

Title (en)
GENERATION OF AZIMUTHALLY OR RADIALLY POLARIZED RADIATION IN OPTICAL WAVEGUIDES

Title (de)
ERZEUGUNG AZIMUTAL ODER RADIAL POLARISIERTER STRAHLUNG IN OPTISCHEN WELLENLEITERN

Title (fr)
PRODUCTION DE RAYONNEMENT À POLARISATION AZIMUTALE OU RADIALE DANS DES GUIDES D'ONDES OPTIQUES

Publication
EP 2697874 A1 20140219 (DE)

Application
EP 11718932 A 20110414

Priority
EP 2011001881 W 20110414

Abstract (en)
[origin: WO2012139598A1] The invention relates to an apparatus for generating azimuthally or radially polarized radiation by means of an optical waveguide (1), wherein the optical waveguide (1) has a structure for conducting azimuthally or radially polarized modes (5, 7). The invention proposes that the azimuthally or radially polarized modes (5, 7) in the optical waveguide (1) have different effective refractive indices and, within the optical waveguide (1), a narrow-band grating (2), is arranged, in particular a fibre Bragg grating, which is designed such that the spectral distance between two azimuthally or radially polarized resonant modes (5, 7) is equal to or greater than the associated spectra bandwidth.

IPC 8 full level
H01S 3/067 (2006.01); **H01S 3/08** (2006.01)

CPC (source: EP US)
G02B 6/105 (2013.01 - US); **H01S 3/06712** (2013.01 - EP US); **H01S 3/0675** (2013.01 - EP US); **G02B 27/286** (2013.01 - US);
H01S 3/0804 (2013.01 - EP US)

Citation (search report)
See references of WO 2012139598A1

Citation (examination)
EP 2330696 A2 20110608 - FUJIKURA LTD [JP]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2012139598 A1 20121018; EP 2697874 A1 20140219; US 2014112612 A1 20140424; US 9459403 B2 20161004

DOCDB simple family (application)
EP 2011001881 W 20110414; EP 11718932 A 20110414; US 201114111279 A 20110414