

ABSTRACT

METHOD FOR RECYCLING POSITIVE ELECTRODE MATERIALS FROM BATTERIES

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A method for recycling positive electrode materials from batteries comprises soaking positive electrode sheets in a first solution; extracting the positive electrode materials from the first solution; soaking the positive electrode materials in a second solution to dissolve waste active materials into the second solution to form a third solution and disperse conductive agents into the third solution; removing copper cations and iron cations from the third solution, adjusting molar ratios of Ni, Co, and Mn into a predetermined first molar ratio in the third solution, and concentrating the third solution, to form a fourth solution; subjecting the fourth solution to coprecipitation reaction to form Ni-Co-Mn ternary precursors dispersed in a fifth solution; extracting the Ni-Co-Mn ternary precursors from the fifth solution; forming lithium carbonate with the fifth solution; and forming Ni-Co-Mn ternary active materials with the Ni-Co-Mn ternary precursors and the lithium carbonate.

20 (Figure 1)