

Title (en)

METHOD AND APPARATUS USING MAGNETIC RESONANCE IMAGING FOR TISSUE PHENOTYPING AND MONITORING

Title (de)

VERFAHREN UND VORRICHTUNG MIT MAGNETRESONANZBILDGEBUNG ZUR GEWEBEPHÄNOTYPISIERUNG UND -ÜBERWACHUNG

Title (fr)

MÉTHODE ET APPAREIL UTILISANT L'IMAGERIE PAR RÉSONANCE MAGNÉTIQUE POUR LA DÉTERMINATION DU PHÉNOTYPE ET LA SURVEILLANCE DE TISSUS

Publication

EP 2838424 A1 20150225 (EN)

Application

EP 13777980 A 20130422

Priority

- US 201261636562 P 20120420
- US 2013037650 W 20130422

Abstract (en)

[origin: WO2013159111A1] Provided herein is a Magnetic Resonance Imaging (MRI) technique and, optionally, software, collectively referred to as the "shutter-speed" model, to analyze image data of cancer patients. Embodiments provide a minimally invasive, yet precisely accurate, approach to determining whether tumors are malignant or benign by distinguishing the characteristics of contrast reagent activity in benign and malignant tumors. Exemplary embodiments provide MRI measured biomarkers for tumor malignancy determination and monitoring, effectively eliminating or limiting the false positives suffered by existing MRI techniques while also improving tissue phenotyping and therapeutic intervention monitoring and prediction.

IPC 8 full level

A61B 5/055 (2006.01)

CPC (source: EP)

A61B 5/055 (2013.01); **A61B 5/4312** (2013.01); **G01R 33/56366** (2013.01)

Citation (search report)

See references of WO 2013159111A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2013159111 A1 20131024; EP 2838424 A1 20150225

DOCDB simple family (application)

US 2013037650 W 20130422; EP 13777980 A 20130422