

Title (en)

CONTROL VALVE FOR VARIABLE DISPLACEMENT COMPRESSOR

Title (de)

REGELVENTIL FÜR KOMPRESSOR MIT VERÄNDERLICHER VERDICHTUNG

Title (fr)

VALVE DE COMMANDE POUR COMPRESSEUR A CYLINDREE VARIABLE

Publication

**EP 1111237 A1 20010627 (EN)**

Application

**EP 00940881 A 20000629**

Priority

- JP 0004300 W 20000629
- JP 18997999 A 19990705

Abstract (en)

A control valve for a variable capacity compressor is provided with a ball valve element 37 to open or shut communication passages (32, 34, 33) for communicating a suction port of a compressor to a crank chamber. The ball valve element 37 is energized to move in a valve shutting direction by a spring force of a compression coil spring 44. The control valve for a variable capacity compressor is provided with a bellows device 40, which drives the ball valve element 37 to move in a valve opening direction being affected by a suction pressure of the compressor. The ball valve element 37 is directly connected to the bellows device 40 with utilizing the ball valve element 37 as an automatic centripetal ball. A valve housing 31 is provided with a hollow tube 49 for introducing a delivery pressure, which is joined to the ball valve element 37 at an end thereof and directly exerts the delivery pressure of the compressor on the ball valve element 37 to move in a valve opening direction. A compression coil spring 50 energizes the ball valve element 37 to move in a valve opening direction through the hollow tube 49 for introducing the delivery pressure. <IMAGE>

IPC 1-7

**F04B 27/14**

IPC 8 full level

**F04B 49/00** (2006.01); **F04B 27/14** (2006.01); **F04B 27/18** (2006.01)

CPC (source: EP KR)

**F04B 27/08** (2013.01 - KR); **F04B 27/1804** (2013.01 - EP); **F04B 2027/1813** (2013.01 - EP); **F04B 2027/1831** (2013.01 - EP);  
**F04B 2027/185** (2013.01 - EP); **F04B 2027/1859** (2013.01 - EP)

Citation (search report)

See references of WO 0102726A1

Cited by

FR2836521A1

Designated contracting state (EPC)

DE FR IT

DOCDB simple family (publication)

**EP 1111237 A1 20010627**; BR 0007004 A 20010619; CN 1317073 A 20011010; JP 2001020857 A 20010123; KR 20010079737 A 20010822;  
WO 0102726 A1 20010111

DOCDB simple family (application)

**EP 00940881 A 20000629**; BR 0007004 A 20000629; CN 00801324 A 20000629; JP 0004300 W 20000629; JP 18997999 A 19990705;  
KR 20017002813 A 20010303