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# United States Patent [19]

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Skottun

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[54] **ENCAPSULATED ACCOMMODATING INTRAOCULAR LENS**

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[57] **ABSTRACT**

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An accommodating intraocular lens which is contained inside an encapsulating rigid shell so as to make it substantially insensitive to changes in the intraocular environment. A flexible transparent membrane divides the interior of the intraocular lens into two separate spaces containing fluid media with different refractive indices. The overall optical power of the intraocular lens may be altered by altering the curvature of the transparent membrane. The intraocular lens is equipped with haptics which extend inward into the interior of the intraocular lens and are attached to the encapsulating rigid shell in such a manner so as to be able to rotate around the place where the haptic crosses from the exterior to the interior of the intraocular lens. This allows the movement of the haptic to be transmitted to the interior of the intraocular lens where these movements are used to control the shape of the transparent membrane. By having the haptics rotate around the place where they cross the rigid shell, there need be only minimal motion at this point, which makes it possible to make the intraocular lens essentially insensitive to changes in the intraocular pressure.

[21] Appl. No.: **09/219,039**

[22] Filed: **Dec. 23, 1998**

[51] Int. Cl.<sup>7</sup> ..... **A61F 2/16**

[52] U.S. Cl. .... **623/6.37; 623/6.38; 623/6.42; 623/6.13**

[58] Field of Search ..... **623/6, 4, 6.11, 623/6.13, 6.37, 6.38, 6.42**

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**19 Claims, 3 Drawing Sheets**

