United States Patent [19]

Feijen

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[54] **BIODEGRADABLE HYDROGEL MATRICES FOR THE CONTROLLED RELEASE OF PHARMACOLOGICALLY ACTIVE AGENTS**

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Related U.S. Application Data

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[58] **Field of Search** 424/423, 426, 484, 488, 424/499, 450

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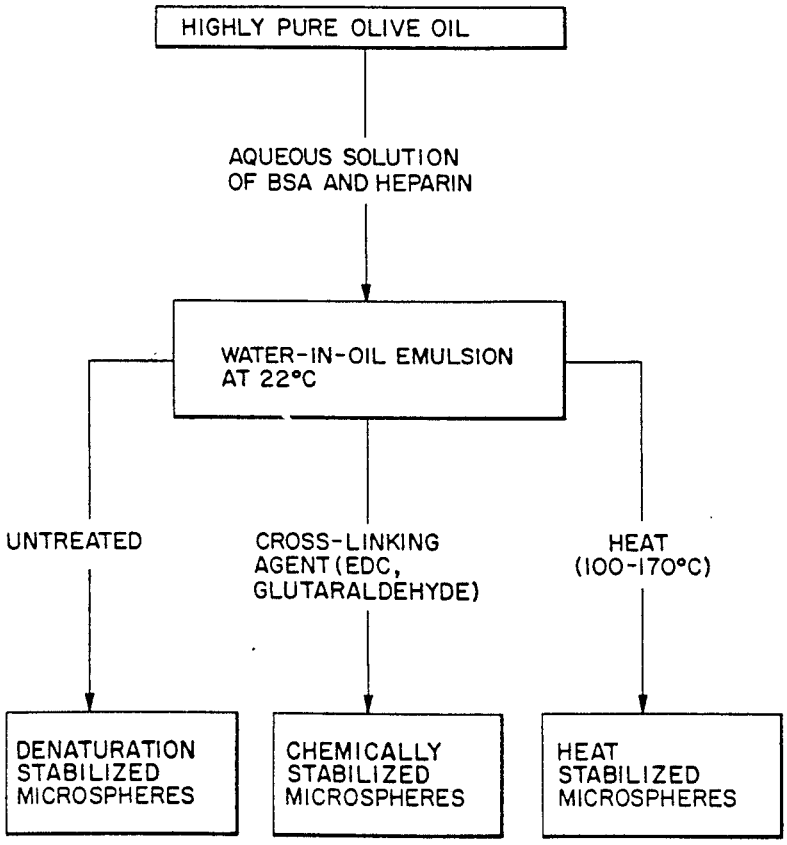
[57] **ABSTRACT**

A biodegradable hydrogel matrix is provided, useful for the controlled release of pharmacologically active agents. The matrix is formed by cross-linking a proteinaceous component and a polysaccharide or mucopolysaccharide, and then loading a selected drug therein. By varying temperature, ionic strength, and the composition of the hydrogel matrix, one can control degradation kinetics, the degree of uptake of a particular pharmacologically active agent, and the overall times release profile.

17 Claims, 12 Drawing Sheets