

Title (en)

SYSTEM AND METHOD FOR DETECTING THE WALK OF A PERSON

Title (de)

SYSTEM UND VERFAHREN ZUR ERKENNUNG DER GANGART EINER PERSON

Title (fr)

SYSTEME ET PROCEDE DE DETECTION DE MARCHE D'UNE PERSONNE

Publication

EP 2400889 A1 20120104 (FR)

Application

EP 10705367 A 20100225

Priority

- EP 2010052368 W 20100225
- FR 0951212 A 20090226

Abstract (en)

[origin: WO2010097422A1] The invention relates to a system for detecting the walk of a person, provided with a housing (BT) including an at least biaxial motion sensor (CM), said housing being suitable for being attached to the upper part of the body of said person such that a first axis of measurement of said sensor (CM) coincides with the anteroposterior axis (AP) or the vertical axis (VT) of said body, and that a second axis of measurement of said sensor (CM) coincides with the medio-lateral axis (ML) of said body, said system additionally being provided with a means (MA) for analysing the measurements output by said sensor (CM), wherein said analysis means (MA) includes: a means (MT) for processing the measurement signals output by said sensor (CM) during a window of time, including a means for searching for a dominant frequency (MRFD) in said signals; and a means for detecting (MD) the walk of the person when a ratio between the dominant frequency of the signal of the first axis of measurement and the dominant frequency of said second axis of measurement, or between the dominant frequency of a Euclidean norm of the vector of measurements transmitted by said sensor (CM) and the dominant frequency of the signal of the second axis of measurement, is substantially equal to two.

IPC 8 full level

A61B 5/103 (2006.01); **A61B 5/11** (2006.01)

CPC (source: EP KR US)

A61B 5/1038 (2013.01 - EP KR US); **A61B 5/1114** (2013.01 - KR); **A61B 5/1116** (2013.01 - KR); **A61B 5/1118** (2013.01 - EP KR US);
A61B 5/112 (2013.01 - KR); **A61B 5/1123** (2013.01 - EP KR US); **A61B 5/6831** (2013.01 - KR); **A61B 5/725** (2013.01 - KR);
A61B 5/725 (2013.01 - KR); **G01C 21/1654** (2020.08 - EP KR US); **G01C 22/006** (2013.01 - KR US); **G06F 17/16** (2013.01 - US);
A61B 2562/0219 (2013.01 - KR)

Citation (search report)

See references of WO 2010097422A1

Citation (examination)

JP 2007160076 A 20070628 - UNIV NIHON

Cited by

EP3032455A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

FR 2942388 A1 20100827; FR 2942388 B1 20121012; CN 102333483 A 20120125; CN 102333483 B 20150722; EP 2400889 A1 20120104;
JP 2012518506 A 20120816; JP 5874130 B2 20160302; KR 101718555 B1 20170321; KR 20110125656 A 20111121;
US 2012041713 A1 20120216; US 9265448 B2 20160223; WO 2010097422 A1 20100902

DOCDB simple family (application)

FR 0951212 A 20090226; CN 201080009404 A 20100225; EP 10705367 A 20100225; EP 2010052368 W 20100225;
JP 2011551487 A 20100225; KR 20117022475 A 20100225; US 201013203461 A 20100225