

Title (en)

COMPOSITE MATERIAL INCLUDING ALUMINA-SILICA SHORT FIBER REINFORCING MATERIAL AND ALUMINUM ALLOY MATRIX METAL WITH MODERATE COPPER AND SILICON CONTENTS

Publication

**EP 0220495 A3 19880113 (EN)**

Application

**EP 86113099 A 19860923**

Priority

JP 21748985 A 19850930

Abstract (en)

[origin: EP0220495A2] 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%.

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IPC 8 full level

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CPC (source: EP)

**C22C 49/06** (2013.01); **C22C 49/14** (2013.01)

Citation (search report)

- [X] EP 0074067 A1 19830316 - SUMITOMO CHEMICAL CO [JP]
- [Y] US 4152149 A 19790501 - ABE YASUAKI [JP], et al
- [Y] FR 1556070 A 19690131

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