

Title (en)

LOW FLAMMABILITY ELECTROLYTES FOR STABLE OPERATION OF ELECTROCHEMICAL DEVICES

Title (de)

SCHWER ENTFLAMMBARE ELEKTROLYTEN ZUM STABILEN BETRIEB VON ELEKTROCHEMISCHEN VORRICHTUNGEN

Title (fr)

ÉLECTROLYTES À FAIBLE INFLAMMABILITÉ POUR LE FONCTIONNEMENT STABLE DE DISPOSITIFS ÉLECTROCHIMIQUES

Publication

**EP 3697869 A4 20210804 (EN)**

Application

**EP 18869273 A 20180831**

Priority

- US 201715788188 A 20171019
- US 2018049141 W 20180831

Abstract (en)

[origin: WO2019078965A1] Low flammability and nonflammable localized superconcentrated electrolytes (LSEs) for stable operation of electrochemical devices, such as rechargeable batteries, supercapacitors, and sensors, are disclosed. Electrochemical devices, such as rechargeable batteries, supercapacitors, and sensors, including the low flammability and nonflammable LSEs are also disclosed. The low flammability and nonflammable LSEs include an active salt, a solvent comprising a flame retardant compound, wherein the active salt is soluble in the solvent, and a diluent in which the active salt is insoluble or poorly soluble. In certain embodiments, such as when the solvent and diluent are immiscible, the LSE further includes a bridge solvent.

IPC 8 full level

**C09K 21/12** (2006.01); **H01M 4/38** (2006.01); **H01M 4/40** (2006.01); **H01M 4/58** (2010.01); **H01M 4/86** (2006.01); **H01M 10/052** (2010.01); **H01M 10/056** (2010.01); **H01M 10/0567** (2010.01); **H01M 10/0568** (2010.01); **H01M 10/0569** (2010.01); **H01M 10/42** (2006.01); **H01M 10/52** (2006.01)

CPC (source: EP KR)

**C09K 21/12** (2013.01 - EP KR); **H01M 4/38** (2013.01 - EP); **H01M 4/382** (2013.01 - EP); **H01M 4/405** (2013.01 - KR); **H01M 4/5805** (2013.01 - EP); **H01M 10/052** (2013.01 - EP); **H01M 10/056** (2013.01 - KR); **H01M 10/0567** (2013.01 - EP); **H01M 10/0568** (2013.01 - EP); **H01M 10/0569** (2013.01 - EP); **H01M 10/4235** (2013.01 - EP); **H01M 2004/8684** (2013.01 - KR); **Y02E 60/10** (2013.01 - EP); **Y02E 60/50** (2013.01 - EP)

Citation (search report)

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- See also references of WO 2019078965A1

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DOCDB simple family (application)

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