

ABSTRACT

## OPTICAL DEVICE INCLUDING REFRACTIVE INDEX MODULATION

5 It has been demonstrated that B containing glasses are  
sensitive to radiation in the band 225 - 275 nm and,  
therefore,  $B_2O_3$  glasses are particularly adapted to receive  
refractive index modulation, e.g. to make reflection  
10 gratings. Glasses containing  $SiO_2$  and  $B_2O_3$  are particularly  
suitable when the grating is to be localised in the  
cladding of a fibre. Glasses containing  $SiO_2$ ,  $GeO_2$ , and  $B_2O_3$   
are suitable when the grating is in the path region of a  
waveguide, e.g. in the core of a fibre.

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Fig.1