

[54] ASPHERIC CONTACT LENS

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[21] Appl. No.: 606,140

[22] Filed: May 2, 1984

[51] Int. Cl.⁴ G02C 7/04; G02C 7/06

[52] U.S. Cl. 351/160 R; 351/161;
351/177

[58] Field of Search 351/160 R, 160 H, 161,
351/162, 177

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[57] ABSTRACT

A contact lens is disclosed wherein at least one of its surfaces, generally the posterior surface, is an aspheric surface of revolution which decreases in curvature from its apex to its periphery and which varies in a continuous and regular manner in eccentricity from its apex to its periphery. The novel surface is defined in terms of three parameters: apical radius of curvature; apical eccentricity; and collectively one or more derivatives of eccentricity. The lens with the novel surface posterior is so designed that the novel surface approximates the contour of the cornea while at the same time producing optical properties in the lens for optimal correction of the refractive error of the non-presbyopic eye, and when presbyopia exists, for the correction of the refractive error of the eye and presbyopia.

24 Claims, 9 Drawing Figures

