

Title (en)
REFRIGERATION CYCLE

Title (de)
KÄLTEKREISLAUF

Title (fr)
CYCLE DE RÉFRIGÉRATION

Publication
EP 2461124 A4 20130403 (EN)

Application
EP 10804285 A 20100720

Priority
• JP 2009177991 A 20090730
• JP 2010062187 W 20100720

Abstract (en)
[origin: EP2461124A1] Provided is a refrigeration cycle wherein, when an orifice is disposed within a refrigeration circuit, and a differential pressure between the upstream side and the downstream side of the orifice is detected using two pressure sensors, the difference between the characteristics of the pressure sensors can be adequately and easily absorbed in software, to accurately determine an actual differential pressure, so that the flow rate of refrigerant and the torque of a compressor can be accurately estimated. The refrigeration cycle wherein the orifice is provided within a refrigerant circuit, and the pressure sensors are respectively provided on the upstream side and the downstream side of the orifice, is characterized in that , with regard to output characteristics representing the relationship between the detected pressure and the sensor output of each pressure sensor, the difference between the output characteristics of one pressure sensor and the output characteristics of the other pressure sensor is determined based on the outputs of both pressure sensors at a condition where the flow of refrigerant is stopped.

IPC 8 full level
F25B 49/02 (2006.01)

CPC (source: EP US)
F25B 41/39 (2021.01 - EP); **F25B 49/022** (2013.01 - EP US); **F25B 41/39** (2021.01 - US); **F25B 2500/19** (2013.01 - EP US); **F25B 2700/191** (2013.01 - EP US)

Citation (search report)
• [X] GB 2194059 A 19880224 - MITSUBISHI HEAVY IND LTD
• [X] JP 2009063179 A 20090326 - SANDEN CORP
• [XD] JP H06281300 A 19941007 - TOSHIBA CORP
• [A] JP 2001173521 A 20010626 - MITSUBISHI MOTORS CORP
• See references of WO 2011013539A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
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DOCDB simple family (application)
EP 10804285 A 20100720; CN 201080034704 A 20100720; JP 2009177991 A 20090730; JP 2010062187 W 20100720; US 201013388032 A 20100720