Title (en)

THERMAL REGULATION OF A BATTERY BY IMMERSION IN A LIQUID COMPOSITION

Title (de)

THERMISCHE REGULIERUNG EINER BATTERIE DURCH EINTAUCHEN IN EINE FLÜSSIGE ZUSAMMENSETZUNG

Title (fr)

RÉGULATION THERMIQUE D'UNE BATTERIE PAR IMMERSION DANS UNE COMPOSITION LIQUIDE

Publication

EP 4229144 A1 20230823 (FR)

Application

EP 21798751 A 20211001

Priority

- FR 2010703 A 20201019
- FR 2105145 A 20210518
- FR 2021051702 W 20211001

Abstract (en)

[origin: WO2022084600A1] The invention relates to the use of a heat transfer composition comprising from more than 0% to 40% by weight of a coolant comprising a compound chosen among halogenated hydrocarbons, perhalogenated compounds, fluorinated ketones, fluorinated ethers and the combinations thereof, and from 60% to less than 100% by weight of a dielectric fluid, for regulating the temperature of a battery, the battery comprising energy storage cells immersed in the heat transfer composition in the liquid state, and the heat transfer composition essentially not undergoing a change of state.

IPC 8 full level

C09K 5/04 (2006.01); **B60H 1/00** (2006.01); **H01B 3/20** (2006.01); **H01M 10/6567** (2014.01)

CPC (source: EP US)

B60H 1/00278 (2013.01 - EP); **B60H 1/00907** (2013.01 - EP); **B60H 1/32284** (2019.05 - EP); **C09K 5/048** (2013.01 - EP); **C09K 5/10** (2013.01 - EP); **H01M 10/44** (2013.01 - EP); **H01M 10/613** (2015.04 - EP); **H01M 10/617** (2015.04 - US); **H01M 10/625** (2015.04 - US); **H01M 10/6567** (2015.04 - EP); **H01M 10/6568** (2015.04 - EP US); **H01M 10/6569** (2015.04 - EP); **H01M 10/66** (2015.04 - EP); **H01M 10/663** (2015.04 - EP US); B60H 2001/00307 (2013.01 - EP); B60H 2001/00928 (2013.01 - EP); H01M 2220/20 (2013.01 - EP US); Y02E 60/10 (2013.01 - EP); Y02T 10/70 (2013.01 - EP)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

FR 3115289 A1 20220422; **FR 3115289 B1 20240524**; CN 116323272 A 20230623; EP 4229144 A1 20230823; FR 3115290 A1 20220422; FR 3115290 B1 20231117; JP 2023546444 A 20231102; US 2023369680 A1 20231116; WO 2022084600 A1 20220428

DOCDB simple family (application)

FR 2105145 A 20210518; CN 202180069870 A 20211001; EP 21798751 A 20211001; FR 2010703 A 20201019; FR 2021051702 W 20211001; JP 2023523585 A 20211001; US 202118246546 A 20211001