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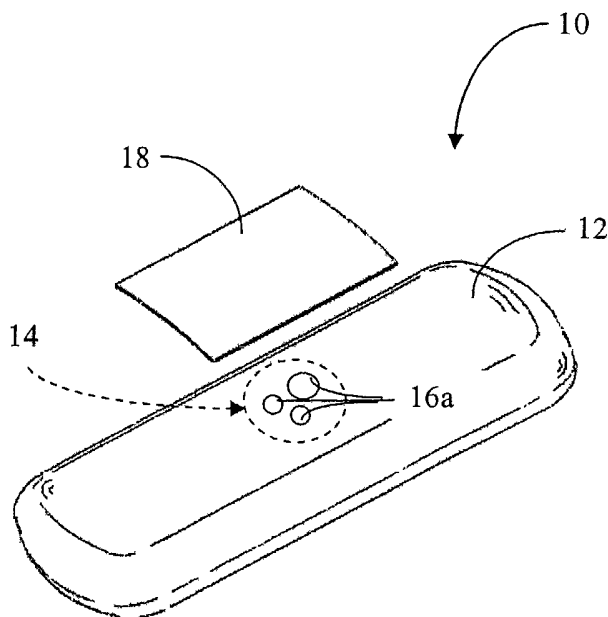
(43) International Publication Date
10 February 2005 (10.02.2005)

PCT

(10) International Publication Number
WO 2005/012871 A3

- (51) International Patent Classification⁷: **G01N 27/327**
- (21) International Application Number:
PCT/US2004/023492
- (22) International Filing Date: 21 July 2004 (21.07.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/490,010 25 July 2003 (25.07.2003) 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, 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, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, 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, IT, LU, 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
- (88) Date of publication of the international search report:
14 April 2005
- 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: INCREASING BIAS FOR OXYGEN PRODUCTION IN AN ELECTRODE SYSTEM



(57) Abstract: The present invention relates generally to systems and methods for electrochemical sensing. Particularly, the invention relates to optimizing bias settings in an electrode system (16) to increase oxygen production at the working electrode. The systems and methods can be employed with an implantable glucose sensor (10) that utilizes amperometric electrochemical sensor technology to measure glucose. The sensor can include a body (12) with a sensing region (14) including an electrode system (16) and sensor electronics.

WO 2005/012871 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/23492

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G01N 27/327
 US CL : 204/403.14

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. ; 204/403.01-403.14; 600/345,347

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)
 Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	JPO abstract of JP 62083649 A (MIKI et al.) 17 April 1987.	1,14 ----- 2-6,8,12,15-19,21
X --- Y	US 4,374,013 A (ENFORS) 15 February 1983, abstract; Figure 1, col. 1:9-20; col 4:6-15; and claim 1.	1,7,14,17 ----- 2-6,8,12,13,15-19,21,25,26
X --- Y	US 6,275,717 B1 (GROSS et al.) 14 August 2001, Figures 1 and 2; column 10:17-31; col. 7:1-29; col. 9:64 - col. 10:3 and col. 15:20 - col. 16:8.	1,4,14 ----- 2,3,5- 10,12,13,15,16,18,19, 21-26

Further documents are listed in the continuation of Box C.

See patent family annex.

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"A"	document defining the general state of the art which is not considered to be of particular relevance	"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
"E"	earlier application or patent published on or after the international filing date	"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
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"O"	document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

10 January 2005 (10.01.2005)

Date of mailing of the international search report

24 JAN 2005

Name and mailing address of the ISA/US

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INTERNATIONAL SEARCH REPORT

PCT/US04/23492

Continuation of B. FIELDS SEARCHED Item 3:

EAST

search terms: replenish, generate, electrolyze, electrolysis, oxygen, O₂, sensor, biosensor, enzyme, glucose, electrochemical, electroanalytical.