

Title (en)
Corrosion resistant polycrystalline abrasive compacts

Title (de)
Korrosionsbeständige polykristalline Schleifpresskörper

Title (fr)
Korrosionsbeständige polykristalline Schleifpresskörpern

Publication
EP 1033414 A2 20000906 (EN)

Application
EP 00301474 A 20000224

Priority
US 25895499 A 19990301

Abstract (en)
A supported abrasive particle compact is composed of a cobalt-cemented carbide support integrally bonded to an abrasive particle layer of self-bonded diamond particles or CBN particles. The cobalt content in said supported compact is provided in form of a nickel-cobalt alloy wherein the amount of nickel is such that the cobalt is present in the face center cubic (FCC) or e phase. The inventive cutters can be made by infiltration of Ni metal into cemented WC substrate and/or the polycrystalline layer bonded thereto. Bonding includes high pressure/high temperature (HP/HT) formation of the supported polycrystalline compact and the brazing of the polycrystalline compact to the support. <IMAGE>

IPC 1-7
C22C 29/06; **B22F 7/06**

IPC 8 full level
B24D 3/00 (2006.01); **B22F 7/06** (2006.01); **B24D 3/34** (2006.01)

CPC (source: EP KR)
B22F 7/06 (2013.01 - EP KR); **B24D 3/34** (2013.01 - EP KR); **B24D 3/342** (2013.01 - EP KR); **B22F 2005/001** (2013.01 - EP KR)

Cited by
US8172915B2; CN110408829A; EP1925383A3; EP2128287A1; US2009288348A1; US2013175369A1; US9463479B2; US7713468B2

Designated contracting state (EPC)
BE DE FR GB IE IT

DOCDB simple family (publication)
EP 1033414 A2 20000906; **EP 1033414 A3 20020918**; JP 2000246645 A 20000912; KR 20000062660 A 20001025; ZA 200000781 B 20000913

DOCDB simple family (application)
EP 00301474 A 20000224; JP 2000050774 A 20000228; KR 20000009771 A 20000228; ZA 200000781 A 20000217