



ABSTRACT OF THE DISCLOSURE

A manufacturing method for erbium doped silica, having a soot formation process, in which a silica glass soot is deposited on a seed rod for forming a soot preform in a porous state on the seed rod, a dopant impregnation process, wherein the soot preform is impregnated with at least an erbium compound, and a preform formation process, wherein this soot preform impregnated with a dopant is heated and rendered transparent. The dopant impregnation process is provided with an operation in which the soot preform obtained in the soot formation process is dipped in a solution containing an erbium compound, an aluminum compound, and a phosphorus compound; this is then desiccated, and soot preform which is impregnated with the erbium compound, the aluminum compound, and the phosphorus compound is obtained.