

(51) International Patent Classification:
G01T 1/20 (2006.01)(21) International Application Number:
PCT/IB2009/050691(22) International Filing Date:
19 February 2009 (19.02.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: SUPPRESSION OF DIRECT DETECTION EVENTS IN X-RAY DETECTORS

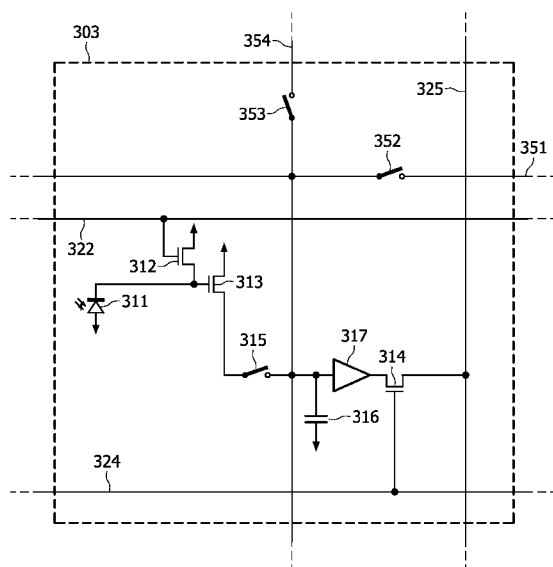


FIG. 4

(57) Abstract: According to an embodiment of the invention, signals coming from a number of pixels or sub-pixels are compared and those signals from pixels or sub-pixels, which are substantially brighter than the other pixels in the comparison, are excluded from contributing to the output signal, to suppress direct detection events in X-ray detectors. For this an X-ray detector apparatus (101) can comprise: -an array (102) of pixel arrangements (303), -each pixel arrangement (303) comprising at least one radiation collection device (311) for converting incident radiation into a collection device signal, -switching arrangements (313, 324, 314, 142; 313, 315, 314, 352, 142; 313, 315, 314; 361) for providing to respectively one output element (141) a signal derived from the collection device signals of a plurality of radiation collection devices (311) of at least one pixel arrangement (303).

**Published:****(88) Date of publication of the international search report:**

25 March 2010

- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2009/050691

A. CLASSIFICATION OF SUBJECT MATTER

INV. G01T1/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

G01T H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 201 891 B1 (INO YOSHIHIRO [JP] ET AL) 13 March 2001 (2001-03-13)	1-2,8, 16-21, 26,33-34
Y	column 11, line 38 - column 12, line 50; figures	22-24, 27-32
X	US 2002/191828 A1 (COLBETH RICHARD E [US] ET AL) 19 December 2002 (2002-12-19)	1,3-6, 8-16,19
Y	page 3, paragraph 29 - paragraph 30 page 3, paragraph 32 - paragraph 34 page 4, paragraph 37 - paragraph 42; figures	22-24, 27-32



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Date of the actual completion of the international search

4 February 2010

Date of mailing of the international search report

10/02/2010

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2009/050691

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 6201891	B1	13-03-2001	US	6463169 B1	08-10-2002

US 2002191828	A1	19-12-2002	NONE		
