

Title (en)

METHOD AND DEVICE FOR THE RELIABLE DETECTION OF MATERIAL DEFECTS IN TRANSPARENT MATERIAL

Title (de)

VERFAHREN UND VORRICHTUNG ZUR SICHEREN DETEKTION VON MATERIALFEHLERN IN TRANSPARENTEM WERKSTOFF

Title (fr)

PROCÉDÉ ET DISPOSITIF DE DÉTECTION ASSURÉE DE DÉFAUTS DE MATIÈRE DANS UN MATÉRIAU TRANSPARENT

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2013020542A1] The invention relates to a method and device for the reliable detection of material defects in a continuously produced band of transparent material by means of examining a strip of a band of this material extending transversely with respect to the conveying direction and observed in transmitted light and reflected light, characterised in that it has the following features: a) uninterrupted illumination of the band of transparent material in transmitted light and reflected light by a linear lamp (6) disposed transversely with respect to the band and having a constant light flux and an adjacent lamp (5) likewise disposed transversely with respect to the strip and having an oscillating light flux, and an additional bright field illumination (8) and an additional dark field illumination (2), wherein the linear lamp (6) has a ruled grating (7) on the surface, b) uninterrupted detection of a detection zone extending over the width of the band of transparent material by means of line scan cameras (9, 1) which are disposed on a fastening portal, c) monitoring the functions of the lamps (5, 6, 2, 8) and the cameras (9, 1), d) an operating program or a learning program for the detection and typing of defects which occur, and a learning program which offers the possibility that points or zones in the transparent material having a certain consistency which are detected as defects are not to be interpreted as inherent defects, but these points or zones are to be classified to a certain extent as insignificant in a learning process.

IPC 8 full level

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