

Title (en)
DIAGNOSTIC METHOD FOR PROPER REFRIGERANT VALVE OPERATION

Title (de)
DIAGNOSEVERFAHREN FÜR ORDNUNGSGEMÄSSEN KÜHLMITTELVENTIL-BETRIEB

Title (fr)
PROCEDE DIAGNOSTIC PERMETTANT DE CONTROLER LE BON FONCTIONNEMENT D'UNE SOUPAPE REFRIGERANTE

Publication
EP 1946066 A4 20111012 (EN)

Application
EP 05813891 A 20051018

Priority
US 2005037671 W 20051018

Abstract (en)
[origin: WO2007046802A1] There is provided a refrigerant system 100 including at least one or a plurality of refrigerant flow control devices 125 for regulating operational parameters of the refrigerant system 100, at least one sensor 135, 140 connected to the refrigerant system 100 for monitoring the operational parameters of the refrigerant system 100, and a controller 130. The controller 130, which is connected to the plurality of refrigerant flow control devices 125 and to each of the at least one sensor 135, 140, switches a refrigerant flow control device 125 of the plurality of refrigerant flow control devices 125 between a first operating state and a second operating state, separately observes a variation in an operational parameter resulting from the switching of each refrigerant flow control device 125 of the plurality of refrigerant flow control devices 125, compares the observed variation with an expected variation due to the switching, and determines whether the refrigerant flow control device 125 is operating properly based on whether the actual variation corresponds to the expected variation. There is also provided a method for diagnostic testing of the refrigerant system 100.

IPC 8 full level
G01M 1/38 (2006.01); **F25B 49/00** (2006.01); **G05B 13/00** (2006.01)

CPC (source: EP US)
F25B 49/005 (2013.01 - EP US); **G05B 23/0256** (2013.01 - EP US); **F25B 2500/19** (2013.01 - EP US); **F25B 2700/1931** (2013.01 - EP US); **F25B 2700/1933** (2013.01 - EP US); **F25B 2700/21152** (2013.01 - EP US)

Citation (search report)

- [X] US 6367269 B1 20020409 - HANSON JAY LOWELL [US], et al
- [X] JP 2004286267 A 20041014 - HITACHI LTD
- [XAI] JP H11325662 A 19991126 - MITSUBISHI ELECTRIC CORP
- [X] US 4381549 A 19830426 - STAMP JR CUSTIS L, et al
- [X] US 4967567 A 19901106 - PROCTOR ROBERT H [US], et al
- [X] JP H02282673 A 19901120 - DAIKIN IND LTD
- [X] JP 2002147818 A 20020522 - SHARP KK
- See also references of WO 2007046802A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2007046802 A1 20070426; CN 101326432 A 20081217; EP 1946066 A1 20080723; EP 1946066 A4 20111012; US 2009255281 A1 20091015

DOCDB simple family (application)
US 2005037671 W 20051018; CN 200580052268 A 20051018; EP 05813891 A 20051018; US 8379708 A 20080418