

Title (en)
Two-stage compression rotary compressor

Title (de)
Zweistufiger Druckrotationsverdichter

Title (fr)
Compreseur rotatif à deux niveaux de compression

Publication
EP 2042741 A2 20090401 (EN)

Application
EP 08164934 A 20080923

Priority
JP 2007252255 A 20070927

Abstract (en)
A two-stage compression rotary (1) compressor includes a low-stage compressing section (12L) and a high-stage compressing section (12H) housed within a cylindrical sealed housing (10) oriented vertically, a low-stage suction pipe (104) connected to a suction side of the low-stage compressing section (12L) and sucking in a low-pressure refrigerant, a low-stage discharge pipe (105) connected to a discharge side of the low-stage compressing section (12L) and discharging the refrigerant from the low-stage to outside of the sealed housing (10), a high-stage suction pipe (106) connected to a suction side of the high-stage compressing section (12H) and sucking in the refrigerant discharged from the low-stage, a low-pressure connecting pipe (31) that connects the low-stage suction pipe and an accumulator (25), and guides the refrigerant inside the accumulator (25) to a suction side of a low-stage compressing section (12L), and an intermediate connecting pipe (23) that connects the low-stage discharge pipe (105) and the high-stage suction pipe (106), wherein an inner diameter of the low-pressure connecting pipe (31) is larger than an inner diameter of the intermediate connecting pipe (23).

IPC 8 full level
F04C 23/00 (2006.01); **F04C 18/356** (2006.01)

CPC (source: EP US)
F04C 18/3564 (2013.01 - EP US); **F04C 23/001** (2013.01 - EP US); **F04C 23/008** (2013.01 - EP US)

Citation (applicant)
JP 2006152931 A 20060615 - HITACHI HOME & LIFE SOLUTIONS

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
EP 2042741 A2 20090401; CN 101398001 A 20090401; JP 2009085027 A 20090423; US 2009087321 A1 20090402

DOCDB simple family (application)
EP 08164934 A 20080923; CN 200810168306 A 20080926; JP 2007252255 A 20070927; US 23499608 A 20080922