

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau

(43) International Publication Date  
22 October 2020 (22.10.2020)



(10) International Publication Number  
**WO 2020/212587 A1**

(51) International Patent Classification:

C22B 1/00 (2006.01) H01M 6/52 (2006.01)

C22B 3/00 (2006.01) H01M 10/54 (2006.01)

(21) International Application Number:

PCT/EP2020/060890

(22) International Filing Date:

17 April 2020 (17.04.2020)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

19170392.5 19 April 2019 (19.04.2019) EP

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO,

DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- of inventorship (Rule 4.17(iv))

Published:

- with international search report (Art. 21(3))

(54) Title: PROCESS FOR THE PREPARATION OF BATTERY PRECURSORS

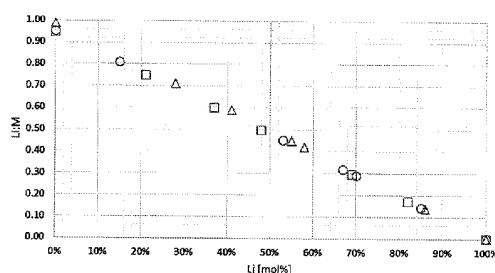


FIGURE 1

(57) Abstract: The invention concerns a process for the recovery of metals such as Ni and Co from a Li-containing starting material. In particular, this process concerns the recovery of metals M from a Li-containing starting material, wherein M comprises Ni and Co, comprising the steps of: Step 1: Providing said starting material, comprising Li-ion batteries or their derived products; Step 2: Removing Li in an amount of more than the maximum of (1) 30% of the Li present in said starting material, and (2) a percentage of the Li present in said starting material determined to obtain a Li:M ratio of less than 0.70 in a subsequent acidic leaching step; Step 3: Subsequent leaching using relative amounts of Li-depleted product and a mineral acid, thereby obtaining a Ni- and Co-bearing solution; and, Step 4: Crystallization of Ni, Co, and optionally Mn. Due to the lower reagent consumption and higher Ni and/or Co concentration during hydrometallurgical processing, the invention is an efficient and economic process for the production of crystals suitable for battery material production.



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