

Title (en)

MICROSCOPIC MULTI-SITE SENSOR ARRAY WITH INTEGRATED CONTROL AND ANALYSIS CIRCUITRY

Title (de)

MIKROSKOPISCHES MEHRORT-SENSORARRAY MIT INTEGRIERTER STEUERUNGS- UND ANALYSEVORRICHTUNG

Title (fr)

RESEAU DE CAPTEURS MICROSCOPIQUES MULTISITES A CIRCUITS D'ANALYSE ET DE COMMANDE INTEGRES

Publication

EP 1230539 A4 20040616 (EN)

Application

EP 00976961 A 20001103

Priority

- US 0030484 W 20001103
- US 16351899 P 19991104

Abstract (en)

[origin: WO0133207A1] There is provided a recording device having at least one potentiometric electrode, at least one amperometric electrode, wherein both electrodes are located on the same recording device. Also provided is a single locus recording device having at least one potentiometric electrode, at least one amperometric electrode, wherein both electrodes are located on the same recording device.

IPC 1-7

G01N 27/26; G01N 27/403; G01N 27/49

IPC 8 full level

G01N 33/483 (2006.01); C12M 1/00 (2006.01); C12M 1/42 (2006.01); G01N 27/27 (2006.01); G01N 27/327 (2006.01); G01N 27/403 (2006.01); G01N 27/416 (2006.01); G01N 27/48 (2006.01); G01N 33/487 (2006.01)

CPC (source: EP)

G01N 33/4836 (2013.01)

Citation (search report)

- [Y] US 4528270 A 19850709 - MATSUNAGA TADASHI [JP]
- [X] US 5683562 A 19971104 - SCHAFFAR BERNHARD [AT], et al
- [XY] KIMURA J ET AL: "AN INTEGRATED MULTIBIOSENSOR FOR SIMULTANEOUS AMPEROMETRIC AND POTENTIOMETRIC MEASUREMENT", SENSORS AND ACTUATORS, ELSEVIER SEQUOIA S.A. LAUSANNE, CH, vol. 15, no. 4, December 1988 (1988-12-01), pages 435 - 443, XP009009356
- [YA] BAUMANN W H ET AL: "Microelectronic sensor system for microphysiological application on living cells", SENSORS AND ACTUATORS B, ELSEVIER SEQUOIA S.A., LAUSANNE, CH, vol. 55, no. 1, 25 April 1999 (1999-04-25), pages 77 - 89, XP004175066, ISSN: 0925-4005
- [Y] VACHETTE CEDRIC ET AL: "In vitro study of the catecholaminergic metabolism of locus coeruleus neurones by differential normal pulse voltammetry", JOURNAL OF NEUROSCIENCE METHODS, vol. 63, no. 1-2, 1995, pages 103 - 112, XP002277669, ISSN: 0165-0270
- [Y] PATENT ABSTRACTS OF JAPAN vol. 014, no. 162 (P - 1029) 29 March 1990 (1990-03-29)
- [X] SCHELTER W ET AL: "COMBINATION OF AMPEROMETRIC AND POTENTIOMETRIC SENSOR PRINCIPLES FOR ON-LINE BLOOD MONITORING", SENSORS AND ACTUATORS B, ELSEVIER SEQUOIA S.A., LAUSANNE, CH, vol. 6, no. 1-3, January 1992 (1992-01-01), pages 91 - 95, XP009009354, ISSN: 0925-4005
- [XY] KAKEROW R ET AL: "A MONOLITHIC SENSOR ARRAY OF INDIVIDUALLY ADDRESSABLE MICROELECTRODES", SENSORS AND ACTUATORS A, ELSEVIER SEQUOIA S.A., LAUSANNE, CH, vol. A43, no. 1/3, 1 May 1994 (1994-05-01), pages 296 - 301, XP00454125, ISSN: 0924-4247
- [X] SILBER A ET AL: "THICK-FILM MULTICHANNEL BIOSENSORS FOR SIMULTANEOUS AMPEROMETRIC AND POTENTIOMETRIC MEASUREMENTS", SENSORS AND ACTUATORS B, ELSEVIER SEQUOIA S.A., LAUSANNE, CH, vol. 30, no. 2, 15 January 1996 (1996-01-15), pages 127 - 132, XP000584838, ISSN: 0925-4005
- [X] KIM C-S ET AL: "A new pH-ISFET based dissolved oxygen sensor by employing electrolysis of oxygen", SENSORS AND ACTUATORS B, ELSEVIER SEQUOIA S.A., LAUSANNE, CH, vol. 34, no. 1-3, 1 August 1996 (1996-08-01), pages 435 - 440, XP004078019, ISSN: 0925-4005
- See references of WO 0133207A1

Cited by

US1125716B2; EP2845904A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0133207 A1 20010510; WO 0133207 A8 20010830; AU 1466301 A 20010514; EP 1230539 A1 20020814; EP 1230539 A4 20040616; JP 2003513275 A 20030408

DOCDB simple family (application)

US 0030484 W 20001103; AU 1466301 A 20001103; EP 00976961 A 20001103; JP 2001535042 A 20001103