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(54) Title: **ARMOR PANEL SYSTEM**

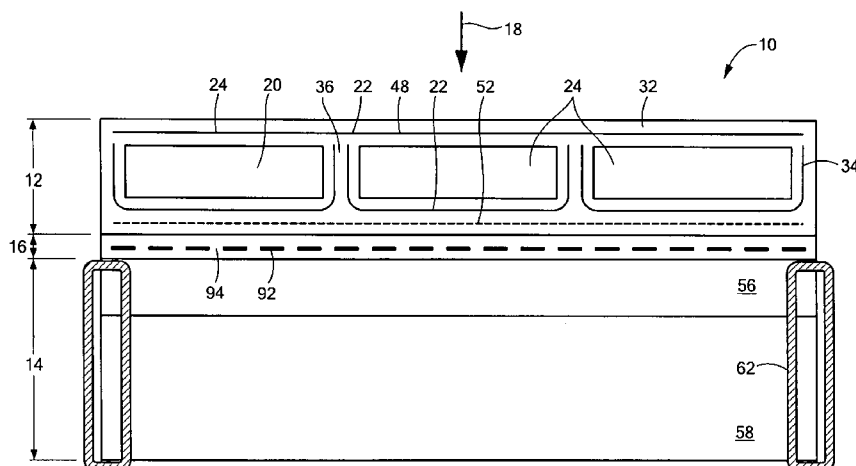


FIG. 1

(57) Abstract: An armor panel system has a strike face assemblage formed of a hard material layer of discrete elements or tiles and a fiber reinforcement bonded to the tiles. The fiber reinforcement includes a layer of cup-shaped staples aligned and bonded to an inner surface of an associated tile and having legs that extend into gaps between side edges of adjacent tiles. The tiles and fiber reinforcement are encapsulated in a matrix material. The armor panel system also includes a support and containment assemblage having a support plate and a containment element. The containment element is fastened to and supported by the support plate along a periphery by stitching, which allows the containment element to act as a net to catch and contain fragments. A bonding layer joins the strike face assemblage and the support and containment assemblage. The bonding layer includes a mesh embedded in an adhesive material.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 08/11544

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - B32B 27/04 (2009.01)

USPC - 442/135

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC(8) -- B32B 27/04 (2009.01) and USPC -- 442/135

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
IPC(8) -- F41H\$ (2009.01) and USPC -- 442/135, 134, 59; 89/36.01Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PubWest (PGPB,USPT,USOC,EPAB,JPAB); USPTO; Espacenet; Google Patents; Googl Scholar; Google--please see extra sheet for Search Terms Used

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2005/098343 A1 (Tunis) 20 October 2005 (20.10.2005) page 2, ln 3-14; page 2, ln 25-28; page 9, ln 18-22; page 10, ln 16-23; page 11, ln 17-32;	1-11; 29-47
Y	US 3,859,892 A (Coes) 14 January 1975 (14.01.1975) Figs 2 and 3; col 1, ln 9-14; col 1, ln 30-33; col 2, ln 54-57;	1-11
Y	US 5,686,689 A (Snedeker et al.) 11 November 1997 (11.11.1997) Figs 1-3; col 1, ln 57-67; col 2, ln 7-12	1-11
Y	2006/0065111 A1 (Henry) 30 March 2006 (30.03.2006) Figs 1, 22, 23; para [0020]; [0054]; [0058]; [0072]; [0073];	11-47
Y	US 1,871,101 A (Waltz) 09 August 1932 (09.08.1932) Fig 1; col 1, ln 7-9;	12-40
Y	US 2007/0089597 A1 (Ma) 26 April 2007 (26.04.2007) Figs 4-6; para [0034]; [0043];	12-40
Y	US 2005/0193667 A1 (Henry et al.) 08 September 2005 (08.09.2005) Fig 3A; para [0006]; [0008]; [0040]	36-37, 41-47

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Search Terms Used:

ADHESIVE ARMOR ARRANGEMENT BALLISTIC BASE BLAST BOND CANVAS CORD EDGE EYELETS FASTEN FIBER
GROMMETS HALF-HITCH\$ HARDWIRE HOLES KNOT KNOTT\$ LASH NOTCHES PALLET PATTERN PENETRATION
PERIMETER PERIPHER\$ PLATE PLATFORM PROJECTILE REINFORC\$ ROPE SECURE SEWN STITCH STRIKE TARP
TARPAULIN TILE WIRE WIRE-TAPES\$ YARN