

Title (en)  
BULK INTERNAL BRAGG GRATINGS AND OPTICAL DEVICES

Title (de)  
VOLUMENINTERNE BRAGG-GITTER UND OPTISCHE BAUELEMENTE

Title (fr)  
RESEAUX DE BRAGG INTERNES DE SUBSTRAT ET DISPOSITIFS OPTIQUES

Publication  
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Application  
**EP 01946161 A 20010606**

Priority

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Abstract (en)  
[origin: WO0210826A1] The present invention provides devices including photosensitive bulk glass bodies (38), containing Bragg gratings (30). Preferably the bulk glass bodies (38) are batch meltable alkali boro-alumino-silicate. The device comprises an input optical waveguide collimator(20) for collimating an input light beam (22) from an optical waveguide (24) to provide an unguided light beam (22) including wavelength range bands (  $\lambda_R$ ,  $\lambda_n$ ); an internal bulk Bragg grating (26) including a transparent photosensitive bulk optical grating medium (28) with an internal modulated refractive index grating (30); at least one output coupler (32) for outputting at least one wavelength range band (  $\lambda_R$ ,  $\lambda_n$ ); and a substrate structure for securing said bulk Bragg grating (26) relative to the input collimator (20) and the output coupler (32), the grating (26) disposed in the unguided light beam (22) wherein one wavelength range band (  $\lambda_n$ ) is transmitted through and one wavelength range band (  $\lambda_R$ ) is reflected by the grating (26).

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IPC 8 full level  
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