

Title (en)

NEGATIVE ELECTRODE HAVING AN ELECTRODE LAYER, AN INTERMEDIATE LAYER, AND A SOLID ELECTROLYTE LAYER

Title (de)

NEGATIVE ELEKTRODE MIT ELEKTRODEN-, ZWISCHEN- UND FESTELEKTROLYTSCHICHT

Title (fr)

ÉLECTRODE NÉGATIVE POURVUE D'UNE COUCHE D'ÉLECTRODE, D'UNE COUCHE INTERMÉDIAIRE ET D'UNE COUCHE D'ÉLECTROLYTE SOLIDE

Publication

EP 3649682 A1 20200513 (DE)

Application

EP 18733236 A 20180620

Priority

- DE 102017211413 A 20170705
- EP 2018066397 W 20180620

Abstract (en)

[origin: WO2019007685A1] The invention relates to a negative electrode (10) for a lithium cell, which comprises a negative electrode layer (11) comprising a metallic lithium, a solid electrolyte layer (12) made of a solid electrolyte having a lithium-ion conducting portion and having a mechanically stabilizing portion, and an intermediate layer (13) between the negative electrode layer (11) and the solid electrolyte layer (12). In order to improve the performance, service life, and safety of a cell equipped therewith, the lithium-ion conducting portions of the solid electrolyte of the solid electrolyte layer (12) and the intermediate layer (13) comprise the same or a similar polymer electrolyte. The invention further relates to a lithium cell equipped therewith and to a method for production thereof.

IPC 8 full level

H01M 2/16 (2006.01); **H01M 4/02** (2006.01); **H01M 4/134** (2010.01); **H01M 4/38** (2006.01); **H01M 10/052** (2010.01); **H01M 10/056** (2010.01); **H01M 10/0565** (2010.01)

CPC (source: EP)

H01M 4/134 (2013.01); **H01M 4/382** (2013.01); **H01M 10/052** (2013.01); **H01M 10/0565** (2013.01); **H01M 50/446** (2021.01); **H01M 50/46** (2021.01); **H01M 10/056** (2013.01); **H01M 2004/027** (2013.01); **H01M 2300/0071** (2013.01); **H01M 2300/0082** (2013.01); **H01M 2300/0091** (2013.01); **H01M 2300/0094** (2013.01); **Y02E 60/10** (2013.01)

Citation (search report)

See references of WO 2019007685A1

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)

DE 102017211413 A1 20190110; EP 3649682 A1 20200513; WO 2019007685 A1 20190110

DOCDB simple family (application)

DE 102017211413 A 20170705; EP 18733236 A 20180620; EP 2018066397 W 20180620