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(54) Title: PROCESS FOR NANOMATERIAL SYNTHESIS FROM THE PREPARATION AND DETONATION OF AN EMULSION, PRODUCTS AND EMULSIONS THEREOF

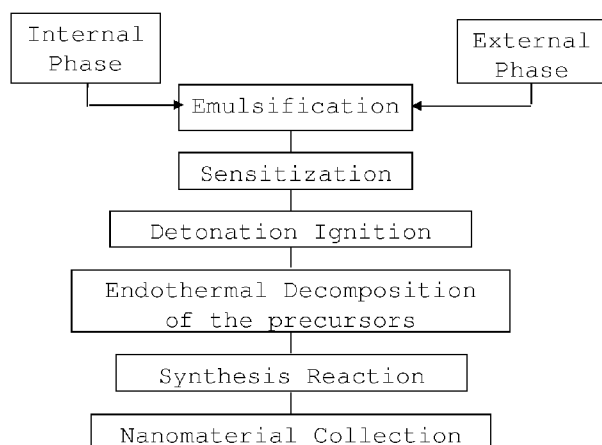


Figure 1

(57) Abstract: The present invention refers to a nanomaterial synthesis process from the decomposition and subsequent reaction among common and economical insoluble precursors, or precursors which hydrolyze in contact with water, which are incorporated in the internal phase of an emulsion. These insoluble precursors are introduced in the internal phase of an emulsion, then being subject to decomposition and subsequent reaction in the solid state, under shockwave effect during the detonation of the emulsion, the nanomaterial with the intended structure being in the end obtained. The process of the present invention therefore allows obtaining a wide range of nanomaterial as composites or binary, ternary structures or higher structures, with small-sized homogeneous primary particles, applicable to several technological fields.



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