

Title (en)

QUARTZ GLASS TUBE FOR USE IN THE PRODUCTION OF OPTICAL FIBER PREFORMS

Title (de)

ROHR AUS QUARZGLASS FÜR DIE VERWENDUNG BEI DER HERSTELLUNG VON VORFORMEN FÜR OPTISCHE FASERN

Title (fr)

TUBE EN VERRE DE SILICE DESTINE A LA PRODUCTION DE PREFORMES DE FIBRE OPTIQUE

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Application

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Priority

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Abstract (en)

[origin: WO0027767A1] An object of the present invention is to provide a quartz glass tube for optical fiber preforms capable of producing optical fiber preforms having high dimensional precision, excellent distribution of refraction index, and yet free from degradation and the like of working environment. The object above is accomplished by a quartz glass tube for use in the production of optical fiber preforms, characterized in that the high temperature viscosity thereof is varied in the wall thickness direction, and that the high temperature viscosity in the inner layer side is lower than that of the outer layer side. It is shown how the viscosity and the refractive index are influenced by different doping agents to optimize producing parameters for the optical fiber preform and the distribution of refraction index of the optical fiber preform obtained. A method for producing an optical fiber preform comprising inserting a core glass rod into said quartz glass tube and melt welding them together is also disclosed.

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