

Title (en)

CONTROL DEVICE OF VARIABLE DISPLACEMENT COMPRESSOR AND VARIABLE DISPLACEMENT CONTROL DEVICE OF REFRIGERATING CYCLE

Title (de)

STEUERVORRICHTUNG FÜR VERDICHTER MIT VARIABLEM VERDRÄNGUNG UND VORRICHTUNG ZUR STEUERUNG DER VARIABLEN VERDRÄNGUNG FÜR KÜHLKREISLAUF

Title (fr)

DISPOSITIF DE COMMANDE D'UN COMPRESSEUR A DEPLACEMENT VARIABLE ET DISPOSITIF DE COMMANDE A DEPLACEMENT VARIABLE D'UN CYCLE DE REFRIGERATION

Publication

**EP 1455143 A4 20111116 (EN)**

Application

**EP 02765373 A 20020829**

Priority

- JP 0208722 W 20020829
- JP 2001328023 A 20011025

Abstract (en)

[origin: EP1455143A1] The present invention provides a control device of a variable displacement compressor and a variable displacement control device of a refrigerating cycle, capable of providing optimal responsiveness and stability under different conditions, by adopting a structure in which a control chamber pressure is controlled with a control valve electrically controlled by a control signal provided from the outside without using a pressure sensitive member. The present invention is adopted in conjunction with a variable displacement compressor 3, the discharge capacity of which is controlled through an adjustment of a crank chamber pressure achieved by electrically controlling a pressure control valve that enables a pressure supply from a discharge space 27 to a crank chamber 24 and also a pressure release from the crank chamber 24 to a suction space 26 with a control signal provided from the outside and adjusts a gain in an arithmetic expression used to calculate the control signal in correspondence to a value representing a physical quantity that affects the air conditioning state. <IMAGE>

IPC 8 full level

**F24F 11/02** (2006.01); **F04B 27/08** (2006.01); **F04B 27/18** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP)

**F04B 27/1804** (2013.01); **F25B 49/022** (2013.01); **F04B 2027/1827** (2013.01); **F04B 2027/1831** (2013.01); **F04B 2027/1854** (2013.01); **F25B 2309/061** (2013.01); **F25B 2400/076** (2013.01); **F25B 2500/18** (2013.01); **F25B 2500/19** (2013.01); **F25B 2600/023** (2013.01); **F25B 2700/1933** (2013.01); **F25B 2700/2104** (2013.01); **F25B 2700/2106** (2013.01); **F25B 2700/21173** (2013.01)

Citation (search report)

- [X] EP 0814262 A2 19971229 - TOYODA AUTOMATIC LOOM WORKS [JP]
- [A] JP H10141242 A 19980526 - TOYODA AUTOMATIC LOOM WORKS
- [A] US 5884497 A 19990323 - KISHITA HIROSHI [JP], et al
- [A] US 4894999 A 19900123 - KAIJU MASAKI [JP], et al
- See references of WO 03036184A1

Cited by

WO2011140069A1

Designated contracting state (EPC)

DE FR

DOCDB simple family (publication)

**EP 1455143 A1 20040908**; **EP 1455143 A4 20111116**; JP WO2003036184 A1 20050210; WO 03036184 A1 20030501

DOCDB simple family (application)

**EP 02765373 A 20020829**; JP 0208722 W 20020829; JP 2003538645 A 20020829