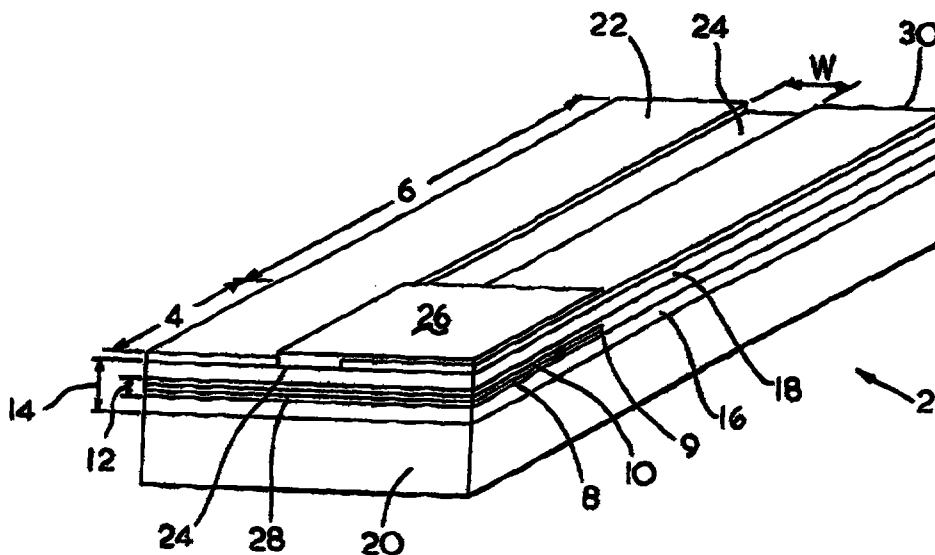




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(54) Title: ELECTRO-OPTIC SEMICONDUCTOR DEVICES AND METHOD FOR MAKING THE SAME



(57) Abstract

An electro-optic semiconductor device (2) comprising a semiconductor waveguide (14) with a core region (12) within which is located at least one active area (4) wherein the core (12) of the waveguide (14) outside of the one or more active areas (4) are not contaminated by diffuse active area material and the one or more active area(s) and the waveguide are monolithic and are grown in an additive growth process. Also provided is a method of making an electro-optic semiconductor device (2), comprising the steps of: growing a first part of a core layer (12) of a semiconductor waveguide (14), selectively growing an active layer (8, 10) over a partial area of the first part of the core layer, and growing a second part of the core layer of the semiconductor waveguide over the first part and the active layer, characterised in that the method comprises an additive growth process.