Title (en)

PHASE LABELING USING SENSITIVITY ENCODING: DATA ACQUISITION AND IMAGE RECONSTRUCTION FOR GEOMETRIC DISTORTION CORRECTION IN EPI.

Title (de)

PHASENMARKIERUNG ANHAND VON SENSITIVITÄTSCODIERUNG: DATENERFASSUNG UND BILDREKONSTRUKTION FÜR GEOMETRISCHE EPI-VERZERRUNGSKORREKTUR

Title (fr)

ÉTIQUETAGE DE PHASE UTILISANT LE CODAGE DE SENSIBILITÉ : ACQUISITION DE DONNÉES ET RECONSTRUCTION D'IMAGE POUR CORRECTION DE DISTORSION GÉOMÉTRIQUE EN IMAGERIE ÉCHO-PLANAIRE

Publication

**EP 2288941 A1 20110302 (EN)**

Application

**EP 09739969 A 20090501**

Priority

- US 2009042593 W 20090501
- US 5005208 P 20080502

Abstract (en)

[origin: WO2009135167A1] A phase labeling using sensitivity encoding system and method for correcting geometric distortion caused by magnetic field inhomogeneity in echo planar imaging (EPI) uses local phase shifts derived directly from the EPI measurement itself, without the need for extra field map scans or coil sensitivity maps. The system and method employs parallel imaging and k- space trajectory modification to produce multiple images from a single acquisition. The EPI measurement is also used to derive sensitivity maps for parallel imaging reconstruction. The derived phase shifts are retrospectively applied to the EPI measurement for correction of geometric distortion in the measurement itself.

IPC 8 full level

**G01V 3/00** (2006.01); **G01R 33/561** (2006.01); **G01R 33/565** (2006.01)

CPC (source: EP)

**G01R 33/5611** (2013.01); **G01R 33/5616** (2013.01); **G01R 33/56341** (2013.01); **G01R 33/56509** (2013.01); **G01R 33/56563** (2013.01); G01R 33/4806 (2013.01); G01R 33/56554 (2013.01)

Cited by

US2013076356A1

Designated contracting state (EPC)

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 SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**WO 2009135167 A1 20091105**; EP 2288941 A1 20110302; EP 2288941 A4 20111221

DOCDB simple family (application)

**US 2009042593 W 20090501**; EP 09739969 A 20090501