

Title (en)  
COMPRESSION DISPLACEMENT CONTROLLER OF REFRIGERATING CYCLE

Title (de)  
REGLER FÜR DEN VERDICHTUNGSGRAD EINES KÜHLMITTELS IN EINEM KÜHLKREISLAUF

Title (fr)  
CONTROLEUR DE CYLINDREE DE COMPRESSION POUR CYCLE FRIGORIFIQUE

Publication  
**EP 1363021 A1 20031119 (EN)**

Application  
**EP 02715833 A 20020118**

Priority  
• JP 0200364 W 20020118  
• JP 2001011513 A 20010119  
• JP 2001123750 A 20010423

Abstract (en)  
In a compression capacity control device for a refrigeration cycle including a variable displacement compressor (10) that compresses refrigerant sucked from a suction chamber (3) communicating with a suction line (1), and discharges the refrigerant into a discharge chamber (4) communicating with a discharge line (2), while varying the delivery quantity of the refrigerant by changing pressure in a pressure-regulating chamber (12) which has the pressure therein controlled by an electromagnetic control valve (20), the electromagnetic control valve (20) arranged between the discharge chamber (4) and the pressure-regulating chamber (12) is held in an open state to place the variable displacement compressor (10) in a state with the minimum delivery quantity within a variable range, when the electromagnetic control valve (20) is in a deenergized state. This makes it possible to dispense with a clutch for inhibiting operation of the compressor, thereby largely reducing the device cost. <IMAGE>

IPC 1-7  
**F04B 27/08**; F04B 49/00; F04B 49/06

IPC 8 full level  
**F04B 49/06** (2006.01); **B60H 1/32** (2006.01); **F04B 27/14** (2006.01); **F04B 27/18** (2006.01); **F04B 49/22** (2006.01)

CPC (source: EP US)  
**F04B 27/1804** (2013.01 - EP US); **F04B 49/225** (2013.01 - EP US); **F04B 2027/1813** (2013.01 - EP US); **F04B 2027/1827** (2013.01 - EP US); **F04B 2027/1895** (2013.01 - EP US)

Citation (search report)  
See references of WO 02057628A1

Cited by  
DE112008001914B4; EP1696123A1; US7651321B2

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**WO 02057628 A1 20020725**; EP 1363021 A1 20031119; JP 2002285973 A 20021003; JP 4070425 B2 20080402; US 2003035733 A1 20030220

DOCDB simple family (application)  
**JP 0200364 W 20020118**; EP 02715833 A 20020118; JP 2001123750 A 20010423; US 21755602 A 20020813