC (source: EP KR)

F25B 1/00 (2013.01 - KR); **F25B 39/00** (2013.01 - EP KR); **F28D 1/0417** (2013.01 - EP); **F28D 1/0477** (2013.01 - EP); **F25B 2500/01** (2013.01 - EP); **F25B 2600/21** (2013.01 - EP); **F28F 1/32** (2013.01 - EP)

Citation (search report)

- [X] EP 1486748 A1 20041215 - DAIKIN IND LTD [JP]
- [X] JP 2009257742 A 20091105 - DAIKIN IND LTD
- [I] DE 3918455 A1 19901220 - THERMAL WAERME KAELTE KLIMA [DE]
- [A] JP H04186079 A 19920702 - HITACHI LTD
- See references of WO 2011148567A1

Cited by

EP2927630A1; FR3019637A1; US9885525B2; US10744856B2

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 2578966 A1 20130410; **EP 2578966 A4 20151209**; **EP 2578966 B1 20200826**; BR 112012029878 A2 20160816; CN 102918338 A 20130206; JP 2011247482 A 20111208; KR 20130088020 A 20130807; WO 2011148567 A1 20111201

DOCDB simple family (application)

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