

Title (en)

On board device for generating plasma discharges for guiding a supersonic or hypersonic flying object

Title (de)

Im Innern eines Flugkörpers angebrachte Plasmaentladungen erzeugende Vorrichtung zur Steuerung eines supersonischen oder hypersonischen Flugkörpers

Title (fr)

Dispositif embarqué de génération de décharges plasma pour le pilotage d'un engin supersonique ou hypersonique

Publication

EP 1767894 A1 20070328 (FR)

Application

EP 06291486 A 20060921

Priority

FR 0509831 A 20050927

Abstract (en)

Guidance, designed to control the trajectory of a high-velocity projectile such as a shell, bullet or missile with a conical nose, comprises generating a high-tension discharge producing a plasma on a first limited sector (28) in a given direction, and maintaining it while generating a low-tension discharge that feeds energy to the plasma in a second sector (27). The maintenance of the plasma in the second sector lasts at least one millisecond, though the two sectors are different and need not have a common area. The plasma generating tensions are applied between electrodes (A, B, C) on the projectile nose in groups (30, 31, 32).

IPC 8 full level

F42B 10/66 (2006.01)

CPC (source: EP US)

F42B 10/668 (2013.01 - EP US)

Citation (applicant)

- US 3151259 A 19640929 - PER GLOERSEN, et al
- FR 2846081 A1 20040423 - SAINT LOUIS INST [FR]

Citation (search report)

- [DXAY] FR 2846081 A1 20040423 - SAINT LOUIS INST [FR]
- [Y] US 3325123 A 19670613 - NULL FAY E
- [A] US 3176227 A 19650330 - WILLIAM BENDER
- [A] US 6247671 B1 20010619 - SAEKS RICHARD E [US], et al

Cited by

US7988103B2

Designated contracting state (EPC)

DE FR GB SE

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1767894 A1 20070328; EP 1767894 B1 20090513; CA 2560520 A1 20070327; CA 2560520 C 20140325; DE 602006006767 D1 20090625; FR 2891359 A1 20070330; FR 2891359 B1 20071214; US 2007200028 A1 20070830; US 7645969 B2 20100112

DOCDB simple family (application)

EP 06291486 A 20060921; CA 2560520 A 20060922; DE 602006006767 T 20060921; FR 0509831 A 20050927; US 52516906 A 20060922