Title (en)

METHOD FOR DETERMINING FEATURES OF A MEASUREMENT OBJECT

Title (de

VERFAHREN ZUM BESTIMMEN VON MERKMALEN EINES MESSOBJEKTS

Title (fr)

PROCÉDÉ DE DÉTERMINATION DE CARACTÉRISTIQUES D'UN OBJET À MESURER

Publication

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Application

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Abstract (en)

[origin: WO2013167461A1] Method for determining features of a measurement object. The invention relates to a computer tomography method for dimensionally determining features on a measurement object, in which the measurement object fastened to a mechanical rotary shaft is x-rayed by the radiation from a radiation source in a plurality of positions relative to the sensor system, at least consisting of the radiation source and a two-dimensional detector, in each case in a plurality of rotational positions around a rotary shaft, and associated 2D x-ray images are recorded in each case, wherein those x-ray images from the different relative positions which are recorded in the same rotational position with respect to the particular starting angle of rotation of the different relative positions are each combined to form a resulting x-ray image, and three-dimensional volume information in the voxel format (so-called voxel volume) is calculated from the resultant x-ray images by means of reconstruction, wherein this voxel volume contains data relating to the local beam absorption, wherein surface points are preferably generated from the voxel data in the region of the material transitions. In order to avoid measurement errors during the computer tomographic measurements of measurement objects in a plurality of relative positions between the measurement object and the x-ray sensor system, it is proposed that the different relative positions are selected in such a manner that the distance between the focal point of the radiation source (focal spot) and the rotary shaft remains the same.

IPC 8 full level

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