

Title (en)

NON-INVASIVE METHOD AND SYSTEM FOR DETECTING AND EVALUATING NEURAL ELECTROPHYSIOLOGICAL ACTIVITY

Title (de)

NICHTINVASIVES VERFAHREN UND SYSTEM FÜR DEN NACHWEIS UND DIE BEURTEILUNG DER NEURALEN ELEKTROPHYSIOLOGISCHEN AKTIVITÄT

Title (fr)

PROCEDE ET SYSTEME NON INVASIF DE DETECTION ET D'EVALUATION DE L'ACTIVITE ELECTROPHYSIOLOGIQUE NEURONALE

Publication

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Application

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Abstract (en)

[origin: WO2009136021A1] The invention pertains to a non-invasive method and system for detecting and evaluating neural electrophysiological sources by exploring a multiplicity of points belonging to a zone of interest. The non-invasive techniques pose problems as to the instability of the estimation in relation to the position of the measurement points and errors of geometrical registration with complementary anatomical examinations, this possibly generating significant errors. The present invention is aimed at proposing a non-invasive method and system for detecting and evaluating profound neural electrophysiological activity which is both fast, complete and accurate. In this regard, the invention is aimed at a non-invasive method of detecting and evaluating neural electrophysiological activity comprising a step (10, 20) of non-invasive acquisition of anatomical and electrophysiological data in an analysis region (12), a step (30) of identifying at least one electrophysiological source and a step (40) of selecting at least one main measurement point (42), characterized in that it furthermore comprises a step (50) of estimating the electrical potentials at a plurality of secondary measurement points (52) belonging to a zone of interest (8) situated around the main measurement point (42).

IPC 8 full level

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