

Title (en)

METHOD AND APPARATUS FOR MOBILITY ANALYSIS USING REAL-TIME ACCELERATION DATA

Title (de)

VERFAHREN UND VORRICHTUNG ZUR MOBILITÄTSANALYSE UNTER VERWENDUNG VON ECHTZEIT-BESCHLEUNIGUNGSDATEN

Title (fr)

PROCÉDÉ ET APPAREIL D'ANALYSE DE MOBILITÉ UTILISANT DES DONNÉES D'ACCÉLÉRATION EN TEMPS RÉEL

Publication

**EP 2036364 A2 20090318 (EN)**

Application

**EP 07794955 A 20070517**

Priority

- US 2007011784 W 20070517
- US 74743706 P 20060517

Abstract (en)

[origin: WO2007136677A2] Disclosed is a method and apparatus for mobility detection, monitoring and analysis. The system (100) includes a wireless bracelet (130) configured to be located in an area in close proximity to an extremity of a human for measuring acceleration. The wireless bracelet (130) sends acceleration data using a mesh-type wireless network to a wireless Collector/Analyzer Server (120) for data collection and further processing. The Collector/Analyzer Server performs signal averaging and temporally smoothing of the collected acceleration data using dynamically sized moving average convolution filters and stores the results. The Collector/Analyzer Server creates differential acceleration time derivatives data, which is used to determine critical events, stores these results, and generates any preprogrammed alarms when it is determined that a critical event has occurred. The Collector/Analyzer Server profiles and correlates the derivative data including critical events with template profiles and measures the correlation for use by a medical managed service provider (120).

IPC 1-7

**H04Q 7/20**

IPC 8 full level

**H04W 84/02** (2009.01); **A61B 5/11** (2006.01); **G08B 21/04** (2006.01)

CPC (source: EP)

**A61B 5/0002** (2013.01); **A61B 5/1117** (2013.01); **A61B 5/681** (2013.01); **A61B 5/7239** (2013.01); **A61B 5/7246** (2013.01); **A61B 5/7242** (2013.01); **A61B 5/7275** (2013.01); **A61B 5/746** (2013.01); **A61B 2562/0219** (2013.01)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

**WO 2007136677 A2 20071129**; **WO 2007136677 A3 20080313**; EP 2036364 A2 20090318; EP 2036364 A4 20130206; JP 2009537224 A 20091029

DOCDB simple family (application)

**US 2007011784 W 20070517**; EP 07794955 A 20070517; JP 2009511059 A 20070517