

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

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Application

EP 07794955 A 20070517

Priority

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- 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).

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