

Title (en)

SWASH PLATE-TYPE VARIABLE DISPLACEMENT COMPRESSOR FOR SUPERCRITICAL REFRIGERATION CYCLE

Title (de)

VERSTELLBARER TAUMELSCHEIBENVERDICHTER FÜR ÜBERKRITISCHEN KÄLTEKREISLAUF

Title (fr)

COMPRESSEUR A CYLINDREE VARIABLE DE TYPE A PLATEAU OSCILLANT CONCU POUR UN CYCLE DE REFRIGERATION SUPERCRITIQUE

Publication

**EP 1586774 A1 20051019 (EN)**

Application

**EP 03789631 A 20031224**

Priority

- JP 0316638 W 20031224
- JP 2002380867 A 20021227

Abstract (en)

A swash plate type variable capacity compressor which is a compressor (10) to be used for a supercritical refrigerating cycle (1) and provided with a swash plate (400) which is disposed rotatably, a piston (500) which is coupled with the swash plate and a cylinder (600) which holds the piston movably, the cylinder is provided with a suction valve (150) for sucking a refrigerant of the supercritical refrigerating cycle and a discharge valve (160) for discharging the refrigerant, wherein the suction valve has valve bodies (152) having flexibility attached to suction ports (141) for sucking the refrigerant, and the swash plate type variable capacity compressor has the valve bodies press-contacted in an elastically deformed state against the valve seats of the suction ports to decrease the number of rotations of the swash plate when the refrigerant is started to be compressed. <IMAGE>

IPC 1-7

**F04B 39/06**

IPC 8 full level

**F04B 27/10** (2006.01); **F04B 39/06** (2006.01); **F04B 39/10** (2006.01)

CPC (source: EP US)

**F04B 27/1009** (2013.01 - EP US); **F04B 39/1073** (2013.01 - EP US)

Cited by

FR2869956A1; WO2006069883A1; WO2009027001A1

Designated contracting state (EPC)

DE FR

DOCDB simple family (publication)

**EP 1586774 A1 20051019; EP 1586774 A4 20110309**; JP WO2004061306 A1 20060511; US 2006083628 A1 20060420;  
WO 2004061306 A1 20040722

DOCDB simple family (application)

**EP 03789631 A 20031224**; JP 0316638 W 20031224; JP 2004564511 A 20031224; US 54047105 A 20050623