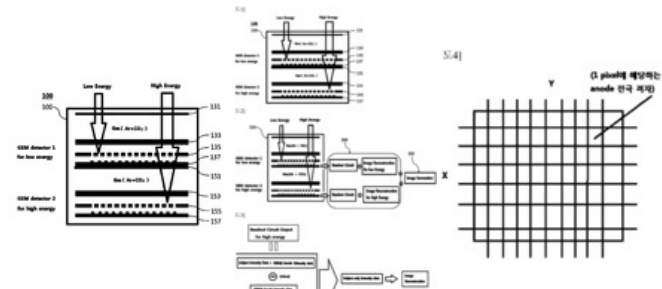
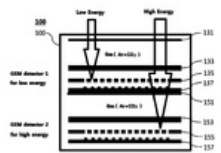


6 results for (gem foil+ and images)/TI/AB/IW/TX - Collection: FAMPAT

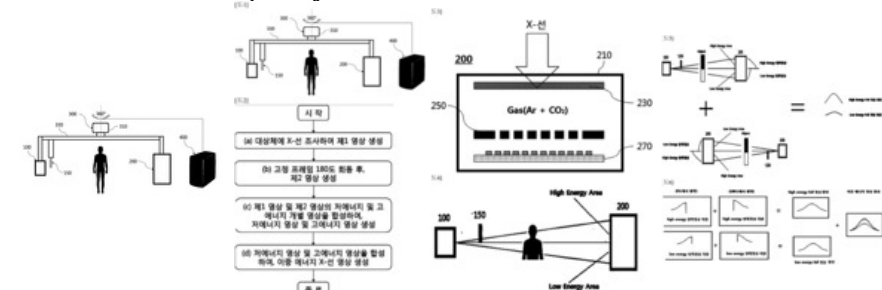
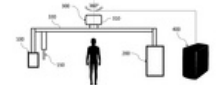
#	Title	Publication number	1st app. date	Applicant/Assignee	1st publ. date	Publ. date
1.	Dual energy x-ray detector using multiple gas electron multiplier detector, and x-ray image capturing system	WO2017171130	2016-03-31	EWHA UNIVERSITY INDUSTRY COLLABORATION FOUND*	2017-10-05	2017-10-05

The present invention relates to a dual energy X-ray detector using a multiple gas electron multiplier (GEM) detector, and an X-ray image capturing system. The present invention comprises: a GEM chamber; a cathode; a first detector for low energy X-ray detection having arranged in parallel a first scintillator reacting with a low energy x-ray, a GEM foil and a first anode; and a second detector for high energy X-ray detection having arranged in parallel a second scintillator reacting with a high energy x-ray, a GEM foil and a second anode, wherein the first detector and the second detector are arranged in series inside the GEM chamber in the direction of the X-rays.



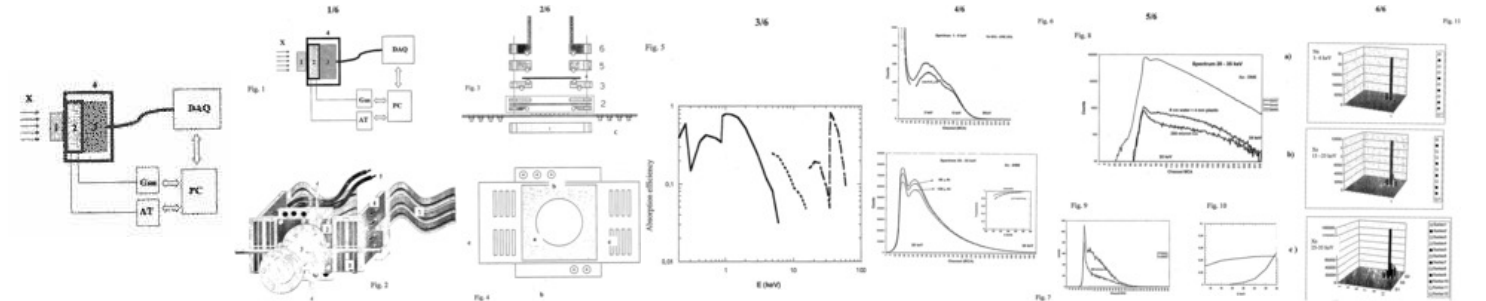
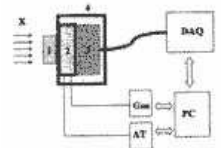
2.	Energy filter-type dual energy x-ray imaging system using gas electron multiplier detector, and x-ray image creation method thereof	KR101742432	2016-03-31	EWHA UNIVERSITY INDUSTRY COLLABORATION FOUND*	2017-05-31	2017-05-31
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The present invention relates to an energy filter-type dual energy X-ray imaging system using a gas electron multiplier detector, and an X-ray image creation method thereof. The present invention comprises: a rotation part which is rotatable about a central axis and has a fixed frame extending in both directions along a straight line from the central axis; an X-ray source which is fixedly coupled to the lower end of the end part on one side of the fixed frame; a low energy X-ray filter part which is installed in front of the X-ray source and blocks a low energy X-ray in any one radiation region among radiation regions in the left/right directions of the X-ray; a gas electron multiplier detector which is fixedly coupled to the lower end of the end part on the other side of the fixed frame; and an image processing part which synthesizes and processes an image detected by the gas electron multiplier detector, wherein the image processing part creates a dual energy X-ray image by synthesizing a first image and a second image, the first image being created by capturing a subject positioned at the lower part of the central axis, and the second image being created by capturing the subject from a position where the fixed frame is rotated by 180 degrees.

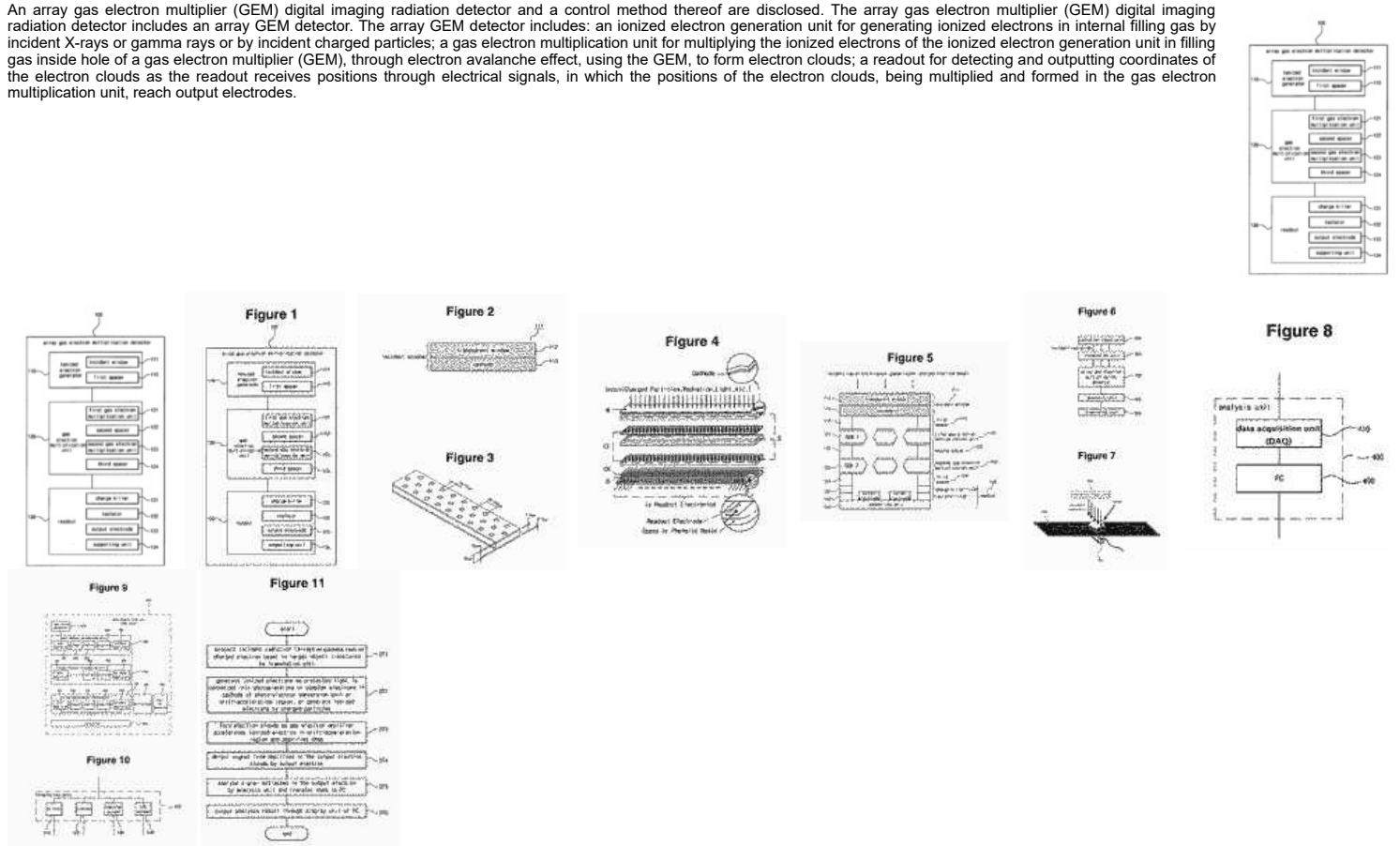


3.	Two dimensional soft x-ray imaging device	ITPI20020071	2002-11-21	BELLAZZINI ROLANDO	2003-02-19	2003-02-19
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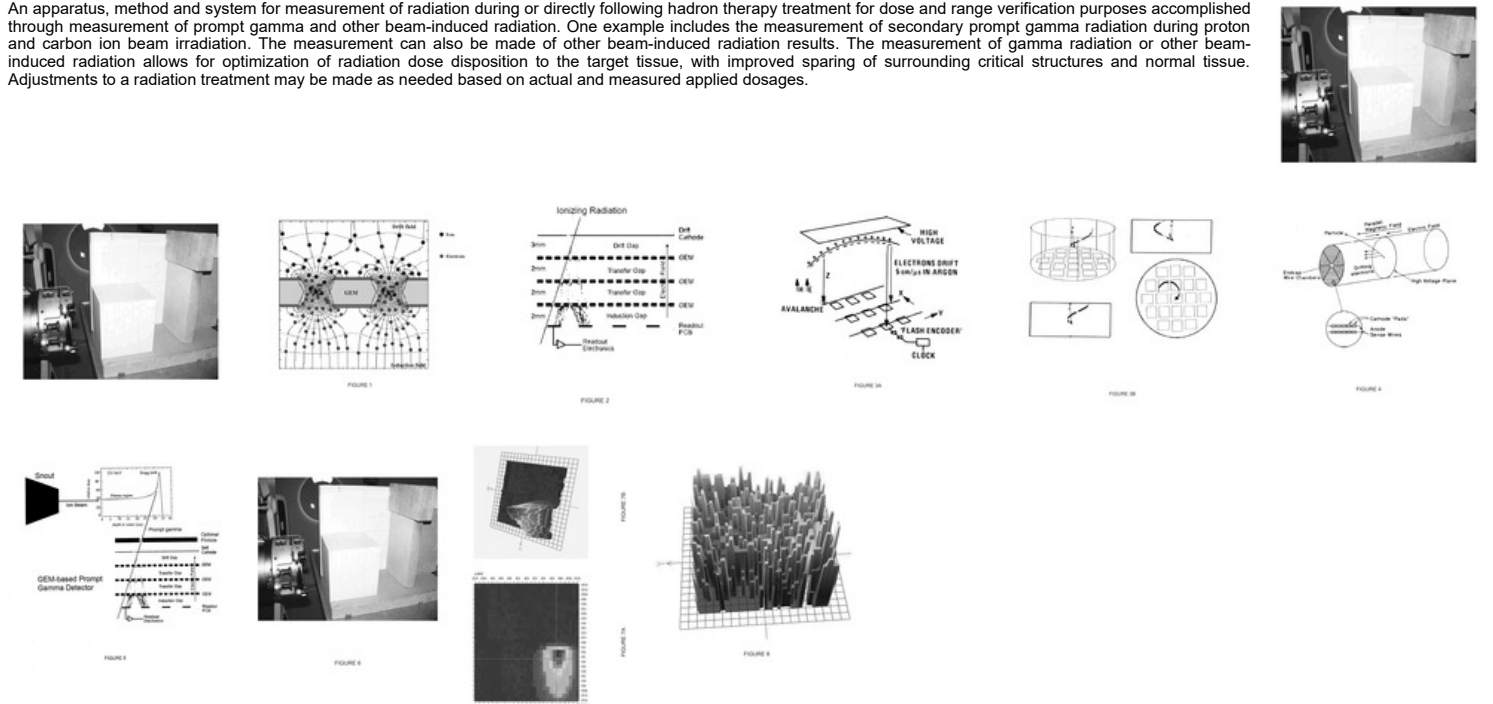
This device allows the acquisition and visualization of two-dimensional x-ray images at high time resolution and with energy resolution. It has a broad range of applications, particularly in science (physics, material engineering, biology) and medicine. The invention includes also the method for the image acquisition and visualization.



An array gas electron multiplier (GEM) digital imaging radiation detector and a control method thereof are disclosed. The array gas electron multiplier (GEM) digital imaging radiation detector includes an array GEM detector. The array GEM detector includes: an ionized electron generation unit for generating ionized electrons in internal filling gas by incident X-rays or gamma rays or by incident charged particles; a gas electron multiplication unit for multiplying the ionized electrons of the ionized electron generation unit in filling gas inside hole of a gas electron multiplier (GEM), through electron avalanche effect, using the GEM, to form electron clouds; a readout for detecting and outputting coordinates of the electron clouds as the readout receives positions through electrical signals, in which the positions of the electron clouds, being multiplied and formed in the gas electron multiplication unit, reach output electrodes.



An apparatus, method and system for measurement of radiation during or directly following hadron therapy treatment for dose and range verification purposes accomplished through measurement of prompt gamma and other beam-induced radiation. One example includes the measurement of secondary prompt gamma radiation during proton and carbon ion beam irradiation. The measurement can also be made of other beam-induced radiation results. The measurement of gamma radiation or other beam-induced radiation allows for optimization of radiation dose disposition to the target tissue, with improved sparing of surrounding critical structures and normal tissue. Adjustments to a radiation treatment may be made as needed based on actual and measured applied dosages.



Detector module designs for radiographic imaging include first and second layers of scintillator rods or pixel arrays oriented in first and second directions. The first and second directions are transversely oriented to define a light sharing region between the first and second layers. Encoding features may be disposed in, on or between the first and second layers, and configured to modulate propagation of optical signals therealong or therebetween.

