US009411055B2

(12) **United States Patent**
Yoon et al.

(10) **Patent No.: US 9,411,055 B2**
(45) **Date of Patent: Aug. 9, 2016**

(54) **PHOTON-COUNTING DETECTOR AND READOUT CIRCUIT**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 35 days.

(21) Appl. No.: **14/102,744**

(22) Filed: **Dec. 11, 2013**

(65) **Prior Publication Data**

US 2014/0158900 A1 Jun. 12, 2014

(30) **Foreign Application Priority Data**

Dec. 11, 2012 (KR) 10-2012-0143829

(51) **Int. Cl.**

G01T 1/17	(2006.01)
G01T 1/24	(2006.01)
H03K 21/02	(2006.01)

(52) **U.S. Cl.**
CPC . ***G01T 1/17*** (2013.01); ***G01T 1/247*** (2013.01); ***H03K 21/026*** (2013.01)

(58) **Field of Classification Search**
CPC G01T 1/17; G01T 1/247; H03K 21/026
See application file for complete search history.

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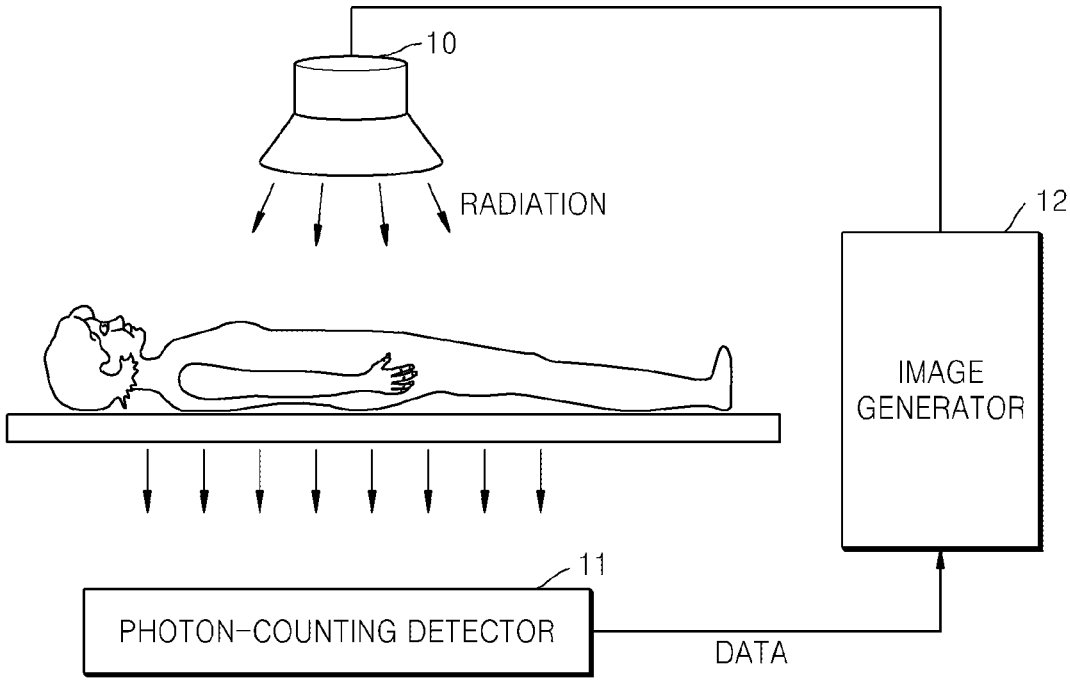
Primary Examiner — Mark R Gaworecki

(57) **ABSTRACT**

A photon-counting detector configured to detect photons included in multi-energy radiation. The photon-counting detector includes a pixel area configured to absorb photons incident thereto, and bias circuits configured to supply one of a bias voltage and a bias current to electronic devices in the pixel area, wherein the bias circuits are in the pixel area.

15 Claims, 8 Drawing Sheets