

Title (en)  
INTERFEROMETRIC OPTICAL SYSTEM

Title (de)  
INTERFEROMETRISCHE OPTISCHE ANORDNUNG

Title (fr)  
SYSTEME OPTIQUE INTERFEROMETRIQUE

Publication  
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Application  
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Abstract (en)  
[origin: WO03060422A2] The invention relates to an interferometric optical device with spectral dispersion comprising a light source, elements for generating a phase shift, elements for measuring the intensity of the interference signals, elements for selectively measuring the intensity of the interference signals and elements for determining the phase angle and/or a relative phase shift of the intensity of the interference signals. According to the invention, the elements for generating a phase shift between components with a different polarisation direction in at least one of the branches of the interferometer comprise a diffraction grating. The elements for selectively measuring the intensity of the interference signal in accordance with the polarisation also permit the determination of the respective intensity for the TE and TM components of the interference signal, based on the co-ordinate system of the diffraction grating.

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GIOVANNINI H. ET AL: "Interefrometric configuration based on a grating interferometer for the measurement of the phase between TE and TM polarizations after diffraction by gratings", OPTICS LETTERS, OSA, OPTICAL SOCIETY OF AMERICA, WASHINGTON, DC, US, vol. 20, no. 21, 1 November 1995 (1995-11-01), pages 2255 - 2257, XP002444900, ISSN: 0146-9592

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