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Declarations under Rule 4.17:

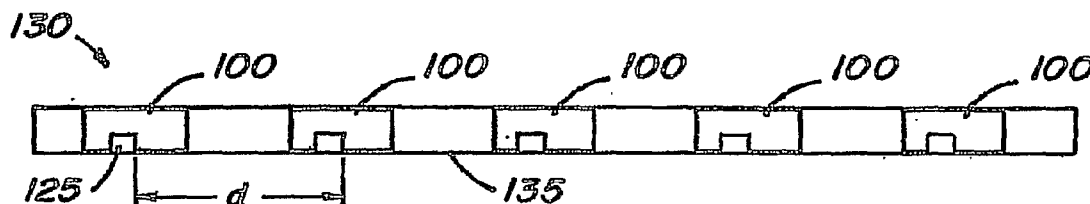
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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24 April 2008

(54) Title: APPARATUS AND METHOD FOR DETECTING GAMMA RAY RADIATION



(57) Abstract: An apparatus for detecting gamma ray (GR) radiation having a plurality of detector cells arranged in an array is disclosed. Each cell includes a housing having an aperture, the housing comprising a GR absorbing material, and a GR detector disposed within the housing such that external gamma rays are received at the GR detector via the aperture. The apertures of each cell are aligned.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 07/14010

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G01V 5/04 (2007.10)

USPC - 250/264

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): G01V 5/04 (2007.10); USPC: 250/264

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

USPC: 250/253-256,261-267 (keyword limited -- see keywords below)

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

PubWEST (PGPB,USPT,EPAB,JPAB); GOOGLE SCHOLAR: gamma ray, downhole, detector, scintillator, crystal, photomultiplier, shielding, absorbing, azimuth, source

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|--------------|--|-----------------------------|
| X -- Y | US 6,995,684 B2 (CLARK) 07 February 2006 (07.02.2006), entire document; Abstract; col 13, ln 17-36; Fig 14; col 6, ln 46-col 7, ln 13; Fig 4b; col 14, ln 37-42; com 17, ln 1-43; Fig 29-30; col 19, ln 22-42; col 18, ln 47-64; col 17, ln 44-49. | 1-10, 12-17 -- 11, 18 |
| Y | US 5,250,806 A (RHEIN-KNUDSEN et al.) 05 October 1993 (05.10.1993), entire document; Abstract; col 8, ln 17-27; col 8, ln 63-66. | 11, 18 |

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

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"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

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Date of the actual completion of the international search

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