

Title (en)
Switchable explosive charge

Title (de)
Umschaltbare Wirkladung

Title (fr)
Charge active commutable

Publication
EP 2442066 A2 20120418 (DE)

Application
EP 11008290 A 20111014

Priority
DE 102010048570 A 20101018

Abstract (en)
The switchable explosive charge of a warhead comprises: a splinter forming a casing and having an explosive charge, in which a tubular holder having pellets (P) is arranged; a first ignition device (Z1) arranged at a front side, where the ignition device corresponds with a plate-shaped transformer, in whose area a detonation wave guide is arranged; and a further ignition device positioned in the region of a longitudinal axis (A) of the explosive charge. The ignition devices are initiated independent of one another. The diameter of the pellets is 1-10 mm. The switchable explosive charge of a warhead comprises: a splinter forming a casing and having an explosive charge, in which a tubular holder having pellets (P) is arranged; a first ignition device (Z1) arranged at a front side, where the ignition device corresponds with a plate-shaped transformer, in whose area a detonation wave guide is arranged; and a further ignition device positioned in the region of a longitudinal axis (A) of the explosive charge. The ignition devices are initiated independent of one another. The diameter of the pellets is 1-10 mm. The ratio of a distance between center points of the adjacent pellets to their diameter is greater than 1-3. The casing is dimensioned with respect to the charge diameter, curvature of the casing, splinter side length, splinter thickness and the typical parameters of the material of the casing so that the casing properties lie within the boundary curve of the casing. The boundary curve is defined for the particular material of the casing by the ratios of the splinter side length to the charge diameter and splinter side length to the splinter thickness. The pellets are: stochastically distributed with respect to their diameter and/or their mutual distances; and systematically arranged on the holder. An independent claim is included for a triggering method for a switchable explosive charge of a warhead.

Abstract (de)
Mit der vorgeschlagenen umschaltbaren Wirkladung und unter Anwendung des Auslöseverfahrens für eine umschaltbare Wirkladung ist es möglich wahlweise entweder geformte beziehungsweise natürliche Splitter zu erzeugen oder die Hülle in feine und feinste Splitter zu zerlegen. Die Wirkladung weist eine Hauptladung (SP) eine Splitter bildende Hülle (H) und eine rohrförmige Halterung (PH) mit einer Vielzahl verteilt angeordneter Pellets auf. Eine erste Zündeinrichtung (Z1) ist stirnseitig, eine weitere Zündeinrichtung (Z2) im Bereich der Längsachse angeordnet.

IPC 8 full level
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Citation (applicant)
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