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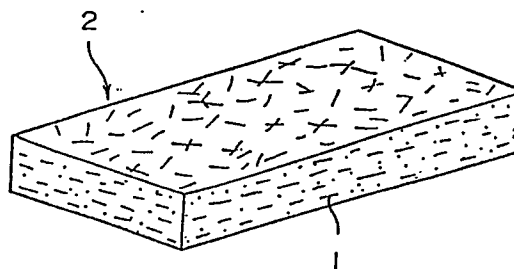
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54 Composite material including alumina-silica short fiber reinforcing material and aluminum alloy matrix metal with moderate copper and silicon contents.

57 A composite material is made from alumina-silica type short fibers embedded in a matrix of metal. The metal is an alloy consisting essentially of between approximately 1.5% to approximately 6% of copper, between approximately 0.5% to approximately 2% of silicon, and remainder substantially aluminum. The short fibers may be all alumina short fibers, or may be all amorphous alumina-silica short fibers, or may have a substantial proportion of the mullite crystalline form included in them. The fiber volume proportion of the alumina-silica type short fibers may desirably be between approximately 5% and approximately 50%, and may more desirably be between approximately 5% and approximately 40%. And, in the desirable case that the fiber volume proportion of the alumina-silica type short fibers is between approximately 5% and approximately 20%, then the copper content of said aluminum alloy matrix metal is desired to be between approximately 2% and approximately 6%.

FIG. 18





DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	EP-A-0 074 067 (SUMITOMO CHEMICAL CO.) * Claim 1; page 12, line 13; page 3, line 24 - page 6, line 4 *	1,2	C 22 C 1/09
Y		3-9	
Y	US-A-4 152 149 (S. HORIKIRI et al.) * Claims 1,4; column 2, line 39 - column 6, line 39 *	3-7	
Y	FR-A-1 556 070 (GENERAL TECHNOLOGIES CORP.) * Abstract II, nos. 2,9,10 *	8,9	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			C 22 C B 22 D F 16 J
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 29-10-1987	Examiner SCHRUEERS H.J.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	