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(54) Title: SMALL DIAMETER, HIGH STRENGTH OPTICAL FIBER

(57) Abstract: A coated optical fiber, preferably a GGP optical fiber includes an optical fiber core, and a silica cladding over the optical fiber core, to provide a silica clad core. A permanent polymeric coating forms on the silica cladding during ultraviolet radiation of a photocurable composition containing a non-hydrolyzable photoinitiator. The coated optical fiber has a diameter from 120 microns to 160 microns and a relative frequency distribution of at least 85 % for dynamic fatigue measurements between 49.2×10^3 kg/cm² (700kpsi) and 63.3×10^3 kg/cm² (900kpsi).



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