

Title (en)

SACRIFICIAL ACTIVE MATERIAL OF A POSITIVE ELECTRODE FOR A LITHIUM-ION ELECTROCHEMICAL ELEMENT

Title (de)

AKTIVES OPFERMATERIAL EINER POSITIVEN ELEKTRODE FÜR EIN ELEKTROCHEMISCHES LITHIUM-IONEN-ELEMENT

Title (fr)

MATIERE ACTIVE SACRIFICIELLE D'ELECTRODE POSITIVE POUR ELEMENT ELECTROCHIMIQUE DE TYPE LITHIUM-ION

Publication

**EP 3642158 A1 20200429 (FR)**

Application

**EP 18724290 A 20180522**

Priority

- FR 1755608 A 20170620
- EP 2018063373 W 20180522

Abstract (en)

[origin: WO2018233963A1] A sacrificial positive active material for a lithium-ion electrochemical element which is a compound of formula  $(\text{LiO})_x(\text{MnO}_2)_y(\text{MnO})_z(\text{MOa})_t$  in which:  $x+y+z+t=1$ ;  $1-x-y \geq 0$ ;  $0.97 \geq x \geq 0.6$ ;  $y \leq 0.45$ .  $x - 0.17$ ;  $y \geq 0$ ;  $y+z > 0$ ;  $t \geq 0$ ;  $1 \leq a < 3$ . M is selected from the group consisting of Fe, Co, Ni, B, Al, Ti, Si, V, Mo, Zr and a mixture thereof.

IPC 8 full level

**C01G 45/12** (2006.01); **H01M 4/505** (2010.01); **H01M 4/525** (2010.01)

CPC (source: EP US)

**C01G 45/1221** (2013.01 - EP US); **C01G 45/1278** (2013.01 - EP US); **C01G 45/1285** (2013.01 - EP US); **H01M 4/131** (2013.01 - EP); **H01M 4/362** (2013.01 - EP); **H01M 4/364** (2013.01 - US); **H01M 4/505** (2013.01 - EP US); **H01M 4/525** (2013.01 - EP US); **H01M 4/5825** (2013.01 - EP US); **H01M 4/587** (2013.01 - EP US); **H01M 10/052** (2013.01 - EP); **H01M 10/0525** (2013.01 - EP US); **C01P 2002/60** (2013.01 - EP); **C01P 2002/72** (2013.01 - EP US); **C01P 2006/40** (2013.01 - EP US); **Y02E 60/10** (2013.01 - EP)

Citation (search report)

See references of WO 2018233963A1

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 2018233963 A1 20181227**; CN 111032574 A 20200417; EP 3642158 A1 20200429; FR 3067710 A1 20181221; FR 3067710 B1 20210917; US 11563212 B2 20230124; US 2020136140 A1 20200430

DOCDB simple family (application)

**EP 2018063373 W 20180522**; CN 201880041339 A 20180522; EP 18724290 A 20180522; FR 1755608 A 20170620; US 201816624632 A 20180522