

Title (en)
REFRIGERATION DEVICE

Title (de)
KÜHLVORRICHTUNG

Title (fr)
DISPOSITIF DE REFRIGERATION

Publication
EP 2357427 A4 20160427 (EN)

Application
EP 09830197 A 20091202

Priority
• JP 2009006561 W 20091202
• JP 2008311505 A 20081205
• JP 2009227151 A 20090930

Abstract (en)
[origin: EP2357427A1] In a refrigerant circuit (5) of an air conditioner (1), a single-stage compression refrigeration cycle is performed. In the refrigerant circuit (5), a second heat exchanger (40) is provided downstream a first heat exchanger (30). In the first heat exchanger (30), high-pressure refrigerant of a high-pressure flow path (31) is cooled by exchanging heat with first intermediate-pressure refrigerant of an intermediate-pressure flow path (32). First intermediate-pressure gas refrigerant generated in the first heat exchanger (30) is supplied to a first compression mechanism (71). Second intermediate-pressure refrigerant having a pressure lower than that of the first intermediate-pressure refrigerant is supplied to an intermediate-pressure flow path (42) of the second heat exchanger (40). In the second heat exchanger (40), high-pressure refrigerant of a high-pressure flow path (41) is further cooled by exchanging heat with the second intermediate-pressure refrigerant of the intermediate-pressure flow path (42). Second intermediate-pressure gas refrigerant generated in the second heat exchanger (40) is supplied to a second compression mechanism (72).

IPC 8 full level
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CPC (source: EP KR US)
F25B 1/00 (2013.01 - KR); **F25B 1/10** (2013.01 - KR); **F25B 13/00** (2013.01 - EP KR US); **F25B 1/04** (2013.01 - EP US); **F25B 1/10** (2013.01 - EP US); **F25B 2313/0272** (2013.01 - EP US); **F25B 2313/02741** (2013.01 - EP US); **F25B 2400/075** (2013.01 - EP US); **F25B 2400/13** (2013.01 - EP US); **F25B 2400/23** (2013.01 - EP US)

Citation (search report)
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• [X] JP S625055 A 19870112 - KOBE STEEL LTD
• See references of WO 2010064427A1

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EP4008973A4; EP2792974A1; CN104110735A; US9958189B2; US9989281B2; US10145587B2; WO2016092512A1

Designated contracting state (EPC)
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