

- [54] METHOD FOR LOCATING ON A CORNEA AN ARTIFICIAL LENS FABRICATED FROM A COLLAGEN-HYDROGEL FOR PROMOTING EPITHELIAL CELL GROWTH
- [75] Inventors: Linda Civerchia, Ft. Lauderdale, Fla.; Dennis D. Shepard, Santa Maria, Calif.
- [73] Assignee: CBS Lens, Santa Maria, Calif.
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Primary Examiner—Ronald Frinks  
 Attorney, Agent, or Firm—Daniel J. Meaney, Jr.

[57] **ABSTRACT**

A method for locating on the cornea an optical lens having a preselected geometric shape and power wherein the optical lens is formed of a collagen-hydrogel for promoting epithelial cell growth is shown. The method comprises the steps of: removing from Bowman's membrane over the area of the pupillary zone of the eye a portion of the corneal epithelium; forming on Bowman's membrane a "V" shaped annular groove having a diameter substantially equal to the maximum geometrical dimensions of the optical lens and a preselected depth; dissecting the peripheral edge of the groove forming a wing of corneal tissue having a preselected length; placing the posterior surface of the optical lens on the anterior surface of Bowman's membrane and positioning the outer edge of the optical lens under the corneal wing, and affixing the optical lens to Bowman's membrane over the pupillary zone of the eye to maintain the same on the cornea with the corneal wing overlying the edge of the optical lens. With the edge of the lens in contact with corneal epithelium, the collagen-hydrogel for promoting epithelial cell growth interacts with epithelial cells during a healing period to promote growth thereof over, and attach to, the anterior surface of the optical lens implanting the same under corneal epithelium.

10 Claims, 4 Drawing Sheets

