

Title (en)
CAMERA-SUPPORTED MOVEMENT DETECTION FOR MOVEMENT COMPENSATION IN REAL TIME IN MAGNETIC RESONANCE IMAGING

Title (de)
KAMERAGESTÜTZE BEWEGUNGSDETEKTION ZUR BEWEGUNGSKOMPENSATION IN ECHTZEIT IN DER BILDGEBENDEN MANETISCHEN RESONANZ

Title (fr)
DéTECTION DE MOUVEMENT ASSISTÉE PAR CAMÉRA POUR LA COMPENSATION EN TEMPS RÉEL DU MOUVEMENT EN IMAGERIE PAR RÉSONNANCE MAGNÉTIQUE

Publication
EP 2521925 A1 20121114 (DE)

Application
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Priority

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- DE 102010004023 A 20100104
- EP 2010069887 W 20101216

Abstract (en)
[origin: WO2011080091A1] The invention relates to a method for compensating patient movements in MRI scans in real time and to a device suitable for carrying out said method. The method involves the following steps: optically sensing a marking element (5) connected to a patient (3) by means of an image sensor module (7) of an MRI-compatible camera (2) which is positioned inside an MRI device; transferring the image data detected by the image sensor module (7) to a micro-controller module (11) which is integrated in the MRI-compatible camera (2); calculating position data of the marking element (5) in the micro-controller module (11); and transmitting the position data to an external analyzing unit or to the MRI device in real time.

IPC 8 full level
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CPC (source: EP US)
G01R 33/56509 (2013.01 - EP US); **G01R 33/5673** (2013.01 - EP US)

Citation (search report)
See references of WO 2011080091A1

Citation (examination)

- US 2005107685 A1 20050519 - SEEGER DEREK [US]
- QIN LEI ET AL: "Prospective head-movement correction for high-resolution MRI using an in-bore optical tracking system", MAGNETIC RESONANCE IN MEDICINE, JOHN WILEY & SONS, INC, US, vol. 62, no. 4, 1 October 2009 (2009-10-01), pages 924 - 934, XP002608333, ISSN: 0740-3194, [retrieved on 20090612], DOI: 10.1002/MRM.22076

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