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(54) **RADIATION MEASURING DEVICE AND DATA PROCESSING METHOD**

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(57) **ABSTRACT**

A radiation measuring device capable of identifying the incident direction of a radiation ray and energy (segmentation) The directivity characteristics of a plurality of detectors are different from each other. A plurality of energy segmentations are set respectively for a plurality of spectra corresponding to a plurality of detectors, and actual measurement ratio information (a plurality of actual measurement counting ratios) expressing the mutual ratio between integrated counting values for each energy segmentation is computed. The actual measurement ratio information is checked against a plurality of response functions, and, when the compatibility relation between specific actual measurement ratio information and specific theoretical ratio information is found, the incident direction of a radiation ray and an energy segmentation are identified based on that relation.

