

Title (en)
ELECTROTHERMAL CHEMICAL CARTRIDGE

Title (de)
CHEMISCHE ELEKTROTHERMISCHE KATERDER

Title (fr)
CARTOUCHE CHIMIQUE ELECTROTHERMIQUE

Publication
EP 0820578 A1 19980128 (EN)

Application
EP 95914744 A 19950323

Priority
US 9503360 W 19950323

Abstract (en)
[origin: WO9629565A1] An electrothermal chemical cartridge (10) with a fuse (18) of tapering cross section enables higher impulse energy to be imparted to a projectile (6) by means of complete controlled burning of propellant (24). A long, narrow tube (16) filled with propellant (24) has a fuse (18) on its inside surface with a cross section that tapers toward the discharge end, separated from the electrical ground of the cartridge casing by a layer of insulation sufficiently thin to be destroyed as the fuse ignites the propellant. A high-voltage electrode (26) connected at the back end (14) of the tube (16) provides for application of a pulse of sufficient current density to ohmically heat or burn the fuse in a controlled fashion from the discharge end (12) to the back end (14). Many such tubes (152) can be bundled together in a large casing (150) for wide barrel guns.

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F42B 5/08

IPC 8 full level
F42B 5/08 (2006.01)

IPC 8 main group level
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CPC (source: EP KR)
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