

Title (en)

ELECTRO-OPTIC MODULATOR, THE PRODUCTION METHOD THEREFOR AND THE BLOCK FOR IMPLEMENTING SAME

Title (de)

ELEKTROOPTISCHER MODULATOR, HERSTELLUNGSVERFAHREN UND BLOCK ZU SEINEM BETRIEB

Title (fr)

MODULATEUR ELECTRO-OPTIQUE, PROCEDE DE REALISATION ET BLOC POUR MISE EN OEUVRE

Publication

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Application

**EP 02785519 A 20021003**

Priority

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- FR 0112727 A 20011003

Abstract (en)

[origin: WO03029881A2] The invention relates to an electric-optic modulator comprising a block (1) of crystal having electro-optic properties, said block extending lengthways along a long axis and comprising a light guide (4) which extends between a light guide input and a light guide output. An electric modulation signal acts on an interaction zone of the block by means of coplanar electrodes (5) together with the light guide through the intermediary of a dielectric layer. Said electrodes are disposed on a main long face of the block and the interaction zone is elongated more or less along the long axis. The light to be modulated arrives through an input optical fibre (2') which is connected to the light guide at the light guide input on a first face of the block. The modulated light leaves the modulator through an output optical fibre (2'') which is connected to the light guide at the light guide output on a second face of the block. According to the invention, the first face and the second face are one single face (D) which is parallel to the long axis. The light guide comprises two bends (11', 11'') which are disposed respectively between the light guide input and a first end of the interaction zone and between a second end of the interaction zone and the light guide output, said bends being essentially symmetrical. The invention also relates to a production method for said modulator and a block for implementing same.

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