

Title (en)

METHOD AND INSPECTION DEVICE FOR OPTICALLY INSPECTING A SURFACE

Title (de)

VERFAHREN UND INSPEKTIONSEINRICHTUNG ZUR OPTISCHEN INSPEKTION EINER OBERFLÄCHE

Title (fr)

PROCÉDÉ ET DISPOSITIF D'INSPECTION POUR L'INSPECTION OPTIQUE D'UNE SURFACE

Publication

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Application

EP 21715496 A 20210322

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Abstract (en)

[origin: CA3179520A1] The invention relates to a method for optically inspecting a surface (10) of an object (1) and to an inspection device (9). In the method, a pattern (13), which is chronologically periodic during an image-capturing sequence and has different illumination patterns (130), is generated on the surface (10) by means of an illumination device (8) of the inspection device (9) and, in the image-capturing sequence, multiple images of the pattern (13) on the surface (10) are captured by means of an image-capturing device (7) of the inspection device (9), the generation of one of the different illumination patterns (130) being synchronised in each case with the capture of one of the images of the pattern (13); the phase pattern (13) is determined from the sequence of known illumination patterns (130) captured in at least one pixel; and defects (4, 5) on the surface (10) are identified from deviations of the illumination pattern (130) captured from the known illumination pattern (130) generated. The illumination device (8) and the image-capturing device (7) are arranged at the reflection angle (a), wherein the object (1) is moved relative to the inspection device (9), and the duration of the image-capturing sequence is selected such that a sequence reflection region (17) can be considered constant (figure 4b).

IPC 8 full level

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