Title (en)

ABRASIVE ARTICLES AND METHODS OF FORMING THE SAME

Title (de)

SCHLEIFARTIKEL UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

ARTICLES ABRASIFS ET LEURS PROCÉDÉS DE FORMATION

Publication

EP 3642295 A4 20210630 (EN)

Application

EP 18821511 A 20180618

Priority

- IN 201741021334 A 20170619
- US 201762546144 P 20170816
- US 2018037989 W 20180618

Abstract (en)

[origin: CA3067641A1] An abrasive article is provided that may include a body. The body may include a bond component and abrasive particles within the bond component. The bond component may include a Fe-Co-Cu-Ni-Sn based bond material and a performance enhancing material. The performance enhancing material may include hex-boron nitride. The content of the performance enhancing material may be at least about 6 vol.% and not greater than about 14 vol.% for a total volume of the bond component.

IPC 8 full level

C09K 3/14 (2006.01); **B24D 3/06** (2006.01); **B24D 3/10** (2006.01); **B24D 3/34** (2006.01)

CPC (source: EP KR)

B24D 3/06 (2013.01 - EP); **B24D 3/10** (2013.01 - EP); **B24D 3/342** (2013.01 - EP); **C09K 3/14** (2013.01 - KR); **C09K 3/1409** (2013.01 - KR); **C09K 3/1436** (2013.01 - KR); C09K 3/1445 (2013.01 - EP)

Citation (search report)

- [Y] JP 2017024161 A 20170202 - MITSUI KENSAKU TOISHI KK, et al
- [Y] SU 450712 A1 19741125
- [Y] US 4042347 A 19770816 - SIOUI RICHARD H
- [Y] LOGINOV P A ET AL: "Peculiarities of the influence of nanomodification on the properties of the Cu-Fe-Co-Ni binder for a diamond tool", RUSSIAN JOURNAL OF NON-FERROUS METALS, ALLERTON PRESS, INC, US, vol. 56, no. 5, 24 October 2015 (2015-10-24), pages 567 - 574, XP035574329, ISSN: 1067-8212, [retrieved on 20151024], DOI: 10.3103/S1067821215050107
- [A] LIU L ET AL: "Microstructure and the properties of FeCoCuNiSnhigh entropy alloys", MATERIALS SCIENCE AND ENGINEERING: A, ELSEVIER, AMSTERDAM, NL, vol. 548, 8 March 2012 (2012-03-08), pages 64 - 68, XP028484066, ISSN: 0921-5093, [retrieved on 20120330], DOI: 10.1016/J.MSEA.2012.03.080
- See references of WO 2018236705A1

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)

BR 112019027340 A2 20200707; CA 3067641 A1 20181227; CN 110770318 A 20200207; EP 3642295 A1 20200429; EP 3642295 A4 20210630; JP 2020528363 A 20200924; JP 2022023879 A 20220208; JP 7175308 B2 20221118; KR 20200006632 A 20200120

DOCDB simple family (application)

BR 112019027340 A 20180618; CA 3067641 A 20180618; CN 201880040706 A 20180618; EP 18821511 A 20180618; JP 2020519019 A 20180618; JP 2021170449 A 20211018; KR 20207000805 A 20180618