

Title (en)
Refrigerating device and refrigerator

Title (de)
Kühlvorrichtung und Kühlschrank

Title (fr)
Dispositif de réfrigération et réfrigérateur

Publication
EP 1696188 A3 20080213 (EN)

Application
EP 06001872 A 20060130

Priority
JP 2005024057 A 20050131

Abstract (en)
[origin: EP1696188A2] An object is to provide a refrigerating device capable of realizing a high-efficiency operation and a refrigerator provided with the refrigerating device in a case where a compressor (1) having an intermediate-pressure portion is applied, the refrigerating device comprises a compressor (1) having an intermediate-pressure portion; a radiator (2) connected to the compressor (1) on a discharge side; and a heat absorbing unit (10) connected to the radiator (2) on an outlet side and including a pressure reducing unit (65) and a heat sink (87), the heat absorbing unit (10) on the outlet side is connected to a suction portion having a pressure which is lower than that of the intermediate-pressure portion of the compressor (1), a refrigerant pipe of the radiator on the outlet side is branched, one refrigerant pipe is connected to the heat absorbing unit (10), the other refrigerant pipe (6) is connected to the intermediate-pressure portion of the compressor (1), and provided with a pressure reducing mechanism (31) and a heat exchanger (32), and this heat exchanger (32) is constituted in such a manner that heat is exchangeable between a refrigerant of the one refrigerant pipe and a refrigerant of the other refrigerant pipe.

IPC 8 full level
F25B 5/02 (2006.01); **F25B 9/00** (2006.01); **F25D 11/02** (2006.01)

CPC (source: EP KR US)
E01C 11/225 (2013.01 - KR); **E01C 15/00** (2013.01 - KR); **F25B 5/02** (2013.01 - EP US); **F25B 9/008** (2013.01 - EP US); **F25D 11/022** (2013.01 - EP US); **E01C 5/065** (2013.01 - KR); **E01C 2201/20** (2013.01 - KR); **F25B 1/10** (2013.01 - EP US); **F25B 40/00** (2013.01 - EP US); **F25B 41/37** (2021.01 - EP KR US); **F25B 2309/06** (2013.01 - EP US); **F25B 2309/061** (2013.01 - EP US); **F25B 2400/05** (2013.01 - EP US); **F25B 2400/13** (2013.01 - EP US); **F25B 2600/2511** (2013.01 - EP US)

Citation (search report)

- [XY] EP 0924478 A2 19990623 - CARRIER CORP [US]
- [X] EP 0541324 A1 19930512 - GEN ELECTRIC [US]
- [Y] US 6442967 B1 20020903 - ALSENZ RICHARD H [US]
- [A] GB 2143014 A 19850130 - HOTPOINT LTD
- [E] EP 1647783 A2 20060419 - MITSUBISHI ELECTRIC CORP [JP]

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EP2088390A3; US8733118B2

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

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
EP 1696188 A2 20060830; **EP 1696188 A3 20080213**; CN 1815106 A 20060809; JP 2006207974 A 20060810; KR 100695370 B1 20070316; KR 20060088039 A 20060803; US 2006168997 A1 20060803

DOCDB simple family (application)
EP 06001872 A 20060130; CN 200610004757 A 20060127; JP 2005024057 A 20050131; KR 20060008601 A 20060127; US 34282606 A 20060131