

Office of Technology Commercialization

ITTC's mission is to advance knowledge and create innovative technologies in information systems, networking and communications, bioinformatics, and radar;

To education and train students for technology leadership;

To transfer knowledge and innovative technologies to Kansas companies and national industries;

By providing an excellent interdisciplinary research and development environment.

Additional ITTC technologies available for licensing are listed at:
www.ittc.ku.edu/techtransfer

University of Kansas
Information &
Telecommunications Technology
Center

2335 Irving Hill Road
Nichols Hall
Lawrence, KS 66045
Telephone: 785-864-4896
Fax: 785-864-0387
Email: kbraman@ku.edu

ITTC is a KTEC Center of Excellence, funded in part by the Kansas Technology Enterprise Corporation.

ITTC is a division of the University of Kansas, which is an entity of the State of Kansas separately managed and distinct from the Kansas Technology Enterprise Corporation.

Title of Invention: Source Affine Image Reconstruction (SAFFIRE) for EEG/MEG Imaging

Technology ID: 08KU006L

Non-Confidential Description: Investigators from ITTC and the Hoglund Brain Imaging Center at KU Medical Center have developed a new way to process Magnetoencephalography (MEG) scans. More than 100 sensors within a MEG scan measure magnetic fields produced by small electrical currents generated as neurons communicate. Accurate signal processing helps produce brain activity mapping that is critical to treating neurological disorders, such as Parkinson's disease. KU researchers have developed a novel approach to MEG signal processing based on a variation of minimum mean-square error (MMSE) estimation.

Applications: Accurate processing of MEG scans could significantly aid in the understanding of healthy brain function and changes caused by age and illness. The SAFFIRE algorithm deftly separates individual signals that are collected from an enclosed space.

Benefits: SAFFIRE has enabled the precise localization of primary and secondary auditory responses, a previously unsolved problem. Precise imaging will allow researchers to better understand brain function and how disease affects it.

Patent Status: Pending (Non-provisional, PCT)

License: Negotiable

Confidential Disclosure Agreement: KU is willing to enter into a Confidential Disclosure Agreement for the purpose of negotiating a License Agreement. If you are interested in learning details of this invention, please contact:

Keith Braman

Director, Technology Commercialization, ITTC at: kbraman@ku.edu

Updated: May 2009