**Innovative Brief** 

Section 1:

Images

Section 2:

**Product Description** 

# Section 1





## Section 2

#### Invention: Electronic Flashbang

Inventor(s): David Skipper

#### Status: Patent Pending

#### Innovative Brief:

The tactical stun grenade or as it is popularly known "flash bang or flashbang" has been a vital device in the inventory of police, SWAT and military tactical teams worldwide for many years. The flashbang originally conceived as a non-lethal device designed to produce a blinding flash of light and a high-decibel "bang." Created in Britain for the Special Air Service's Counter terrorist wing the "flashbang" has seen service in most areas of law enforcement and military groups. The flashbang, when activated, momentarily activates the eye's photoreceptor cells causing temporary blindness. The eye will restore itself to a normal state, but an afterimage will be visible for a longer length of time. The loud blast is meant to cause a temporary loss of hearing and can also disturb the inner ear affecting balance. The hearing will return to normal after a period of time.

The flashbang's original concept was to be a non-lethal device designed to assist in critical situations where hostages, other innocent persons, or anytime when the desire to use non-lethal force is directed. However, the flashbang's use of the pyrotechnic material in its construction creates a concussive blast that has proven to cause permanent injuries and even death in some cases. The pyrotechnic material use can cause fires by igniting flammable materials that may be present. Persons in proximity to the activation of the flashbang can suffer serious burns, injury, some fatal. The traditional flashbang is an explosive device, and all the danger associated with explosives will be present when it is in use. The flashbang is also a one-time use device and requires replacement each time a unit is deployed in service.

Current technical innovations with sound and lighting devices would infer that the explosive pyrotechnic device should be replaced with a safer and actual non-lethal product that can be reused.

The **Electronic Flashbang** is an innovative and unique product designed to replace the pyrotechnic version of the flashbang grenade. Built of sturdy impact and fire resistant materials, the **Electronic Flashbang** presents a stun grenade that consists of solid state electronics that can control sound and light emissions to produce the same

effects of the current flashbang grenade that is now in use. The **Electronic Flashbang** comes in two distinct shapes. The spherical version fits the hand nicely and is easy to throw accurately. An elongated version that is known as the "pill" form is also proven to have the same characteristics as the spherical type. Both versions feature high-intensity LEDs located at strategic points on the product's exterior. Internal speakers capable of producing high decibel sounds additionally featured on the **Electronic Flashbang**. The same disorienting flash and high-decibel sound created by the current flashbang is present with the **Electronic Flashbang**. The unit design is for use in tactical and police situations with the same effects but without any lethality of the pyrotechnics being present. The **Electronic Flashbang** capabilities include the rechargeable batteries contained within the **Electronic** 

**Flashbang's** structure. Once deployed the **Electronic Flashbang** recovery assures that it can be re-charged and brought back into service when needed. Each unit activates with the push of a trigger button programmed for time delay. The same effect as the pyrotechnic flashbang grenade but without any of the lethality and waste. The **Electronic Flashbang** is the future of the stun grenade with tactical units and police forces.

### **Unique Functions of Invention:**

- No pyrotechnics used
- All solid-state electronics
- High-decibel sounds
- High intensity LED flash
- Non-lethality is assured
- Replaces current stun grenades
- Reduces waste
- Units are rechargeable and can be reused
- Fireproof and impact resistant cases
- Saves time and expenses
- Simple straight forward use
- Cost effective