

# United States Patent [19]

Singer et al.

[11] Patent Number: **4,620,954**

[45] Date of Patent: **Nov. 4, 1986**

[54] **HYDROGEL FROM  
ULTRAVIOLET-INITIATED  
COPOLYMERIZATION**

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[21] Appl. No.: **742,545**

[22] Filed: **Jun. 7, 1985**

[51] Int. Cl.<sup>4</sup> ..... **C08J 3/00**

[52] U.S. Cl. .... **264/1.4; 264/1.1; 522/13; 523/108; 526/264**

[58] Field of Search ..... **523/108; 526/264; 204/159.23, 159.24; 264/1.1, 1.4**

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[57] **ABSTRACT**

In the particular embodiment described in the specification, a contact lens hydrogel is prepared by copolymerizing 75 parts of N-vinyl pyrrolidone and 23 parts of phenyl ethyl methacrylate together with allyl methacrylate as a crosslinker, t-butyl peroctoate as a thermal initiator and 2,2-dimethoxy-2-phenylacetophenone or benzoin methyl ether as a photoinitiator. The mixture is maintained at a temperature of 5° C. and protected from light prior to photopolymerization which is carried out under ultraviolet radiation. The copolymer is then post-cured thermally. Cloudy or hazy hydrogels are avoided by preventing prepolymerization of the mixture.

**13 Claims, No Drawings**