

ABSTRACT

METHODS FOR FORMING VARIABLE OPTIC OPHTHALMIC DEVICES INCLUDING SHAPED LIQUID CRYSTAL ELEMENTS

This invention discloses methods and apparatus for providing an ophthalmic lens of variable optical power. The variable optic insert may have surfaces within that have differing radii of curvature. The variable optic insert may also comprise polarizing elements. In some examples, an intermediate optic piece may be formed to comprise a UV absorbing dye, allowing differential processing of regions on either side of the intermediate optic piece. In some embodiments, an ophthalmic lens is cast-molded from a silicone hydrogel. The various ophthalmic lens entities may include electroactive liquid crystal layers to electrically control refractive characteristics.

Figure 7