Title (en)

METHOD FOR PRODUCING NANOSCALE METAL OXIDE-FILLED POLYMERS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON MIT NANOSKALIGEN METALLOXIDEN GEFÜLLTEN POLYMEREN

Title (fr)

PROCÉDÉ POUR PRODUIRE DES POLYMÈRES REMPLIS D'OXYDES MÉTALLIQUES NANOMÉTRIQUES

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Abstract (en)

[origin: WO2008055869A2] The invention relates to a method for producing nanoscale metal oxide-filled polymers. Said method is characterized by the following steps: a) producing a nanosuspension of one or more crystalline metal oxides, metal hydroxides or metal oxide hydroxides by heating a suspension of one or more compounds containing the corresponding metals in a first polymerizable compound to a temperature higher than the boiling point of water at process temperature and lower than the boiling temperature of the first polymerizable compound and also lower than the temperature at which polymerization of the first polymerizable compound begins, in the presence of water in an amount corresponding to 1 to 10 oxygen atoms per metal atom of the compound or of the compounds containing the corresponding metals, and b) polymerization of the first polymerizable compound under the conditions of temperature and pressure conventional for the first polymerizable compound.

IPC 8 full level

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