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(21) International Application Number: PCT/US00/01687 (22) International Filing Date: 25 January 2000 (25.01.00) (30) Priority Data: 09/238,008 26 January 1999 (26.01.99) US (71) Applicant: HIGH-DENSITY ENERGY, INC. [US/US]; 914 East Alost Avenue, Azusa, CA 91702 (US). (72) Inventors: SHUN, You-Keung; Room 8, #181 Shan XI Road, South Shanghai (CN). LOU, Chou-Lui; Flat B. 17/F, 1140 Shen Nan Zhong Road, Shenzhen (CN). (74) Agents: KESTERSON, James, C. et al.; Jones Day Reavis & Pogue, 2727 North Harwood Street, Dallas, TX 75201-1515 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, 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, 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), 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: CATALYTIC AIR CATHODE FOR AIR-METAL BATTERIES**(57) Abstract**

An air cathode (10) for use in an electrochemical cell or battery having an air permeable and water impermeable layer (12), an electrically conductive middle layer (18) and a catalytic layer (22) comprising a mixture of carbon particles, particulate materials, having a high surface area, metal hydroxides, and hydrophobic particles.

