

Title (en)

SINGLE-MODE DBR LASER WITH IMPROVED PHASE-SHIFT SECTION AND METHOD FOR FABRICATING SAME

Title (de)

EINMODEN-DBR-LASER MIT VERBESSERTEM PHASENSCHIEBETEIL UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)

LASER DBR MONOMODE AVEC SECTION DE DEPHASAGE AMELIOREE, ET SON PROCEDE DE FABRICATION

Publication

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Application

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Abstract (en)

[origin: WO03103107A1] An edge-emitting laser (100) for generating single-longitudinal mode laser light. A semiconductor active region (120) amplifies, by stimulated emission, light in the laser cavity at a lasing wavelength. There are first and second grating sections (141,143) adjacent to the active region (120) and having first and second reflectivities respectively and a first effective index of refraction. The first and second grating sections (141,143) have a Bragg wavelength substantially equal to the lasing wavelength. A gratingless phase-shift section (142) is disposed adjacent to the active region (120) and between the first and second grating sections (141,143) and has a second index of refraction different than the first index of refraction and a length sufficient to impart a phase shift for light at the lasing wavelength sufficient to achieve longitudinal mode operation.

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