

Title (en)
REFRIGERATION DEVICE

Title (de)
KÜHLVORRICHTUNG

Title (fr)
DISPOSITIF DE RÉFRIGÉRATION

Publication
EP 1992887 A4 20151216 (EN)

Application
EP 07737771 A 20070305

Priority
• JP 2007054186 W 20070305
• JP 2006059482 A 20060306

Abstract (en)
[origin: EP1992887A1] A refrigerant circuit (20) is provided with an intermediate pressure heat exchanger (40) and a gas/liquid separator (51) . In a cooling mode, a part of refrigerant condensed in an outdoor heat exchanger (36) flows into injection piping (43). The refrigerant admitted into the injection piping (43) is pressure reduced down to an intermediate pressure during its passage through an injection expansion valve (44) , evaporates in the intermediate pressure heat exchanger (40) , and is supplied to an intermediate pressure port (32) of a compressor (31). In a heating mode, refrigerant condensed in an indoor heat exchanger (71) is pressure reduced down to an intermediate pressure during its passage through an indoor expansion valve (72) and then flows into the gas/liquid separator (51). And, the intermediate pressure gas refrigerant within the gas/liquid separator (51) is supplied to the intermediate pressure port (32) of the compressor (31).

IPC 8 full level
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CPC (source: EP KR US)
F25B 1/00 (2013.01 - KR); **F25B 1/10** (2013.01 - EP KR US); **F25B 13/00** (2013.01 - EP KR US); **F25B 2313/02741** (2013.01 - EP US); **F25B 2400/05** (2013.01 - EP US); **F25B 2400/053** (2013.01 - EP US); **F25B 2400/13** (2013.01 - EP US); **F25B 2400/23** (2013.01 - EP US); **F25B 2500/01** (2013.01 - EP US)

Citation (search report)
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• [Y] JP H10318614 A 19981204 - MATSUSHITA ELECTRIC IND CO LTD
• [A] US 6321542 B1 20011127 - UENO TAKEO [JP], et al
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