

Title (en)

METAL MATRIX COMPOSITE HAVING ENHANCED TOUGHNESS AND METHOD OF MAKING.

Title (de)

METALLMATRIXVERBUNDWERKSTOFF MIT ERHÖHTER ZÄHIGKEIT UND VERFAHREN SEINER HERSTELLUNG.

Title (fr)

COMPOSITE A MATRICE METALLIQUE PLUS RESISTANT ET PROCEDE DE FABRICATION ASSOCIE.

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Application

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Abstract (en)

[origin: WO9410351A1] A metal matrix composite comprising a stack of alternate layers of unreinforced metal and discontinuously reinforced metal. In a preferred embodiment, the unreinforced metal is an aluminum alloy and the discontinuously reinforced metal is an aluminum alloy reinforced with silicon carbide particles. The metal matrix composite may be formed by the steps of: (a) providing a stack of layers unreinforced metal and discontinuously reinforced metal; and (b) applying sufficient heat and pressure to the stack to cause interlayer adhesion of the layers and thus form a laminated MMC. The stack of layers may be alternating layers of unreinforced metal and discontinuously reinforced metal. In a preferred embodiment the outer layers of the stack are an unreinforced aluminum alloy.

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