

Title (en)

Metal matrix fiber reinforced composite material and its preparation

Title (de)

Metallmatrix -Faserverbundkörper und Verfahren zu dessen Herstellung

Title (fr)

Matériau composite à matrice métallique contenant des fibres et son procédé de préparation

Publication

EP 1046724 A3 20040107 (DE)

Application

EP 00890121 A 20000418

Priority

AT 69699 A 19990419

Abstract (en)

[origin: EP1046724A2] A metal-ceramic material, comprising a heavy metal matrix containing uniformly distributed short ceramic fibers of specified aspect ratio, is new. A metal-ceramic material comprises a matrix of heavy metal (alloy), especially an iron-nickel-molybdenum or cobalt base all containing uniformly distributed short ceramic phase fibers which have a length of 5-15 times their diameter particles and which optionally having a surface layer. An Independent claim is also included for a powder metallurgical process for production of the above metal-ceramic material Preferred Features: The matrix may consist of copper or a copper alloy.

IPC 1-7

C22C 47/14; **C22C 47/00**

IPC 8 full level

B22F 1/062 (2022.01); **C22C 47/14** (2006.01)

CPC (source: EP US)

B22F 1/062 (2022.01 - EP US); **C22C 47/14** (2013.01 - EP US); **B22F 2998/10** (2013.01 - EP); **B22F 2999/00** (2013.01 - EP)

C-Set (source: EP US)

EP

1. **B22F 2998/10** + **B22F 2201/02** + **B22F 3/1208** + **B22F 3/15**

2. **B22F 2999/00** + **B22F 1/062** + **B22F 1/05**

US

B22F 2999/00 + **B22F 1/062** + **B22F 1/05**

Citation (search report)

- [X] GB 1521599 A 19780816 - SUMITOMO ALUMINIUM SMELTING CO
- [A] US 5400505 A 19950328 - WEI WILLIAM [DE], et al
- [X] PATENT ABSTRACTS OF JAPAN vol. 015, no. 445 (C - 0884) 13 November 1991 (1991-11-13)

Cited by

US10145179B2; US10156098B2; US10641045B2

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EP 1046724 A2 20001025; **EP 1046724 A3 20040107**; **EP 1046724 B1 20051012**; AT 408527 B 20011227; AT A69699 A 20010515; DE 50011313 D1 20060223; DK 1046724 T3 20060206; ES 2250095 T3 20060416

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