Title (en)

Composite armor plate and method for using the same

Title (de

Verbundstoffpanzerplatte und Verwendungsverfahren dafür

Title (fr)

Plaque de blindage composite et son procédé d'utilisation

Publication

EP 2071272 A3 20121121 (EN)

Application

EP 08253752 A 20081118

Priority

- IL 18805107 A 20071211
- IL 19129908 A 20080507

Abstract (en)

[origin: EP2071272A2] The invention provides an armor plate for absorbing and dissipating kinetic energy from armor piercing 7.62mm projectiles, the armor plate comprising a plurality of ceramic pellets and a solidified material, each ceramic pellet having a body portion and a convexly curved end portion, each body portion having two opposite ends, an axis passing through each end and a substantially constant cross-section along the axis, and each convexly curved end portion extending from an end of the corresponding body portion, each body portion having a body portion length along the axis between the two ends, the ceramic pellets being embedded in the solidified material so that the solidified material retains the ceramic pellets in a ceramic pellet layer which is one pellet thick with the convexly curved end portions lying at or adjacent an impact receiving side of the armor plate, wherein the ceramic pellet layer has an edge extending therearound formed by a subset of the ceramic pellets, wherein the ceramic pellets are arranged so that the body portion of substantially each pellet, other than of the pellets of the subset, lies in contact with or closely adjacent to the respective body portions of six neighboring ones of the ceramic pellets.

IPC 8 full level

F41H 5/04 (2006.01)

CPC (source: EP US)

F41H 5/0414 (2013.01 - EP US); F41H 5/0492 (2013.01 - EP US)

Citation (search report)

- [XD] WO 9815796 A1 19980416 GOODANEW MARTIN ERIC [GB], et al
- [AD] EP 1521051 A1 20050406 COHEN MICHAEL [IL]
- [AD] US 5763813 A 19980609 COHEN MICHAEL [IL], et al

Cited by

PL424443A1; CN110270686A; EP2363682A3; EP2363682B1

Designated contracting state (EPC)

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Designated extension state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

EP 08253752 A 20081118; US 33318308 A 20081211