

Docket #: S13-068

Controlled X-Ray for Security Inspection

A researcher at SLAC National Accelerator Laboratory has developed a pulsed X-ray system for fast, high-throughput, unambiguous identification of materials in moving containers. This method uses X-ray pulses with controllable intra-pulse energy distribution to detect container contents such as explosives, nuclear materials or drugs. The mode and apparatus allows flexibility to make different scenarios of inspection in a range of checkpoint locations.

Applications

- **Cargo inspection system** - non-destructive identification of contents at seaports, security checkpoints, land border crossing, customs etc.

Advantages

- **Fast and high throughput** - up to 60 km/h cargo speed
- **Sensitive** - high probability of unambiguous material identification
- **Non-destructive**

Publications

- [Concept of RF Linac for Intra-Pulse Multi-Energy Scan](#) (SLAC-PUB-15943)

Patents

- Published Application: [20140270086](#)

Innovators

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