

Title (en)

METHOD AND DEVICE FOR OPTICAL SURFACE MEASUREMENT BY MEANS OF A CONFOCAL SENSOR

Title (de)

VERFAHREN UND VORRICHTUNG ZUR OPTISCHEN OBERFLÄCHENMESSUNG MIT HILFE EINES KONFOKALEN SENSORS

Title (fr)

PROCÉDÉ ET DISPOSITIF DE MESURE OPTIQUE DE SURFACES AU MOYEN D'UN CAPTEUR CONFOCAL

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Application

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Abstract (en)

[origin: WO2019020800A1] The invention relates to a method and a device for the optical measurement of technical surfaces by means of a confocal sensor, where light from a light source (2) is directed towards the surface (8) of a sample to be measured by means of an optical system (5, 16). According to the invention, the optical system (5, 16) comprises an electrically controlled adaptive optics (7), wherein the focus of the optical system (5, 16) is varied by an electric signal (f (t)) in the Z-direction. The light reflected back from the sample surface (8) is directed to at least one photosensor (10), where the sensor signal is measured over time by means of a detection device (11) and the time of a signal maximum is determined. The detection device (11) derives the height Z of the surface (8) from the electric signal at the time of the signal maximum.

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