

(12) **United States Patent**  
**Jaax et al.**

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(54) **METHODS AND SYSTEMS FOR STIMULATING A MOTOR CORTEX OF THE BRAIN TO TREAT A MEDICAL CONDITION**

(58) **Field of Classification Search**  
CPC ..... A61N 1/36082; A61N 1/37205  
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See application file for complete search history.

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(57) **ABSTRACT**

Methods of treating a medical condition include applying at least one stimulus to a motor cortex within a brain of a patient with an implanted system control unit in accordance with one or more stimulation parameters. Systems for treating a medical condition include a system control unit implanted within the patient that is configured to apply at least one stimulus to a motor cortex within a brain of a patient in accordance with one or more stimulation parameters.

**1 Claim, 11 Drawing Sheets**

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 70 days.  
This patent is subject to a terminal disclaimer.

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