

Title (en)
VARIABLE DISPLACEMENT SWASH PLATE-TYPE COMPRESSOR AND AIR CONDITIONING SYSTEM USING SAID COMPRESSOR

Title (de)
VERSTELLBARER VERSCHIEBUNGS-TAUMELSCHIEBENKOMPRESER UND KLIMAANLAGENSYSTEM MIT DEM KOMPRESSOR

Title (fr)
COMPRESSEUR DE TYPE À PLATEAU OSCILLANT À DÉPLACEMENT VARIABLE ET SYSTÈME DE CLIMATISATION UTILISANT LEDIT COMPRESSEUR

Publication
EP 2450572 A1 20120509 (EN)

Application
EP 10793796 A 20100617

Priority
• JP 2010004026 W 20100617
• JP 2009154485 A 20090630

Abstract (en)
This invention provides a variable-capacity swash plate compressor that does not allow the compressor performance to be compromised by ensuring that the suction passage is not constricted in an operating area where low pressure pulsations do not occur and, at the same time, makes it possible to fully reduce low pressure pulsations by constricting the suction passage in an operating area where low pressure pulsations tend to occur readily and an air-conditioning system equipped with such a variable-capacity swash plate compressor. A variable-capacity swash plate compressor includes a suction throttle valve 62 that is disposed in a suction passage 61, through which a coolant taken in through a suction port 60 is guided to a suction chamber 54, and adjusts the passage area of the suction passage 61 through which the coolant passes, and a solenoid valve 70 that freely adjusts the degree of opening of the suction throttle valve 62. The solenoid valve 70 may adjust the degree of opening of the suction throttle valve 62 by adjusting the pressure in a back pressure chamber 68 of the suction throttle valve 62 or it may directly control the degree of opening of the suction throttle valve 62 in correspondence to supplied electric energy.

IPC 8 full level
F04B 27/08 (2006.01); **B60H 1/32** (2006.01); **F04B 27/14** (2006.01); **F25B 1/02** (2006.01)

CPC (source: EP)
F04B 27/1009 (2013.01); **F04B 27/16** (2013.01); **F04B 27/1804** (2013.01); **F04B 49/225** (2013.01); **F04B 2027/1818** (2013.01);
F04B 2027/1877 (2013.01)

Cited by
DE102018220709B4

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

DOCDB simple family (publication)
EP 2450572 A1 20120509; EP 2450572 A4 20170712; JP 2011012548 A 20110120; JP 5519199 B2 20140611; WO 2011001621 A1 20110106

DOCDB simple family (application)
EP 10793796 A 20100617; JP 2009154485 A 20090630; JP 2010004026 W 20100617