Abstract: Traditional analysis of sleep patterns requires several channels of data. This analysis can be useful for customized analysis including assessing sleep quality, detecting pathological conditions, determining the effect of medication on sleep states and identifying biomarkers, and drug dosages or reactions. A novel analysis is presented, for the extraction and analysis of attenuated rhythms collected from the scalp of animals based on the combination of single channel analysis methods for sleep and non-invasive recordings.

**Title:** METHODS OF IDENTIFYING SLEEP AND WAKING PATTERNS AND USES

**Figure 5**
**INTERNATIONAL SEARCH REPORT**

**INTERNATIONAL APPLICATION No.**

**PCT/US2009/064632**

**A. CLASSIFICATION OF SUBJECT MATTER**

**IPC(8) - A61B 5/04 (2011.01)**

**USPC - 600/544**

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, 4/0408, 5/0448, 5/05 (2011.01)**

**USPC - 600/544, 547; 435/22; 607/2**

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)

MicroPatent, Google Patent

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
<thead>
<tr>
<th>Category*</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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| * Special categories of cited documents: |
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**Date of the actual completion of the international search**

22 September 2011

**Date of mailing of the international search report**

03 OCT 2011

**Name and mailing address of the ISA/US**

Mail Stop PCT, Attn: ISA/US, Commissioner for Patents

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