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(54) Title: MANUFACTURE OF LARGE ARTICLES IN SYNTHETIC VITREOUS SILICA

(57) Abstract: A process for the manufacture of a substantially bubble-free article of synthetic vitreous silica free from localised variations in refractive index (striae) and suitable for optical applications, wherein an ingot of synthetic vitreous silica containing unacceptable bubbles is submitted to a first heat treatment process consisting of hot isostatic pressing at a temperature in the range 1,250°C to 1,500°C at a pressure in the range 10 MPa to 250 MPa, followed by a second heat treatment process at a pressure in the range 0.01 to 1 MPa and at a temperature in the range 1,550°C to 1,850°C.



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