

### **Duke File (IDF) Number**

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### **Meet the Inventors**

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## **Magnetic resonance imaging method for detecting magnetic field oscillations**

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This invention is a new magnetic resonance imaging method that can detect magnetic field oscillations in specific frequency bands, in particular those induced by neuroelectric activity in the brain. In contrast to existing neuroimaging techniques, it can noninvasively and directly localize neuroelectric activity with both a high spatial and temporal specificity. Its main advantage over previously proposed methods is that it is only sensitive to the magnetic field oscillations of interest but not to other potentially confounding contributions to the signal.

