

Title (en)

COMPOSITE METAL, CEMENTED CARBIDE BIT CONSTRUCTION

Title (de)

VERBUNDMETALL, SINTERKARBIDBOHRERKONSTRUKTION

Title (fr)

CONSTRUCTION DE FORET DE MÉTAL COMPOSITE ET CARBURE CÉMENTÉ

Publication

**EP 2307659 A4 20130807 (EN)**

Application

**EP 09763484 A 20090610**

Priority

- US 2009046810 W 20090610
- US 13645608 A 20080610

Abstract (en)

[origin: US2009301788A1] A manufacturing method and drill bit having either a preformed steel powder blank or machined steel core and abrasion and erosion resistant material components attached thereon.

IPC 8 full level

**E21B 10/46** (2006.01); **B22F 3/14** (2006.01); **C22C 1/05** (2006.01); **C22C 29/00** (2006.01); **C22C 29/10** (2006.01); **E21B 10/54** (2006.01)

CPC (source: EP US)

**B22F 7/062** (2013.01 - EP US); **B22F 7/08** (2013.01 - EP US); **C22C 1/051** (2013.01 - EP US); **C22C 26/00** (2013.01 - EP US); **C22C 29/06** (2013.01 - EP US); **C22C 29/10** (2013.01 - EP US); **C22C 29/14** (2013.01 - EP US); **C22C 29/16** (2013.01 - EP US); **E21B 10/55** (2013.01 - EP US); **B22F 3/15** (2013.01 - EP US); **B22F 3/172** (2013.01 - EP US); **B22F 2005/002** (2013.01 - EP US); **C22C 2204/00** (2013.01 - EP US)

Citation (search report)

- [X] US 2007251732 A1 20071101 - MIRCHANDANI PRAKASH K [US], et al
- [X] WO 0161142 A1 20010823 - KENNAMETAL INC [US], et al
- [A] US 2007102199 A1 20070510 - SMITH REDD H [US], et al
- See references of WO 2009152194A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

**US 2009301788 A1 20091210**; EP 2307659 A2 20110413; EP 2307659 A4 20130807; RU 2010154503 A 20120720; WO 2009152194 A2 20091217; WO 2009152194 A3 20100325; WO 2009152194 A4 20100514

DOCDB simple family (application)

**US 13645608 A 20080610**; EP 09763484 A 20090610; RU 2010154503 A 20090610; US 2009046810 W 20090610