



US006860186B2

(12) **United States Patent**
Cohen

(10) **Patent No.:** **US 6,860,186 B2**
(45) **Date of Patent:** **Mar. 1, 2005**

(54) **CERAMIC BODIES AND BALLISTIC ARMOR INCORPORATING THE SAME**

(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 57 days.

(21) Appl. No.: **10/322,237**

(22) Filed: **Dec. 18, 2002**

(65) **Prior Publication Data**

US 2004/0083880 A1 May 6, 2004

Related U.S. Application Data

(63) Continuation-in-part of application No. 10/256,112, filed on Sep. 26, 2002, now abandoned.

(30) **Foreign Application Priority Data**

Sep. 19, 2002 (IL) 151830

(51) **Int. Cl.⁷** **F41H 5/02**

(52) **U.S. Cl.** **89/36.02**

(58) **Field of Search** 89/36.02

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,523,057 A * 8/1970 Buck 428/156

3,705,558 A	*	12/1972	McDougal et al.	109/84
4,179,979 A	*	12/1979	Cook et al.	89/36.02
4,665,794 A	*	5/1987	Gerber et al.	89/36.02
H1061 H	*	6/1992	Rozner et al.	89/36.02
H1519 H	*	3/1996	Semple	89/36.02
H1567 H	*	8/1996	Parsons et al.	89/36.02
5,738,925 A	*	4/1998	Chaput	428/101
5,972,819 A	*	10/1999	Cohen	501/127
6,112,635 A	*	9/2000	Cohen	89/36.02
6,200,664 B1	*	3/2001	Figge et al.	428/178
6,203,908 B1	*	3/2001	Cohen	428/397
6,289,781 B1	*	9/2001	Cohen	89/36.02
6,408,734 B1	*	6/2002	Cohen	89/36.02
6,532,857 B1	*	3/2003	Shih et al.	89/36.02

FOREIGN PATENT DOCUMENTS

DE	2601562 A1	*	1/1977	F41H/5/02
GB	2272272 A	*	5/1994	F41H/5/04

* cited by examiner

Primary Examiner—Michael J. Carone

Assistant Examiner—Troy Chambers

(74) *Attorney, Agent, or Firm*—Fulbright & Jaworski LLP

(57) **ABSTRACT**

The invention provides a ceramic body for deployment in a composite armor panel, for absorbing and dissipating kinetic energy from high velocity projectiles, the body having a peg-like configuration consisting of a stem section and a head section wherein a cross-sectional area across the stem is less than a cross-sectional area across the head section.

17 Claims, 4 Drawing Sheets

