

Title (en)

METHOD AND DEVICE FOR MEASURING THREE-DIMENSIONAL SHAPES

Title (de)

VERFAHREN UND VORRICHTUNG ZUM MESSEN VON DREIDIMENSIONALEN FORMEN

Title (fr)

PROCEDE ET DISPOSITIF DE MESURE DE FORMES TRIDIMENSIONNELLES

Publication

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Application

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Abstract (en)

[origin: WO9848242A1] The invention relates to a method and a device for measuring of the shape of an object being measured, in order to provide a supplementary object connected to the shape of the object being measured, wherein the object being measured is provided on its surface with a pattern of fluorescent substances. The surface of the object with the pattern is illuminated with a first type of light (13a, 13b) with a wavelength which excites the fluorescent paint substance used. The pattern is registered by means of optical reading units sensitive to the excited fluorescent light with registration of the same parts of pattern from mutually different directions. The surface of the object is illuminated with a second type of light (15a-15d). The registration of the appearance of the surface of the object is performed during illumination with the second type of light. Calculation of position and shape of the parts of the pattern are made from the registrations of the pattern, and the position for the gradient changes in the surface shape of the object calculated from the registrations of the appearance of the surface, and a three-dimensional shape with interfaces, connected to the object being measured, at the gradient changes is calculated for the supplementary object.

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