

Title (en)

TUNING OF OPTICAL WAVEGUIDE DEVICES CONTAINING AN ORGANIC MATERIAL

Title (de)

ABSTIMMUNG VON EIN ORGANISCHES MATERIAL ENTHALTENDEN OPTISCHEN WELLENLEITERBAUELEMENTEN

Title (fr)

ACCORD DE GUIDES D'ONDES OPTIQUES CONTENANT UN MATERIAU ORGANIQUE

Publication

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Application

**EP 00982108 A 20001114**

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Abstract (en)

[origin: EP1118886A1] The present invention provides methods of tuning the optical properties, such as the channel center wavelengths, of an integrated optical waveguide device by providing a device, such as a wavelength division multiplexer or demultiplexer, which contains an organic material, and fine tuning the device by exposing the organic material to at least one incremental step of UV irradiation. <IMAGE>

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**G02B 6/12**

IPC 8 full level

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Citation (search report)

- [A] DE 4402422 A1 19940929 - FUJITSU LTD [JP]
- [A] DE 4411860 A1 19951019 - FRAUNHOFER GES FORSCHUNG [DE]
- [A] US 4712854 A 19871215 - MIKAMI KAZUO [JP], et al
- [Y] ZAUNER D A ET AL: "UV trimming of arrayed-waveguide grating wavelength division demultiplexers", ELECTRONICS LETTERS, IEE STEVENAGE, GB, vol. 34, no. 8, 16 April 1998 (1998-04-16), pages 780 - 781, XP006009596, ISSN: 0013-5194
- [Y] MURATA H ET AL: "LIGHT-INDUCED INDEX CHANGE IN A WAVEGUIDE OF A NOVEL ORGANIC QUINOID DYE AND ITS APPLICATIONS TO ALL-OPTICAL DEVICES WITH LOCALIZED NONLINEARITY", NONLINEAR OPTICS '98. MATERIALS, FUNDAMENTALS AND APPLICATIONS TOPICAL MEETING. PRINCEVILLE, KAUAI, HI, AUG. 10 - 14, 1998, NONLINEAR OPTICS. MATERIALS, FUNDAMENTALS AND APPLICATIONS, NEW YORK, NY : IEEE, US, August 1998 (1998-08-01), pages 313 - 315, XP002938561, ISBN: 0-7803-4951-2
- [Y] INOUE Y ET AL: "ATHERMAL SILICA-BASED ARRAYED-WAVEGUIDE GRATING MULTIPLEXER", ELECTRONICS LETTERS, IEE STEVENAGE, GB, vol. 33, no. 23, 6 November 1997 (1997-11-06), pages 1945 - 1947, XP002938564, ISSN: 0013-5194
- See references of WO 0151969A1

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