

Title (en)

SOLUTION-DEPOSITED ELECTRODE COATINGS FOR THERMAL RUNAWAY MITIGATION IN RECHARGEABLE BATTERIES

Title (de)

LÖSUNGSABGESCHIEDENE ELEKTRODENBESCHICHTUNGEN ZUR ABSCHWÄCHUNG DES THERMISCHEN DURCHGEHENS IN WIEDERAUFLADBAREN BATTERIEN

Title (fr)

REVÊTEMENTS D'ÉLECTRODE DÉPOSÉS EN SOLUTION POUR ATTÉNUATION D'EMBALLLEMENT THERMIQUE DANS DES BATTERIES RECHARGEABLES

Publication

**EP 4059071 A1 20220921 (EN)**

Application

**EP 20888138 A 20201108**

Priority

- US 201962934522 P 20191113
- US 2020059590 W 20201108

Abstract (en)

[origin: WO2021096786A1] Provided herein are battery cells comprising artificial solid-electrolyte interphase (SEI) layers used as protective coatings on electrodes. The SEI layers are produced by liquid-phase deposition (LDP). The battery cell may comprise an anode, a cathode, an electrolyte disposed between the anode and the cathode, a polymer separator disposed between the anode and the cathode, and a casing containing the anode, the cathode, the electrolyte, and the polymer separator, wherein at least one or the anode or cathode comprises an SEI layer produced by an LDP method.

IPC 8 full level

**H01M 4/36** (2006.01); **H01M 4/60** (2006.01); **H01M 10/00** (2006.01)

CPC (source: EP)

**H01M 4/0416** (2013.01); **H01M 4/13** (2013.01); **H01M 4/133** (2013.01); **H01M 4/139** (2013.01); **H01M 4/1393** (2013.01); **H01M 4/62** (2013.01); **H01M 10/052** (2013.01); **H01M 10/4235** (2013.01); **Y02E 60/10** (2013.01)

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 2021096786 A1 20210520**; CN 115210907 A 20221018; EP 4059071 A1 20220921; EP 4059071 A4 20240724

DOCDB simple family (application)

**US 2020059590 W 20201108**; CN 202080092933 A 20201108; EP 20888138 A 20201108