

Title (en)

A composite armor plate and ceramic bodies for use therein

Title (de)

Verbundpanzerplatte und Keramikkörper dafür

Title (fr)

Plaque de blindage composite et corps en céramique pour celle-ci

Publication

EP 1522817 A1 20050413 (EN)

Application

EP 04255976 A 20040929

Priority

IL 15832003 A 20031009

Abstract (en)

The invention provides a composite armor plate for absorbing and dissipating kinetic energy from high-velocity projectiles, the plate comprising a single internal layer of pellets which are bound and retained in plate form by an elastic material, substantially internally within the elastic material, such that the pellets are bound in a plurality of spaced-apart rows and columns, the pellets being made of ceramic material, and the pellets being substantially fully embedded in the elastic material so that the pellets form an internal layer, wherein the solidified material and the plate are elastic, and wherein a majority of each of the pellets is in direct contact with six adjacent pellets in the same layer to provide mutual lateral confinement therebetween, each of the pellets being characterized by a body having a substantially regular geometric cross-sectional area and first and second end faces, each of the end faces projecting from the body and having an outwardly decreasing cross-sectional area wherein the height of the end face disposed substantially opposite to an outer impact receiving major surface of the plate is less than 15% of the length of the diameter of the pellet body from which it projects. <IMAGE>

IPC 1-7

F41H 5/04

IPC 8 full level

F41H 5/00 (2006.01); **F41H 5/04** (2006.01)

CPC (source: EP US)

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

Citation (applicant)

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- US 5972819 A 19991026 - COHEN MICHAEL [IL]
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Citation (search report)

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