

Title (en)

CROSSED GRATING PHOTONIC CRYSTALS AND MULTIPLE EXPOSURE PROCESSES FOR MAKING THEM

Title (de)

PHOTONISCHE KRISTALLE MIT GEKREUZTEN GITTERN UND MEHRFACH-BELICHTUNGSPROZESSE ZU DEREN HERSTELLUNG

Title (fr)

CRISTAUX PHOTONIQUES EN RESEAU CROISE ET MULTIPLES PROCESSUS D'EXPOSITION AUX FINS DE LEUR FABRICATION

Publication

**EP 1086404 A1 20010328 (EN)**

Application

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- EP 98401369 A 19980608
- US 9912202 W 19990602

Abstract (en)

[origin: EP0964305A1] Disclosed is a method of making a photonic crystal having a period suitable for use with light wavelengths in the range of about 800 nm to 1800 nm. The method includes the use of a thick photoresist on a substrate in which the photoresist is exposed to interference fringes formed from four non-coplanar laser beams. A masking technique, which makes use of backside illumination of the photoresist, is described in a method of making a photonic crystal which is a passive optical component. The types of passive optical components which can be made include a waveguide, a light cavity, as well as couplers, splitters, and wavelength division multiplexers. <IMAGE>

IPC 1-7

**G03F 7/22**; **G03H 1/28**

IPC 8 full level

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