Infrared (IR) Debonding

**Features**
- Eliminates most mechanical processing
- Applies directional heat, without the use of a susceptor
- Can be easily repositioned and located
- Designed to be operated with minimum physical effort

**Benefits**
- Materials or components are not damaged or abraded, allowing for preservation or reuse
- IR heating is instantaneous and rapid, shortening schedules
- Uses less energy than conventional methods, minimizing costs
- Debonded items can be easily removed from the apparatus, allowing quicker processing
- Physical activity required is minimized, eliminating many hazards to workers

**Applications**
- Dismantlement and salvage operations
- Repair operations involving defective components
- Component recovery
- Manufacturing quality control
- Recycling

**Patents & Awards**
- U.S. Patent No. 7,896,053
- Technology Ventures Corporation–featured technology, 2012

**Inventors**
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**Technology Readiness Level (1–9)**

Actual application of the technology in its final form and in Y-12 production use.
Partnering Opportunities

Y-12 is seeking an industry partner to fully commercialize this technology.

If you would like more information, please contact the Office of Technology Commercialization and Partnerships:
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