

Title (en)
RADIATION DETECTOR WITH AN ADJUSTABLE SPECTRAL SENSITIVITY

Title (de)
STRAHLUNGSDETEKTOR MIT EINSTELLBARER SPEKTRALER EMPFINDLICHKEIT

Title (fr)
DÉTECTEUR DE RAYONNEMENT À SENSIBILITÉ SPECTRALE RÉGLABLE

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Abstract (en)
[origin: WO2008065170A1] The invention specifies a radiation detector (1) having a detector arrangement (2), which has a plurality of detector elements (4, 5, 6) which are used to obtain a detector signal (DS) during operation of the radiation detector, and having a control apparatus (3), wherein the detector elements each have a spectral sensitivity distribution (400, 500, 600) and are suitable for generating signals (S4, S5, S6), at least one detector element contains a compound semiconductor material and this detector element is designed to detect radiation in the visible spectral range, the radiation detector is designed in such a manner that the sensitivity distributions of the detector elements are used to form different spectral sensitivity channels (420, 520, 620) of the radiation detector, a channel signal (K4, K5, K6) which is assigned to the respective sensitivity channel can be generated in the sensitivity channels using the detector elements, and the control apparatus is designed in such a manner that the contributions of different channel signals to the detector signal of the radiation detector are controlled differently.

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