OAK RIDGE NATIONAL LABORATORY

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Multiple source imaging for simultaneous capture of multiple projections

Disclosure Number

200902302

Technology Summary

A system for Associated Particle Imaging (API) with neutrons is disclosed. This system uses a neutron generator as the source. Neutrons emitted from the generator have an associated alpha particle emitted in approximately the opposite direction. Through the use of alpha detectors, the system can be used for time and/or direction tagged imaging, and the system removes measurement noise from scattered neutrons. One neutron path transmits through the object while the other results in a scatter or a fission within the object.

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