

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
4 November 2010 (04.11.2010)

PCT

(10) International Publication Number
WO 2010/126767 A2

(51) International Patent Classification:
H01M 12/06 (2006.01) *B82B 3/00* (2006.01)
H01M 8/02 (2006.01)

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(21) International Application Number:
PCT/US2010/031995

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(22) International Filing Date:
22 April 2010 (22.04.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/174,122 30 April 2009 (30.04.2009) US

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(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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Published:

— *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*

(54) Title: SINGLE WALL CARBON NANOTUBE BASED AIR CATHODES

(57) Abstract: An embodiment of the invention is an air cathode having a porous membrane with at least one hydrophobic surface that contacts a conductive catalytic film that comprises single walled carbon nanotubes (SWNTs) where the nanotubes are in intimate electrical contact. The conductive film can include fullerenes, metals, metal alloys, metal oxides, or electroactive polymers in addition to the SWNTs. In other embodiments of the invention the air cathode is a component of a metal-air battery or a fuel cell.



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