

Improvements to Neutron Detectors

Disclosure Number

200902344

Technology Summary

The technique allows the use of different materials in gaseous detector for neutron detection. It combines the advantages of high efficiency and low parallax errors inherent to solid converters with all the attractive characteristics (large areas, high dynamic range, helium-free) associated with gaseous detectors. This single neutron device can find applications in neutron scattering, neutron imaging or high energy particles detection. The resulting neutron detector has superior pulse height resolution, better quantum efficiency and is inexpensive to manufacture.

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