

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 A4 20130206 (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 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)

Citation (search report)

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- See references of WO 2007136677A2

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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