

Title (en)

PRECIPITATION OF NANOPARTICLES IN MONOMERS FOR THE PRODUCTION OF HYBRID PARTICLES

Title (de)

FÄLLUNG VON NANOPARTIKELN IN MONOMEREN ZUR HERSTELLUNG VON HYBRIDPARTIKELN

Title (fr)

PRÉCIPITATION DE NANOPARTICULES EN MONOMÈRES POUR LA FABRICATION DE PARTICULES HYBRIDES

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Application

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Abstract (en)

[origin: WO2014037554A1] The invention relates to a method for producing hybrid nanoparticles containing at least one inorganic material and at least one polymer organic material, comprising at least the following steps: (A) providing an emulsion comprising a disperse phase (I) containing at least one precursor compound of the at least one polymer organic material, and at least one compound which effects the precipitation of the at least one inorganic material, a continuous aqueous phase (II) and, if appropriate, at least one compound which effects the polymerization of the at least one precursor compound, wherein these are present in the disperse phase (I), in the continuous aqueous phase (II) or in both phases (I) and (II), (B) adding at least one precursor compound of the at least one inorganic material to the emulsion from step (A), such that the at least one inorganic material is formed in the disperse phase by means of precipitation, (C) if appropriate, adding at least one compound which effects the polymerization of the at least one precursor compound of the at least one polymer organic material, if this has not taken place in step (A), and (D) polymerizing the at least one precursor compound of the at least one polymer organic material. The invention further relates to nanoparticles that can be produced by the method according to the invention, and to the use of a nanoparticle according to the invention in optical, electronic, chemical, agrochemical, medical, pharmaceutical and/or biotechnological systems or for the administration of at least one active substance.

IPC 8 full level

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