

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
4 October 2007 (04.10.2007)

PCT

(10) International Publication Number
WO 2007/111996 A3

(51) International Patent Classification:

H01B 1/12 (2006.01) **C08G 73/00** (2006.01)
C08J 7/04 (2006.01) **C08G 75/00** (2006.01)

(21) International Application Number:

PCT/US2007/007237

(22) International Filing Date: 23 March 2007 (23.03.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/785,470 24 March 2006 (24.03.2006) US

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(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).

Published:

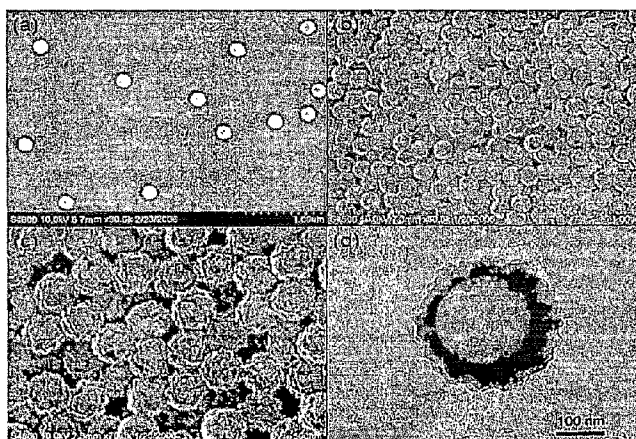
- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
13 March 2008

(15) Information about Correction:

Previous Correction:
see Notice of 13 December 2007

(54) Title: CONDUCTING POLYMER INK



(57) Abstract: Disclosed are conductive polymer inks and methods for forming the inks. The disclosed inks include a dispersion of conductive core/shell nanoparticles. The core/shell nanoparticles include a polymeric core and a shell formed of a conducting polymer. The inks can include a dispersion of the core/shell nanoparticles in a liquid carrier, such as an alcohol. The disclosed inks can be formulated to high viscosities and can be utilized in high-speed printing processes including rotogravure and flexographic printing processes. Products encompassed by the disclosure include polymer devices such as sensors, OFETs, RFID tags, printed circuit board, electrochromic devices, non-volatile memory devices, photovoltaics, and the like.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US07/07237

A. CLASSIFICATION OF SUBJECT MATTER

IPC: **H01B 1/12**(2006.01);**C08J 7/04**(2006.01);**C08G 73/00**(2006.01),**75/00**(2006.01)

USPC: 252/500,511;428/357,407,704;427/195,198,213.3,385.5;528/378,422,423;524/458

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 252/500,511;428/357,407,704;427/195,198,213.3,385.5;528/378,422,423;524/458

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 5,415,893 A (WIERSMA et al) 16 May 1995 (16.15.1995), Abstract, Cl-2, Ln 23-34; Cl-5, Ln 3-11, 28-33; Cl-6, Ln 35-43; Cl-7, Ln 19-28; Cl-9, Lm 1-8, Ln 43-45; Cl-10, Ex-1.	1-9, 11-12, 14-16, 21-22, 24-26, 34, 39, 40-42 -----
X --- Y	US 6,399,675 B1 (KIM et al) 04 June 2002 (04.06.2002), Abstract, Cl-2, Ln 26-56; Cl-3, Ln 12-48; Cl-4, Ln 50-55; Cl-5, Ln 27-57; Cl-6, Prep. Ex-1; Cl-7, Ex-1; Cl-8, Ex-7.	1, 5-23, 25-26, 31-32, 34-35, 40-42 -----
Y	US 6,652,777 B2 (RAPP et al) 25 Nov 2003, (25.11.2003), Abstract, Cl-5, Ln 20-24.	2,24, 28-29, 33, 36-38 35-36
A	JP 2004-189796 (TOYO INK) 08 July 2004 (8.07.2004), Abstract, 0090.	1-42

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☐ See patent family annex.

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"O"	document referring to an oral disclosure, use, exhibition or other means		
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Date of the actual completion of the international search

04 October 2007 (04.10.2007)

Date of mailing of the international search report

07 JAN 2008

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