Title (en)

Electro-explosive initiator and method of manufacture

Title (de)

Pyrotechnischer elektrischer Anzünder und Montageverfahren

Title (fr)

Initiateur électropyrotechnique et procédé d'assemblage

Publication

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Application

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Priority

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Abstract (en)

Electro pyrotechnic initiation switch consists of a housing made from two plastic sub-assemblies: a first sub-assembly (2) having a wall (4) and base (5) forming a container for a pre-compressed pyrotechnic charge made from two compounds (7, 8), and a second sub-assembly (3) with two conducting pins (11, 12) in line with its main axis. Electro pyrotechnic initiation switch consists of a housing made from two plastic sub-assemblies: a first sub-assembly (2) having a wall (4) and base (5) forming a container for a pre-compressed pyrotechnic charge made from two compounds (7, 8), and a second sub-assembly (3) with two conducting pins (11, 12) in line with its main axis, connected by an electrical bridge (13) at one end (14) of the sub-assembly. The two sub-assemblies, made from a plastic with a low moisture take-up, are sealed together by ultrasound welding.
The invention relates to an electro-pyrotechnic initiator comprising a pyrotechnic charge (6) provided with at least one composition, and a plastic housing (1) with two substructures. The first substructure (2) comprises a plastic wall (4) which is fixed to a plastic base (5) so as to form a container. The second plastic substructure (3) has a main axis and is penetrated in the direction of said axis by at least two pins (11, 12) which are connected to each other on one surface (14) of said substructure (3) via a electrical bridge (13). Said surface (14) is symmetrically hollow along a height H and a width L. The second substructure (3) forms a base. The first (2) and second (3) substructures are joined in an air-tight manner by means of ultrasonic welding.

Abstract (fr)

L'invention concerne un initiateur électro-pyrotechnique comportant une charge pyrotechnique (6), ladite charge (6) comprenant au moins une composition. Il comprend également un boîtier (1) en matière plastique comportant deux sous-ensembles. Le premier sous-ensemble (2) comprend une paroi (4) en plastique solidaire d'un fond (5) également en plastique et formant un contenant. Le deuxième sous-ensemble (3) en plastique ayant un axe principal (10) est traversé par au moins deux broches (11, 12) selon la direction dudit axe (10). Ces broches (11, 12) sont reliées entre elles par un pont électrique (13) sur une face (14) dudit sous-ensemble (3). Cette face (14) est évidée symétriquement sur une hauteur H et une largeur L. Le deuxième sous-ensemble (3) forme une embase. Les premier (2) et deuxième (3) sous-ensembles sont assemblés hermétiquement par soudage ultrasons. <IMAGE>

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CPC (source: EP KR US)

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Citation (search report)

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WO2006106257A1; EP1710532A1

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