

Title (en)

Refrigerant suction structure in fixed displacement type piston compressor, and operation control method in fixed displacement type piston compressor

Title (de)

Kühlmittelsaugstruktur in einem Kolbenverdichter mit fester Verschiebung und Betriebssteuerverfahren in einem Kolbenverdichter mit fester Verschiebung

Title (fr)

Structure à aspiration réfrigérante dans un compresseur à piston à déplacement fixé, et procédé de contrôle des opérations dans un compresseur à piston à déplacement fixe

Publication

**EP 1978251 A3 20091230 (EN)**

Application

**EP 08005766 A 20080327**

Priority

- JP 2007084792 A 20070328
- JP 2007088327 A 20070329

Abstract (en)

[origin: EP1978251A2] An introduction passage (31) of rotary valve (35, 36) has outlets (312, 313) for feeding out refrigerant in a suction pressure zone (142) toward each of compression chambers (271, 281). A switch portion in a shutoff state shuts off a portion (142) of the suction pressure zone within a compressor (10) from the outlets (312, 313) of the introduction passage (31). The switch portion includes a valve body (42), a working pressure chamber (412), and a working pressure applying portion (48, 67-68). The working pressure chamber (412) introduces a working pressure that is applied to the valve body (42) so as to arrange the valve body (42) at a communication position. The pressure in the suction pressure zone (142) acts against the pressure in the working pressure chamber (412) through the valve body (42).

IPC 8 full level

**F04B 27/10** (2006.01)

CPC (source: EP KR US)

**F04B 27/0878** (2013.01 - KR); **F04B 27/0895** (2013.01 - KR); **F04B 27/1018** (2013.01 - EP KR US); **F04B 27/1045** (2013.01 - KR); **F04B 27/1054** (2013.01 - KR); **F04B 27/109** (2013.01 - KR); **F04B 27/16** (2013.01 - EP KR US); **F04B 27/1804** (2013.01 - KR); **F04B 49/225** (2013.01 - EP KR US); **F05B 2210/14** (2013.01 - KR)

Citation (search report)

- [DXY] JP H07119631 A 19950509 - NIPPON DENSO CO
- [Y] US 5478212 A 19951226 - SAKAI TAKESHI [JP], et al
- [DA] JP 2006083835 A 20060330 - TOYOTA IND CORP

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 1978251 A2 20081008**; **EP 1978251 A3 20091230**; BR PI0801398 A2 20081111; KR 100921372 B1 20091014; KR 20080088446 A 20081002; US 2008240928 A1 20081002

DOCDB simple family (application)

**EP 08005766 A 20080327**; BR PI0801398 A 20080327; KR 20080028224 A 20080327; US 5673208 A 20080327