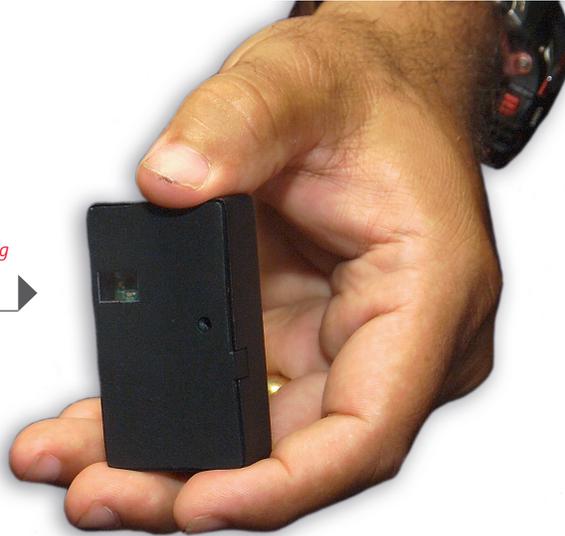


PAD — Personal Annunciation Device



Not even the size of a pager, the PAD may be the smallest self-arming multiple-use accident notification device.



The Personal Annunciation Device (PAD) is a wireless emergency alert technology that can be easily adapted for multiple-hazard or high-consequence events where traditional notification means are not adequate and rapid alert and accountability are required. The PAD uses radio frequency identification (RFID) technology. It not only provides the user an emergency alert and an approximate location of the hazard but also notifies command-and-control personnel of the user's location. The RFID feature uses a "bread-crumbs approach," acting as a tracker as the individual moves from area to area. The device can receive either an automatic signal from a network of detectors or a coded message from a sender.

SECURITY

Features

- Lightweight, small and self-activated
- Integrates radio-frequency receiver with RFID technology
- Provides concurrent alarms of vibration, light and sound and displays location of emergency

Benefits

- Reliable — performs over a frequency range that can penetrate areas where pager or cell phone messages would not be received
- Immediate — provides alarm within 5 seconds of emergency
- Automated — requires little human interface
- Versatile — can be easily adapted for multiple-hazard or high-consequence events where rapid alert and accountability are required
- Efficient — has extended battery life because of self-activation feature

Applications

- Coal mines and high-hazard industrial facilities
- Chemical companies
- Large convention and game venues
- Universities
- Remote snow-ski and beach resort complexes
- Hospitals
- Schools (Elementary, Middle, High)

Patents & Awards

- U.S. Patent No. 7,876,213
- 2007 R&D 100 Award
- Technology Ventures Corporation—featured technology, 2010

Inventors

Peter Angelo, James Younkin and Paul DeMint

Technology Readiness Level (1–9)



Technology has been proven to work in its final form and under expected conditions.

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:**

OTCP@y12.doe.gov

(865) 241-5981

<http://www.y12.doe.gov/technologies>