

Title (en)
VEHICLE AIR CONDITIONING DEVICE USING A SUPERCRITICAL CYCLE

Title (de)
FAHRZEUGKLIMAAANLAGE UNTER VERWENDUNG EINES ÜBERKRITISCHEN KREISLAUFES

Title (fr)
DISPOSITIF DE CLIMATISATION DE VEHICULE UTILISANT UN CYCLE SUPERCRITIQUE

Publication
EP 1325269 A1 20030709 (FR)

Application
EP 01980592 A 20011009

Priority
• FR 0103115 W 20011009
• FR 0013074 A 20001012

Abstract (en)
[origin: FR2815397A1] The expansion device (4) of the refrigerating fluid loop is controlled to set the internal heat exchanger efficiency (η_{int}), represented by the equation: $\eta_{int} = (T_{ec} - T_{se}) / (T_{sr} - T_{se})$, where T_{ec} , T_{se} and T_{sr} are respectively, temperatures at the compressor input (1), and at the evaporator output (5) and at the fluid cooler output (2), at a reference value such that the fluid leaves the evaporator in a completely gaseous state without overheating.

IPC 1-7
F25B 40/00; F25B 9/00

IPC 8 full level
B60H 1/32 (2006.01); **F24F 11/02** (2006.01); **F25B 1/00** (2006.01); **F25B 9/00** (2006.01); **F25B 40/00** (2006.01)

CPC (source: EP US)
F25B 9/008 (2013.01 - EP US); **F25B 40/00** (2013.01 - EP US); **F25B 2309/061** (2013.01 - EP US); **F25B 2600/02** (2013.01 - EP US); **F25B 2600/2513** (2013.01 - EP US); **F25B 2700/1352** (2013.01 - EP US); **F25B 2700/21151** (2013.01 - EP US); **F25B 2700/21163** (2013.01 - EP US); **F25B 2700/21173** (2013.01 - EP US)

Citation (search report)
See references of WO 0231416A1

Designated contracting state (EPC)
DE ES IT

DOCDB simple family (publication)
FR 2815397 A1 20020419; **FR 2815397 B1 20040625**; AU 1240502 A 20020422; DE 60118588 D1 20060518; DE 60118588 T2 20070426; EP 1325269 A1 20030709; EP 1325269 B1 20060405; ES 2261492 T3 20061116; JP 2004511747 A 20040415; US 2003159452 A1 20030828; US 6786057 B2 20040907; WO 0231416 A1 20020418

DOCDB simple family (application)
FR 0013074 A 20001012; AU 1240502 A 20011009; DE 60118588 T 20011009; EP 01980592 A 20011009; ES 01980592 T 20011009; FR 0103115 W 20011009; JP 2002534756 A 20011009; US 27580903 A 20030314