

Title (en)

LIQUID CRYSTAL WAVELENGTH SELECTIVE ROUTER

Title (de)

SELEKTIVER ROUTER FÜR DIE FLÜSSIGKRISTALL-WELLENLÄNGE

Title (fr)

ROUTEUR À CRISTAUX LIQUIDES À SÉLECTION DE LONGUEUR D'ONDE

Publication

**EP 2443510 A1 20120425 (EN)**

Application

**EP 10789108 A 20100617**

Priority

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- US 21354409 P 20090618

Abstract (en)

[origin: WO2010146590A1] A polarization independent switch, using polarization diversity for converting the input beams to a single defined polarization direction, followed by wavelength dispersion to spread the individual wavelength channels over a pixilated switching device. This may be a polarization rotation element whose setting can be controlled by means of an applied electronic signal. This may either leave the polarization direction unchanged, or it may rotate it such that it is essentially orthogonal to the polarization of the input beam exiting the polarization diversity components. The beam then proceeds to a birefractive wedge element which refracts light having the two orthogonal polarizations to different extents, thus separating the beams according to the control signal applied to the polarization rotation element through which each wavelength component of the beam passed. The beams may thus be directed to different ports according to the control signal setting. 2 x 1 switch configurations are shown.

IPC 8 full level

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CPC (source: EP)

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