

Title (en)

NITRILE SOLVENT-BASED ELECTROLYTE FOR ORGANIC BATTERY

Title (de)

ELEKTROLYT AUF NITRILLÖSUNGSMITTELBASIS FÜR ORGANISCHE BATTERIE

Title (fr)

ELECTROLYTE À BASE DE SOLVANT NITRILE POUR BATTERIE ORGANIQUE

Publication

EP 3928367 A1 20211229 (FR)

Application

EP 19710298 A 20190221

Priority

EP 2019054351 W 20190221

Abstract (en)

[origin: WO2020169200A1] The present invention relates to an electrochemical cell for an organic battery, in particular for a lithium-ion battery, comprising: - at least one organic electrode comprising, as the active material at least one molecular compound, referred to as the active compound, which is selected from aromatic dianhydrides and the imide derivatives thereof, in particular the dianhydride of perylene 3,4,9,10 tetracarboxylic acid (PTCDA) or one of the reduced forms thereof; and - an electrolyte comprising at least one nitrile solvent selected from the mononitriles having the formula R1-CN where R1 represents a C1 to C3 alkyl group; and the dinitriles having the formula NC-R2-CN where R2 represents an alkylene group having an even number of carbon atoms.

IPC 8 full level

H01M 4/13 (2010.01); **H01M 4/58** (2010.01); **H01M 4/60** (2006.01); **H01M 4/62** (2006.01); **H01M 10/0569** (2010.01); **H01M 10/52** (2006.01)

CPC (source: EP)

H01M 4/13 (2013.01); **H01M 4/5825** (2013.01); **H01M 4/60** (2013.01); **H01M 4/623** (2013.01); **H01M 4/626** (2013.01); **H01M 10/0569** (2013.01); **H01M 10/52** (2013.01); **Y02E 60/10** (2013.01)

Citation (search report)

See references of WO 2020169200A1

Cited by

CN114552008A

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 2020169200 A1 20200827; EP 3928367 A1 20211229

DOCDB simple family (application)

EP 2019054351 W 20190221; EP 19710298 A 20190221