

Title (en)

SURFACE COATINGS FOR CERAMIC ELECTROLYTE PARTICLES

Title (de)

OBERFLÄCHEN BESCHICHTUNGEN FÜR KERAMIK ELEKTROLYT PARTIKEL

Title (fr)

REVÊTEMENTS DE SURFACE POUR PARTICULES D'ÉLECTROLYTE EN CÉRAMIQUE

Publication

**EP 3685456 A1 20200729 (EN)**

Application

**EP 18853621 A 20180710**

Priority

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- US 2018041528 W 20180710

Abstract (en)

[origin: WO2019050618A1] Core/shell ionically-conductive particles are disclosed. The core particles contain ceramic electrolyte materials, and the shells are electronically-conductive. The core/shell particles can be combined with organic electrolytes to form composite organic-ceramic electrolytes that can be used in lithium battery cells. Such composite organic-ceramic electrolytes have been found to have improved lithium transport properties when compared to similar composite electrolytes made with ceramic electrolyte particles that do not have electronically-conductive shells.

IPC 8 full level

**H01M 4/62** (2006.01); **H01M 10/0525** (2010.01); **H01M 10/0565** (2010.01); **H01M 50/443** (2021.01); **H01M 50/497** (2021.01)

CPC (source: EP US)

**H01M 10/052** (2013.01 - EP); **H01M 10/0525** (2013.01 - EP); **H01M 10/056** (2013.01 - EP); **H01M 50/443** (2021.01 - EP US); **H01M 50/497** (2021.01 - EP US); **H01M 4/131** (2013.01 - EP); **H01M 4/133** (2013.01 - EP); **H01M 4/134** (2013.01 - EP); **H01M 4/381** (2013.01 - EP); **H01M 4/386** (2013.01 - EP); **H01M 4/485** (2013.01 - EP); **H01M 4/52** (2013.01 - EP); **H01M 4/624** (2013.01 - EP); **H01M 2300/0025** (2013.01 - EP); **H01M 2300/0065** (2013.01 - EP); **H01M 2300/0071** (2013.01 - EP); **H01M 2300/0082** (2013.01 - EP); **H01M 2300/0091** (2013.01 - EP); **H01M 2300/0094** (2013.01 - EP); **Y02E 60/10** (2013.01 - EP)

Designated contracting state (EPC)

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Designated extension state (EPC)

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DOCDB simple family (publication)

**WO 2019050618 A1 20190314**; CN 111656563 A 20200911; CN 111656563 B 20230404; EP 3685456 A1 20200729; EP 3685456 A4 20210818

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