



## Neural Activation Imaging

Close to 200,000 new epilepsy patients are diagnosed each year in the U.S. If standard drug treatments are unsuccessful, a physician may recommend surgical treatment. The gold standard in localizing the seizure onset zone for surgical pre-planning entails the use of invasive intra-cerebral nodes.

This novel algorithm provides a method to image the activation and connectivity of neural sources obtained via a non-invasive skull cap with electrodes. The primary site of seizure sources and other brain functions can be localized with high accuracy.

This innovation is potentially a paradigm-changing technology for the treatment of epilepsy patients by eliminating the need for the invasive acquisition of electrical brain activity.

### Features & Benefits

- Non-invasive deep brain localization of electrical disturbance sources
- Imaging of activation times provides a more clinically oriented information format with a significant reduction in data
- Provides physiological properties of neural tissues rather than physical quantities
- Reduction in surgical time and procedures

### Technology Status

Human testing of the neural activation imaging algorithm has been performed.

### IP Status

Patent Pending  
(International Application Number PCT/US2007/009638)

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