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- (71) **Applicant (for all designated States except US):** U MASS DARTMOUTH-CENTRAL [US/US]; 225 Franklin St., 12th Floor, Boston, MA 02110 (US).
- (72) **Inventors; and**
- (75) **Inventors/Applicants (for US only):** RICE, John, M. [US/US]; 81 Hummocks Avenue, Portsmouth, RI 02871 (US). KIM, Yong, K. [US/US]; 15 Fox Run Terrace, North Dartmouth, MA 02747 (US). LEWIS, Armand, F. [US/US]; 15 Ocean View Avenue, Mattapoisett, MA 02739 (US).
- (74) **Agents:** ADAMS, Lisa et al.; Nutter McClennen & Fish LLP, Seaport West, 155 Seaport Boulevard, Boston, MA 02210-2604 (US).

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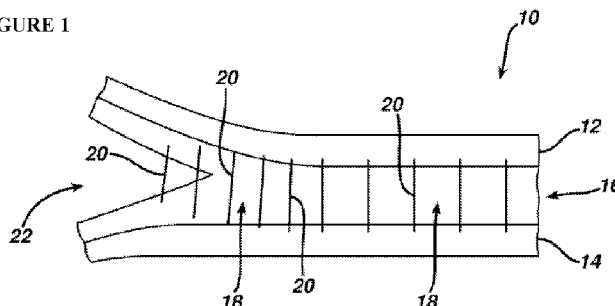
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(54) **Title:** FABRIC BASED LAMINAR COMPOSITE AND METHOD FOR MANUFACTURE THEREOF

FIGURE 1



(57) **Abstract:** Fiber based z-directional reinforced composites having enhanced inter-laminar strength, impact toughness, energy transmission properties (electrical and thermal conduction) and coefficient of thermal expansion are provided. The composites include at least two substrates separated by a reinforcement zone that includes a plurality of fibers disposed in a binder resin. At least some, and in one embodiment, a majority, of the fibers are oriented so as to be substantially perpendicular to the substrates. Multi-layered composites having more than two substrate layers can also be formed. Methods for forming such composites are also provided.



A. CLASSIFICATION OF SUBJECT MATTER		
<i>D06M 17/04(2006.01)i, B32B 27/12(2006.01)i, D06M 13/11(2006.01)i</i>		
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) D06M 17/04; B32B 27/38; C08F 8/00; C08K 3/34		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean utility models and applications for utility models Japanese utility models and applications for utility models		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS(KIPO internal) & Keywords: fabric, laminar, reinforce, composite		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2002-0051888 A1 (SHOBHA MURARI et al.) 02 May 2002 See abstract and claims.	1-20
A	US 6667360 B1 (NG; CHEK BENG et al.) 23 December 2003 See abstract and claims.	1-20
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002-0051888 A1	02.05.2002	US 2004-0228778 A1 US 6720080 B2	18.11.2004 13.04.2004
US 6667360 B1	23.12.2003	None	