

Digital Discrimination Methods for Gamma-Insensitive Neutron Detectors

Disclosure Number

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Technology Summary

The invention relates to neutron anger cameras and more specifically to improved methods for neutron-gamma discrimination. A series of digital methods allowing the discrimination between neutron and gamma in thermal-neutron detectors are described. The neutron detector includes neutron scintillator and a pixilated or discrete photodetector. Neutron-gamma discrimination is based on the combination of several parameters, which are extracted from the shape and amplitude of event pulses from the detector. These parameters have unique characteristics for neutrons and gammas.

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