

Title (en)

Control valve for clutch type variable displacement compressor

Title (de)

Steuerungsventil für einen Verdichter mit Kupplung mit variabler Fördermenge

Title (fr)

Soupape de réglage pour un compresseur à débit variable avec embrayage

Publication

EP 1764505 A1 20070321 (EN)

Application

EP 06120172 A 20060906

Priority

JP 2005266147 A 20050914

Abstract (en)

A control valve for a clutch type variable displacement compressor includes a liquid-discharge passage for connecting a second port in communication with a control-pressure chamber of the compressor to a third port in communication with the suction-pressure region of the compressor. Opening and closing the liquid-discharge passage are controlled by movement of a pressure-sensing member of a pressure-sensing mechanism. The pressure-sensing member is placed such that the liquid-discharge passage is opened while pressure equalization inside the compressor at a stop of the compressor is maintained in starting the compressor from its stop state. The pressure-sensing member is moved in a direction which causes the liquid-discharge passage to be closed when a pressure in the suction-pressure region is lowered and reaches a predetermined pressure as the compressor is started.

IPC 8 full level

F04B 27/18 (2006.01)

CPC (source: EP US)

F04B 27/1804 (2013.01 - EP US)

Citation (search report)

- [X] EP 1024286 A2 20000802 - TOYODA AUTOMATIC LOOM WORKS [JP]
- [X] EP 1081378 A2 20010307 - TOYODA AUTOMATIC LOOM WORKS [JP]
- [X] US 6010312 A 20000104 - SUITOU KEN [JP], et al

Designated contracting state (EPC)

DE FR IT

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1764505 A1 20070321; EP 1764505 B1 20080528; DE 602006001335 D1 20080710; JP 2007077863 A 20070329; US 2007059183 A1 20070315

DOCDB simple family (application)

EP 06120172 A 20060906; DE 602006001335 T 20060906; JP 2005266147 A 20050914; US 52097006 A 20060913