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**Clarke**

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(54) **ACCOMMODATING INTRAOCULAR LENS AND METHODS OF USE**

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1101 days.

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See application file for complete search history.

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(57) **ABSTRACT**

An accommodating intraocular lens, for use in an eye, is made from flexible, optionally elastic, bio-compatible lens body material surrounding a closed and sealed lens cavity which is filled with bio-compatible optical liquid, optionally a gel. The optical liquid has a refractive index sufficiently high to, in cooperation with the ciliary muscle, focus light, incident on the eye, on the retina, and to provide accommodation. The curvature of the front surface of the lens is deformable, by the pressure expressed by the ciliary body during the accommodative effort, thus to change the radius of curvature of the anterior body member and/or the posterior body member, thus providing smooth focusing, including from far distance in the relaxed state to near distance of less than 50 centimeters in the accommodative state.

**30 Claims, 7 Drawing Sheets**

