

Title (en)

Device and method for protection against missiles and use of a laser device

Title (de)

Abwehrvorrichtung gegen Flugkörper, Verfahren zur Abwehr gegen Flugkörper und Verwendung einer Laservorrichtung

Title (fr)

Dispositif et méthode de protection contre des missiles et utilisation d'un dispositif laser

Publication

**EP 1746381 A1 20070124 (DE)**

Application

**EP 06116303 A 20060629**

Priority

DE 102005034613 A 20050718

Abstract (en)

The defence device against missiles (12), with infrared detection (14), comprises a plasma generating unit (16) by which a plasma or plasma breakthrough is generated in the air at a distance from the plasma generating unit. One or more plasma clouds (30) are produced in the air by the plasma generating unit. The plasma generating unit includes at least one laser device (18) by means of which light pulses are emitted. Independent claims are included for: (1) a method for defence against missiles which have infrared detection which entails producing plasma clouds in the air; and (2) a use of a laser device for producing plasma in the air.

IPC 8 full level

**F41H 11/02** (2006.01)

CPC (source: EP)

**F41H 11/02** (2013.01)

Citation (applicant)

- DE 4107533 A1 19920910 - BUCK CHEM TECH WERKE [DE]
- EP 0240819 A2 19871014 - WEGMANN & CO [DE]
- DE 2744401 A1 19790405 - PRECITRONIC
- WO 2005026650 A2 20050324 - GAMMA RECH S ET TECHNOLOGIES P [CH], et al
- US 5726855 A 19980310 - MOUROU GERARD [US], et al
- STEFAN BORNEIS: "Hochenergie-Petawattlaser - die Erzeugung ultraintensiver Pulse", PHOTONIK, March 2005 (2005-03-01), pages 76 - 79

Citation (search report)

- [XY] WO 2005026650 A2 20050324 - GAMMA RECH S ET TECHNOLOGIES P [CH], et al
- [Y] US 5726855 A 19980310 - MOUROU GERARD [US], et al
- [A] US 5175664 A 19921229 - DIELS JEAN-CLAUDE [US], et al
- [A] DE 102004007405 A1 20041007 - APPLIED PHOTONICS WORLDWIDE IN [US]
- [A] EP 1455199 A1 20040908 - LOCKHEED CORP [US]

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Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

**EP 1746381 A1 20070124; EP 1746381 B1 20100707; EP 1746381 B8 20100901**; AT E473414 T1 20100715; DE 102005034613 B3 20070329; DE 502006007357 D1 20100819

DOCDB simple family (application)

**EP 06116303 A 20060629**; AT 06116303 T 20060629; DE 102005034613 A 20050718; DE 502006007357 T 20060629