

(19) World Intellectual Property Organization
International Bureau



G00002



(43) International Publication Date
31 October 2002 (31.10.2002)

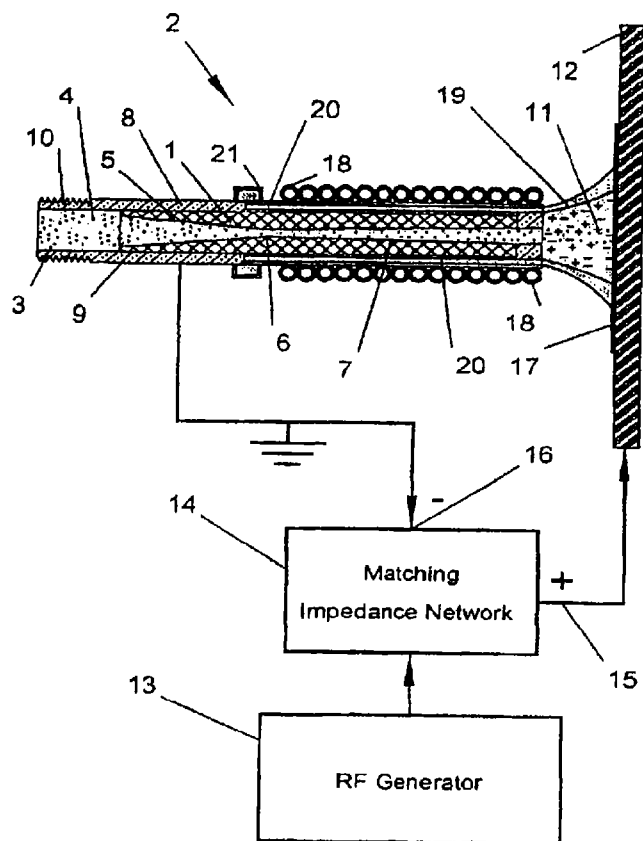
PCT

(10) International Publication Number
WO 02/085532 A1

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| (51) International Patent Classification⁷:
C23C 4/00, 24/04, B05B 15/04 | B05B 7/22, | (74) Agent: LYON, Richard; Lyon & Harr, LLP, 300 Esplanade Drive, Suite 800, Oxnard, CA 93030 (US). |
| (21) International Application Number: | PCT/US02/12693 | (81) Designated States (<i>national</i>): 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, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW. |
| (22) International Filing Date: | 20 April 2002 (20.04.2002) | |
| (25) Filing Language: | English | |
| (26) Publication Language: | English | |
| (30) Priority Data:
60/286,256 | 24 April 2001 (24.04.2001) | US |
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[US/US]; 389 S. Los Carneros Road, Goleta, CA 93117 (US). | | (84) Designated States (<i>regional</i>): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, 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). |
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[Continued on next page]

(54) Title: A APPARATUS AND PROCESS FOR SOLID-STATE DEPOSITION AND CONSOLIDATION OF HIGH VELOCITY POWDER PARTICLES USING THERMAL PLASTIC DEFORMATION



(57) Abstract: Apparatus and process for solid-state deposition and consolidation of powder particles entrained in a subsonic or sonic gas jet onto the surface of an object. Under high velocity impact and thermal plastic deformation, the powder particles adhesively bond to the substrate and cohesively bond together to form consolidated materials with metallurgical bonds.



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Published:

— with international search report

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