

Title (en)

WEAR RESISTANT CERAMIC MATERIALS.

Title (de)

VERSCHLEISSFESTE KERAMISCHE MATERIALIEN.

Title (fr)

MATERIAUX CERAMIQUES RESISTANTS A L'USURE.

Publication

EP 0045745 A1 19820217 (EN)

Application

EP 80902093 A 19800922

Priority

US 8837679 A 19791026

Abstract (en)

[origin: WO8101144A1] Tough and wear-resistant ceramic materials based on reactive metal bonded alumina-titanium nitride. The ceramic composite body contains a metal phase with reactive metal components such as Zr, Ti, Hf, or Y to obtain the characteristic of toughness. The compositions were extremely useful for applications such as metal cutting operations where improved toughness is required in addition to the exceptional wear resistance which ceramics usually possess.

Abstract (fr)

Materiaux ceramiques durs et resistants a l'usure a base de nitrule de titane-alumine a liaison metallique de reaction. Le corps composite ceramique contient une phase metallique avec des composants metalliques reactifs tels que Zr, Ti, Hf, ou Y pour obtenir la caracteristique de durete. Les compositions sont extremement utiles dans des applications telles que des operations de coupe de metaux ou 1, on a besoin d'une durete accrue en plus de la resistance a l'usure exceptionnelle que les materiaux ceramiques possedent generalement.

IPC 1-7

C04B 35/00; C04B 35/58; C22C 29/00

IPC 8 full level

C04B 35/117 (2006.01); C22C 29/12 (2006.01)

CPC (source: EP)

C04B 35/117 (2013.01); C22C 29/12 (2013.01)

Designated contracting state (EPC)

AT CH DE FR GB LI LU NL SE

DOCDB simple family (publication)

WO 8101144 A1 19810430; EP 0045745 A1 19820217

DOCDB simple family (application)

US 8001264 W 19800922; EP 80902093 A 19800922