

[54] **METHOD AND APPARATUS FOR MEASURING ASPHERIC CONTACT LENS SURFACES**

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[58] Field of Search 356/124, 127, 125; 350/86, 91

[56] **References Cited**

U.S. PATENT DOCUMENTS

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[57] **ABSTRACT**

This invention consists of an improvement in known

measuring microscopes and the method of use of such microscope for measuring radii of curvature of contact lens surface areas by catoptric imagery, by attaching a novel lens holding stage with an adjustable lens holder to the measuring microscope below the objective lens thereof and supporting an optical contact lens, either semi-finished or finished, in said holder, with provisions for tilting the lens holder of the stage a selected angular amount about a lens holder axis and translating the lens holder along a horizontal translation axis perpendicular to the lens holder axis, both the lens holder axis and the horizontal translation axis being perpendicular to the optical axis of the microscope, the horizontal translation axis intersecting both the optical axis of the microscope and the lens holder axis, tilting the optical contact lens a given angular amount about the lens holder axis and translating the lens along the horizontal translation axis in such a manner that said optical axis is made normal to the lens area being measured at each of selected positions along a selected single meridian to measure the radius or radii of curvature of the polished reflecting contact lens surface at any desired number of positions.

10 Claims, 20 Drawing Figures

