

Title (en)

HEAT PUMP SYSTEM FOR ELECTRIC VEHICLES

Title (de)

WÄRMEPUMPENSYSTEM FÜR ELEKTROFAHRZEUGE

Title (fr)

SYSTÈME DE POMPE À CHALEUR POUR VÉHICULES ÉLECTRIQUES

Publication

EP 3218213 A1 20170920 (EN)

Application

EP 15795230 A 20151008

Priority

- TR 201413318 A 20141112
- TR 2015050129 W 20151008

Abstract (en)

[origin: WO2016076809A1] The present invention relates to a heat pump system for electric vehicles (1); which, in electric vehicles, enables to cool the motor (M) and the battery (B), and enables operation of the cabin air conditioning system; and comprises at least one air conditioning module heating coil (4) which enables to heat the cabin, at least one two-phase and two-fluid hot heat exchanger (5) which collects the waste heat of the motor, at least one two-phase and two-fluid cold heat exchanger (9) which collects the waste heat of the cabin air conditioning system (K) and the battery (B) group, at least one by-pass line (10) and thermostat (11) which deactivate the radiator (2) when the outer environment is cold, at least one cabin air conditioning module fan (13) which, when the vehicle is not running, cools the cabin by transferring the excess heat within the cabin to the coolant, at least one cooling coil (16) which reduces cabin temperature.

IPC 8 full level

B60H 1/00 (2006.01)

CPC (source: EP US)

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Citation (search report)

See references of WO 2016076809A1

Citation (examination)

- US 2012060522 A1 20120315 - MARKOWITZ MARKUS [DE], et al
- EP 2191990 A2 20100602 - SCANIA CV ABP [SE]

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DOCDB simple family (publication)

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