

Title (en)
Refrigerant cycle apparatus

Title (de)
Kältekreislaufgerät

Title (fr)
Appareil à cycle frigorifique

Publication
EP 1628088 A2 20060222 (EN)

Application
EP 05017389 A 20050810

Priority
JP 2004235405 A 20040812

Abstract (en)
In a refrigerant cycle apparatus which is operated at a supercritical pressure on a high-pressure side, for a purpose of maintaining or enhancing performances or reducing generation of clogging or a dimension of a capillary tube, a compressor has a first compression element, and a second compression element which compresses a refrigerant compressed by the first compression element, a gas phase refrigerant in an intermediate pressure receiver is sucked into the second compression element of the compressor, a liquid phase refrigerant in the intermediate pressure receiver is pressure reduced in a second pressure reducing device, and introduced into an evaporator, and the first pressure reducing device comprises a capillary tube on an upstream side of the refrigerant, and throttling means on a downstream side of the capillary tube.

IPC 8 full level
F25B 1/10 (2006.01); **F25B 9/00** (2006.01); **F25B 41/06** (2006.01)

CPC (source: EP US)
F25B 1/10 (2013.01 - EP US); **F25B 9/008** (2013.01 - EP); **F25B 41/39** (2021.01 - EP US); **F25B 5/02** (2013.01 - EP);
F25B 2309/061 (2013.01 - EP); **F25B 2400/13** (2013.01 - EP); **F25B 2400/23** (2013.01 - EP); **F25B 2600/2507** (2013.01 - EP)

Citation (applicant)
JP 2804527 B2 19980930

Cited by
EP1984680A4; DE102011012644A1; FR3013268A1; EP2952828A4; GB2446062A; GB2446062B; US10234151B2; US11754321B2;
WO2019185121A1; EP3379178B1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1628088 A2 20060222; **EP 1628088 A3 20060830**; CN 1734209 A 20060215; JP 2006052898 A 20060223; JP 4049769 B2 20080220

DOCDB simple family (application)
EP 05017389 A 20050810; CN 200510078568 A 20050617; JP 2004235405 A 20040812