

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 B1 20160127 (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

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

- US 5457471 A 19951010 - EPPERSON JR EDWIN H [US]
- US 4753169 A 19880628 - SHORES MARVIN W [US]
- US 5340058 A 19940823 - HOLL ROLF [DE], et al

Cited by

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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

DOCDB simple family (publication)

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US 2012121892 A1 20120517

DOCDB simple family (application)

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