

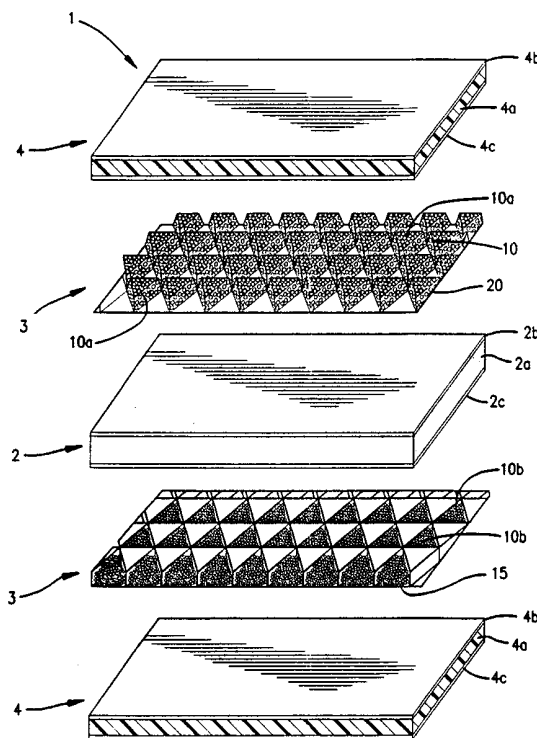


## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>7</sup> :</b> <b>B32B 1/00, E04B 1/82,</b> <b>F41H 5/00</b>	<b>A3</b>	<b>(11) International Publication Number:</b> <b>WO 00/33015</b>  <b>(43) International Publication Date:</b> 8 June 2000 (08.06.00)
<b>(21) International Application Number:</b> PCT/US99/28481 <b>(22) International Filing Date:</b> 2 December 1999 (02.12.99)  <b>(30) Priority Data:</b> 09/203,608      2 December 1998 (02.12.98)      US  <b>(71) Applicant:</b> ATLANTIC RESEARCH CORPORATION [US/US]; 5945 Wellington Road, Gainesville, VA 20155-1699 (US).  <b>(72) Inventor:</b> FIGGE, Irving, E., Sr.; 8050 Lisle Drive #203, Manassas, VA 22110 (US).  <b>(74) Agent:</b> PRESTA, Frank, P.; Nixon & Vanderhye P.C., Suite 800, 1100 North Glebe Road, Arlington, VA 22201-4714 (US).		<b>(81) Designated States:</b> CA, JP, KR, MX, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  <b>Published</b> <i>With international search report.</i>  <b>(88) Date of publication of the international search report:</b> 5 October 2000 (05.10.00)

**(54) Title:** SHOCK ATTENUATION BARRIER**(57) Abstract**

A shock attenuation barrier (1) including a plurality of layers successively arranged including a first layer (4), a second layer (3) having a plurality of molded geometric shapes (10), a third layer (2) including foam, a fourth layer (3) having a plurality of molded geometric shapes (10) and a fifth layer (4). Cavities (15) defined by inside surfaces of the geometric shapes (10) and a surface of the foam layer (2) preferably are filled with a shock absorbing filler (20) material.



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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US99/28481

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B32B 1/00; E04B 1/82; F41H 5/00

US CL : Please See Extra Sheet.

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)

U.S. : 52/408.789.1.793.1; 89/36.01; 181/284.288.290.294; 428/178.318.8.911

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, 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.
X	US 3,940,811 A (TOMIKAWA ET AL) 02 MARCH 1976, see Fig. No. 3 and the corresponding text.	1-35
X	US 4,025,996 A (SAVEKER) 31 MAY 1977, see figures 3 and 4 along with the corresponding text.	1-35



Further documents are listed in the continuation of Box C.



See patent family annex.

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# INTERNATIONAL SEARCH REPORT

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US CL :

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