

Title (en)
METHOD AND DEVICE FOR OPTICALLY INSPECTING A TEST OBJECT WITH AN AT LEAST PARTIALLY REFLECTIVE SURFACE

Title (de)
VERFAHREN UND VORRICHTUNG ZUM OPTISCHEN INSPIZIEREN EINES PRÜFLINGS MIT EINER ZUMINDEST TEILWEISE REFLEKTIERENDEN OBERFLÄCHE

Title (fr)
PROCÉDÉ ET DISPOSITIF D'INSPECTION OPTIQUE D'UN SPÉCIMEN DOTÉ D'UNE SURFACE AU MOINS EN PARTIE RÉFLÉCHISSANTE

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Application
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Abstract (en)
[origin: WO2011095322A1] A device for optically inspecting a test object with an at least partially reflective surface (22) has a camera (12) with a number of pixels (48) and an illuminating device (14) comprising a plurality of spatially distributed light sources (16). A workpiece receiving portion is used to position the test object relative to the illuminating device (14) and to the camera (12) such that light from the light sources (16) is reflected to the camera (12) via the surface (22). An analyzing and controlling unit (32) generates a series of different illumination patterns (38, 38'; 40) on the surface (22), wherein different light sources (16) are switched on in the course of the series. According to one aspect of the invention, an individual light origin region (60), which represents a spatial distribution of individual light contributions (56, 58) that the light sources (16) generate on at least one pixel (48) via the surface (22), is determined using the images for the at least one pixel (48), said images being received with the camera. Properties of the test object (20) are determined using the individual light origin region (60).

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