

Delayed Latching Mechanism



Uncontrolled and rapid movement of equipment and people through security gates has been a major problem for security personnel. In many facilities, a simple turn of a key can open a gate, giving access to trucks and equipment entering a protected area. A simple lock does not give security personnel enough time to protect the facility by keeping the gate closed if such protection is deemed necessary. The Delayed Latching Mechanism is a rugged, hydraulically operated locking latch system that adds a time delay to the unlocking action. Access from the outside is controlled by repeatedly pumping the hydraulic lever until it locks into place, which adds a time-delay level of protection. From the inside, the mechanism can be easily unlocked.

SECURITY

Features

- The required pumping action provides a time-delay feature, adding a level of protection that traditional locks and latches do not provide
- Opening from the inside is still a simple and quick process

Benefits

- Fully mechanical; no electricity required
- Simple, rugged design requires minimal maintenance
- Access to secured areas during emergency situations when electricity is not available

Applications

- Securing structures such as doors, hatches, or gates
- Security areas, hazardous areas, border crossings, and penitentiaries
- Places requiring limited access entry doors and gates

Patents & Awards

- U.S. Patent No. 9,033,376

Inventors

Lee Bzorgi

Technology Readiness Level (1–9)



The system has been built and tested, and it can be demonstrated.

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>

