

Title (en)

LITHIUM-ION BATTERY AND METHOD FOR THE MANUFACTURE THEREOF

Title (de)

LITHIUM-IONEN-BATTERIE UND VERFAHREN ZU DEREN HERSTELLUNG

Title (fr)

BATTERIE A IONS DE LITHIUM ET SON PROCEDE DE FABRICATION

Publication

EP 4128410 A1 20230208 (FR)

Application

EP 21713766 A 20210323

Priority

- EP 20166569 A 20200330
- IB 2021052375 W 20210323

Abstract (en)

[origin: CA3173247A1] A battery (1000) comprising at least one elementary cell (100) formed by an anode (20), an electrolyte (30) and a cathode (50), defining a stack (l), said stack (l) and said battery having six faces, specifically - two mutually opposing front faces (F1, F2), - two mutually opposing side faces (F3, F5), - and two mutually opposing longitudinal faces (F4, F6), it being understood that the first longitudinal face (F6) of the battery comprises at least one anode connection region (1002) and that a second longitudinal face (F4) of the battery comprises at least one cathode connection region (1006), said anode connection region (1002) and cathode connection region (1006) being laterally opposed, characterized in that - in a first longitudinal direction (XX') of the battery, each anode current collector substrate (10) projects simultaneously from each anode layer (20), from each electrolyte material layer (30) or separator layer impregnated with an electrolyte (31), from each cathode layer (50) and from each cathode current collector substrate layer (40) and - in a second longitudinal direction (XX'') of the battery, opposite said first longitudinal direction (XX'), each cathode current collector substrate (40) projects simultaneously from each anode layer (20), from each electrolyte material layer (30) or separator layer impregnated with an electrolyte (31), from each cathode layer (50) and from each anode current collector substrate layer (10).

IPC 8 full level

H01M 4/04 (2006.01); **H01M 4/64** (2006.01); **H01M 10/04** (2006.01); **H01M 10/052** (2006.01); **H01M 10/0525** (2006.01); **H01M 10/056** (2006.01); **H01M 10/0585** (2006.01); **H01M 50/124** (2006.01); **H01M 50/126** (2006.01); **H01M 50/54** (2006.01); **H01M 50/543** (2006.01)

CPC (source: EP IL KR US)

H01M 4/0404 (2013.01 - EP IL KR US); **H01M 4/0407** (2013.01 - EP IL KR US); **H01M 4/64** (2013.01 - EP IL KR); **H01M 10/0413** (2013.01 - EP IL); **H01M 10/0436** (2013.01 - EP IL KR); **H01M 10/052** (2013.01 - EP IL KR); **H01M 10/0525** (2013.01 - US); **H01M 10/056** (2013.01 - EP IL US); **H01M 10/0585** (2013.01 - EP IL KR US); **H01M 50/124** (2021.01 - EP IL); **H01M 50/126** (2021.01 - EP IL KR US); **H01M 50/131** (2021.01 - KR US); **H01M 50/461** (2021.01 - KR); **H01M 50/54** (2021.01 - EP IL KR); **H01M 50/543** (2021.01 - EP IL); **Y02E 60/10** (2013.01 - EP IL); **Y02P 70/50** (2015.11 - EP IL)

Citation (search report)

See references of WO 2021198843A1

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 20166569 A 20200330; CA 3173247 A 20210323; CN 202180038646 A 20210323; EP 21713766 A 20210323; IB 2021052375 W 20210323; IL 29677922 A 20220922; JP 2022559537 A 20210323; KR 20227037934 A 20210323; TW 110111103 A 20210326; US 202117907437 A 20210323