

Title (en)

PROCESS FOR PRODUCING TITANIUM CARBIDE, TITANIUM NITRIDE, OR TUNGSTEN CARBIDE HARDENED MATERIALS

Title (de)

HERSTELLUNGSVERFAHREN FÜR TITANIUMKARBID-, TITANIUMNITRID- ODER WOLFRAMKARBID-GEHÄRTETE MATERIALIEN

Title (fr)

PROCEDE DE PRODUCTION DE MATERIAUX DURCIS DE CARBURE DE TITANE, DE NITRURE DE TITANE, OU DE CARBURE DE TUNGSTENE

Publication

EP 1268106 A1 20030102 (EN)

Application

EP 01908504 A 20010222

Priority

- NZ 0100024 W 20010222
- NZ 50299900 A 20000222

Abstract (en)

[origin: WO0162420A1] A process for producing a composite material of titanium carbide, titanium nitride, or tungsten carbide and metal or a metal alloy such as iron or steel or an alloy comprises blending together precursor materials including a titanium or tungsten source, a source of carbon, and a metal or a metal alloy and heating the precursor materials in a vacuum or an inert atmosphere or a nitrogen containing atmosphere to a temperature effective to form TiC, TiN or WC, to thereby form a material comprising particles of TiC, TiN or WC substantially encapsulated in a matrix of metal or metal alloy.

IPC 1-7

B22F 9/20; **C22C 14/00**; **C22C 29/08**; **C22C 29/10**; **C22C 29/16**; **C22C 33/02**

IPC 8 full level

B22F 9/20 (2006.01); **C22C 1/05** (2006.01); **C22C 14/00** (2006.01); **C22C 29/08** (2006.01); **C22C 29/10** (2006.01); **C22C 29/16** (2006.01); **C22C 33/02** (2006.01)

CPC (source: EP US)

C22C 1/053 (2013.01 - EP US); **B22F 2998/10** (2013.01 - EP US)

C-Set (source: EP US)

B22F 2998/10 + **C22C 1/053** + **B22F 3/26**

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0162420 A1 20010830; AU 3624601 A 20010903; CA 2400632 A1 20010830; EP 1268106 A1 20030102; EP 1268106 A4 20040421; US 2003145685 A1 20030807

DOCDB simple family (application)

NZ 0100024 W 20010222; AU 3624601 A 20010222; CA 2400632 A 20010222; EP 01908504 A 20010222; US 20408202 A 20021118