

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
2 June 2005 (02.06.2005)

PCT

(10) International Publication Number
WO 2005/050559 A3

(51) International Patent Classification:
19/00, 6/00

A61B 5/05,

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(21) International Application Number:

PCT/US2004/038850

(22) International Filing Date:

17 November 2004 (17.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/523,036 18 November 2003 (18.11.2003) 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.

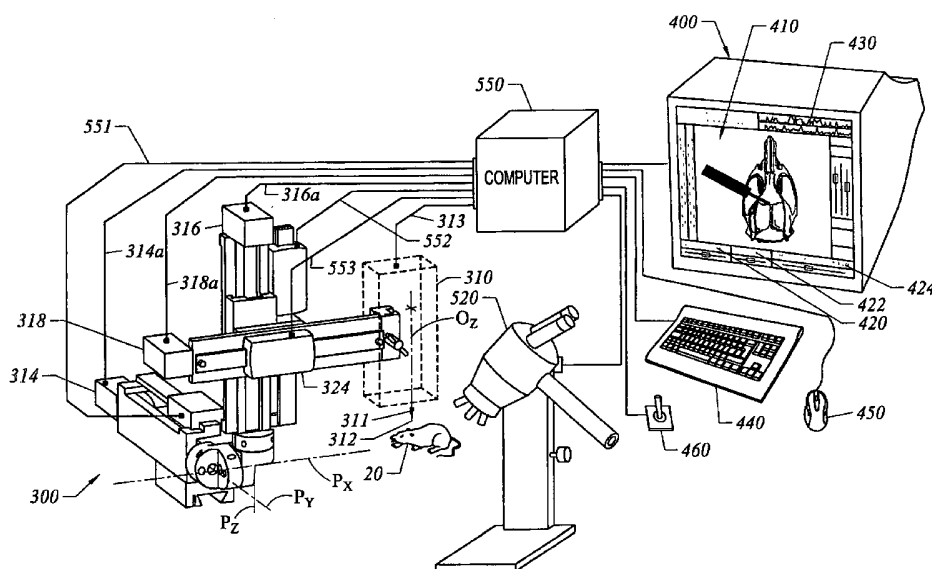
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, 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

[Continued on next page]

(54) Title: STEREOTAXIC INSTRUMENT WITH LINEAR COORDINATE SCALES COUPLED TO SPLIT-IMAGE MICROSCOPIC IMAGE DISPLAY SYSTEM



(57) Abstract: A stereotaxic instrument is coupled to a split-screen imaging system to provide a split-screen image of the skull of the brain research subject animal along with an image of the X, Y and Z coordinates of the electrode tip (or other tool tip) being used. In addition, a third split-screen image of a recording graph displaying electrical activity recorded by an electrode may be shown. The imaging system may be a microscope/computer system or digital camera/computer system. The split-screen images may be displayed on a computer monitor or in a microscope. The system can be utilized with motor driven shift mechanisms or with manual shift mechanisms. The system allows experiments to be conducted with the subject enclosed within a Faraday cage. Remote and automatic cell searching experiments may be conducted as well.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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(88) Date of publication of the international search report:

12 January 2006

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/38850

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 5/05, 19/00, 6/00

US CL : 600/407, 476; 606/130

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. : 600/407, 476, 424, 429; 606/130

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.
Y	US6,006,126 A (COSMAN) 21 December 1999, see entire document.	1-6
Y	US 2003/0120282 A1 (SCOUTEN et al.) 26 June 2003, see entire document.	1-4
Y	US 6,575,969 B1 (RITTMAN, III et al.) 10 June 2003, see entire document.	5, 6



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"&"

document member of the same patent family

Date of the actual completion of the international search

18 November 2005 (18.11.2005)

Date of mailing of the international search report

29 NOV 2005

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