

Title (en)

METHOD OF DEPOSITING OXIDIZED CARBON-BASED MICROPARTICLES AND NANOPARTICLES

Title (de)

VERFAHREN ZUR ABSCHIEDUNG VON AUF OXIDIERTEM KOHLENSTOFF BASIERTEN MIKROPARTIKELN UND NANOPARTIKELN

Title (fr)

PROCEDE DE DEPOT DE NANOPARTICULES ET DE MICROPARTICULES CARBONEES OXYDEES

Publication

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Application

**EP 16706982 A 20160205**

Priority

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Abstract (en)

[origin: WO2016124756A1] The present invention concerns the field of components for storing energy and relates to a method of depositing nano-/microparticles, including at least graphene sheets, on a support (8), comprising the following steps: oxidizing at least the graphene sheets; suspending the nano-/microparticles in at least one solution comprising at least water as solvent; spraying each suspension onto a substrate (15) by hydrodynamic instability; heating the substrate (15) during each spraying, in order to promote the complete evaporation of the solvent from each part of each suspension sprayed onto the substrate (15), to a temperature below or equal to one and a half times the boiling temperature of each of the aforementioned solutions and lower than or equal to 200 degrees Celsius; and reheating the deposit (1) after the spraying or sprayings to a temperature that is sufficient to deoxidize at least the oxidized graphene present in the deposit (1) and higher than the temperature of the substrate (15) during the deposition step.

IPC 8 full level

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