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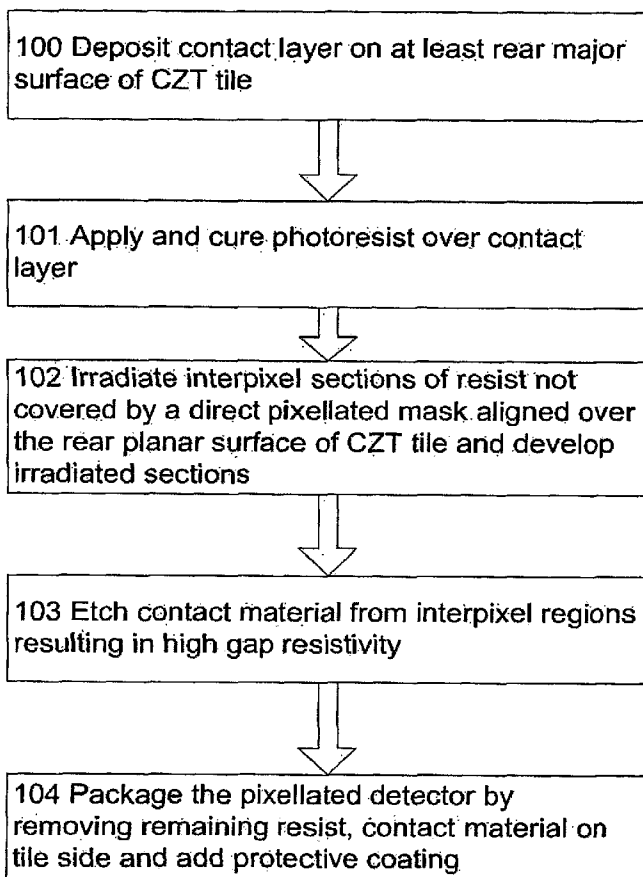
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(54) Title: METHOD OF MAKING SEGMENTED CONTACTS FOR RADIATION DETECTORS USING DIRECT PHOTOLITHOGRAPHY



(57) Abstract: A method is provided for fabricating contacts on semiconductor substrates by direct lithography that results in durable adhesion of the electrodes, increased interpixel resistance and the electrodes which act as a blocking contact, thereby providing for improved energy resolution in a resultant radiation detector.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 07/04319

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G01T 01/24 (2007.01)

USPC - 250/370.01

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)

IPC(8): G01T 01/24 (2007.01), USPC: 250/370.01

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC: 250/370.01, (keyword limited -- see keywords below)

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

PubWEST, SCHOLAR GOOGLE: semiconductor, radiation detector, anode, cathode, lithography, CZT crystal, gold electrodes, oxide, CdZnTe, contact

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2002/0158207 A1 (SPARTIOTIS et al.) 31 October 2002 (31.10.2002), entire document; Abstract; para [0045]-[0057]; Fig 1A-L, para [0046]; Fig 1A, para [0047]-[0057]; Fig 1B-L, para [0061]; Fig 1, para [0034], [0037], para [0048]; Fig 1C, para [0049]; Fig 1D, (para [0048]-[0057]; Fig 1C-L, para [0044], [0065], para [0017], para [0014]-[0018], para [0019], para [0055]-[0056]; Fig 1J-K, para [0058], [0061]; Fig 1, para [0067], para [0063]; Fig 2.	1-28
Y	US 6,212,093 B1 (LINDSEY) 3 April 2003 (03.04.2003), entire document, col 15, ln 18-40, maskless laser ablation lithography, col 3, ln 48-col 4, ln 11, col 15, ln 18-40, direct deposition of a metallic electrode and maskless laser ablation lithography, col 15, ln 31-34, col 15, ln 5-10, col 14, ln 48-67; col 15, ln 31-34.	1-28
Y	US 4, 144,090 A (FRANZ) 13 March 1979 (13.03.1979), entire document; Abstract; col 1, ln 35-39, col 2, ln 9-19, col 1, ln 45-48.	7-9
Y	US 2004/0052456 A1 (BOFFI et al.) 18 March 2004 (18.03.2004), entire document; Abstract, para [0064]; [0003]; [0008]-[0009], para [0027].	22
Y	US 2005/0167606 A1 (HARRISON et al.) 4 August 2005 (04.08.2005), entire document, para [0069], para [0008], para [0045]-[0048]; Fig 1A-C.	19, 25, 28
A	US 5,677,539 A (APOTOVSKY et al.) 14 October 1997 (14.10.1997), entire document.	1-28
A	US 5,905,624 A (SHAHAR et al.) 18 May 1999 (18.05.1999), entire document.	1-28

 Further documents are listed in the continuation of Box C.


* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

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Date of mailing of the international search report

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