

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
3 April 2008 (03.04.2008)

PCT

(10) International Publication Number
WO 2008/039151 A1

(51) International Patent Classification:

C08G 61/12 (2006.01) *G01N 27/92* (2006.01)
H01L 51/05 (2006.01) *H01L 51/30* (2006.01)

(74) Agent: ELLA CHEONG SPRUSON & FERGUSON
(SINGAPORE) PTE LTD; P.O. BOX 1531, ROBINSON
ROAD POST OFFICE, Singapore 903031 (SG).

(21) International Application Number:

PCT/SG2006/000282

(22) International Filing Date:

26 September 2006 (26.09.2006)

(25) Filing Language:

English

(26) Publication Language:

English

(71) Applicant (*for all designated States except US*):
**AGENCY FOR SCIENCE, TECHNOLOGY AND
RESEARCH** [SG/SG]; 20 Biopolis Way, #07-01 Centros,
Singapore 138668 (SG).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **YING, Jackie
Y** [US/SG]; 31 Toh Avenue, Singapore 508056 (SG).
YU, HSIAO-HUA [CN/SG]; 18 Pine Grove, #12-04,
Cavendish Park, Singapore 597594 (SG). **MOHAMED
ALI, EMRIL** [SG/SG]; Blk 2, Marine Vista, #05-69,
Neptune Court, Singapore 449026 (SG). **KANTCHEV,
ERIC ASSEN B** [BG/SG]; 66 Telok Blangah Road,
#06-05, Harbourlights, Singapore 098830 (SG).

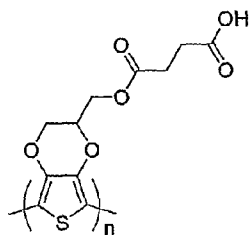
(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP,
KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT,
LU, LV, 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, 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).

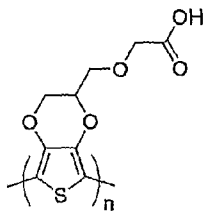
Published:

— with international search report

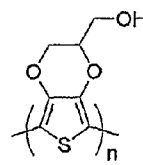
(54) Title: ELECTRICALLY CONDUCTING POLYMERS



poly(C₄-EDOT-COOH)



poly(C₂-EDOT-COOH)



poly(EDOT-OH)

(57) Abstract: The present invention provides a polymer for use in detecting or quantifying an analyte Exposure of the polymer to the analyte is capable of causing a shift in the onset potential for conductivity or semiconductivity of the polymer. A sensor for an analyte comprising the polymer is also described.