

ABSTRACT

WAVE-GUIDING STRUCTURE WITH LASING PROPERTIES

Optical wave-guides, eg fibres, for use as photonic amplifiers have a path region partly or, preferably, wholly composed as a silica/germania glass with 0.1 to 5000ppm mole of Er^{3+} as a lasing additive and alumina to adjust the bandwidth, the Ge:Al mole ratio being more than 2.8, eg 1:0.001 to 0.25. It is surprising that low amounts of alumina have a useful and significant effect on the lasing bandwidth whereby frequency division multiplex is facilitated.

This Sheet Has Been Replaced

