



**CRANE**

## Segmented Flexible Linear Shaped Charge

**Track Code:** CRANE-100508

**Categories:**

- Mechanical Engineering
- NSWC Crane

**Keywords:**

- Crane
- Explosives
- Mechanical Engineering

Linear shaped charges are used in various explosive and distinct cutting applications. Linear charges add to the safety of the cutting operation because the operator may detonate the charge remotely. Current flexible linear shaped charges are less efficient than similar sized metal jacketed linear charges.

Naval Surface Warfare Center, Crane Division (NSWC Crane), has developed and patented a segmented flexible linear shaped charge for use with an explosive device. This technology includes a flexible explosive core and plurality of axially spaced housing segments having rigidity greater than that of the core. Upon detonation of the explosive core, the lower walls of the housing segments and explosive core are focused into a target. The segmented flexible linear shaped charge is both flexible and efficient.

**Advantages:**

- Enhancing the efficiency of flexible linear shaped charge

**Potential Applications:**

- Explosive application
- Pipe cutting application
- Under water mining operations
- Controlled demotion and drilling projects

**People:**

- Scheid, Eric (Project leader)

**Intellectual Property:**

**Application Date:** January 28, 2011

**Type:** Utility Patent

**Country of Filing:** United States

**Patent Number:** 8,904,934

**Issue Date:** December 9, 2014

**Contact OTC:**

Purdue Office of Technology Commercialization

The Convergence Center

101 Foundry Drive, Suite 2500

West Lafayette, IN 47906

Phone: (765) 588-3475

Fax: (765) 463-3486

Email: [otcip@prf.org](mailto:otcip@prf.org)