



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3: **11.12.2013 Bulletin 2013/50** (51) Int Cl.: **G01T 1/17 (2006.01)**

(43) Date of publication A2: **05.12.2012 Bulletin 2012/49**

(21) Application number: **12170342.5**

(22) Date of filing: **31.05.2012**

(84) Designated Contracting States:  
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR**  
 Designated Extension States:  
**BA ME**

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(30) Priority: **03.06.2011 US 201113153026**  
**10.05.2012 JP 2012108492**

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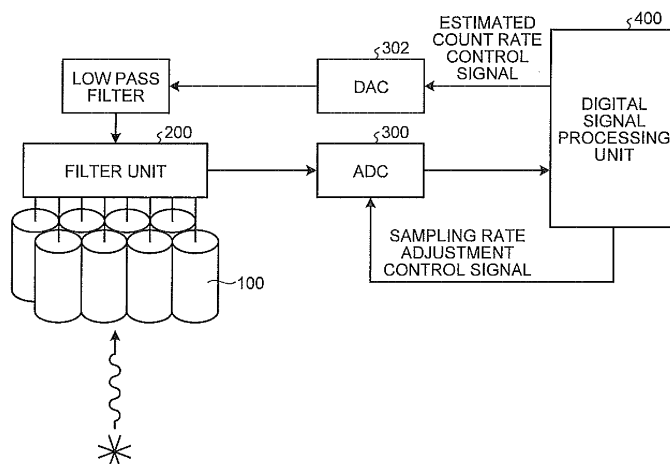
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(54) **Device for radiation detection, radiation detection system and radiation detection method**

(57) According to one embodiment, a device for radiation detection includes a rate counter (400) and a controller (400). The rate counter (400) is configured to estimate, based on a signal which is filtered by an adjustable filter (200, 400) configured to perform filtering, a count rate of events detected by a radiation detector (100). The

controller (400) is configured to generate a filtering control signal based on an estimated count rate which is the count rate estimated by the rate counter (400), and to output the filtering control signal to the filter (200, 400), the filtering control signal causing the filter (200, 400) to adjust the filtering to optimize an energy resolution.

**FIG.1**





EUROPEAN SEARCH REPORT

Application Number  
EP 12 17 0342

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Y	----- WO 97/07591 A1 (WARBURTON WILLIAM K [US]) 27 February 1997 (1997-02-27) * page 2 * * figure 2 *	8-10	-----
			TECHNICAL FIELDS SEARCHED (IPC)
			G01T
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
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CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document	

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EPO FORM 1503 03.82 (F04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.

EP 12 17 0342

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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