

Title (en)

Vapor-compression refrigeration circuit and automotive air-conditioning system using the refrigeration circuit

Title (de)

Dampfkompansions-Kühlschaltung und Fahrzeugklimaanlagensystem mit der Kühlschaltung

Title (fr)

Circuit de réfrigération à compression de vapeur et système de climatisation de véhicule utilisant le circuit de réfrigération

Publication

EP 1865274 A1 20071212 (EN)

Application

EP 07010829 A 20070531

Priority

JP 2006157306 A 20060606

Abstract (en)

A vapor-compression refrigeration circuit includes a compound compressor (14) having a low-stage compression section (34) and a high-stage compression section (36) connected in series with each other, and an intercooler (32, 104) inserted in a refrigerant passage connecting between the low- and high-stage compression sections (34, 36), for cooling refrigerant discharged from the low-stage compression section (34) and then allowing the refrigerant to be sucked into the high-stage compression section (36). The compound compressor (14) has a swash plate (62), cylinder bores (42a) and pistons (48a) constituting the low-stage compression section (34), cylinder bores (42b) and pistons (48b) constituting the high-stage compression section (36), and shoes (64) for converting rotation of the swash plate (62) to reciprocating motions of the pistons (48a, 48b) of the low- and high-stage compression sections (34, 36).

IPC 8 full level

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Citation (search report)

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Designated contracting state (EPC)

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