Claims

1. A method of forming a cured polymeric material, the method comprising:

providing a polymeric composition;

exposing the composition to ultraviolet (UV) radiation to thereby form an intermediate composition that is partially cured; and

exposing the intermediate composition to electron beam (EB) radiation to thereby form a cured polymeric material;

wherein the polymeric composition comprises (i) at least one polymer, (ii) at least one monomer diluent, (iii) acrylic acid, and (iv) at least one photoinitiator; and

wherein the UV radiation has a wavelength within a range of from 200 nm to 500 nm.

2. The method of claim 1 wherein the UV radiation has a wavelength within a range of from 300 nm to 500 nm.

3. The method of claim1 wherein the electron beam radiation is at a dosage of less than 10 kiloGray.

4. The method of claim 1 wherein the electron beam radiation is at a dosage within a range of from 10 kiloGray to 100 kiloGray.

5. The method of claim 1 wherein the polymeric composition comprises (i) at least one polymer, (ii) at least one monomer diluent, (iii) acrylic acid, and (iv) at least one photoinitiator.

6. The method of claim 5 wherein the composition further comprises at least one crosslinker.

7. The method of claim 1 wherein the composition is free of solvents.

8. The method of claim 6 wherein the polymer is a crosslinkable acrylate polymer.