

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
21 December 2007 (21.12.2007)

PCT

(10) International Publication Number
WO 2007/146834 A3

(51) International Patent Classification:
A61N 1/32 (2006.01)

(21) International Application Number:
PCT/US2007/070799

(22) International Filing Date: 8 June 2007 (08.06.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/451,728 12 June 2006 (12.06.2006) 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, DO, 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, ME, 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:
28 August 2008



WO 2007/146834 A3

(54) Title: METHODS AND APPARATUS FOR MULTI-VESSEL RENAL NEUROMODULATION

(57) Abstract: Methods and apparatus are provided for multi-vessel neuromodulation, e.g., via a pulsed electric field. Such multi-vessel neuromodulation may effectuate irreversible electroporation or electrofusion, necrosis and/or inducement of apoptosis, alteration of gene expression, action potential attenuation or blockade, changes in cytokine up-regulation and other conditions in target neural fibers. In some embodiments, the multi-vessel neuromodulation is applied to neural fibers that contribute to renal function. Such multi-vessel neuromodulation optionally may be performed bilaterally.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US07/70799

A. CLASSIFICATION OF SUBJECT MATTER

IPC: **A61N 1/32(2006.01)**

USPC: **607/44**

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. : 607/44

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	U.S. Pub. 2003/0060858 A1 (Kieval et al) 27 March 2003 (27.03.2003), see entire document especially Figs. 15a, 15b	1-2, 6, 9-11, 14-15, 19, 22-23 and 28-30 ----- 3-5, 7-8, 12-13 and 31
Y	US 6,246,912 B1 (Sluijter et al) 12 June 2001 (12.06.2001), see entire document especially Figs. 9-10, Col. 19, ll. 20-29	3-5, 7-8, 12-13 and 31
A	US 7,162,303 B2 (Levin et al) 09 January 2007 (09.01.2007)	1-32

Further documents are listed in the continuation of Box C.

See patent family annex.

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"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	"&" document member of the same patent family

Date of the actual completion of the international search
09 June 2008 (09.06.2008)

Date of mailing of the international search report
02 JUL 2008

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