

Title (en)
Ball movement path measuring method

Title (de)
Ballbewegungsbahnmessverfahren

Title (fr)
Procédé de mesure de la trajectoire d'un mouvement de balle

Publication
EP 2388048 A1 20111123 (EN)

Application
EP 10163267 A 20100519

Priority
EP 10163267 A 20100519

Abstract (en)
A ball movement path measuring method includes the steps of: preparing an operating unit and a measurement unit, mounting the triaxial accelerometer (C) in the object (O) to be measured for enabling the triaxial accelerometer (C) to define XYZ triaxial space coordinates, obtaining the data of a initial position of the XYZ axes at a first measuring time and the data of a reference position of the XYZ axes at a second measuring time and transmitting the obtained data to the operating unit, and comparing the reference position to the initial position and calculating the XYZ acceleration data, XYZ vector components of force and torsion force relative to each of XYZ axes after receipt of force subject to the contained angle between the coordinates data of the reference position and the coordinate data of the initial position and then using the XYZ acceleration data and the data of the weight and size of the object (O) to calculate the force experienced by the object (O), initial velocity, flight duration, flight height, flight distance and/or rotation speed.

IPC 8 full level
A63B 43/00 (2006.01); **G01C 21/16** (2006.01)

CPC (source: EP)
A63B 43/00 (2013.01); **A63B 2024/0034** (2013.01); **A63B 2220/40** (2013.01); **A63B 2220/833** (2013.01)

Citation (applicant)
US 6551194 B2 20030422 - HAMMERQUIST EARL LEON [US]

Citation (search report)

- [Y] US 2009029754 A1 20090129 - SLOCUM ADAM [US], et al
- [Y] US 2007059675 A1 20070315 - KUENZLER UDO [DE], et al
- [A] GB 2440510 A 20080206 - SANGHA PARM [GB]
- [A] DE 102006013732 A1 20070719 - FRAUNHOFER GES FORSCHUNG [DE]
- [A] FR 2885816 A1 20061124 - BOSCHAT DANIEL [FR], et al
- [A] US 2007178967 A1 20070802 - ROSENBERG LOUIS B [US]

Cited by
CN113040757A; ITMI20130059A1

Designated contracting state (EPC)
AL 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

Designated extension state (EPC)
BA ME RS

DOCDB simple family (publication)
EP 2388048 A1 20111123

DOCDB simple family (application)
EP 10163267 A 20100519