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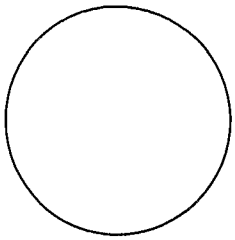
(54) Title: VISION ENHANCING OPHTHALMIC DEVICES AND RELATED METHODS AND COMPOSITIONS



(57) Abstract: Devices, methods, and compositions for improving vision or treating diseases, disorders or injury of the eye are described. Ophthalmic devices, such as corneal onlays, corneal inlays, and full-thickness corneal implants, are made of a material that is effective in facilitating nerve growth through or over the device. The material may include an amount of collagen greater than 1% (w/w), such as between about 10% (w/w) and about 30% (w/w). The material may include collagen polymers and/or a second biopolymer or water-soluble synthetic polymer cross-linked using EDC/NHS chemistry. The material may additionally comprise a synthetic polymer. The devices are placed into an eye to correct or improve the vision of an individual or to treat a disease, disorder or injury of an eye of an individual.

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