

Title (en)
MULTI-DENSITY AND MULTI-ATOMIC NUMBER DETECTOR MEDIA WITH GAS ELECTRON MULTIPLIER FOR IMAGING APPLICATIONS

Title (de)
DETEKTOR-ANORDNUNG MIT GAS-ELEKTRONEN-VERVIELFACHER ZUR BILDERZEUGUNG UNTER MEHREREN DICHT- UND ATOMZAHL-WERTEN

Title (fr)
MILIEUX DE DETECTION DE DENSITES ET NOMBRES ATOMIQUES MULTIPLES AVEC MULTIPLICATEUR D'ELECTRON DE GAZ POUR DES APPLICATIONS EN IMAGERIE

Publication
EP 1314184 A1 20030528 (EN)

Application
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Priority
US 0023892 W 20000831

Abstract (en)
[origin: WO0219381A1] A multi-detector system receives incident radiation through a subject includes a gaseous microstrip detector, which has alternating anodes and cathodes on a substrate opposite a voltage source, is positioned adjacent a semiconductor detector. In a dual energy environment, electric fields are applied to both detectors as the incident radiation is directed therethrough. Accordingly, the detectors generate corresponding signals which are compared to generate a contrasted signal of the subject. These signals may be generated for imaging, radiation monitoring, radiation measuring and the like. The direction of incident radiation and the orientation of the electric fields may be adjusted according to the particular application. Additionally, the system can be utilized in a single-energy environment where two images of the same incident radiation energy will be formed from the different detector media. By utilizing various processing techniques enhanced contrast between the images can be obtained.

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H01J 47/02; **G01T 1/29**

IPC 8 full level
G01T 1/18 (2006.01); **G01T 1/185** (2006.01); **G01T 1/24** (2006.01); **G01T 1/29** (2006.01); **H01J 47/02** (2006.01)

CPC (source: EP)
G01T 1/185 (2013.01); **G01T 1/2935** (2013.01); **H01J 47/02** (2013.01)

Citation (search report)
See references of WO 0219381A1

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