

Title (en)  
INSPECTION SYSTEM AND METHOD FOR ANALYZING FAULTS

Title (de)  
INSPEKTIONSSYSTEM UND VERFAHREN ZUR FEHLERANALYSE

Title (fr)  
SYSTÈME D'INSPECTION ET PROCÉDÉ D'ANALYSE DE DÉFAUT

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Application  
**EP 22790499 A 20220921**

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Abstract (en)  
[origin: WO2023046769A1] The invention relates to an inspection system (26) for analyzing faults of a product, said inspection system comprising a projection device (32), an optical detection device (28), and a processing device, wherein the projection device has a spectrometer device, by means of which white light can be separated into its spectral components, and a multichromatic light beam (37) formed from monochromatic light beams can be projected onto a product. The light beam (37), which is reflected on the product, can be detected by means of a detection unit (29) comprising a flat camera (27) and a lens (28) on a detection plane (46) running transversely, preferably orthogonally, to the surface (38) of the product, wherein the detection unit has a dispersive or diffractive element (31), by means of which the reflected light beam can be projected onto an image plane (49) of the flat camera, and height information of the product surface can be derived from a spatial distribution of saturation values of the reflected light beam on the image plane by means of a processing device. A longitudinal chromatic aberration of the reflected light beam on the image plane is corrected by means of a correction device.

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