

Title (en)

DISPERSED SOLUTION OF CARBON MATERIALS FOR MAKING CURRENT COLLECTORS

Title (de)

DISPERGIERTE LÖSUNG AUS KOHLENSTOFFMATERIALIEN ZUR HERSTELLUNG VON STROMKOLLEKTOREN

Title (fr)

SOLUTION DISPERSEE DE MATERIAUX CARBONES POUR LA FABRICATION DE COLLECTEURS DE COURANT

Publication

EP 1943693 A1 20080716 (FR)

Application

EP 06808216 A 20060929

Priority

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- FR 0509933 A 20050929

Abstract (en)

[origin: FR2891402A1] Preparation of a nanometric carbonaceous particles dispersed solution containing neither binder nor dispersant, comprises preparing a polymeric matrix of determined viscosity, introducing a fraction of the carbonaceous particles and a fraction of a wetting agent i.e. solvent of the matrix, maintaining the mixture under agitation until obtaining a stable ground of viscosity and repeating the introduction of carbonaceous particles and the agitation until exhaustion of the carbonaceous particles and solvent. Independent claims are included for: (1) a nanometric carbonaceous particles dispersed solution comprising carbonaceous particles (1-4% mass/volume, 2-4% mass/volume) in suspension, a polymeric matrix (20-40 vol.%) and a wetting agent, solvent of the polymeric matrix, where the dispersed solution contains neither binder nor dispersant; (2) preparation of a conducting carbonaceous layer on a substrate comprising preparing a dispersed solution of carbonaceous nanometric particles, depositing a layer of the dispersed solution on the substrate, drying the layer with free air, eliminating the polymer by heat treatment and the carbonaceous particles that are non-adherent with the substrate, by brushing; and (3) an electrical energy storage system comprising a metallic current collector and an active film, where the current collector is covered with a conductor layer obtained using the solution of carbonaceous particles.

IPC 8 full level

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