

Title (en)

NOVEL BATTERY SYSTEMS BASED ON LITHIUM DIFLUOROPHOSPHATE

Title (de)

NEUARTIGE BATTERIESYSTEME AUF DER BASIS VON LITHIUM-DIFLUORPHOSPHAT

Title (fr)

NOUVEAUX SYSTÈMES DE BATTERIE À BASE DE DIFLUOROPHOSPHATE DE LITHIUM

Publication

EP 3662532 A4 20210908 (EN)

Application

EP 18841764 A 20180731

Priority

- US 201715663976 A 20170731
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- IB 2018055745 W 20180731

Abstract (en)

[origin: WO2019025980A1] A nonaqueous electrolyte for a lithium ion battery includes a lithium salt, a first nonaqueous solvent, and an additive mixture comprising a first operative additive of lithium difluorophosphate and a second operative additive of either fluoro ethylene carbonate or vinylene carbonate. A lithium-ion battery includes a negative electrode, a positive electrode comprising NMC with micrometer-scale grains, a nonaqueous electrolyte having lithium ions dissolved in a first nonaqueous solvent, and an additive mixture having a first operative additive of either fluoro ethylene carbonate or vinylene carbonate and a second operative additive of either 1,3,2-dioxathiolane-2,2-dioxide, another sulfur-containing additive, or lithium difluorophosphate.

IPC 8 full level

H01M 10/0567 (2010.01); **H01M 4/525** (2010.01); **H01M 10/0525** (2010.01); **H01M 4/02** (2006.01); **H01M 4/36** (2006.01); **H01M 4/62** (2006.01); **H01M 10/0569** (2010.01)

CPC (source: EP KR)

H01M 4/505 (2013.01 - KR); **H01M 4/525** (2013.01 - EP KR); **H01M 10/0525** (2013.01 - EP KR); **H01M 10/0567** (2013.01 - EP KR); **H01M 10/0569** (2013.01 - KR); **H01M 4/366** (2013.01 - EP KR); **H01M 4/62** (2013.01 - EP KR); **H01M 10/0569** (2013.01 - EP); **H01M 2004/021** (2013.01 - EP); **H01M 2220/10** (2013.01 - EP KR); **H01M 2220/20** (2013.01 - EP KR); **H01M 2300/0025** (2013.01 - EP); **H01M 2300/004** (2013.01 - KR); **Y02E 60/10** (2013.01 - EP)

Citation (search report)

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Designated contracting state (EPC)

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