

Title (en)

TEMPERATURE EQUALISATION DEVICE AND DEVICE ARRANGEMENT IN A TEMPERATURE EQUALISATION SYSTEM

Title (de)

TEMPERIERUNGSVORRICHTUNG UND VORRICHTUNGSANORDNUNG IN EINEM TEMPERIERUNGSSYSTEM

Title (fr)

DISPOSITIF D'ÉQUILIBRAGE DE TEMPÉRATURE ET ENSEMBLE DE DISPOSITIF DANS UN SYSTÈME D'ÉQUILIBRAGE DE TEMPÉRATURE

Publication

EP 3776713 A1 20210217 (DE)

Application

EP 19715455 A 20190402

Priority

- DE 102018107913 A 20180404
- EP 2019058223 W 20190402

Abstract (en)

[origin: WO2019192977A1] The invention relates to a temperature equalisation device (1) which is configured to equalise the temperature of a drive battery (2) of an electric drive in a vehicle, using a temperature equalisation circuit. Said temperature equalisation circuit (3) comprises a battery through-flow section (32) which is in thermal contact with the drive battery (2); a cooling through-flow section (34) which is in thermal contact with an ambient heat exchanger (4); and conducting sections for the connection of the temperature equalisation circuit (3) and the temperature equalisation device (1). The temperature equalisation device (1) comprises: an electrical pump assembly (13) with a pump housing (11) for circulating a liquid heat transfer medium; an electrical heating device (15) for heating the heat transfer medium; and a temperature equalisation control device (16) comprising: a pump control section which is configured to control a pumping capacity; and a heating control section configured to control a heating output; wherein, in the pump housing (11), a heating through-flow section (35) for the temperature equalisation circuit (3) is provided which is in thermal contact with the electrical heating device (15).

IPC 8 full level

H01M 10/625 (2014.01); **B60L 1/00** (2006.01); **H01M 10/613** (2014.01); **H01M 10/615** (2014.01); **H01M 10/63** (2014.01); **H01M 10/655** (2014.01)

CPC (source: EP US)

B60L 1/003 (2013.01 - EP); **B60L 1/02** (2013.01 - EP); **B60L 50/60** (2019.01 - US); **B60L 58/26** (2019.01 - EP US); **B60L 58/27** (2019.01 - EP US); **H01M 10/486** (2013.01 - US); **H01M 10/613** (2015.04 - EP US); **H01M 10/615** (2015.04 - EP US); **H01M 10/625** (2015.04 - EP US); **H01M 10/63** (2015.04 - EP US); **H01M 10/6556** (2015.04 - US); **H01M 10/6568** (2015.04 - EP US); **H01M 10/6571** (2015.04 - EP US); **H01M 2220/20** (2013.01 - EP US); **Y02E 60/10** (2013.01 - EP); **Y02T 10/70** (2013.01 - EP)

Citation (search report)

See references of WO 2019192977A1

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 2019192977 A1 20191010; BR 112020018298 A2 20201222; CN 111937221 A 20201113; DE 102018107913 A1 20191010; EP 3776713 A1 20210217; US 2021143493 A1 20210513

DOCDB simple family (application)

EP 2019058223 W 20190402; BR 112020018298 A 20190402; CN 201980023137 A 20190402; DE 102018107913 A 20180404; EP 19715455 A 20190402; US 201917044739 A 20190402