

[54] **VISCOELASTIC MATERIAL FOR OPTHALMIC SURGERY**

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[58] **Field of Search** **514/54, 912, 913, 915; 523/105; 604/28, 294; 424/80**

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,003,991	1/1977	Krohn et al.	424/81
4,136,173	1/1979	Pramoda et al.	514/15
4,141,973	2/1979	Balazs	514/54
4,328,803	5/1982	Pape	514/54
4,486,416	12/1984	Soll et al.	514/54
4,604,217	8/1986	Lukach et al.	523/130

FOREIGN PATENT DOCUMENTS

8600079 1/1986 World Int. Prop. O. 514/54

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[57] **ABSTRACT**

An ophthalmic surgical procedure wherein the anterior or posterior chamber of the eye is filled with viscoelastic space-filling and ocular tissue protective surgical material, the improvement comprising the utilization therein of a composition particularly adapted for use as an ophthalmic viscoelastic surgical material in the anterior or posterior chamber of the eye consisting of an aqueous solution containing from about 1.5% to about 25%, by weight, of a physiologically acceptable, water-soluble polyvinylpyrrolidone polymer or polyvinylpyrrolidone copolymer, having a molecular weight greater than 500,000, said aqueous solution having a viscosity greater than about 5,000 centipoises, measured at 25° C. using a Brookfield viscometer.

19 Claims, No Drawings