

Title (en)

PROCESS FOR MAKING A COATED CATHODE ACTIVE MATERIAL, AND COATED CATHODE ACTIVE MATERIAL

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES BESCHICHTETEN KATHODENAKTIVMATERIALS UND BESCHICHTETES KATHODENAKTIVMATERIAL

Title (fr)

PROCÉDÉ DE FABRICATION DE MATÉRIAU ACTIF DE CATHODE REVÊTU, ET MATÉRIAU ACTIF DE CATHODE REVÊTU

Publication

EP 4367726 A1 20240515 (EN)

Application

EP 22733935 A 20220614

Priority

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- EP 2022066241 W 20220614

Abstract (en)

[origin: WO2023280534A1] Process for making a coated electrode active material wherein said process comprises the following steps: (a) providing an electrode active material according to general formula $\text{Li}_{1+x}\text{TM}_{1-x}\text{O}_2$, wherein TM is Ni or a combination of Ni and at least one of Co and Mn, and, optionally, at least one metal selected from Al, Mg, Ti and Zr, and x is in the range of from zero to 0.2, (b) contacting said electrode active material with a solution of salts of M2 wherein M2 is a combination of metals that includes Co, Cu, Ni, Zn and Mg, at a temperature in the range of from 5 °C to 85 °C, (c) removing the solvent from step (b), thereby obtaining a solid residue, (d) exposing the solid residue from step (c) to 3 to 10 pulses of electromagnetic radiation with a wavelength in the range of from 200 to 1400 nm, wherein the duration of the pulses is in the range of from 1 milliseconds to 2 seconds, (e) heat-treating the material so obtained in an oxygen-containing atmosphere at a temperature in the range of from 300 to 750 °C for 10 minutes to 4 hours.

IPC 8 full level

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