What is claimed is:

1. A process for producing a contact lens, comprising the steps of:

(a) obtaining a contact lens precursor which is a coated contact lens which comprises a lens bulk material completely covered with an anchor layer of a polyanionic polymer which comprises at least 60% by mole of repeating units of at least one carboxyl-containing vinylic monomer;

(b) placing and sealing the contact lens precursor in a lens package which comprises an aqueous solution for immersing the contact lens precursor, wherein the aqueous solution comprises

(i) at least one polyaziridine compound having a number average molecular weight of about 2000 Dalton or less and at least two aziridine groups,

(ii) a thermally-crosslinkable hydrophilic polymeric material which has azetidinium groups, and

(iii) a buffering system for ensuring the aqueous solution having a pH of from about 6.8 to about 9.5;

(c) staging the sealed lens package with the contact lens precursor immersed in the aqueous solution therein at a temperature of from about 10°C to about 100°C for a time period of from about 0.5 to about 24 hours; and

(d) autoclaving, after step (c), the sealed lens package with the contact lens precursor immersed in the aqueous solution therein at a temperature of from about 115°C to about 125°C for 20-90 minutes to obtain the contact lens, wherein the contact lens comprise (i) a crosslink anchor layer thereon and (2) an outer surface hydrogel layer which is covalently attached to the crosslinked anchor layer, wherein the crosslinked anchor layer is obtained by crosslinking the polyanionic polymer in the anchor layer via crosslinkers derived from said at least one polyaziridine compound in coupling reaction between at least one pair of aziridine and carboxyl groups, wherein the outer surface hydrogel layer is formed by crosslinking the thermally-crosslinked hydrophilic polymeric material.

2. The process of claim 1, wherein said at least one carboxyl-containing vinylic monomer is acrylic acid, methacrylic acid, ethylacrylic acid, 2-(meth)acrylamidoglycolic acid, and combinations thereof.

3. The process of claim 1, wherein the polyanionic polymer is polyacrylic acid, polymethacrylic acid, poly(ethylacrylic acid), poly(acrylic acid-co-methacrylic acid), poly[ethylacrylic acid-co-(meth)acrylic acid], poly(N,N-2-acrylamidoglycolic acid), poly[(meth)acrylic acid-co-acrylamide], poly[(meth)acrylic acid-co-vinylpyrrolidone], poly[ethylacrylic acid-co-acrylamide], poly[ethylacrylic acid-co-vinylpyrrolidone], poly[(meth)acrylic acid-co-vinylacetate], poly[ethylacrylic acid-co-vinylacetate], or

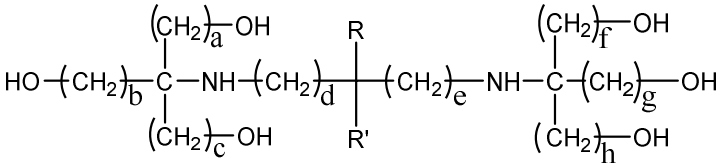
combinations thereof.

4. The process of claim 1, wherein the polyanionic polymer is a graft polymer which is grafted onto the inner layer or the lens bulk material, wherein the graft polymer comprises repeating units of at least one carboxyl-containing vinylic monomer which is acrylic acid, methacrylic acid, ethylacrylic acid, 2-(meth)acrylamidoglycolic acid, and combinations thereof.
5. The process of claim 1, wherein the lens bulk material is a silicone hydrogel material, wherein the silicone hydrogel bulk material comprises: (1) repeating units of at least one polysiloxane vinylic monomer; (2) repeating units of at least one hydrophilic vinylic monomer; (3) repeating units of at least one polysiloxane vinylic crosslinker; (4) repeating units of at least one hydrophilic N-vinyl amide monomer; (5) repeating units of at least one polycarbosiloxane vinylic monomer; (6) repeating units of at least one polycarbosiloxane vinylic crosslinker; (7) repeating units of at least one silicone-containing vinylic monomer having a bis(trialkylsilyloxy)alkylsilyl or tris(trialkylsilyloxy)silyl group; (8) repeating units of one or more blending vinylic monomers; (9) repeating units of one or more non-silicone vinylic crosslinking agents; or (10) combinations thereof.
6. The process of claim 1, wherein the lens bulk material is a non-silicone hydrogel material, wherein the non-silicon hydrogel material comprises at least 50% by mole of repeating units of at least one hydroxyl-containing vinylic monomer.
7. The process of claim 1, wherein the step of staging is performed at a temperature of from about 20°C to about 90°C for a time period of from about 1 to about 16 hours.
8. The process of claim 7, wherein the aqueous solution is obtained directly in the lens package by mixing an aqueous polyaziridine solution and an aqueous in-package-crosslinking solution, wherein the aqueous polyaziridine solution is free of any thermally-crosslinkable hydrophilic polymeric material having azetidinium groups and comprises at least one polyaziridine compound, wherein the aqueous in-package-crosslinking solution is free of any polyaziridine compound and comprises said thermally-crosslinkable hydrophilic polymeric material having azetidinium groups.
9. The process of claim 8, wherein the aqueous polyaziridine solution is added into the lens package, the contact lens precursor is immersed in the aqueous polyaziridine solution in the lens package, and then the aqueous in-package-crosslinking solution is added in the lens package containing the contact lens precursor immersed in the aqueous polyaziridine solution in the lens package.
10. The process of claim 7, wherein the polyaziridine compound is trimethylolpropane tris(2-methyl-1-aziridinepropionate), pentaerythritol tris[3-(1-aziridinyl)propionate], trimethylolpropane tris(3-aziridinopropionate), a Michael reaction product of a vinylic

crosslinker having at least three (meth)acryloyl groups and 2-methylaziridine, a Michael reaction product of a vinylic crosslinker having at least three (meth)acryloyl groups and aziridine, or a combination thereof.

11. The process of claim 10, wherein the aqueous solution comprises from about 0.01% to about 2.5% by weight of said at least one polyaziridine compound.

12. The process of claim 11, wherein the buffering system comprises from about 0.01% to about 2% by weight of a bis-aminopolyol of formula (I) and/or salts thereof



wherein a, b, c, d, e, f, g, and h independently of one another are an integer from 1 to 6; and R and R' independent of each other are hydrogen or a C_1-C_6 alkyl.

13. The process of claim 11, wherein the buffering system comprises a phosphate salt.

14. The process of claim 13, wherein the anqueous solution comprises propylene glycol in an amount for providing the aqueous solution with a tonicity of from about 200 to about 450 milliosmol (mOsm) , and/or a pH of from about 6.9 to about 9.2.

15. The process of claim 14, wherein the aqueous solution further comprises from about 0.01% to about 2% by weight of a thermally-crosslinkable hydrophilic polymeric material which has azetidinium groups, wherein the thermally-crosslinkable hydrophilic polymeric material has amino groups, thiol groups, carboxyl groups, or combinations thereof.

16. The process of claim 15, wherein the thermally-crosslinkable hydrophilic polymeric material is a partially-crosslinked polymeric material that comprises a three-dimensional network and azetidinium groups within the network or being attached to the network.

17. The process of claim 16, wherein the lens packaging solution further comprises a partially hydrolyzed polyvinyl alcohol having a hydrolysis degree of hydrolysis of from about 80% to about 98%.