

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
31 May 2007 (31.05.2007)

PCT

(10) International Publication Number
WO 2007/061431 A2

(51) International Patent Classification: **Not classified**

(21) International Application Number:
PCT/US2006/005531

(22) International Filing Date:
16 February 2006 (16.02.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/653,382 16 February 2005 (16.02.2005) US

(71) Applicant (for all designated States except US): **UNIVERSITY OF DAYTON** [US/US]; 300 College Park, Dayton, OH 45469 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DAI, Liming** [AU/US]; 634 Southern Belle Boulevard, Beavercreek, OH 45434 (US). **LEE, Kyung, Min** [KR/US]; 1452 Buckingham Gate Boulevard # D, Cuyahoga Falls, OH 44221 (US).

(74) Agents: **PRIOR, Patricia, L.** et al.; Dinsmore & Shohl LLP, One Dayton Centre-Suite 1300, One South Main Street, Dayton, OH 45402-2023 (US).

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

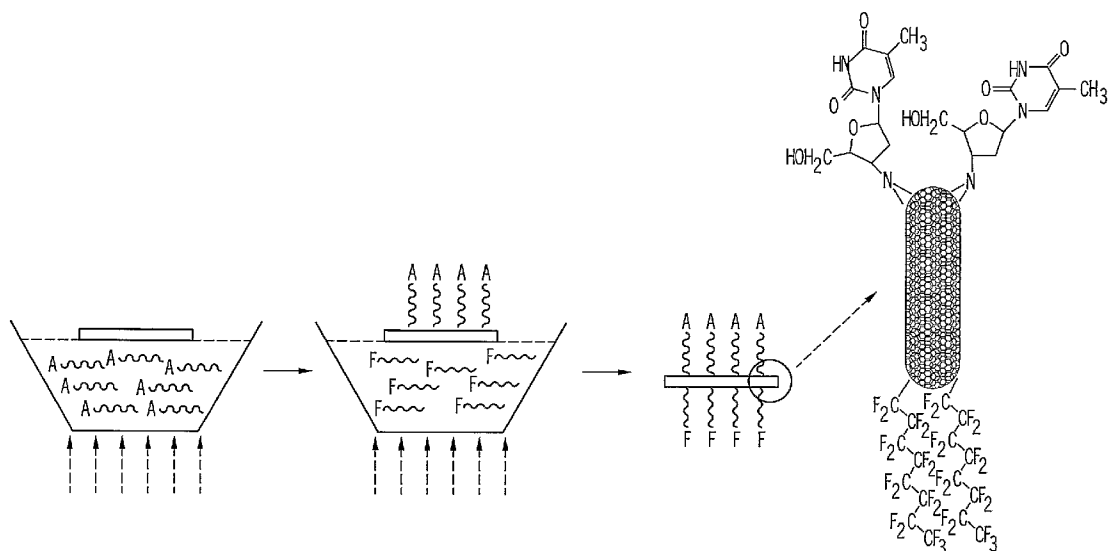
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

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.

(54) Title: ASYMMETRIC END-FUNCTIONALIZATION OF CARBON NANOTUBES



(57) Abstract: A photochemical approach for asymmetric end-functionalization of carbon nanotubes is described. Asymmetric end-functionalized carbon nanotubes are also disclosed.