

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
15 November 2007 (15.11.2007)

PCT

(10) International Publication Number
WO 2007/130972 A2

(51) International Patent Classification:

H01L 51/46 (2006.01)

(21) International Application Number:

PCT/US2007/067925

(22) International Filing Date: 1 May 2007 (01.05.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/796,608

1 May 2006 (01.05.2006) US

(71) Applicants (for all designated States except US): **WAKE FOREST UNIVERSITY** [US/US]; One Technology Place, 200 East First Street, Suite 101, Winston-salem, North Carolina 27101 (US). **NEW MEXICO STATE UNIVERSITY** [US/US]; Office of Intellectual Property and Technology Transfer, Box 30001, Las Cruces, New Mexico 88003-8001 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CARROLL, David, L.** [US/US]; 5173 Laurel View Drive, Winston-salem, North Carolina 27104 (US). **CURRAN, Seamus, A.**

[IE/US]; 2070 Cotton Avenue, Las Cruces, New Mexico 88001 (US). **DEWALD, James, L.** [US/US]; 3397 Venus Street, Las Cruces, New Mexico (US).

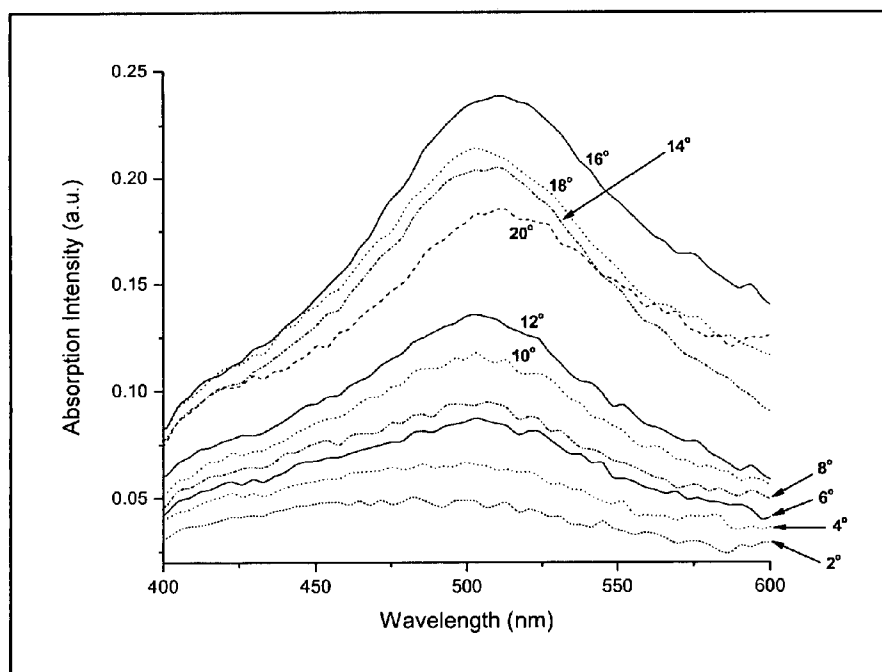
(74) Agents: **WIMBISH, J., Clinton et al.**; 1001 West Fourth Street, Winston-salem, North Carolina 27101-2400 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, 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, 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, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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, MT, 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).

[Continued on next page]

(54) Title: FIBER PHOTOVOLTAIC DEVICES AND APPLICATIONS THEREOF



(57) Abstract: The present invention relates to organic optoelectronic devices and, in particular, to organic photovoltaic devices having a fiber structure. In one embodiment, a photovoltaic device comprises a first electrode comprising an indium tin oxide fiber, at least one photosensitive organic layer surrounding the first electrode and electrically connected to the first electrode, and a second electrode surrounding the organic layer and electrically connected to the organic layer.

WO 2007/130972 A2



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.