

Title (en)

OPTICAL SEMICONDUCTOR COMPONENT WITH DEEP RIDGED WAVEGUIDE

Title (de)

OPTISCHES HALBLEITERBAUELEMENT MIT TIEFEM RIPPENWELLENLEITER

Title (fr)

COMPOSANT SEMI-CONDUCTEUR OPTIQUE A GUIDE D'ONDES NERVURE PROFOND

Publication

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Application

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Priority

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- EP 9703584 W 19970626

Abstract (en)

[origin: DE19626130A1] Digital optical telecommunication uses optical semiconductor components having a transition region for the expansion of the mode field of a light wave in order to reduce losses when coupling to an optical fibre or an optical waveguide of a supporting plate. An optical semiconductor component contains a deep ridged waveguide (RIDGE) with a surfacing (DS) disposed on a substrate (SUB). The ridged waveguide (RIDGE) has a first (MQW) and a second (BULK) waveguide centre, these being separated by a separating layer (SEP). The thickness of this separating layer increases in a transition region (UB1) along a longitudinal direction (L) of the ridged waveguide (RIDGE), thus increasing the vertical distance between the two waveguide centres (MQW, BULK).

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