

Title (en)

OPTICAL MEASURING DEVICE FOR HETERODYN INTERFEROMETRIC SURFACE MEASUREMENTS

Title (de)

OPTISCHE MESSVORRICHTUNG FÜR HETERODYNINTERFEROMETRISCHE OBERFLÄCHENMESSUNGEN

Title (fr)

DISPOSITIF DE MESURE OPTIQUE DESTINE A DES MESURES DE SURFACE HETERODYNINTERFEROMETRIQUES

Publication

EP 1697694 A1 20060906 (DE)

Application

EP 04802638 A 20041023

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Abstract (en)

[origin: WO2005061986A1] The invention relates to an optical measuring device for heterodyn interferometric surface measurements, comprising a modulation interferometer (4), a measuring arrangement connected thereto and a receiver device wherein the signals contained in the interfering radiation are evaluated. A simple, easy-to-handle construction can be obtained by providing a direction-dependent coupler (3) which injects input radiation into the modulation interferometer (4) and transmits partial beams (4.8, 4.9) reconducted therefrom to the measuring arrangement (6), and by forming a common light path in the modulation interferometer (4) to the rear of the coupler (3), said light path being used to guide the input radiation to a partially reflecting optical element (4.2) for sub-division into at least two partial beams (4.8, 4.9), whereupon a partial beam (4.8) thereof is reflected to the element (4.2) and is reconducted along the common light path and another partial beam (4.9) is reflected to a downstream mirror (4.5) according to the optical path difference (L) and is reconducted to the common light path via the element (4.2).

IPC 8 full level

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