

Title (en)

METHOD FOR MANAGING A REVERSIBLE AIR-CONDITIONING CIRCUIT OF A MOTOR VEHICLE

Title (de)

VERFAHREN ZUR VERWALTUNG EINES REVERSIBLEN KLIMATISIERUNGSKREISLAUFS EINES KRAFTFAHRZEUGS

Title (fr)

PROCEDE DE GESTION D'UN CIRCUIT DE CLIMATISATION INVERSIBLE DE VEHICULE AUTOMOBILE

Publication

EP 3658833 A1 20200603 (FR)

Application

EP 18755871 A 20180726

Priority

- FR 1757225 A 20170728
- FR 2018051923 W 20180726

Abstract (en)

[origin: WO2019020953A1] The present invention relates to a method for managing an indirect reversible air conditioning circuit (1) in which a refrigerant circulates, said reversible air conditioning circuit (1) being able to operate in a heat-pump mode in which the refrigerant passes in succession into : a compressor (3), a condenser (5), a first expansion device (7), an evaporator (9), a second expansion device (11), and an evaporator-condenser (13), said air conditioning circuit (1) comprising a central control unit (40) able to control the opening of the first expansion device (7), said management method comprising: a step of determining: the opening Cestim of the first expansion device (7), a reference superheating SHcomp_in_sp, SHcomp_in_sp being comprised between a minimum superheating SHcomp_in_sp_min and a maximum superheating Shcomp_in_sp_max, a step of opening the expansion device (7) according to Cestim and of controlling the superheating SHcomp_in by varying the opening of the expansion device (7) so as to achieve the reference superheating SHcomp_in_sp and keep SHcomp_in between SHcomp_in_sp_min and SHcomp_in_sp_max.

IPC 8 full level

F25B 49/02 (2006.01); **F25B 5/04** (2006.01); **F25B 6/04** (2006.01); **F25B 40/02** (2006.01); **F25B 40/06** (2006.01)

CPC (source: EP)

F25B 5/04 (2013.01); **F25B 6/04** (2013.01); **F25B 40/02** (2013.01); **F25B 40/06** (2013.01); **F25B 41/39** (2021.01); **F25B 49/022** (2013.01); **F25B 2600/21** (2013.01); **F25B 2600/2513** (2013.01)

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)

WO 2019020953 A1 20190131; CN 111051798 A 20200421; CN 111051798 B 20211217; EP 3658833 A1 20200603; EP 3658833 B1 20240828; FR 3069625 A1 20190201; FR 3069625 B1 20191227

DOCDB simple family (application)

FR 2018051923 W 20180726; CN 201880058638 A 20180726; EP 18755871 A 20180726; FR 1757225 A 20170728