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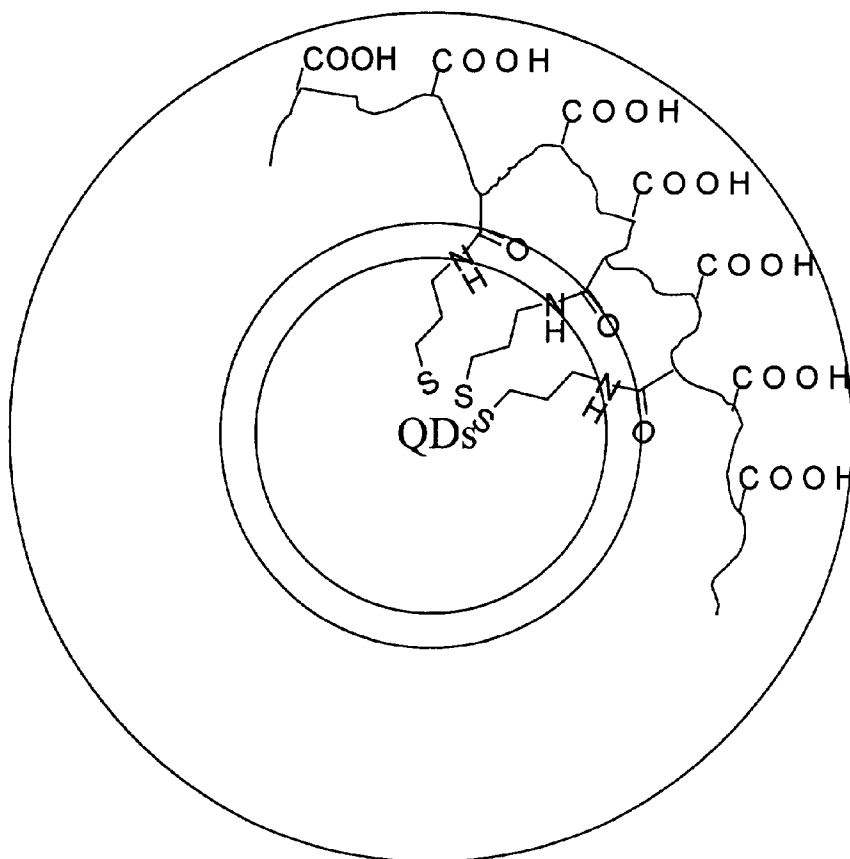
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(54) Title: NOVEL WATER-SOLUBLE NANOCRYSTALS COMPRISING A POLYMERIC COATING REAGENT, AND
METHODS OF PREPARING THE SAME



(57) Abstract: Disclosed is a water soluble nanocrystal comprising a nanocrystal core comprising at least one metal M1 selected from an element of main group II, subgroup VIIA, subgroup VIIIA, 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, and a water soluble polymer covalently coupled with the capping reagent to form a water soluble polymer shell over the nanocrystal core. Also disclosed are compositions comprising such nanocrystals and uses of such nanocrystals.



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