

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)

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

Publication

EP 1774301 A2 20070418 (DE)

Application

EP 05773890 A 20050725

Priority

- EP 2005008082 W 20050725
- DE 102004035943 A 20040723

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: $B = Z_{\text{SB}} \cdot \text{ARCSIN}(Q_{\text{max}})$, where Q_{max} represents the pulse transmission, λ represents the wavelength of the x-rays, and Z_{SB} represents the distance between the measuring point and the detector.

IPC 8 full level

G01N 23/00 (2006.01)

CPC (source: EP US)

G01N 23/046 (2013.01 - EP US); **G01N 2223/201** (2013.01 - EP US); **G01N 2223/419** (2013.01 - EP US)

Citation (search report)

See references of WO 2006010588A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

DE 102004035943 A1 20060216; **DE 102004035943 B4 20071108**; CN 101088007 A 20071212; EP 1774301 A2 20070418; US 2007153970 A1 20070705; US 7583783 B2 20090901; WO 2006010588 A2 20060202; WO 2006010588 A3 20060330

DOCDB simple family (application)

DE 102004035943 A 20040723; CN 200580032260 A 20050725; EP 05773890 A 20050725; EP 2005008082 W 20050725; US 62542907 A 20070122