

Title (en)

A METHOD OF PRODUCING A TOOL FOR CUTTING, DRILLING OR CRUSHING OF SOLID MATERIAL, AND SUCH A TOOL

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES WERKZEUGS ZUM SCHNEIDEN, BOHREN UND ZERKLEINERN VON FESTEM MATERIAL UND SOLCH EIN WERKZEUG

Title (fr)

PROCÉDÉ DE PRODUCTION D'UN OUTIL DE COUPE, DE PERÇAGE OU DE BROYAGE D'UN MATÉRIAU SOLIDE ET UN TEL OUTIL

Publication

**EP 3297782 B1 20190918 (EN)**

Application

**EP 16725458 A 20160519**

Priority

- EP 15168655 A 20150521
- EP 2016061238 W 20160519

Abstract (en)

[origin: WO2016184956A1] A tool (1) for cutting, drilling or crushing of solid material, wherein -said tool (1) comprises a cemented carbide body (2) attached to a steel holder (3) by a braze joint located between a base surface (8) of the cemented carbide body (2) and the steel holder (3), - said cemented carbide body (2) comprises a hard phase mainly comprised by tungsten carbide, WC, and a binder consisting of cobalt, wherein the cobalt content of the cemented carbide body (2) is equal to or lower than about 5.5 wt%, and wherein, - the cemented carbide body (2) presents a cobalt content gradient therein wherein the cobalt content increases towards said base surface (8) and is at least 4.5 wt% at said base surface (8), - the ratio cobalt content at the base surface to cobalt content of the cemented carbide is  $\geq 1.09$ . A method for producing the tool is also presented.

IPC 8 full level

**B22F 7/08** (2006.01); **C22C 1/05** (2006.01); **C22C 1/10** (2006.01); **B22F 5/00** (2006.01)

CPC (source: EP US)

**B22F 7/08** (2013.01 - EP US); **C22C 1/051** (2013.01 - EP US); **C22C 1/055** (2013.01 - EP US); **C22C 1/056** (2013.01 - EP US); **C22C 1/1094** (2013.01 - EP US); **C22C 29/005** (2013.01 - US); **C22C 29/08** (2013.01 - US); **E21C 35/19** (2013.01 - US); **B22F 2005/001** (2013.01 - EP US); **B22F 2999/00** (2013.01 - EP US)

C-Set (source: EP US)

1. **B22F 2999/00 + B22F 2207/03 + C22C 29/08**
2. **B22F 2999/00 + B22F 2207/03 + C22C 1/1094 + C22C 1/055 + C22C 1/056**
3. **B22F 2999/00 + C22C 1/056 + B22F 2201/02**

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2016184956 A1 20161124**; AU 2016265198 A1 20171109; CN 107635700 A 20180126; EP 3297782 A1 20180328; EP 3297782 B1 20190918; US 2018161881 A1 20180614

DOCDB simple family (application)

**EP 2016061238 W 20160519**; AU 2016265198 A 20160519; CN 201680029139 A 20160519; EP 16725458 A 20160519; US 201615575444 A 20160519