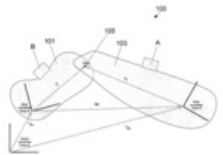
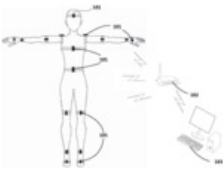
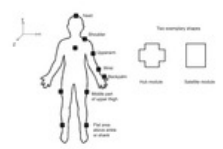
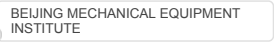
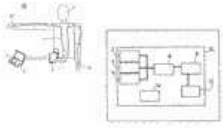


6 results for 3 and inertial - Collection: FAMPAT

#	  Title	Publication number	Publ. date	Applicant/Assignee	
1.	Inertial sensor kinematic coupling	EP2461748	2012-06-13		
A method is disclosed for measuring the motion of an object, composed of multiple segments connected by joints, via the estimation of the 3D orientation of the object segments relative to one another without dependence on a magnetic field as a reference for heading. The method includes first applying a plurality of inertial sensor units to the segments of the object, e.g., a user thigh, shank, foot, etc. Next an approximation of the distance between each inertial sensor unit and at least one adjacent joint is provided and the joint is subjected to an acceleration, e.g., as the user takes a step or two. The relative orientations of the segments are calculated and the orientations are used to form an estimation of the 3D orientation of the object segments relative to one another without using the local magnetic field as a reference for heading.					
2.	Human body movement reconstruction and analysis system and method based on inertial sensing units	CN104461013	2015-03-25	 	
The invention discloses a human body movement reconstruction and analysis system and method based on inertial sensing units. The system comprises a pose information acquisition system, a WIFI wireless router and a central computer. The pose information acquisition system is composed of the inertial sensing units. The inertial sensing units are installed on multiple parts of a human body respectively to collect accelerated velocities, angular velocities and magnetic information of all the parts in real time and fuse the accelerated velocities, the angular velocities and the magnetic information to obtain pose information such as pose angles, quaternions and Euler angles; next, the collected information and the fused information are sent to the central computer through the WIFI wireless router in a WIFI mode; the central computer fuses pose information data of all the inertial sensing units to complete human body movement reconstruction and extracts movement parameters such as positions, velocities, angles, the accelerated velocities and angular accelerated velocities, and the movement parameters are used for biomechanical analysis and kinematic analysis of human body movement. By means of the human body movement reconstruction and analysis system and method, influences on the movement of a subject are reduced to the maximum extent, the requirements for capturing the movement of the whole body of the subject and the special movement of a specific part of the subject are both met, and the system and method are suitable for various application occasions.					
3.	System and method for capturing and analyzing motions	US20170084070	2017-03-23		
Techniques for capturing and analyzing motion made by a person performing activities are described. According to one aspect of the present invention, sensing devices are attached to different parts of a body. As a person makes moves, the sensor modules, each including at least one inertial sensor, produce sensing data that are locally received in one designated sensing device that is in communication with an external device either remotely or locally. Relying on the resources on the external device, the combined sensing data received from the these sensing devices are processed and analyzed to derive the motions made the person. Depending on applications, various attributes of the motion can be derived from the combined sensing data, where the attributes can be incorporated into an application running on a mobile device for 3D graphics rendering into a human avatar animation and motion chart analysis.					
4.	Exoskeleton state detecting method	CN105147298	2015-12-16		
The invention discloses an exoskeleton state detecting method. The method specifically includes the steps of establishing an exoskeleton testing system to complete the state detection of exoskeleton, wherein angle sensors (1) are installed at knee joints, hip joints and ankle joints of exoskeleton, acceleration sensors (2) are installed on thighs and shanks of exoskeleton, an inertia measurement unit (3) is installed on the back of exoskeleton, foot sole pressure sensors (4) are installed on foot soles of exoskeleton, a six-dimensional torque sensor (5) is installed on the back of exoskeleton, a power supply (6) supplies power to the exoskeleton testing system, a data collecting assembly (7) collects data, a data computation processor (8) stores and displays data, and an animation display processor (10) displays an exoskeleton animation model on a display B (11) in real time in the 3D form. The method is comprehensive in data collection, flexible in display mode and capable of providing visual data and animation feedback for wearers and adjusters.					
5.	Method based on human posture obtained human action of the system alignment system	CN110109532	2019-08-09		
The present invention discloses a method for obtaining a human gesture-based human motion alignment system of the system, including: obtaining a human gesture system, for obtaining user human posture information; mannequin conversion system, for converting human pose information is converted into a human body model, creating an animated motion; analysis computing system, a human pose information for the joint and muscle stress analysis calculation, calculating a user in a standard motion picture and a motion animation motion of a dynamic model, and the critical data for a dynamic model of the associated position postil, obtaining a marked and labeled standard human body model of the human body model user; control system, means for obtaining a difference of user actions with the standard operation information in real time, the application of the system can simultaneously satisfy the 3 D, 2 D educational effect, and can greatly reduce the cost of the teacher teaching a student obtain professional.					
6.	A system and a method for motion tracking using a calibration unit	EP1970005	2008-09-17	 	
The application relates to motion tracking system (10) for tracking a movement of an object (P) in a three-dimensional space, the system comprising orientation measurement units (S1,S3,...,SN) for measuring data related to at least orientation of the object portions, wherein the orientation measurement units are arranged in positional and orientational relationships with respective object portions and having at least orientational parameters; a processor (3,5) for receiving data from the orientation measurement units, the said processor comprising a module for deriving orientation and/or position information of the object portions using the received data and a calibration unit (7) arranged to calculate calibration values based on received data and pre-determined constraints for determining at least the mutual proportions of the object portions and orientational parameters of the orientation measurement units. The application further relates to a method for tracking a movement of an object, a medical rehabilitation system and an animation system.					