

Title (en)

Titanium semiconductor bridge igniter

Title (de)

Titanium Halbleiterbrückenzünder

Title (fr)

Dispositif pyrotechnique à pontage semi-conducteur à base de titanium

Publication

EP 1113241 A1 20010704 (EN)

Application

EP 00128005 A 20001220

Priority

US 47034399 A 19991222

Abstract (en)

A titanium semiconductor bridge igniter (10, 10') has a substrate (12, 12') on which is carried a pair of spaced-apart pads (18a, 18b) connected by a bridge (20). The pads (18a, 18b) and bridge (20) are made of a layer of polysilicon (22) or crystalline silicon (22') covered by a layer of titanium (24). Metal lands (26a, 26b) overlie the pads (18a, 18b) but leave the bridge (20) exposed so that it can be placed in contact with an energetic material charge (42). A method of stabilizing the titanium semiconductor bridge igniter (10, 10') against temperature-induced variations in electrical resistance of bridge (20) includes heating the titanium semiconductor bridge igniter (10, 10') to an elevated temperature, e.g., from about 37 DEG C to about 250 DEG C. <IMAGE>

IPC 1-7

F42B 3/13

IPC 8 full level

F42B 3/10 (2006.01); **F42B 3/13** (2006.01); **H01B 7/00** (2006.01)

CPC (source: EP KR US)

F42B 3/13 (2013.01 - EP US); **H01B 7/00** (2013.01 - KR)

Citation (applicant)

- US 4708060 A 19871124 - BICKES JR ROBERT W [US], et al
- US 4976200 A 19901211 - BENSON DAVID A [US], et al

Citation (search report)

- [XA] WO 9742462 A1 19971113 - SCB TECHNOLOGIES INC [US]
- [A] US 5905226 A 19990518 - BAGINSKI THOMAS A [US]
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EP 00128005 A 20001220; JP 2000382092 A 20001215; KR 20000080976 A 20001222; US 55599006 A 20061102; US 82952607 A 20070727