

Title (en)

EVALUATION OF IMAGES OF THE BRAIN OBTAINED BY MEANS OF FUNCTIONAL MAGNETIC RESONANCE TOMOGRAPHY

Title (de)

AUSWERTEN VON MITTELS FUNKTIONALER MAGNET-RESONANZ-TOMOGRAPHIE GEWONNENEN BILDERN DES GEHIRNS

Title (fr)

EVALUATION D'IMAGES DU CERVEAU OBTENUES PAR TOMOGRAPHIE PAR RESONANCE MAGNETIQUE FONCTIONNELLE

Publication

EP 1456798 A2 20040915 (DE)

Application

EP 02791617 A 20021209

Priority

- DE 0204517 W 20021209
- DE 10162927 A 20011220

Abstract (en)

[origin: WO03054794A2] The invention relates to a method for evaluating an image (fMRI-image) of the brain obtained by means of functional magnetic resonance tomography. According to said method, a neuronal network is used to simulate the activities of the brain. Supposed disorders of the brain are simulated in the neuronal network (disturbed neuronal network). The activities determined in the disturbed neuronal network are compared with the activities observed in the fMRI image. The loss of function of any substructures of the brain can be artificially simulated in the model and its effect on the complex synergy of the areas of the brain can be quantified. The comparison with the fMRI image or fMRI activity pattern relating to the patient enables the cause of the disorders to be localised, thus leading to a successful diagnosis.

IPC 1-7

G06F 19/00

IPC 8 full level

G06N 3/02 (2006.01); **G06V 10/40** (2022.01); **G16Z 99/00** (2019.01)

CPC (source: EP US)

G06N 3/02 (2013.01 - EP US); **G06V 10/40** (2022.01 - EP US); **G16H 50/50** (2017.12 - EP US); **G16Z 99/00** (2019.01 - EP US); **G06V 2201/031** (2022.01 - EP US)

Citation (search report)

See references of WO 03054794A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)

WO 03054794 A2 20030703; **WO 03054794 A3 20040617**; CN 1620666 A 20050525; DE 10162927 A1 20030717; EP 1456798 A2 20040915; US 2005119558 A1 20050602; US 7349728 B2 20080325

DOCDB simple family (application)

DE 0204517 W 20021209; CN 02828264 A 20021209; DE 10162927 A 20011220; EP 02791617 A 20021209; US 49961905 A 20050121