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[54] **BIODEGRADABLE MICROSPHERES AS A CARRIER FOR MACROMOLECULES**

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[58] **Field of Search** 428/402.22; 424/486, 424/487, 501, 499; 514/963, 2, 885

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[57] **ABSTRACT**

A method for preparing biodegradable microspheres having a three-dimensional network in which biologically active macromolecular agents are physically entrapped therein. The microsphere is able to degrade and release the macromolecular agent at a controlled rate. The method involves emulsifying a vinyl derivative of a biodegradable hydrophilic polymer, a water-soluble monovinyl monomer and a biologically active macromolecule in water, and copolymerizing the biodegradable hydrophilic polymer and the water-soluble monovinyl monomer such that the biologically active macromolecule is entrapped therein.

13 Claims, 2 Drawing Sheets