

Title (en)
ELECTRO OPTIC MODULATOR

Title (de)
ELEKTROOPTISCHER MODULATOR

Title (fr)
MODULATEUR ELECTRO-OPTIQUE

Publication
EP 1125151 A1 20010822 (EN)

Application
EP 99936856 A 19990802

Priority
• GB 9902537 W 19990802
• GB 9817555 A 19980813

Abstract (en)
[origin: GB2340616A] A doped substrate (12) is described for use around a ridge waveguide (10), for controlling the refractive index of the waveguide material. Instead of simply diffusing dopant in from a surface of the substrate (12) adjacent the waveguide (10), an area of the substrate is etched and dopant diffused in from a side face of the etched region (28, 30). Thus, the dopant profile is established from a horizontal direction, allowing the profile to be controlled. A simple vertically uniform doping profile (12) can thus be provided, leading to a vertically uniform current density, or an anisotropic wet etch can be applied after the initial etch to provide a profile (36) which concentrates the current density at a selected height in the substrate.

IPC 1-7
G02B 6/12; G02F 1/025

IPC 8 full level
G02F 1/025 (2006.01)

CPC (source: EP)
G02F 1/025 (2013.01)

Citation (examination)
GB 2265252 A 19930922 - BOOKHAM TECHNOLOGY LTD [GB]

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
GB 2340616 A 20000223; GB 2340616 B 20001227; GB 9817555 D0 19981007; AU 5182999 A 20000306; CN 1323403 A 20011121; EP 1125151 A1 20010822; EP 1256825 A2 20021113; EP 1256825 A3 20040825; WO 0010039 A1 20000224

DOCDB simple family (application)
GB 9817555 A 19980813; AU 5182999 A 19990802; CN 99812069 A 19990802; EP 02015699 A 19990802; EP 99936856 A 19990802; GB 9902537 W 19990802