Preparation of SiO_2-TiO_2 Fibers from Polytitanosiloxanes*

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Silicic acid was extracted with tetrahydrofuran from an aqueous sodium metasilicate solution neutralized with hydrochloric acid. The reaction of silicic acid with bis (2, 4-pentanedionato) titanium diisopropoxide led to polytitanosiloxane polymers with good spinnability and stability against condensations. Precursor fiber was obtained on dry spinning of the polymer. Pyrolysis of the precursor at ca. 1000°C provided with SiO_2-TiO_2 fibers of 9.5-9.6 μm in diameter. [*Received August 7, 1986*]