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(54) Title: CERAMIC POWDERS COATED WITH A NANOPARTICLE LAYER AND PROCESS FOR OBTAINING THERE-OF

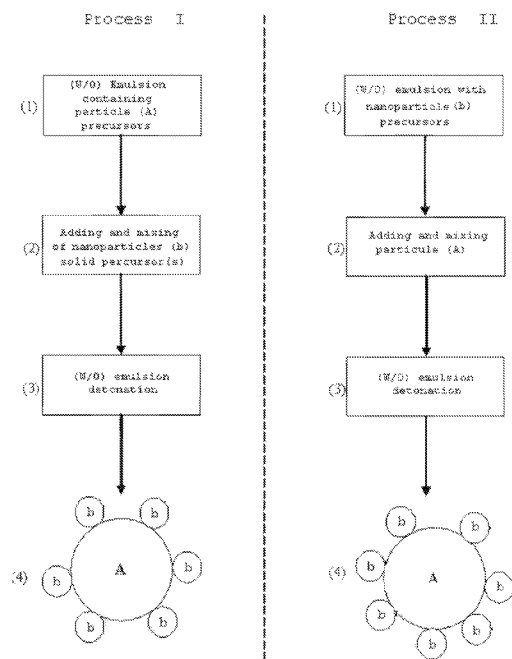


Figure 1

(57) Abstract: The present invention refers to ceramic powders coated with a layer of nanoparticles of multiple crystalline structures and process for obtaining the same. These coatings are obtained by means of the introduction of precursors in water in oil emulsions, which upon decomposition during its detonation, form the nanoparticles that adhere to the surface of the ceramic powder intended to coat. The later base ceramic powder can be synthesized during the emulsion detonation (W/O) or simply be directly placed in its composition. The properties of the obtained coating, such as thickness, adhesion, porosity and coated surface percentage, can be adjusted according to the application desired, the ceramic powders coated being applicable to several types of areas of the nanotechnology, such as electronics, biomedicine, chemistry, ceramics and energy industries.



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