

ELECTRO-ACTIVE DIFFRACTIVE LENS AND METHOD FOR MAKING THE SAME

ABSTRACT

Aspects of the present invention provide an electro-active lens and method for manufacturing the same that encapsulates liquid crystal using solid transparent optical material using an improved liquid crystal seal feature. The seal feature greatly reduces the visibility of the liquid crystal seal feature in an assembled electro-active lens. The seal feature is also structurally robust such that the electro-active lens can be processed to fit a spectacle frame without disturbing containment of the liquid crystal and without disrupting electrical connectivity to the lens used to alter the refractive index of the liquid crystal, thereby ensuring fabrication of a commercially viable electro- active lens.

FIGURE 1