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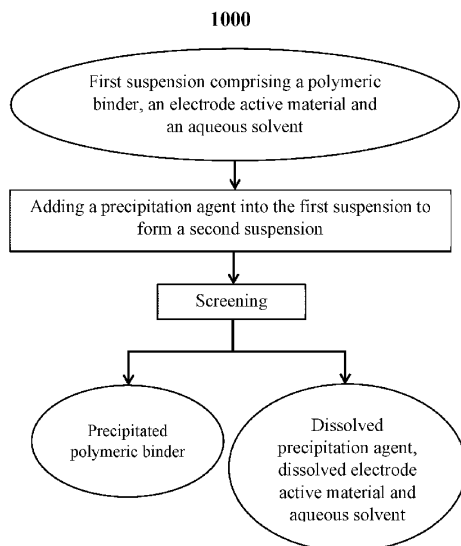


Figure 10

(57) Abstract: Disclosed is a method for precipitating a polymer by adding a precipitation agent into a first suspension to form a second suspension; wherein the first suspension comprises a polymer and an aqueous solvent; and wherein the polymer comprises a copolymer comprising a structural unit derived from an acid group-containing monomer and a structural unit derived from a hydrophobic group-containing monomer. The method for precipitation of a polymer disclosed herein is developed to initiate the bond disruption and/or breakage between the polymer and the aqueous solvent within the second suspension. This is accompanied with the structural transformation of the polymer driven by the intermolecular and intramolecular interactions of the polymer chains which brings about the precipitation of the polymer. The method circumvents both complex separation process and contamination of the polymer, enables excellent materials recovery and allows the precipitation of the polymer to be achieved within a short time frame. An application of the method for precipitating a polymeric binder in a battery electrode is disclosed herein.

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