

Title (en)

TOOL FOR DETECTING PHOTONIC RADIATION PARTICULARLY SUITABLE FOR HIGH-FLUX RADIATION

Title (de)

WERKZEUG ZUR DETEKTION VON PHOTONENSTRAHLUNG, DIE INSBESONDERS FÜR HOCHDICHTER STRAHLUNG GEEIGNET IST

Title (fr)

OUTIL DE DETECTION DE RAYONNEMENT PHOTONIQUE PARTICULIEREMENT ADAPTE A DES RAYONNEMENTS A FORT FLUX

Publication

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Application

EP 15713201 A 20150224

Priority

- FR 1451610 A 20140227
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Abstract (en)

[origin: WO2015128574A1] The invention relates to a tool for detecting radiation, comprising: a semiconductor detector material (10) able to interact with ionising radiation; an electrode (100) for collecting charge carriers generated in the detector material under the effect of an interaction with the ionising radiation; a shaping circuit (11) for forming an electrical pulse having a shape that depends on the amount of charge collected; a counting circuit (15, 16, 17, 22) for counting the number of pulses formed, comprising a counter and an incrementing element, characterised in that it comprises: a duration-measuring element (17) for measuring a pulse duration (f) for each pulse formed; a peak-detecting element (15) for determining a maximum amplitude (H) of each pulse formed; and a combining element (16) for combining said maximum amplitude H and said pulse duration (f), in order to establish said parameter for comparison. Preferably, the parameter for comparison is the product (H × t) of a maximum amplitude measured for the pulse and the corresponding pulse duration, the counting threshold having a fixed preset value.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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