

Title (en)  
IRON ALUMINIDE COMPOSITE AND METHOD OF MANUFACTURE THEREOF

Title (de)  
EISENALUMINIDKOMPOSIT UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)  
COMPOSITE D'ALUMINURE DE FER ET PROCEDE DE FABRICATION

Publication  
**EP 1060279 A4 20030212 (EN)**

Application  
**EP 99905633 A 19990202**

Priority  
• US 9902211 W 19990202  
• US 1748398 A 19980202

Abstract (en)  
[origin: WO9939016A1] An iron aluminide composite including an oxide filler and an additive which improves metallurgical bonding of the oxide filler to the iron aluminide. The composite is useful for structural components, extruded shapes and electrical resistance heating elements. The iron aluminide can include, in weight %,  $\leq 1$  % Cr, 4-32 % Al,  $\leq 2$  % Ti,  $\leq 2$  % Mo,  $\leq 1$  % Zr,  $\leq 1$  % C,  $\leq 3$  % W and  $\leq 0.1$  % B. The oxide filler can comprise  $\leq 40$  % aluminum oxide particles and the additive can comprise up to 40 % of one or more refractory carbides such as TiC.

IPC 1-7  
**C22C 38/06**; **C22C 1/04**; **C22C 1/05**

IPC 8 full level  
**B22F 3/12** (2006.01); **B22F 3/23** (2006.01); **C22C 1/04** (2006.01); **C22C 14/00** (2006.01); **C22C 29/00** (2006.01); **C22C 32/00** (2006.01); **C22C 33/02** (2006.01)

CPC (source: EP KR)  
**B22F 3/23** (2013.01 - EP); **C22C 1/0458** (2013.01 - EP); **C22C 14/00** (2013.01 - EP); **C22C 29/005** (2013.01 - EP); **C22C 32/00** (2013.01 - EP); **C22C 33/00** (2013.01 - KR); **B22F 2998/10** (2013.01 - EP)

Citation (search report)  
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• See references of WO 9939016A1

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