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(21) International Application Number: PCT/US99/20241 (22) International Filing Date: 2 September 1999 (02.09.99) (30) Priority Data: 09/146,600 3 September 1998 (03.09.98) US (71) Applicant: MATERIALS RESEARCH CORPORATION [US/US]; 542 Route 303, Orangeburg, NJ 10962 (US). (72) Inventors: JOYCE, James, Elliott; 35 Tarleton Road, Bedford, NY 10506 (US). HUNT, Thomas, John; 891 Lockwood Drive, Peekskill, NY 10566 (US). GILMAN, Paul, Sanford; 5 Marget Ann Lane, Suffern, NY 10901 (US). (74) Agents: FREI, Donald, F. et al.; Wood, Herron & Evans, L.L.P., 2700 Carew Tower, Cincinnati, OH 45202 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, 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, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, 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), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: METHOD OF MANUFACTURING ENHANCED FINISH SPUTTERING TARGETS (57) Abstract A method is provided for achieving an enhanced finish on a sputter target surface that results in good film uniformity, low particle counts, and little to no burn-in time. The method involves chemically etching the surface of the sputter target by immersing the surface one or more times in an etching solution, with intermediate rinsing steps. The result is a surface substantially free of mechanical deformation that exhibits a surface similar to a sputtered target with a surface roughness of 10–30 μin.		