

Title (en)

METHOD FOR PREPARING LAYERED NANOPARTICLES, AND NANOPARTICLES OBTAINED

Title (de)

VERFAHREN ZUR HERSTELLUNG VON GESCHICHTETEN NANOPARTIKELN UND NANOPARTIKEL

Title (fr)

PROCEDE DE PREPARATION DE NANOPARTICULES EN FEUILLETS ET NANOPARTICULES OBTENUES.

Publication

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Application

EP 06847163 A 20061218

Priority

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- FR 0554076 A 20051223

Abstract (en)

[origin: FR2895412A1] Preparing a nanoparticle layer comprises: mixing a layer material with an expanding agent e.g. polyols; reacting the expanded layer with a grafting agent in the presence of water and an acid; and recovering the nanoparticle layer. Preparing a nanoparticle layer comprises: mixing a layer material with an expanding agent e.g. polyols; reacting the expanded layer with a grafting agent of formula $R-aXY_1$ 4 - a in the presence of water and an acid; and recovering the nanoparticle layer. R : H or 1-40C hydrocarbon, preferably contain O or N or substituted by NH₂, COOH, epoxy or amido group; X : Ti, Zr or Si; Y₁ : 1-12C alkoxy or halo; and a : 1-3. An independent claim is included for a nanoparticle foil obtained by the process, where the foil comprises percentage loss on ignition is greater than 6, preferably greater than 16.

IPC 8 full level

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CPC (source: EP US)

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