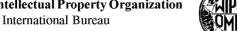
(19) World Intellectual Property Organization





(43) International Publication Date 25 July 2002 (25.07.2002)

(10) International Publication Number WO 02/057766 A3

(51) International Patent Classification7: G01N 27/30, C12Q 1/00, G01N 33/487

PCT/US02/00274 (21) International Application Number:

(22) International Filing Date: 8 January 2002 (08.01.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

09/761,311 17 January 2001 (17.01.2001)

(71) Applicant (for all designated States except US): E. I. DU PONT DE NEMOURS AND COMPANY [US/US]; 1007 Market Street, Wilmington, DE 19898 (US).

- (72) Inventor; and
- (75) Inventor/Applicant (for US only): CHAN, Man-Sheung [US/US]; 102 Toynbee Place, Chapel Hill, NC 27514 (US).
- (74) Agent: SANTOPIETRO, Lois, A.; E. I. DU PONT DE NEMOURS AND COMPANY, Legal Patent Records Center, 4417 Lancaster Pike, Wilmington, DE 19805 (US).

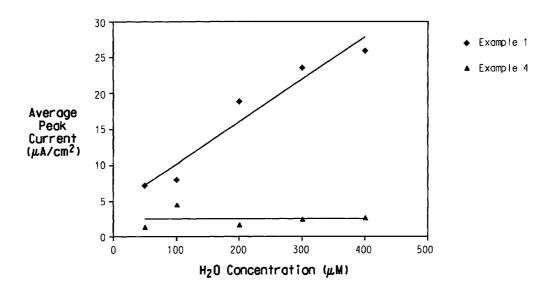
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (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: 27 December 2002

[Continued on next page]

(54) Title: THICK FILM CONDUCTOR COMPOSITION FOR USE IN BIOSENSORS



(57) Abstract: This invention is directed to a composition comprising: (a) platinum group metal powder, alloys, or mixtures thereof as a powder or deposited on graphite supports; (b) poly(glycol ether), derivatives, or mixtures thereof; (c) carbon-based electrically conductive filler; and (d) thermoplastic polymer or mixtures thereof. The invention is further directed to a process for dispersing platinum group metal powder, alloys, or mixtures thereof in poly(glycol ether), derivatives, or mixtures thereof for use in the com-



WO 02/057766 A3



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.

INTERNATIONAL SEARCH REPORT

onal Application No PCT/US 02/00274

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G01N27/30 C12Q1/00 G01N33/487

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

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 practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT							
Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.						
EP 0 987 333 A (DU PONT) 22 March 2000 (2000-03-22) page 3, line 14 -page 5, line 42; examples	1-13						
page 4, line 26 - line 46	1-13						
US 5 707 502 A (BROWN JOSEF ET AL) 13 January 1998 (1998-01-13) column 11, line 15 -column 13, line 8	1-13						
US 5 616 222 A (MALEY THOMAS C ET AL) 1 April 1997 (1997-04-01) cited in the application column 14, line 4 -column 15, line 58 column 22, line 66 -column 23, line 15	1-13						
	EP 0 987 333 A (DU PONT) 22 March 2000 (2000-03-22) page 3, line 14 -page 5, line 42; examples 1-6 page 4, line 26 - line 46 US 5 707 502 A (BROWN JOSEF ET AL) 13 January 1998 (1998-01-13) column 11, line 15 -column 13, line 8 US 5 616 222 A (MALEY THOMAS C ET AL) 1 April 1997 (1997-04-01) cited in the application column 14, line 4 -column 15, line 58 column 22, line 66 -column 23, line 15						

X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents: 'A' document defining the general state of the art which is not considered to be of particular relevance 'E' earlier document but published on or after the international filing date 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) 'O' document referring to an oral disclosure, use, exhibition or other means 'P' document published prior to the international filing date but later than the priority date claimed	 'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention 'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone 'Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. '&' document member of the same patent family
Date of the actual completion of the international search 10 October 2002	Date of mailing of the international search report 17/10/2002
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni, Fax: (+31-70) 340-3016	Authorized officer Komenda, P

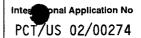
INTERNATIONAL SEARCH REPORT

Intermedial Application No
PCT/US 02/00274

C (Canalani	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	Relevant to claim No.		
Category °	Citation of document, with indication, where appropriate, of the relevant passages			
A	WO 99 10520 A (AHMED SAYED ;UNIV MANCHESTER (GB); RIGBY GERALDINE PATRICIA (GB);) 4 March 1999 (1999-03-04) page 5, line 4 - line 22; claim 1	1-13		

INTERNATIONAL SEARCH REPORT

ormation on patent family members



				101/	05 02/002/4
Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0987333	Α	22-03-2000	US	6042751 A	28-03-2000
	,,	22 00 2000	ĒΡ	0987333 A2	22-03-2000
			JP	2000097898 A	07-04-2000
US 5707502	Α	13-01-1998	NONE		
US 5616222		01-04-1997	US	5494562 A	27-02-1996
			ΑT	188741 T	15-01-2000
			AU	704637 B2	29-04-1999
			ΑU	1229595 A	11-01-1996
			CA	2138856 A1	28-12-1995
			DE	69514427 D1	17-02-2000
			DE	69514427 T2	24-08-2000
			DK	690134 T3	01-05-2000
			EP	0690134 A1	03-01-1996
			ES	2141893 T3	01-04-2000
			JP	8193969 A	30-07-1996
			PL	306936 A1	08-01-1996
			US	5529676 A	25-06-1996
			US	5573647 A	12-11-1996
			US	5582698 A	10-12-1996
			US	5711868 A	27-01-1998
			US	5601694 A	11-02-1997
			US	5770028 A	23-06-1998
WO 9910520	Α	04-03-1999	AU	8742798 A	16-03-1999
			EP	1005567 A1	07-06-2000
			WO	9910520 A1	04-03-1999
			US	6200772 B1	13-03-2001