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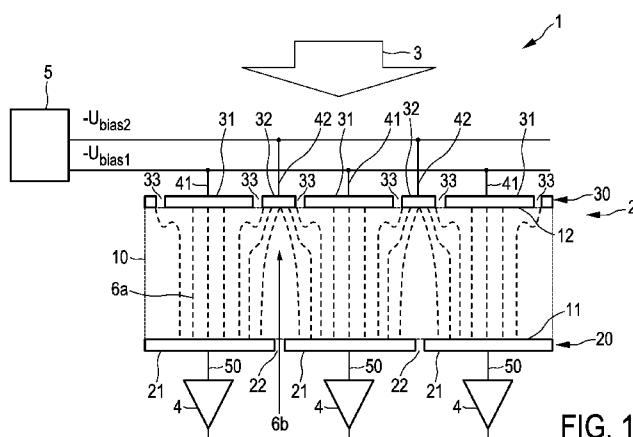


FIG. 1

(57) **Abstract:** The present invention relates to radiation detector (2) comprising a radiation sensitive semiconductor element (10) generating electron-hole pairs in response to an irradiation with radiation (3), an anode electrode (20) arranged on a first surface (11) of the semiconductor element (10) facing away from the radiation, said anode electrode (20) being segmented into anode segments (21) representing anode pixels, wherein anode gaps (22) are arranged between said anode segments (21), a cathode electrode (30) arranged on a second surface (12) of the semiconductor element (10) opposite the first surface (11) and facing the radiation (3), said cathode electrode (30) being segmented into first and second cathode segments (31, 32), wherein said first cathode segments (31) are substantially arranged opposite said anode segments (21) and said second cathode segments (32) are substantially arranged opposite said anode gaps (22), and a cathode terminal (41, 42) providing electrical connections to said first cathode segments (31) and said second cathode segments (32) for coupling different electrical potentials to said first and second cathode segments (31, 32). By such an arrangement charge sharing can be effectively reduced.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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ADD.

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)
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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 practicable, search terms used)

EPO-Internal, WPI Data, 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	DE 10 2007 055676 A1 (SIEMENS AG [DE]) 4 June 2009 (2009-06-04) paragraph [0024] - paragraph [0027]; figures paragraph [0030] - paragraph [0031] paragraph [0034] paragraph [0021]	1-5, 7, 9, 10, 12, 14, 15
A	US 2005/249331 A1 (WEAR JAMES A [US] ET AL) 10 November 2005 (2005-11-10) paragraph [0018] - paragraph [0021] paragraph [0027] - paragraph [0028]; figures	1
A	US 2007/280409 A1 (KONNO YASUTAKA [JP]) 6 December 2007 (2007-12-06) figures	1

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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