

Title (en)
Vapor compression refrigerating cycle

Title (de)
Dampfkomppressionskühlkreislauf

Title (fr)
Cycle de réfrigération à compression de vapeur

Publication
EP 1855068 A2 20071114 (EN)

Application
EP 07107061 A 20070426

Priority
JP 2006131131 A 20060510

Abstract (en)
A vapor compression refrigerating cycle (1) has an evaporator (6), a compressor (2), a radiator (3), an expander (4) and a gas/liquid separator (5) for separating refrigerant flowed out from the expander (4) and refrigerant flowed in from the evaporator (6) into gas-phase refrigerant and liquid-phase refrigerant, flowing out the liquid-phase refrigerant to the evaporator side and flowing out the gas-phase refrigerant to the compressor side, wherein a pumping means (7) for sending liquid-phase refrigerant flowed out from the gas/liquid separator (5) to the evaporator side is provided between the gas/liquid separator (5) and the evaporator (6), and at least the pumping means (7) is constructed integrally with the gas/liquid separator (5). In this structure, the number of parts of the refrigerating cycle (1) may be decreased and the cost, the size and the weight of refrigerating cycle (1) may be reduced.

IPC 8 full level
F25B 9/06 (2006.01)

CPC (source: EP)
F25B 9/008 (2013.01); **F25B 9/06** (2013.01); **F25B 43/006** (2013.01); **F25B 2309/061** (2013.01); **F25B 2400/14** (2013.01); **F25B 2400/23** (2013.01); **F25B 2500/18** (2013.01); **F25B 2600/2501** (2013.01)

Cited by
EP3159626A1; DE102016101292A1; EP3159627A1; CN101765749A; WO2013117187A3; US10036583B2; WO2009061268A1

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 MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK YU

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