

a hydrogel polymer formed by the free radical polymerization of a hydrophilic monomer solution gelled and crosslinked to form a three dimensional polymeric meshwork for anchoring collagen; and

a stock solution of collagen comprising a constituent of a ground substance of tissue added to and substantially uniformly interdispersed within said polymeric meshwork forming a collagen-hydrogel for promoting epithelial cell growth and attachment of such cells to the surface of the hydrogel polymer, said collagen-hydrogel being capable of promoting and supporting growth of epithelial cells to form a corneal epithelium of the eye;

said lens body being adapted to have the posterior surface thereof positioned over the pupil of an eye and affixed to Bowman's membrane in an area substantially equal to the shape of said lens body having the corneal epithelium removed therefrom, and when so affixed being capable of supporting and promoting cell growth of the corneal epithelium which adheres to and covers the posterior surface of said lens body.

11. The contact lens of claim 10 wherein said lens body shape is molded from the collagen-hydrogel.

12. An artificial lens for an eye which is capable of resisting rejection thereof by the cornea and supporting growth and attachment of epithelial cells from the corneal epithelium to the anterior surface of and permanently implanting the artificial lens on the eye, said artificial lens comprising

an optical portion configured for placement over the pupillary zone of the eye and on the central anterior surface of Bowman's membrane of the cornea having the corneal epithelium thereof removed, said optical portion being dimensioned to substantially cover the total anterior surface of the pupillary zone of an eye, said optical portion being formed of a collagen-hydrogel for promoting epithelial cell growth comprising

a hydrogel polymer formed by the free radical polymerization of a hydrophilic monomer solution gelled and crosslinked to form a three dimensional polymeric meshwork for anchoring collagen; and

a stock solution of collagen comprising a constituent of a ground substance of tissue added to and substantially uniformly interdispersed within said polymeric meshwork forming a collagen-hydro-

gel for promoting epithelial cell growth and attachment of such cells to the surface of the hydrogel polymer, said collagen-hydrogel being capable of promoting and supporting growth of epithelial cells enabling corneal epithelium to adhere to and cover the anterior surface of and to permanently implant the artificial lens on the eye.

13. The artificial lens for an eye of claim 12 wherein the stock solution of collagen is formed of native collagen derived from animal sources and capable of promoting and supporting growth of corneal epithelial cells.

14. The artificial lens for an eye of claim 12 wherein the hydrophilic monomer of the collagen-hydrogel is hydroxyethylemethacrylate.

15. The artificial lens for an eye of claim 12 wherein the hydrogel polymer of the collagen-hydrogel includes at least one crosslinking agent.

16. The artificial lens for an eye of claim 12 wherein said at least one crosslinking agent in the hydrogel polymer of the collagen-hydrogel is ethylene glycol dimethacrylate.

17. The artificial lens for an eye of claim 13 wherein said native collagen of the collagen-hydrogel collagen is harvested from tissues of human cornea, livestock cornea or calf's skins.

18. The artificial lens of claim 13 wherein said native collagen of the collagen-hydrogel is human tissue.

19. The collagen-hydrogel of claim 1 wherein the collagen-hydrogel has traces of ammonium persulfate and sodium metabisulfate.

20. A collagen-hydrogel for promoting epithelial cell growth formed from a stock solution of collagen which is produced by centrifuging and concentrating a soluble collagen and adding the stock solution of collagen to a hydrogel polymer formed by the free radical polymerization of a hydrophilic monomer solution gelled and crosslinked to form a three dimensional polymeric meshwork for anchoring collagen from the stock solution of collagen forming a collagen-hydrogel for promoting epithelial cell growth and attachment of such cells to the surface of the hydrogel polymer, said collagen-hydrogel, when attached to Bowman's membrane of the cornea of an eye, being capable of supporting and promoting epithelial cells growth enabling the corneal epithelium to adhere to and cover said collagen-hydrogel.

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