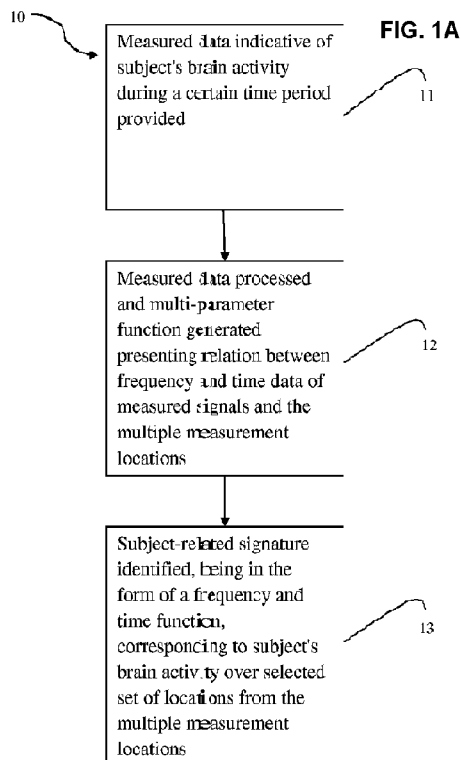




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[Continued on next page]

- (54) **Title:** METHOD AND SYSTEM FOR USE IN MONITORING NEURAL ACTIVITY IN A SUBJECT'S BRAIN



(57) **Abstract:** A system and method are presented for use in monitoring brain activity of a subject. The system comprises a control unit which comprises: a data input utility for receiving measured data comprising data corresponding to signals measured during a certain time period and being indicative of a subject's brain activity originated from locations in the subject's brain during said certain time period, and a processor utility which is configured and operable for processing the measured data and generating data indicative thereof in the form of a multi-parameter function presenting a relation between frequency and time data of the measured signals and for analyzing said relation and identifying a subject-related signature corresponding to the subject's brain neural activity.



SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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USPC - 600/546

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)

IPC(8) - A61B 5/04, 5/0402, 5/0476, 5/0478, 5/048, 5/0482, 5/0484; A61N 1/36 (2012.01)

USPC - 382/131; 600/410, 544, 545, 546

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)

PatBase

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X — Y	US 2010/0145215 A1 (PRADEEP et al) 10 June 2010 (10.06.2010) entire document	1-7, 12-28, 32-37, 43, 45 ----- 8-10
Y	WO 2010/127044 A1 (HOCHMAN et al) 04 November 2010 (04.11.2010) entire document	8-10
A	US 2010/0016752 A1 (SIERACKI) 21 January 2010 (21.01.2010) entire document	1-45
A	US 7,865,235 B2 (LE et al) 04 January 2011 (04.01.2011) entire document	1-45
A	WO 2009/063463 A2 (ZUCKERMAN et al) 22 May 2009 (22.05.2009) entire document	1-45
P	US 2011/0028827 A1 (SITARAM et al) 03 February 2011 (03.02.2011) entire document	1-45

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