

[54] LAMINATE OPTIC WITH INTERIOR FRESNEL LENS

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[57] ABSTRACT

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Composite lens, especially an intraocular lens for insertion through an incision into an eye and desirably containing haptics, comprising a flat, partially hollow laminate optic, formed by a pair of relatively thin, sheet-like elements having opposed interior surfaces, at least one such element constituting a protected Fresnel lens defining the interior surface of the element as a discontinuous surface formation of a concentric series of annular prisms, the interior surfaces being peripherally sealed together to define therebetween a counterpart series of permanent captive gas enclosing, liquid free, spaces of different index of refraction from that of the elements, preferably with the elements being formed of flexible, temporarily deformable material and together sized to provide the optic with a comparatively thin thickness in relation to its diameter, permitting its deformation into a reduced girth cylindrical shape for eye insertion through a minimum size corneal incision, after which the lens will return to its original state for seating in place in the eye.

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[52] U.S. Cl. 623/6; 351/166; 351/171; 351/172

[58] Field of Search 623/6; 351/166, 168-172

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Primary Examiner—Ronald L. Frinks

15 Claims, 1 Drawing Sheet

