

Title (en)

CONFOCAL MICROSCOPIC 3D LIGHT-SECTION SENSOR

Title (de)

KONFOKALER MIKROSKOPISCHER 3D-LICHTSCHNITTSSENSOR

Title (fr)

CAPTEUR À COUPE OPTIQUE 3D MICROSCOPIQUE À FOYER COMMUN

Publication

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Application

EP 13710967 A 20130215

Priority

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- DE 2013100060 W 20130215

Abstract (en)

[origin: WO2013120490A1] The invention relates to a measuring arrangement (1) for contactless measurement of a surface profile (6) of a three-dimensional object (5). The problem of finding a new option for contactless measurement of the surface profile (6) of an object (5) with high accuracy and high spatial resolution is solved, according to the invention, by virtue of three line laser modules (2) having rays (3) arranged virtually in a T-shaped fashion with respect to one another, the laser lines of which are set in a co-planar fashion in a common light plane (4) as a light curtain and the object (5) with the surface profile (6) being immersed in the light plane (4) such that the light plane (4) generates a light-section representation of the surface profile (6) of the object (5), and at least one camera (7) with a lens focused in the light plane (4) for recording stray light generated at the surface profile (6) is arranged at an observation angle (alpha) virtually orthogonal to the light plane (4).

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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