



US006289781B1

(12) **United States Patent**  
**Cohen**

(10) **Patent No.:** **US 6,289,781 B1**  
(45) **Date of Patent:** **\*Sep. 18, 2001**

(54) **COMPOSITE ARMOR PLATES AND PANEL**

(76) **Inventor:** **Michael Cohen**, Kibbutz Kfar Etzion,  
Mobile Post North Yehuda 90200 (IL)

(\*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.  
This patent is subject to a terminal disclaimer.

(21) **Appl. No.:** **09/313,681**

(22) **Filed:** **May 18, 1999**

**Related U.S. Application Data**

(63) Continuation-in-part of application No. 09/048,628, filed on Mar. 26, 1998, now Pat. No. 6,112,635, which is a continuation-in-part of application No. 08/944,343, filed on Oct. 6, 1997, now Pat. No. 5,972,819, which is a continuation-in-part of application No. 08/704,432, filed on Aug. 26, 1996, now Pat. No. 5,763,813.

(30) **Foreign Application Priority Data**

May 19, 1998 (IL) ..... 124-543

(51) **Int. Cl.<sup>7</sup>** ..... **F41H 5/04**

(52) **U.S. Cl.** ..... **89/36.02; 428/911**

(58) **Field of Search** ..... 89/36.01, 36.02;  
109/82, 83, 84; 428/911

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*Primary Examiner*—Stephen M. Johnson

(74) *Attorney, Agent, or Firm*—Fulbright & Jaworski L.L.P.

(57) **ABSTRACT**

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 directly bound and retained in plate form by a solidified material such that the pellets are bound in a plurality of adjacent rows, characterized in that the pellets have a specific gravity of at least 2 and are made of a material selected from the group consisting of glass, sintered refractory material, ceramic material which does not contain aluminium oxide and ceramic material having an aluminium oxide content of not more than 80%, the majority of the pellets each have at least one axis of at least 3 mm length and are bound by the solidified material in the single internal layer of adjacent rows such that each of a majority of the pellets is in direct contact with at least 4 adjacent pellets in the same layer to provide mutual lateral confinement therebetween, the pellets each have a substantially regular geometric form and the solidified material and the plate are elastic.

**16 Claims, 1 Drawing Sheet**

