

AN OPTICAL WAVEGUIDE AND A METHOD FOR FABRICATING THE SAME

ABSTRACT

The present invention relates to an optical waveguide, comprising: an optical waveguide layer; a modulation layer located on the optical waveguide layer, wherein a first isolation layer is disposed between the optical waveguide layer and the modulation layer, and a first protective layer covers the modulation layer; the optical waveguide further comprising: a second isolation layer surrounding the first isolation layer and the modulation layer, and a second protective layer surrounding the first protective layer, the second isolation layer, and the optical waveguide layer; wherein the modulation layer is enclosed in a sealed cavity defined by the first protective layer, the first isolation layer, and the second isolation layer, and the modulation layer is a phase-change material layer or comprises a phase-change material layer. Accordingly, the present invention also provides a method for preparing the optical waveguide.