

Title (en)

BONE TRACKING WITH A GYROSCOPE SENSOR IN COMPUTER-ASSISTED SURGERY

Title (de)

KNOCHENORTUNG MIT EINEM GYROSKOPSENSOR IN DER COMPUTERUNTERSTÜTZTEN CHIRURGIE

Title (fr)

REPÉRAGE DES OS AU MOYEN D'UN CAPTEUR DE GYROSCOPE EN CHIRURGIE ASSISTÉE PAR ORDINATEUR

Publication

**EP 2598074 A4 20150729 (EN)**

Application

**EP 10855135 A 20100730**

Priority

CA 2010001206 W 20100730

Abstract (en)

[origin: WO2012012863A1] A system tracks an object in computer-assisted surgery. The system comprises a sensor unit secured to the femur. Gyroscopes on the sensor unit produce readings related to orientation data about three axes of rotation. A tracking unit receives the gyroscope readings. An axis calibrator on the tracking unit comprises a calculator for adding at least part of the gyroscope readings for specific movements of the object about a desired axis. An axis normalizer on the tracking unit determines an orientation of the desired axis with respect to the sensor unit from the added gyroscope readings. A tracking processor tracks the desired axis from the gyroscope readings. An interface displays orientation data for the object from a tracking of the desired axis. A method for tracking an object with a gyroscope sensor unit is also provided.

IPC 8 full level

**A61B 17/56** (2006.01); **A61B 19/00** (2006.01); **A61B 34/20** (2016.01)

CPC (source: EP)

**A61B 34/20** (2016.02); **G01C 25/005** (2013.01); **A61B 5/1126** (2013.01); **A61B 2034/2048** (2016.02); **A61B 2562/0219** (2013.01)

Citation (search report)

- No further relevant documents disclosed
- See references of WO 2012012863A1

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME RS

DOCDB simple family (publication)

**WO 2012012863 A1 20120202**; AU 2010358354 A1 20121206; AU 2010358354 B2 20140522; CA 2806889 A1 20120202; EP 2598074 A1 20130605; EP 2598074 A4 20150729

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