

Title (en)

DUAL ENERGY DETECTOR AND METHODS FOR PROCESSING DETECTOR DATA

Title (de)

DUAL-ENERGIE-DETEKTOR UND AUFBEREITUNGSVERFAHREN FÜR DETEKTORDATEN

Title (fr)

DÉTECTEUR À DOUBLE ÉNERGIE ET PROCÉDÉS DE TRAITEMENT DE DONNÉES DE DÉTECTEUR

Publication

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Application

**EP 21739112 A 20210701**

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Abstract (en)

[origin: WO2022003141A1] The invention relates to a dual energy X-ray detector (100) comprising a first detector array (110) having first detector elements (111) and a second detector array (120) arranged parallel to the first array and having second detector elements (122). The detector arrays (110, 120) are arranged parallel to one another in the array direction and are arranged one behind the other in the direction of the X-rays (RX) to be detected, such that the projections of the first and the second detector arrays (110, 120) in the direction of one of the X-rays (RX) to be detected, which X-ray runs through the centroid of the area of a reference detector element of the first or the second detector array (110, 120), overlap one another and are offset by an effective offset ( $\Delta x$ ;  $\Delta y$ ). Furthermore, the invention relates to an X-ray inspection system (200) having such a detector (100) and to methods for processing detector data provided by means of the detector (100).

IPC 8 full level

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