Title (en)

X-RAY COMPUTER TOMOGRAPH AND METHOD FOR EXAMINING A TEST PART USING AN X-RAY COMPUTER TOMOGRAPH

Title (de)

RÖNTGENCOMPUTERTOMOGRAPH SOWIE VERFAHREN ZUR UNTERSUCHUNG EINES PRÜFTEILS MIT EINEM RÖNTGENCOMPUTERTOMOGRAPHEN

Title (fr)

TOMOGRAPHE A RAYONS X ASSISTE PAR ORDINATEUR AINSI QUE PROCEDE POUR EXAMINER UNE PIECE A CONTROLER A L'AIDE D'UN TOMOGRAPHE A RAYONS X ASSISTE PAR ORDINATEUR

Publication

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Application

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Abstract (en)

[origin: WO2006010588A2] The invention relates to an X-ray computer tomograph comprising an X-ray source (1) which generates a fan beam of X-rays, and a two-dimensional detector array (5) with energy resolution, said devices being arranged on opposite sides of a gantry in such a way that the X-rays fully penetrate a region to be examined and a row of detector elements (6) is arranged in the plane of the fan beam (2), a plurality of other rows of detector elements (7) being connected to said first row in at least one direction perpendicularly to the fan beam (2). No secondary collimator is arranged between the region to be examined and the detector array (5) during the measurement, and the following holds good for the width (B) of the detector elements: B = Z<SB>P</SB> * ARCSIN (Q_{max} * ?), where q_{max} represents the pulse transmission, ? represents the wavelength of the x-rays, and Z<SB>P</SB> represents the distance between the measuring point and the detector.

IPC 8 full level

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