

Title (en)  
Percussion fuse with piezoelectric generator

Title (de)  
Aufschlagzünder mit piezoelektrischem Generator

Title (fr)  
Fusée d'impact à générateur piézoélectrique

Publication  
**EP 1878995 A2 20080116 (FR)**

Application  
**EP 07290832 A 20070702**

Priority  
FR 0606449 A 20060713

Abstract (en)  
The rocket impact (1) comprises a body (2) having a piezoelectric generator (4) placed on a support of the body, which forms an anvil, and a piston (7) to exert a mechanical constraint on the generator and to receive an effort transmitted by a cap. The piston slides with respect to the body. A plastic deformable unit is interposed between the cap and the body, where the unit is distorted by a movement of the body during the impact of the rocket on a target. An energy consumed by the distortion of the unit ensures a progressive pressing of the piezoelectric generator. The rocket impact (1), comprises a body (2) having a piezoelectric generator (4) placed on a support of the body, which forms an anvil, and a piston (7) to exert a mechanical constraint on the generator and to receive an effort transmitted by a cap. The piston slides with respect to the body. A plastic deformable unit is interposed between the cap and the body, where the unit is distorted by a movement of the body during the impact of the rocket on a target. An energy consumed by the distortion of the unit ensures a gradual collapse of the piezoelectric generator during the impact of rocket on the target. The plastic deformable unit is constituted by a metal washer (10). The metal washer has two deformable caps separated by a groove.

Abstract (fr)  
L'invention a pour objet une fusée 1 d'impact comportant un corps 2 renfermant un générateur piézoélectrique 4 qui mis en place sur un support solidaire du corps 2 et formant enclume, fusée comportant un piston 7 destiné à venir exercer une contrainte mécanique sur le générateur, piston qui reçoit l'effort d'impact transmis par une coiffe 9. Cette fusée est caractérisée en ce que le piston 7 est monté coulissant par rapport au corps 2 et en ce qu'elle comporte un moyen 10 plastiquement déformable qui est interposé entre la coiffe 9 et le corps 2, moyen qui est déformé par le déplacement de la coiffe 9 lors de l'impact sur une cible, ce déplacement entraînant le déplacement du piston 7.

IPC 8 full level  
**F42C 11/02** (2006.01); **F42C 1/10** (2006.01)

CPC (source: EP US)  
**F42C 1/10** (2013.01 - EP US); **F42C 11/02** (2013.01 - EP US)

Citation (applicant)  
• FR 1595412 A 19700608  
• FR 2669416 A1 19920522 - FRANCE ETAT ARMEMENT [FR], et al  
• WO 8503345 A1 19850801 - MEFINA SA [CH]

Cited by  
RU205478U1

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Designated extension state (EPC)  
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