

Title (en)

Method of making metal composite materials

Title (de)

Verfahren zur Herstellung von metallischem Verbundmaterial

Title (fr)

Procédé de préparation d'un matériau composite métallique

Publication

EP 1043411 A2 20001011 (EN)

Application

EP 00105246 A 20000314

Priority

SE 9901206 A 19990406

Abstract (en)

The present invention provides a method of producing a metal composite material by dissolving at least one inorganic metal salt of Mo and/or W optionally together with one or more organic iron group metal salts in water and possibly at least another polar solvent, complex binding the metals with at least one complex former comprising functional groups in the form of OH or NR₃, (R=H or alkyl). The amount of said salt of Mo and/or W in the solution should be no more than 4×10^{-3} x (wt% H₂O)<2> g/100 ml solution and not less than 10 wt-% water. The method further includes adding hard constituent powder to the solution, evaporating the solvent and heat treating the remaining powder in an inert and/or reducing atmosphere. As a result coated hard constituent powder is obtained which after addition of pressing agent and optionally with other coated hard constituent powders and/or carbon to obtain the desired composition can be compacted and sintered according to standard practice.

IPC 1-7

C22C 1/05

IPC 8 full level

B22F 1/00 (2006.01); **B22F 1/02** (2006.01); **B22F 9/26** (2006.01); **C22C 1/05** (2006.01); **C22C 29/08** (2006.01)

CPC (source: EP US)

C22C 1/051 (2013.01 - EP US); **C22C 29/08** (2013.01 - EP); **B22F 2999/00** (2013.01 - EP)

Cited by

EP2678514A4; EP2436793A1; DE102008052559A1; US10647614B2; US10766823B2

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 1043411 A2 20001011; **EP 1043411 A3 20051102**; **EP 1043411 B1 20080709**; AT E400669 T1 20080715; DE 60039384 D1 20080821; JP 2000313929 A 20001114; SE 519233 C2 20030204; SE 9901206 D0 19990406; SE 9901206 L 20001007

DOCDB simple family (application)

EP 00105246 A 20000314; AT 00105246 T 20000314; DE 60039384 T 20000314; JP 2000108002 A 20000405; SE 9901206 A 19990406