

Title (en)

LITHIUM ACCUMULATOR WITH A TWO-LAYERED THERMALLY INSULATING PACKAGE AND WITH A HEAT PIPE FOR THERMAL MANAGEMENT

Title (de)

LITHIUMAKKUMULATOR MIT ZWEILAGIGEM WÄRMEISOLIERENDEM GEHÄUSE UND MIT EINEM WÄRMEROHR ZUR WÄRMEVERWALTUNG

Title (fr)

ACCUMULATEUR AU LITHIUM AVEC EMBALLAGE ISOLANT THERMIQUEMENT A DEUX COUCHES ET AVEC CALODUC POUR LA GESTION THERMIQUE

Publication

EP 3235022 A1 20171025 (FR)

Application

EP 15810636 A 20151216

Priority

- FR 1462536 A 20141216
- EP 2015079976 W 20151216

Abstract (en)

[origin: WO2016096974A1] Lithium electrochemical accumulator including at least one first package housing at least one electrochemical cell, said first package including at least: one internal thermally insulating layer suitable for confining, to the interior of a first package, the heat given off even in case of abnormal operation of a cell C and for protecting the cell(s) from heat generated outside the first package; one external layer superposed on the internal layer, the external layer being mechanically strong and fire resistant; and one cooling device including at least one heat pipe the enclosure of which passes through the first package(s) in a seal-tight manner and such that the heated zone of the heat pipe(s) is located inside the first package(s) and that the cooled zone of the heat pipe(s) is located outside the first package(s).

IPC 8 full level

H01M 10/654 (2014.01); **H01M 10/6552** (2014.01); **H01M 10/6556** (2014.01); **H01M 10/6569** (2014.01); **H01M 50/117** (2021.01); **H01M 50/119** (2021.01); **H01M 50/121** (2021.01); **H01M 50/122** (2021.01); **H01M 50/124** (2021.01); **H01M 50/131** (2021.01); **H01M 50/143** (2021.01); **H01M 50/204** (2021.01); **H01M 50/222** (2021.01); **H01M 50/224** (2021.01); **H01M 50/227** (2021.01); **H01M 50/229** (2021.01); **H01M 50/231** (2021.01); **H01M 50/24** (2021.01); **H01M 50/296** (2021.01)

CPC (source: EP US)

H01M 10/654 (2015.04 - EP US); **H01M 10/6552** (2015.04 - EP US); **H01M 10/6556** (2015.04 - EP US); **H01M 10/658** (2015.04 - EP US); **H01M 50/117** (2021.01 - EP US); **H01M 50/119** (2021.01 - EP US); **H01M 50/121** (2021.01 - EP US); **H01M 50/122** (2021.01 - EP US); **H01M 50/124** (2021.01 - EP US); **H01M 50/1243** (2021.01 - EP US); **H01M 50/1245** (2021.01 - EP US); **H01M 50/131** (2021.01 - EP US); **H01M 50/143** (2021.01 - EP US); **H01M 50/204** (2021.01 - EP US); **H01M 50/222** (2021.01 - EP US); **H01M 50/224** (2021.01 - EP US); **H01M 50/227** (2021.01 - EP US); **H01M 50/229** (2021.01 - EP US); **H01M 50/231** (2021.01 - EP US); **H01M 50/24** (2021.01 - EP US); **H01M 50/296** (2021.01 - EP US); **H01M 10/052** (2013.01 - US); **H01M 10/6569** (2015.04 - EP US); **Y02E 60/10** (2013.01 - EP); **Y02P 70/50** (2015.11 - EP)

Citation (search report)

See references of WO 2016096974A1

Citation (examination)

- US 6146786 A 20001114 - STADNICK STEVEN J [US], et al
- WO 2010138197 A1 20101202 - SEARETE LLC [US], et al
- WO 2013110406 A1 20130801 - BOSCH GMBH ROBERT [DE], et al

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

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DOCDB simple family (application)

FR 1462536 A 20141216; EP 15810636 A 20151216; EP 2015079976 W 20151216; US 201515536397 A 20151216