

Title (en)

DEVICE AND METHOD FOR OPTICAL SPECTROSCOPY, OPTICAL SENSOR AND USE OF SAID DEVICE

Title (de)

VORRICHTUNG UND VERFAHREN ZUR OPTISCHEN SPEKTROSKOPIE UND OPTISCHEN SENSORIK SOWIE VERWENDUNG DER VORRICHTUNG

Title (fr)

DISPOSITIF ET PROCEDE DE SPECTROSCOPIE OPTIQUE, CAPTEURS OPTIQUES ET UTILISATION DUDIT DISPOSITIF

Publication

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Application

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Priority

EP 0207861 W 20020715

Abstract (en)

[origin: WO2004008092A1] The invention relates to a device and a method for optical spectroscopy, optical sensor and use of said device. According to the invention, a device with high spectral resolution yet with comparatively low quality requirements for the optical components may be achieved, whereby the device for optical spectroscopy comprises means for generation of an interference pattern, means for injection of the light field under investigation such that only one or individual spatial modes of the field are transmitted and a detector which can record the intensity of the interference pattern generated in a number of different spatial positions, whereby the wavefronts and/or the dispersion direction of at least one of the light fields in the interference pattern are altered as a function of wavelength due to spectral dispersive or diffractive optical elements. The invention further relates to a method for determining the optical spectrum and/or measured values encoded or transmitted by means of an optical spectrum by analysis of the interference pattern measured with said device, or by using said device.

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CPC (source: EP US)

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Citation (search report)

See references of WO 2004008092A1

Citation (examination)

- DD 293893 A5 19910912 - AKADEMIE DER WISSENSCHAFTEN, INSTITUT FUR MECHANIK [DE]
- NL 1014807 A
- FR 2782383 A1 20000218 - COMMISSARIAT ENERGIE ATOMIQUE [FR]

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