

Title (en)

METAL-CERAMIC COMPOSITE MATERIAL AND PROCESS FOR ITS MANUFACTURE

Publication

**EP 0263427 B1 19930811 (FR)**

Application

**EP 87114248 A 19870930**

Priority

US 91757786 A 19861010

Abstract (en)

[origin: US4792353A] A consolidated metal-ceramic composite comprises a first phase of particles of aluminum oxide or a solid solution based on aluminum oxide uniformly distributed in a second matrix phase wherein the second matrix phase is non-reactive with aluminum oxide and contains a sufficient amount of titanium carbide at the interface between the first and second phase to prevent a chemical reaction at the interface during consolidation at the liquidus temperature and which exhibits good mechanical properties with regard to strength and toughness at high temperatures up to about 1200 DEG C.

IPC 1-7

**C22C 1/09; C22C 29/12**

IPC 8 full level

**B22F 1/18** (2022.01); **C22C 29/12** (2006.01); **C22C 47/04** (2006.01); **C22C 49/08** (2006.01); **C22C 49/14** (2006.01)

CPC (source: EP US)

**B22F 1/18** (2022.01 - EP US); **C22C 19/00** (2013.01 - EP); **C22C 29/12** (2013.01 - EP US); **C22C 33/02** (2013.01 - EP);  
**C22C 47/04** (2013.01 - EP US); **C22C 49/08** (2013.01 - EP US); **C22C 49/14** (2013.01 - EP US)

Cited by

CN104480364A; EP0443659A1; US6669707B1

Designated contracting state (EPC)

AT BE CH DE ES FR GB IT LI LU NL SE

DOCDB simple family (publication)

**EP 0263427 A2 19880413; EP 0263427 A3 19890927; EP 0263427 B1 19930811;** AT E92971 T1 19930815; DE 263427 T1 19880901;  
DE 3786976 D1 19930916; ES 2002692 A4 19881001; JP S63134644 A 19880607; US 4792353 A 19881220

DOCDB simple family (application)

**EP 87114248 A 19870930;** AT 87114248 T 19870930; DE 3786976 T 19870930; DE 87114248 T 19870930; ES 87114248 T 19870930;  
JP 25394387 A 19871009; US 91757786 A 19861010