

Title (en)
METHOD OF DETECTING A REFRIGERANT LOSS

Title (de)
METHODE ZUR DETEKTION EINES KÄLTEMITTELVERLUSTS

Title (fr)
PROCÉDÉ DE DÉTECTION D'UNE PERTE DE RÉFRIGÉRANT

Publication
EP 4006453 A1 20220601 (EN)

Application
EP 20209859 A 20201125

Priority
EP 20209859 A 20201125

Abstract (en)
Refrigerant loss. A method of detecting a loss of refrigerant from a refrigerant circuit (1) comprising a compressor (5) and an evaporator (4) having an outlet port and an expansion valve (3) having an inlet port and an outlet port, the refrigerant circuit (1) comprising a first sensor (7) for recording a thermodynamic state of the refrigerant at the inlet port of the expansion valve (3) and a third sensor (8) for recording a thermodynamic state of the refrigerant at the outlet port of the expansion valve (3), and a second sensor (9) for recording a thermodynamic state of the refrigerant at the outlet port of the at least one evaporator (4), the method comprising the steps of: recording a first signal indicative of a thermodynamic state of the refrigerant; recording a fourth signal indicative of a thermodynamic state of the refrigerant.

IPC 8 full level
F25B 49/00 (2006.01)

CPC (source: EP)
F25B 49/005 (2013.01); **F25B 2500/19** (2013.01); **F25B 2500/222** (2013.01); **F25B 2500/24** (2013.01); **F25B 2700/13** (2013.01); **F25B 2700/191** (2013.01); **F25B 2700/197** (2013.01)

Citation (applicant)
• DE 102004019929 A1 20051201 - SIEMENS AG [DE]
• EP 2499435 A2 20120919 - EMERSON RETAIL SERVICES INC [US]

Citation (search report)
• [XYI] US 7380404 B2 20080603 - KANG PENGJU [US], et al
• [Y] FR 3091336 A1 20200703 - FAIVELEY TRANSP TOURS [FR]
• [A] JP 2011220624 A 20111104 - MITSUBISHI ELECTRIC CORP

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 RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 4006453 A1 20220601

DOCDB simple family (application)
EP 20209859 A 20201125