

ABSTRACT

The invention relates to a waveguide and a polarisation splitter based on said waveguide, in which a rotation of an angle greater than zero is applied to a plurality of sections of a core material and a plurality of sections of a covering material, thereby achieving an independent control of the refractive indices of a zero-order transverse electric mode and a zero-order transverse magnetic mode. This document also describes a manufacturing method of said waveguide which allows the birefringence of the light that passes through the waveguide.