

Title (en)

ELECTRODE BASED ON LITHIATED IRON MANGANESE PHOSPHATE FOR ELECTROCHEMICAL LITHIUM-ION COMPONENT

Title (de)

ELEKTRODE AUF DER BASIS VON LITHIIERTEM EISENMANGANPHOSPHAT FÜR ELEKTROCHEMISCHE LITHIUM-IONEN-KOMPONENTE

Title (fr)

ÉLECTRODE À BASE DE PHOSPHATE DE MANGANÈSE ET DE FER LITHIÉ POUR ÉLÉMENT ÉLECTROCHIMIQUE LITHIUM-ION

Publication

EP 4078701 A1 20221026 (FR)

Application

EP 20789183 A 20201015

Priority

- FR 1914865 A 20191219
- EP 2020079072 W 20201015

Abstract (en)

[origin: WO2021121714A1] An active substance composition comprising: a) a lithiated iron manganese phosphate of formula $\text{Li}_x\text{Mn}_{1-y-z}\text{Fe}_y\text{M}_z\text{PO}_4$ in which M is selected from the group consisting of B, Mg, Al, Si, Ca, Ti, V, Cr, Co, Ni, Cu, Zn, Y, Zr, Nb and Mo, alone or as a mixture, with $0.8 \leq x \leq 1.2$; $1-y-z > 0.5$; $0.5 > y \geq 0.05$ and $0 \leq z \leq 0.2$; and b) at least one crosslinked or non-crosslinked polymer selected from: i) a hydrogenated butadiene-acrylonitrile copolymer comprising from 10 to 60% by mass of acrylonitrile units and containing a molar percentage of residual double bonds of from 0.5 to 20%, ii) a carboxylated butadiene-acrylonitrile copolymer comprising from 10 to 60% by mass of acrylonitrile units and containing a molar percentage of residual double bonds of from 0.5 to 20%, iii) a mixture thereof.

IPC 8 full level

H01M 4/136 (2010.01); **H01M 4/02** (2006.01); **H01M 4/1397** (2010.01); **H01M 4/58** (2010.01); **H01M 4/62** (2006.01)

CPC (source: EP)

H01M 4/136 (2013.01); **H01M 4/1397** (2013.01); **H01M 4/5825** (2013.01); **H01M 4/622** (2013.01); **H01M 4/623** (2013.01);
H01M 2004/021 (2013.01); **Y02E 60/10** (2013.01)

Citation (search report)

See references of WO 2021121714A1

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

FR 3105242 A1 20210625; **FR 3105242 B1 20211126**; EP 4078701 A1 20221026; WO 2021121714 A1 20210624

DOCDB simple family (application)

FR 1914865 A 20191219; EP 2020079072 W 20201015; EP 20789183 A 20201015