

Title (en)

Missile with a skin having an ablation layer thereon

Title (de)

Flugkörper mit einer Aussenhülle und einer darauf aufgetragenen Ablationsschicht

Title (fr)

Missile avec enveloppe extérieure couverte d'une couche ablative

Publication

**EP 2455704 A3 20140716 (DE)**

Application

**EP 11008941 A 20111110**

Priority

DE 102010051752 A 20101117

Abstract (en)

[origin: EP2455704A2] A missile comprises an outer casing (12); an outer coating (14) in the form of an ablation layer (18) applied to the outer casing; a matrix material (24) disposed in the ablation layer and intended to at least partially decompose during a flight; and hollow glass bodies (26) embedded in the matrix material. The matrix material is a self-curing material, epoxy resin, polyester resin, elastomer, terpolymer elastomer, thermoplastic material or isocyanate. Independent claims are included for the following: (1) a matrix material comprising hollow glass bodies embedded as an ablation layer intended to be partially vaporized during a flight and forming an outer coating on an outer casing of a missile; and (2) producing a missile, involving providing an outer casing; providing an outer coating in the form of an ablation layer containing a matrix material intended to at least partially decompose during a flight and hollow glass bodies embedded in the matrix material; applying the ablation layer to the outer casing as a liquid material; and subsequently curing the liquid material.

IPC 8 full level

**F42B 15/34** (2006.01); **B64G 1/58** (2006.01); **F42B 10/46** (2006.01)

CPC (source: EP US)

**F42B 15/34** (2013.01 - EP US); **Y10T 428/252** (2015.01 - EP US)

Citation (search report)

- [XYI] US 4837250 A 19890606 - HEADRICK STEPHEN E [US], et al
- [XYI] US 4077921 A 19780307 - SHARPE MAX H, et al
- [XYI] EP 1493788 A1 20050105 - UNITED TECHNOLOGIES CORP [US]
- [XYI] US 5661198 A 19970826 - INATANI YOSHIFUMI [JP], et al
- [XYI] US 4031059 A 19770621 - STRAUSS ERIC L

Cited by

DE102017007059A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2455704 A2 20120523**; **EP 2455704 A3 20140716**; **EP 2455704 B1 20160127**; DE 102010051752 A1 20120524;  
US 2012121892 A1 20120517

DOCDB simple family (application)

**EP 11008941 A 20111110**; DE 102010051752 A 20101117; US 201113297451 A 20111116