

Title (en)

INTEGRATED HIGH SPECTRAL RESOLUTION OPTICAL SPECTROMETER AND METHOD FOR MAKING SAME

Title (de)

HOCHAUFLÖSENDE INTEGRIERTE OPTISCHE SPEKTROMETER UND ZUGEHÖRIGES HERSTELLUNGSVERFAHREN

Title (fr)

SPECTROMETRE OPTIQUE INTEGRE A HAUTE RESOLUTION SPECTRALE ET PROCEDE DE FABRICATION

Publication

**EP 1377857 A2 20040107 (FR)**

Application

**EP 02722382 A 20020326**

Priority

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Abstract (en)

[origin: WO02077687A2] The invention concerns an integrated optical spectrometer with high spectral resolution, in particular for high-speed telecommunications and metrology, and a method for making same. Said spectrometer comprises at least an elementary spectrometer which includes an optical phase grating including a set of micro-guides (12) and formed on a cleaved planar optical guide (14), reflecting means (24, 30, 32, 34) adapted to successively reflect radiation derived from the set of micro-guides, so as to propagate said radiation in folded form and in free space, means (26) for photodetection of said radiation thus reflected and means (28) for focusing radiation on said photodetection means.

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