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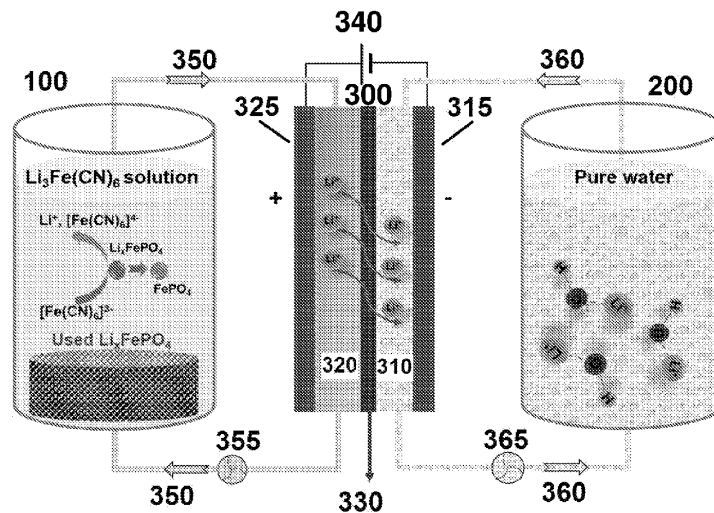


FIG. 1

(57) Abstract: Disclosed herein is a method of recovering lithium or sodium from an active material of a lithium or sodium ion battery. In a preferred embodiment, the method comprises a redox-targeting reaction of a used active material LiFePO_4 with a redox mediator $[\text{Fe}(\text{CN})_6]^{3-}$ in a tank to produce lithium ions, circulating the reacted redox solution into a cell to regenerate said redox mediator and enabling said lithium ions to migrate through a membrane towards a cathode wherein said lithium ions are captured as LiOH through an electrochemical reaction.

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