Title (en)

Cooling cycle

Title (de)

Kühlkreislauf

Title (fr)

Cycle de refroidissement

Publication

EP 1519127 A1 20050330 (EN)

Application

EP 04022914 A 20040927

Priority

JP 2003334770 A 20030926

Abstract (en)

Theme : To provide a cooling cycle having a structure such that rises in the coolant discharge temperature of a compressor are prevented, increases in pressure losses in the internal heat exchanger are avoided, and reductions in size, weight and cost of the necessary components are enabled. <??>Means of Resolution : A Cooling cycle 1, comprising compressor 2 which increases the pressure of the coolant, radiator 3 which cools the coolant compressed by the compressor, expansion device 4 which reduces the pressure of the coolant cooled by radiator 3, evaporator 5 which evaporates the coolant whose pressure is reduced in expansion device 4, accumulator 6 which in addition to separating out the gas and liquid in the coolant passing through evaporator 5 separates out the oil mixed in with the coolant, and internal heat exchanger 7 which exchanges heat between the low-pressure coolant conducted from accumulator 6 to compressor 2 and the high-pressure coolant conducted from radiator 3 to expansion device 4, is provided with recovery path 10 which bypasses internal heat exchanger 7 enabling recovery of the liquid coolant or oil in accumulator 6 between said internal heat exchanger 7 and compressor 2, and regulator valve 11 which regulates the quantity recovered via this recovery path 10. <IMAGE>

IPC 1-7

F25B 40/00; F25B 9/00

IPC 8 full level

F25B 1/00 (2006.01); **F25B 9/00** (2006.01); **F25B 13/00** (2006.01); **F25B 40/00** (2006.01)

CPC (source: EP)

F25B 9/008 (2013.01); **F25B 40/00** (2013.01); F25B 2309/061 (2013.01); F25B 2600/2501 (2013.01); F25B 2700/21152 (2013.01)

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