

Title (en)

A METHOD FOR UPSCALABLE PRECIPITATION SYNTHESIS OF BATTERY MATERIALS WITH TUNABLE PARTICLE SIZE DISTRIBUTION

Title (de)

VERFAHREN FÜR AUFSKALIERBARE FÄLLUNGSSYNTHESE VON BATTERIEMATERIALIEN MIT EINSTELLBARER
TEILCHENGRÖSSENVERTEILUNG

Title (fr)

PROCÉDÉ DE SYNTHÈSE PAR PRÉCIPITATION À GRANDE ÉCHELLE DE MATÉRIAUX DE BATTERIE À DISTRIBUTION DE TAILLE DE
PARTICULES ADAPTABLE

Publication

EP 3487813 A1 20190529 (EN)

Application

EP 17739543 A 20170711

Priority

- DK PA201600436 A 20160720
- EP 2017067388 W 20170711

Abstract (en)

[origin: WO2018015210A1] A metal carbonate material comprising nickel and manganese in an atomic ratio of $0 \leq \text{Ni:Mn} \leq 1/3$ is produced by a method for precipitation synthesis, where seed particles are produced continuously, agglomerated and grown in a first reactor, a specific amount of the product suspension is transferred batch-wise or continuously to a stirred second reactor, and a further continuous feed of raw materials in a fixed ratio is added to this second reactor to grow the particles. This step is optionally repeated one or more times, and then the final product is collected batch-wise or continuously from the last reactor.

IPC 8 full level

C01G 45/00 (2006.01); **C01D 5/06** (2006.01); **C01G 53/00** (2006.01); **H01M 4/131** (2010.01)

CPC (source: EP)

C01D 5/06 (2013.01); **C01G 45/00** (2013.01); **C01G 53/006** (2013.01); **H01M 4/131** (2013.01); **C01P 2004/32** (2013.01); **C01P 2004/50** (2013.01); **C01P 2004/54** (2013.01); **C01P 2004/61** (2013.01); **H01M 4/505** (2013.01); **H01M 4/525** (2013.01); **Y02E 60/10** (2013.01)

Citation (search report)

See references of WO 2018015210A1

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 2018015210 A1 20180125; CN 109311696 A 20190205; CN 109311696 B 20230602; EP 3487813 A1 20190529

DOCDB simple family (application)

EP 2017067388 W 20170711; CN 201780038592 A 20170711; EP 17739543 A 20170711