

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
23 June 2005 (23.06.2005)

PCT

(10) International Publication Number
WO 2005/057548 A3

(51) International Patent Classification:

G10L 21/00 (2006.01) **A61B 5/04** (2006.01)
G10L 21/06 (2006.01) **A61B 5/05** (2006.01)
A61N 1/18 (2006.01)

(21) International Application Number:

PCT/US2004/041435

(22) International Filing Date:

8 December 2004 (08.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/527,943 8 December 2003 (08.12.2003) 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, LT, 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:

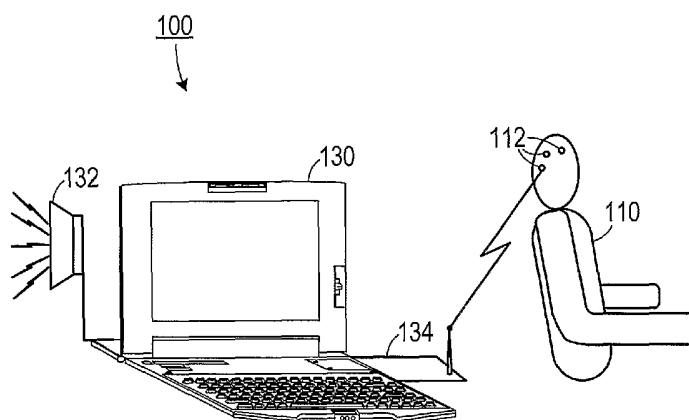
- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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

21 December 2006

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: SYSTEM AND METHOD FOR SPEECH GENERATION FROM BRAIN ACTIVITY



(57) Abstract: In a method of assisting a subject [110] to generate speech [132], at least one first neural impulse is sensed from a first preselected location [112] in the subject's brain. A first preselected sound is associated with the first neural impulse. The first preselected sound is generated in an audible format. In an apparatus for assisting the subject [110] to generate speech [132], at least one sensor senses a neural impulse [112] in the subject's brain and generates a signal representative thereof. An electronic speech generator [130] generates a phoneme in response to the generation of the signal [134]. An audio system generates audible sounds [132] corresponding to the phoneme based upon the signal received from the speech generator [130].

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/41435

A. CLASSIFICATION OF SUBJECT MATTER

IPC: **G10L 21/00**(2006.01),**21/06**(2006.01);**A61N 1/18**(2006.01);**A61B 5/04**(2006.01),**5/05**
(2006.01)

USPC: 704/270,271;607/3;600/544,545,410

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. : 704/270, 271; 607/3; 600/544, 545, 410

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)
EAST/USPTO

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/0099412 A1 (FISCHELL et al.) 25 Jan. 2002(25.01.2002), Fig. 1 and paragraphs 13-14, 31, 28, 26, 24, 15-16, 33, 105; 203, 17, 21, 120-121;	1, 3-6, 8-10, 15-18, 20
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Y	Fig. 3, 5D, and paragraphs 134, 17,19, 21	2, 7, 11-14, 19, 21-33
Y	US 4,736,751 (GEVINS et al.) 12 Apr. 1988 (12.04.1988) col. 8, lines 53-60, 7, lines 65-66, col.1, lines 57-60 and abstract, col. 2, lines 1-68, .	2, 7, 11-14, 21-24, 26-33
Y	US 2002/0103429 A1 (deCHARMS) 1 Aug. 2002 (01.08.2002) paragraphs 28-29, 140, 685 and Fig 14	21-23
Y	US 2003/0023183 A1 (WILLIAMS) 30 Jan. 2003 (30.01.2003) paragraph 45	26

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Date of the actual completion of the international search

12 September 2006 (12.09.2006)

Date of mailing of the international search report

20 OCT 2006

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

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