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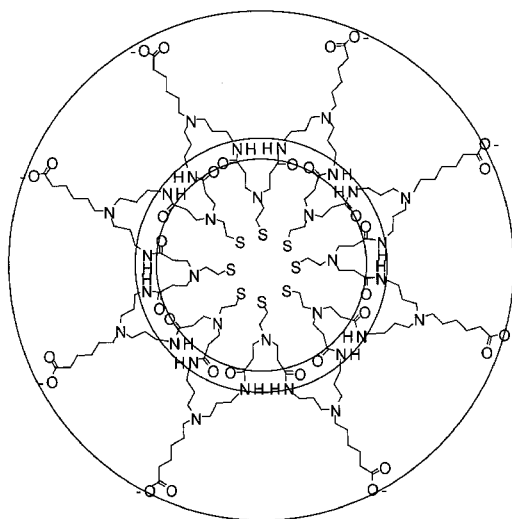
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(54) Title: NOVEL WATER-SOLUBLE NANOCRYSTALS COMPRISING A LOW MOLECULAR WEIGHT COATING REAGENT, AND METHODS OF PREPARING THE SAME



(57) Abstract: The invention relates to a water soluble nanocrystal with a nanocrystal core comprising at least one metal M1 selected from an element of main group II, VIIA, subgroup VIIA, subgroup IB, subgroup IIB, main group III or main group IV of the periodic system of the elements (PSE), at least one element A selected from main group V or main group VI of the PSE, a capping reagent attached to the surface of the core of the nanocrystal, said capping reagent having at least two coupling groups, and a second layer comprising a low molecular weight coating reagent having at least two coupling moieties covalently coupled with the coating reagent, and at least one water soluble group for conferring water solubility to the second layer.

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