

Title (en)

OPTICAL-READY SUBSTRATES WITH OPTICAL WAVEGUIDE CIRCUITS AND MICROELECTRONIC CIRCUITS

Title (de)

OPTISCH FERTIGE SUBSTRATE MIT OPTISCHEM WELLENLEITER UND MIKROELEKTRONISCHEM SCHALTSTROMKREIS

Title (fr)

SUBSTRATS OPTIQUEMENT PRÉPARÉS AVEC GUIDE D'ONDE OPTIQUE ET CIRCUITS MICROÉLECTRONIQUES

Publication

EP 1776610 A2 20070425 (EN)

Application

EP 03755727 A 20030721

Priority

- US 0322687 W 20030721
- US 39755202 P 20020722
- US 28049202 A 20021025
- US 28050502 A 20021025

Abstract (en)

[origin: WO2004010192A2] An article of manufacture comprising an optical-ready substrate made of a first semiconductor layer, an insulating layer on top of the first semiconductor layer, and a second semiconductor layer on top of the insulating layer, wherein the second semiconductor layer has a top surface and is laterally divided into two regions including a first region and a second region, the top surface of the first region being of a quality that is sufficient to permit microelectronic circuitry to be formed therein and the second region including an optical signal distribution circuit formed therein, the optical signal distribution circuit made up of interconnected semiconductor photonic elements and designed to provide signals to the microelectronic circuit to be fabricated in the first region of the second semiconductor layer.

IPC 8 full level

G02B 6/12 (2006.01); **G02B 6/42** (2006.01); **G02B 6/43** (2006.01); **G02B 6/30** (2006.01)

CPC (source: EP)

G02B 6/12 (2013.01); **G02B 6/4201** (2013.01); **G02B 6/4257** (2013.01); **G02B 6/43** (2013.01); **G02B 6/30** (2013.01); **G02B 6/4214** (2013.01)

Citation (search report)

See references of WO 2004010192A2

Citation (examination)

US 2002052061 A1 20020502 - FITZGERALD EUGENE A [US]

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004010192 A2 20040129; **WO 2004010192 A3 20040422**; AU 2003273221 A1 20040209; AU 2003273221 A8 20040209; EP 1776610 A2 20070425

DOCDB simple family (application)

US 0322687 W 20030721; AU 2003273221 A 20030721; EP 03755727 A 20030721