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COMBINED MULTIFOCAL TORIC LENS DESIGNS

ABSTRACT OF THE DISCLOSURE

Combined multifocal toric lens designs are disclosed which combine a correction for astigmatism, either corneal or lenticular, with a correction for presbyopia. One of the front and back surfaces of the lens defines a toric surface for an astigmatic optical correction, and one of the front and back surfaces, which can be the same surface or the opposite surface, defines a multifocal surface for a presbyopic optical correction, to provide visual acuity for astigmatic presbyopes. Embodiments are disclosed wherein one surface of the lens design has a combined concentric annular ring, multifocal toric surface, and the other surface of the lens design has a spherical or aspherical surface. In other embodiments, one surface of the lens design has a toric surface for a toric correction, and the other surface of the lens design has a multifocal surface to provide a presbyopic correction, which may include concentric annular ring multifocal lens designs, or other presbyopic lens designs which contain more than one spherical or aspherical power such as aspheres, segments, progressive aspheres, diffractive, birefringent or other concentrics.