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(54) Title: METHOD AND SYSTEM FOR SEPARATING BLACK MASS FROM ELECTRODES OF SPENT LITHIUM ION BATTERIES

(57) Abstract: A method for separating black mass from electrodes of spent lithium ion batteries includes separating electrode pieces from remainder of material of a portion of a spent lithium ion battery. The electrode pieces are heated to a temperature in a range from about 200 °C to about 350 °C for a predetermined period of time to obtain pre-heated electrode pieces. The pre-heated electrode pieces are disposed in a neutral liquid to obtain a first suspension. Ultrasound vibrations are applied to the first suspension to separate the black mass and the binder from the metal pieces. Metal pieces, binder material and black mass from the electrode pieces are then segregated to obtain black mass.



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