

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
14 February 2002 (14.02.2002)

PCT

(10) International Publication Number
WO 02/011876 A3

(51) International Patent Classification⁷: **C22C 29/02**

(21) International Application Number: PCT/IB01/01383

(22) International Filing Date: 3 August 2001 (03.08.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2000/4044 8 August 2000 (08.08.2000) ZA

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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- entirely in electronic form (except for this front page) and available upon request from the International Bureau

(88) Date of publication of the international search report:
25 July 2002

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



WO 02/011876 A3

(54) Title: METHOD OF PRODUCING AN ABRASIVE PRODUCT CONTAINING DIAMOND

(57) Abstract: A method of producing an abrasive product comprises providing a mixture of a mass of discrete carbide particles and a mass of diamond particles, the diamond particles being present in the mixture in an amount such that the diamond content of the abrasive product is 25 % or less by weight, and subjecting the mixture to elevated temperature and pressure conditions at which the diamond is crystallographically stable and at which substantially no graphite is formed, in the presence of a bonding metal or alloy capable of bonding the mixture into a coherent, sintered product, to produce the abrasive product. The bonding metal or alloy is preferably a combination of a transition metal or a transition metal alloy and up to 40% by volume of the bonding metal or alloy of a second metal which is a stronger carbide former than the transition metal or the transition metal alloy, or an alloy of the second metal.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB 01/01383

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C22C29/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C22C B24D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 774 527 A (SUMITOMO ELECTRIC INDUSTRIES) 21 May 1997 (1997-05-21) claims 1-3,7,9,12,18,22,26-28,31; example 22	1-19
X	EP 0 583 916 A (DE BEERS IND DIAMOND) 23 February 1994 (1994-02-23) cited in the application claims 1-13	1,2,10, 13-16,18

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Date of the actual completion of the international search

29 May 2002

Date of mailing of the international search report

05/06/2002

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INTERNATIONAL SEARCH REPORT

Inter Application No

PCT/IB 01/01383

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