

[54] INTRAOCULAR AND EXTRAOCULAR LENS CONSTRUCTION AND METHOD OF MAKING THE SAME

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[56] References Cited

U.S. PATENT DOCUMENTS

| | | | |
|-----------|--------|---------------|-----------|
| 4,080,709 | 3/1978 | Poler | 3/13 |
| 4,149,279 | 4/1979 | Poler | 3/13 |
| 4,206,518 | 6/1980 | Jardon et al. | 3/1 B |
| 4,402,579 | 9/1983 | Poler | 351/160 R |

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[57] ABSTRACT

The invention contemplates integral lens-and-haptic structure and a technique of making the same, using sheet material as the only ingredient of the ultimate product, which may be an intraocular implant or for extraocular (i.e., cornea-contact) application. The sheet material is of substantially the ultimate thickness of the lens, and may be of optical-quality glass or of a transparent plastic which is inert to body fluids. Suitably coordinated masking and etching steps determine the contour of the ultimate central circular lens as well as the thickness and fenestration detail of the ultimate thin flexible haptic formations which are integral with and extend radially outward of the lens blank. Lens-surface curvature may be developed before or after haptic formation.

14 Claims, 20 Drawing Figures

