Title (en)
  REFRIGERATION CYCLE DEVICE

Title (de)
  KÄLTEKREISLAUFVORRICHTUNG

Title (fr)
  DISPOSITIF DE CYCLE DE REFROIDISSEMENT

Publication
  EP 2942585 A4 20161130 (EN)

Application
  EP 13868444 A 20130906

Priority
  • JP 2012285786 A 20121227
  • JP 2013074012 W 20130906

Abstract (en)
  [origin: EP2942585A1] A refrigeration cycle apparatus includes a first refrigerant circuit connecting a refrigerant discharging part of a compressor 101, a condenser 102, a first expansion valve 103, a first evaporator 104, and a refrigerant suction portion 205 of an ejector 105; a second refrigerant circuit branching off from connection piping between an outlet side of the condenser 102 and the first expansion valve 103 and connecting to a refrigerant inflow portion 204 of the ejector 105; and a third refrigerant circuit connecting to a diffuser (a refrigerant outflow portion) 203 of the ejector 105, a second evaporator 106, and a refrigerant suction portion of the compressor 101. Each of the first evaporator 104 and the second evaporator 106 is a water heat exchanger to exchange heat between refrigerant flowing in a refrigerant circuit including the evaporator and a liquid heat medium different from the refrigerant. The liquid heat medium is supplied from outside, and flows out through the second evaporator 106 and the first evaporator 104 in this order.

IPC 8 full level
  F25B 5/04 (2006.01); **F25B 1/00** (2006.01); **F25B 41/40** (2021.01)

CPC (source: EP)
  F25B 41/00 (2013.01); F25B 25/005 (2013.01); F25B 2341/0012 (2013.01)

Citation (search report)
  • [A] US 2006266072 A1 20061130 - TAKEUCHI HIROTSUGU [JP], et al
  • See references of WO 2014103436A1

Cited by
  DE102015009255A1; US12018876B2

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 2942585 A1 20151111; **EP 2942585 A4 20161130**; **EP 2942585 B1 20210317**; CN 203704419 U 20140709; JP WO2014103436 A1 20170112; WO 2014103436 A1 20140703

DOCDB simple family (application)
  EP 13868444 A 20130906; CN 201320897498 U 20131227; JP 2013074012 W 20130906; JP 2014554186 A 20130906