US 20080146302A1

(19) **United States**

(12) **Patent Application Publication**

(10) **Pub. No.: US 2008/0146302 A1**

(43) **Pub. Date: Jun. 19, 2008**

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(54) **MASSIVE MULTIPLAYER EVENT USING PHYSICAL SKILLS**

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(21) Appl. No.: **11/676,271**

(22) Filed: **Feb. 16, 2007**

Related U.S. Application Data

(63) Continuation-in-part of application No. 11/610,969, filed on Dec. 14, 2006.

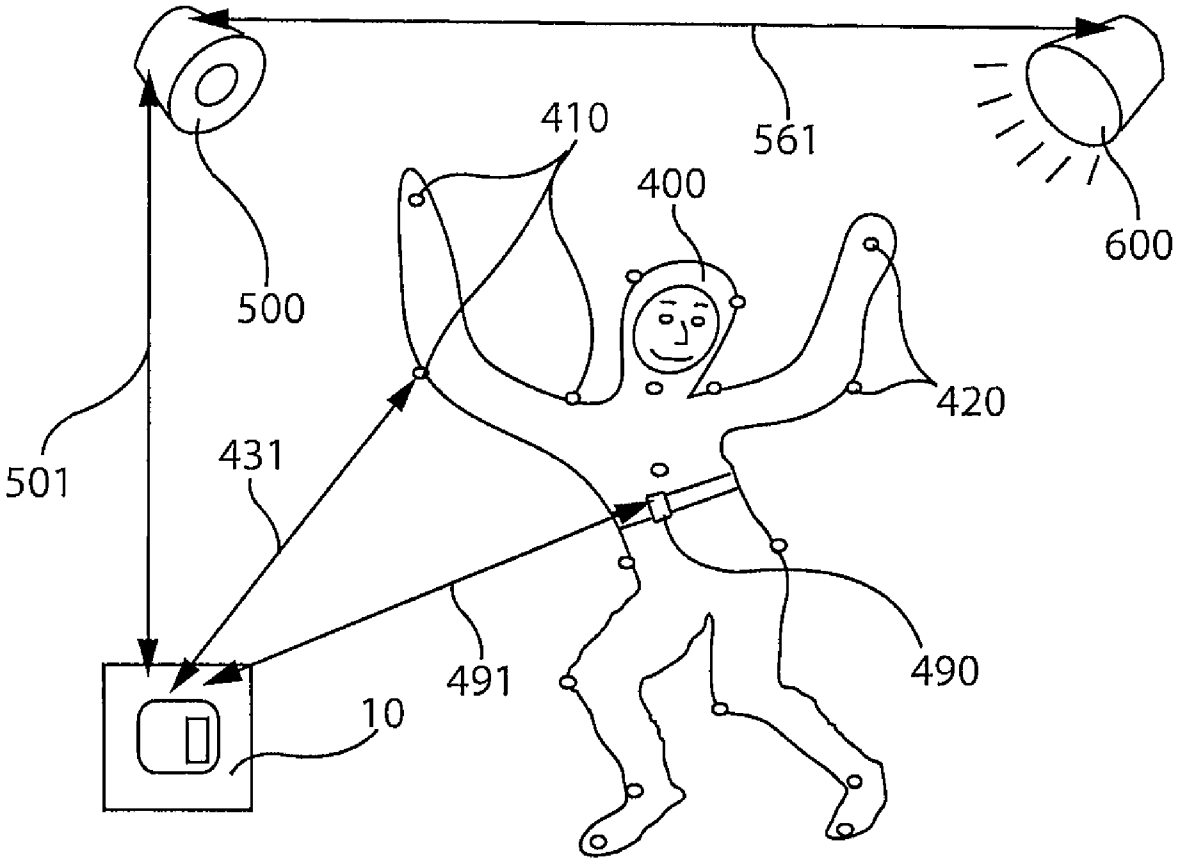
Publication Classification

(51) **Int. Cl.**
A63F 9/24 (2006.01)

(52) **U.S. Cl.** **463/7**; 463/42

(57) **ABSTRACT**

The invention disclosed is a massive multiplayer online game or event. An online server is connected to the world wide web. A first sensor to detect movement and orientation of a first user, wherein first data signals are communicated from said sensor to the online server; and a second sensor to detect movement and orientation of a second user, wherein data signals are communicated from said sensor to the online server are used. A machine readable program having protocol thereon to coordinate the first data signals and the second data signals in accordance with the protocol of the event.



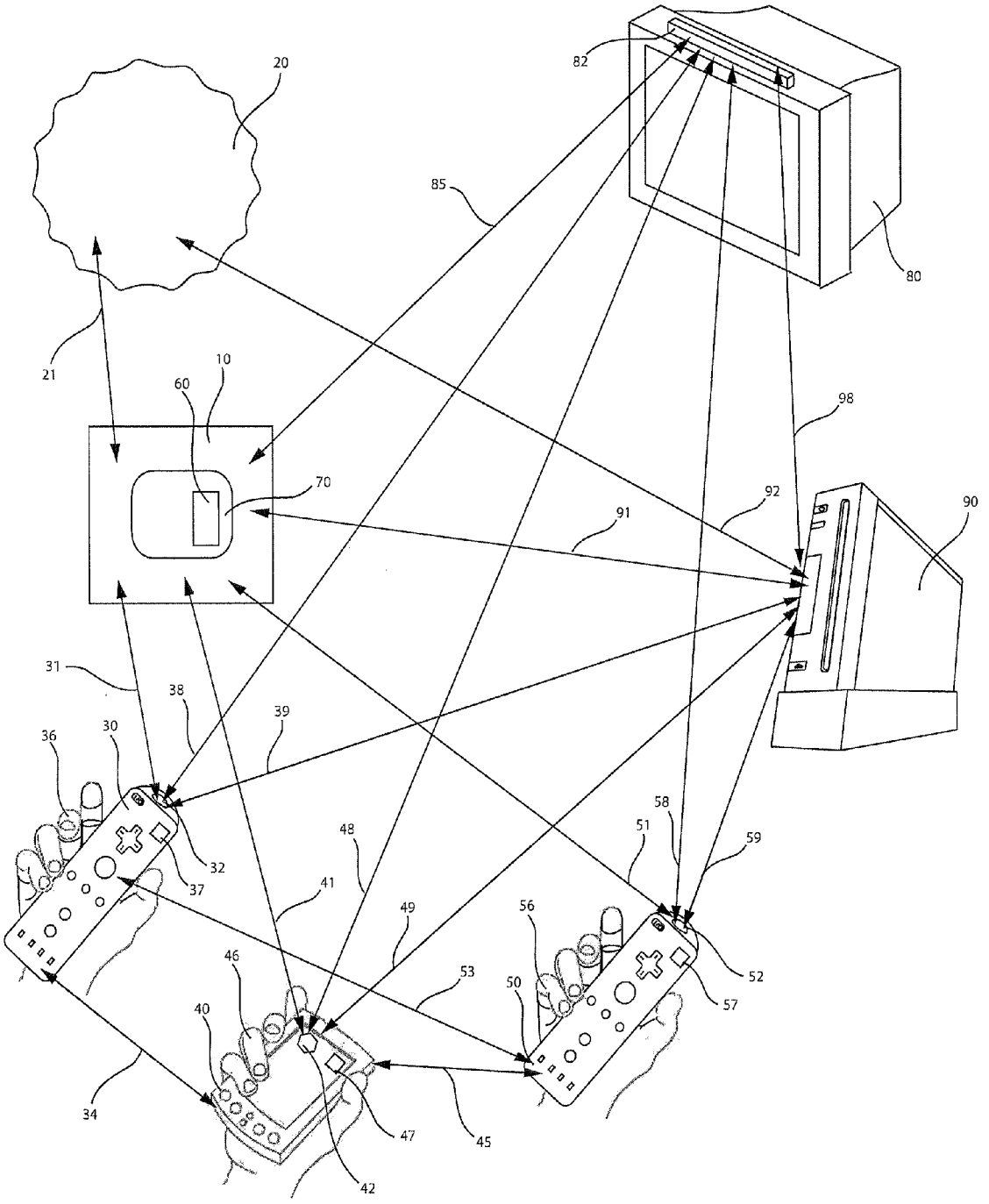

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FIG. 1

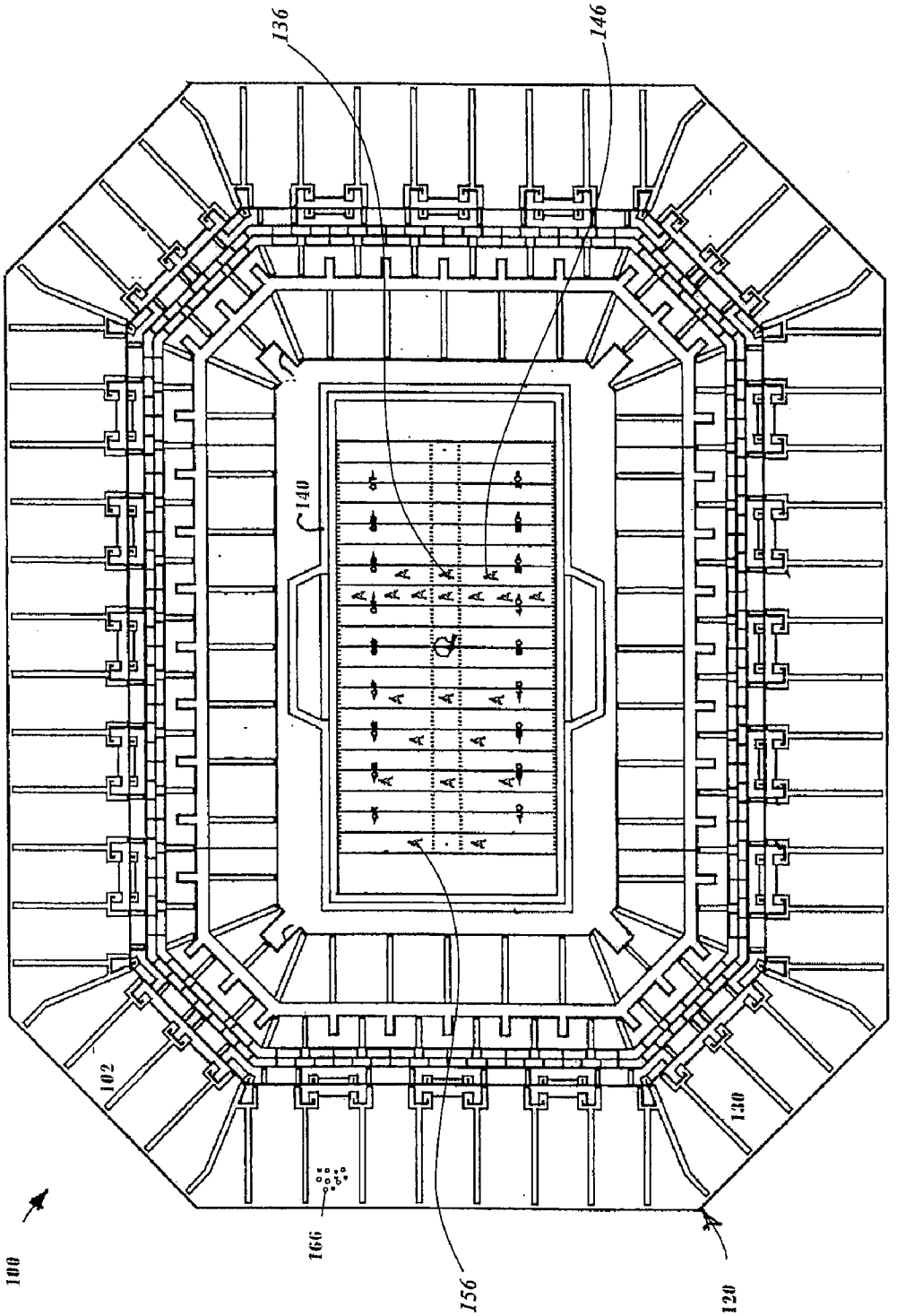

FIG. 2

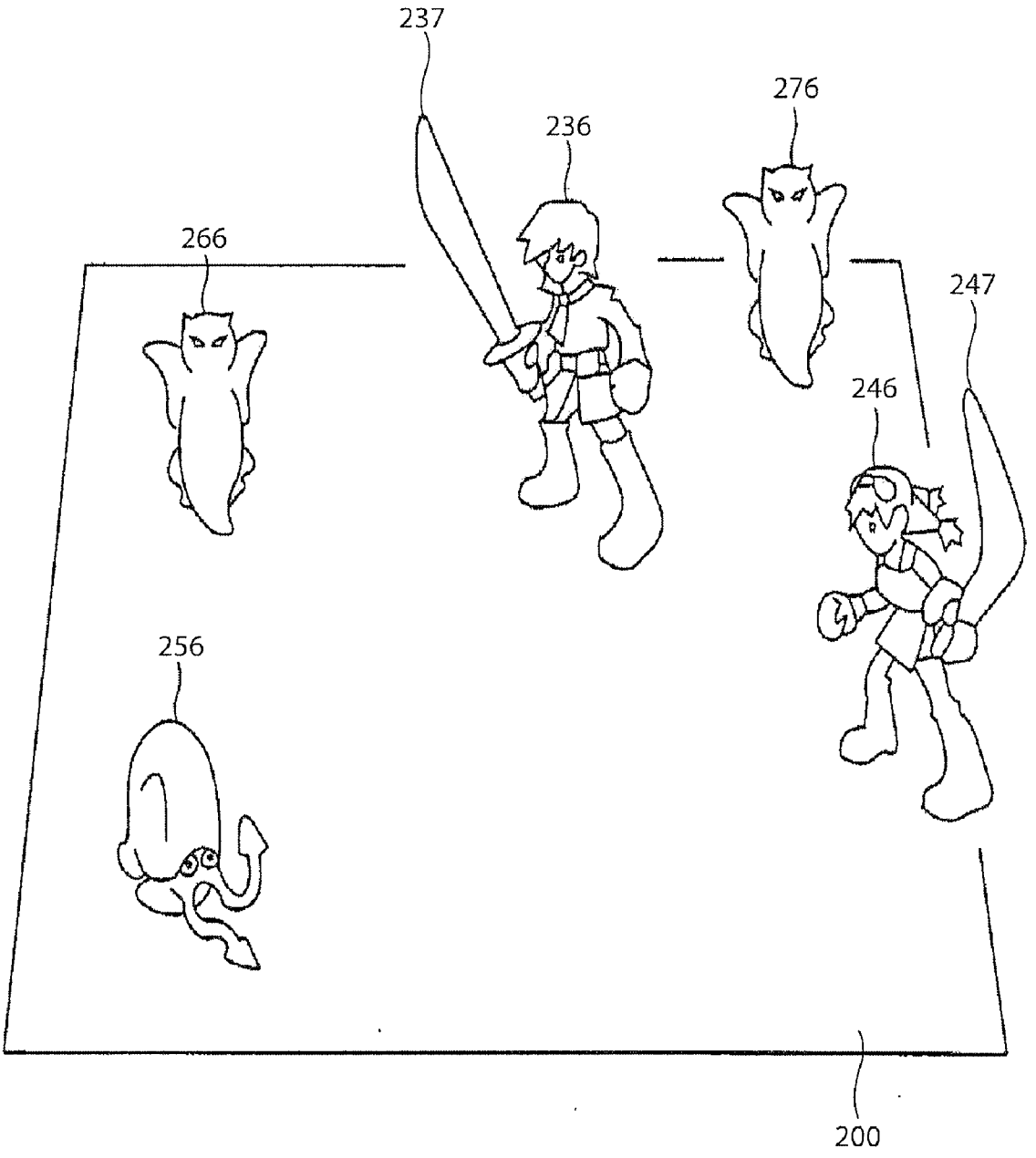

FIG. 3

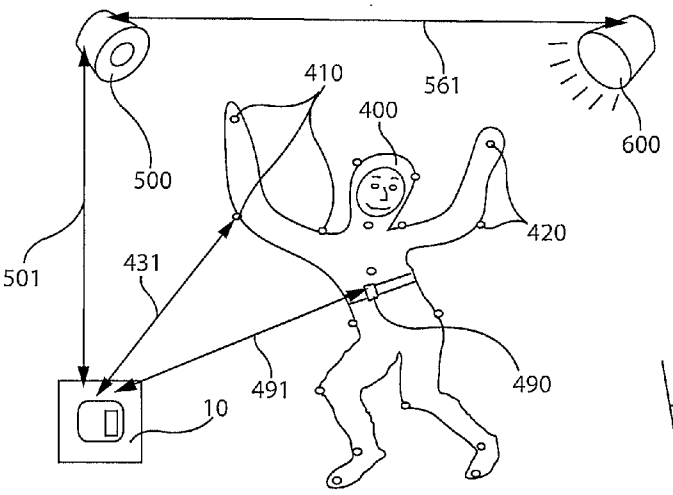

FIG. 4a

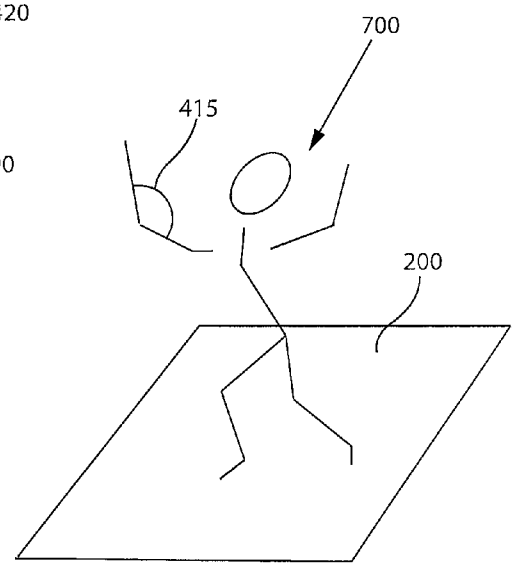

FIG. 4b

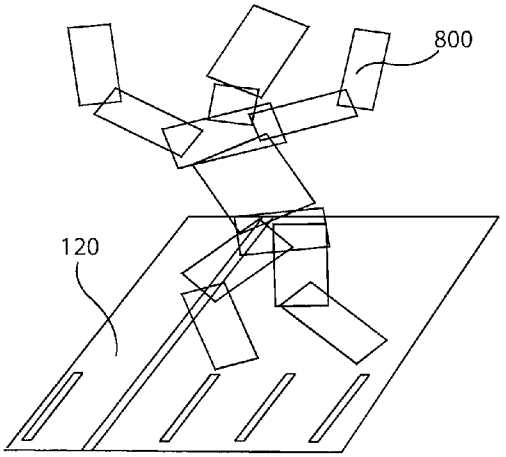

FIG. 4c

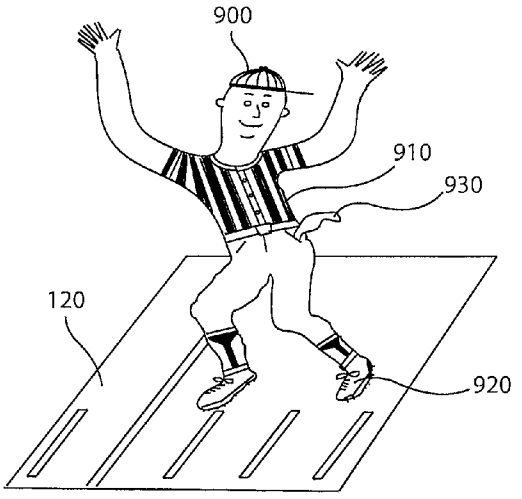

FIG. 4d

MASSIVE MULTIPLAYER EVENT USING PHYSICAL SKILLS

RELATED APPLICATION

[0001] The present invention is a continuation-in-part of co-pending U.S. patent application Ser. No. 11/610,969, filed Dec. 14, 2006 and entitled "Massive Multiplayer Online Sports Teams and Events" and is incorporated herein by reference in its entirety.

FIELD OF THE INVENTION

[0002] This invention relates to Massive Multiplayer online games.

BACKGROUND OF THE INVENTION

[0003] A Massively Multiplayer Online Game (MMOG or MMO) is a computer game which is capable of supporting hundreds or thousands of players simultaneously, and is played on the Internet. Typically, this type of game is played in a giant persistent world.

[0004] MMOs can enable players to compete with and against each other on a grand scale, and sometimes to interact meaningfully with people around the world. Most MMOs require players to invest large amounts of their time into the game. Many MMOs can be played for free on the internet such as: Runescape, Adventure Quest, Silkroad Online and Renaissance Kingdoms.

SUMMARY OF THE INVENTION

[0005] A first aspect of the invention includes a massive multiplayer online game or event comprising: an online server connected to the world wide web; a first remote having a first sensor to detect movement and orientation of a first user, wherein first data signals are communicated from said sensor to the online server; a second remote having a second sensor to detect movement and orientation of a second user, wherein data signals are communicated from said sensor to the online server; and a machine readable program with the rules of a game or event thereon to coordinate the first data signals and the second data signals in accordance with the game.

[0006] A second aspect of the invention includes a massive multiplayer online game or event comprising: connecting at least 100 users to an online server connected to the world wide web; providing a remote having a first sensor to detect movement and orientation of a first user, wherein first data signals are communicated from said sensor to the online server; providing a remote having a second sensor to detect movement and orientation of a second user, wherein data signals are communicated from said sensor to the online server; providing a rules of a game or event thereon to coordinate the first data signals and the second data signals in accordance with the rules of a game or event; and competing, using physical skills, between the first and second user to generate the first data signals and second data signals to arrive at an outcome based on the rules of the game or event.

[0007] A third aspect of the invention includes a massive multiplayer online event comprising: an online server connected to the world wide web; a first remote having a first sensor to detect movement and orientation of a first user, wherein first data signals are communicated from said sensor to the online server; a second remote having a second sensor to detect movement and orientation of a second user, wherein data signals are communicated from said sensor to the online server; and a machine readable program having combat protocol thereon to coordinate the first data signals and the second data signals in accordance with the combat protocol.

[0008] A fourth aspect of the invention includes a massive multiplayer online event comprising: connecting at least 100 users to an online server connected to the world wide web; providing a remote having a first sensor to detect movement and orientation of a first user, wherein first data signals are communicated from said sensor to the online server; providing a remote having a second sensor to detect movement and orientation of a second user, wherein data signals are communicated from said sensor to the online server; providing a combat protocol to coordinate the first data signals and the second data signals in accordance with the combat protocol; and competing, using physical skills, between the first and second user to generate the first data signals and second data signals to arrive at an outcome based on the combat protocol.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] Some of the embodiments of this invention will be described in detail, with reference to the following figures, wherein like designations denote like members, wherein:

[0010] FIG. **1** is a diagram of an embodiment of the present invention;

[0011] FIG. **2** is an embodiment of a view of a MMOSTE event;

[0012] FIG. **3** is an embodiment of a view of a MMOSTE battle event;

[0013] FIG. **4***a* depicts an embodiment of a motion capture system of an MMOSTE user;

[0014] FIG. **4***b* depicts an embodiment of a rendered anatomical reconstruction of an MMOSTE user;

[0015] FIG. **4***c* depicts an embodiment of a mapped 3-D model of an MMOSTE user; and,

[0016] FIG. **4***d* depicts and embodiment of a rendered MMOSTE avatar.

DETAILED DESCRIPTION OF THE INVENTION

[0017] Although certain embodiments of the present invention will be shown and described in detail, it should be understood that various changes and modifications may be made without departing from the scope of the appended claims. The scope of the present invention will in no way be limited to the number of constituting components, the materials thereof, the shapes thereof, the relative arrangement thereof, etc., and are disclosed simply as an example of an embodiment. The features and advantages of the present invention are illustrated in detail in the accompanying drawings, wherein like reference numerals refer to like elements throughout the drawings.

[0018] As a preface to the detailed description, it should be noted that, as used in this specification and the appended claims, the singular forms "a", "an" and "the" include plural referents, unless the context clearly dictates otherwise.

[0019] This invention is a MMOSTE (Massive Multiplayer Online Sports Teams and Events). The technology may involve a computer game which is capable of supporting hundreds or thousands of players simultaneously, and is played on the Internet using actual physical actions of the players as if actually competing in a sports tournament or event. It allows people from around the world to compete on sports teams or in individual sports tournaments or events. Individuals or teams may become superstars in a virtual world

in team sports and events in stadiums, arenas and venues such as boxing, lacrosse, downhill skiing, tennis, table tennis, track events, sports car driving, golf, karate, ultimate fighting, diving, ballet, motocross, soccer, basketball, baseball, wrestling, gladiator sports, air sports (hang-gliding, helicopter, airplane), space sports (space-walking, spaceship racing), American football, badminton, Canadian football, cricket, curling, cycling, road bicycle racing, mountain bike racing, BMX, motor-cycle street-bike racing, monster-truck racing, roller-blading, ice-skating, snowboarding, snow-mobile racing, field Hockey, thoroughbred Horse racing, skateboarding, ice hockey, lacrosse, box/indoor lacrosse, mixed martial arts, rugby league, shooting, archery, swimming, scuba-diving, boating, water-skiing, triathlon or any other sports team or event such as any Olympic sporting event.

[0020] Individuals may purchase virtual sports equipment using either virtual world dollars through tournaments or use real world dollars to upgrade their abilities in a quicker manner. Players will be classified in categories such as novice, amateurs and professionals based upon experience. Players can be sponsored by corporations that would like their name attached to the teams. Individuals could also purchase teams and property holdings such as stadiums, trademarks, etc. They can have team owners, agents free agency, player contracts (virtual or real). Players can take on characteristics of real life athletes based on win percentage, speed agility, etc. Players can download available playbooks, modify playbooks, or generate their own playbooks.

[0021] Players may access and acquire cheat functionalities allowing them to expand performance capabilities. For example, certain cheat functions may allow players to jump higher and longer, move faster, contact balls and other objects with greater accuracy, swing harder, etc. In some events, various players may compete against each other using cheat-mode functionality such that various actions of some players affected by cheat functionality may be countered by various actions of other players also affected by cheat functionality. In this sense, the cheat functionality may become a competitive advantage or disadvantage to be utilized by and against any or all competing players. However, various parameters and rules may be provided to proscribe any cheating capability by any player participating in various MMOSTE happenings. For instance, where a player is participating in an event having typical player activity and/or competing against other players having similar player activity, cheating may be prohibited so that player movement and functionality is directed purely under parameters related to common player remote control devices utilizing physical movement to direct online participation by players. Protocols may be provided to alert players when cheating functionality is or is attempting to be used. Moreover, parameters and rules may provide for discipline or sanctions against players who inappropriately use cheat functionality. Such discipline may include temporary or complete loss of play privileges, fines related to virtual or real dollars, or diminishment of player skill set. Player parameters and rules may be provided under contract by owners, other players, MMOSTE operators, governments, ISP's, team captains, managers, programmers, companies, sponsors, corporations or other entities or combinations of entities. Player agreements may be in the form of click-wrap agreements, shrink-wrap agreements, standard paper contracts or other binding agreements.

[0022] Teams may be comprised of multiple players, wherein the players may be under contract to play and participate in particular MMOSTE happenings. Accordingly, players may incur liability for failure to meet contractual terms. Player contracts may be comprised of agreements similar to contracts for real world athletes or event participants and may be tailored to operate according to and secure rights in MMOSTE participation. However, MMOSTE players may also play and participate in an online world under no contractual obligations. In addition, teams may be included in various leagues, such as professional leagues, minor leagues (farming players to professional teams), and amateurs leagues. Furthermore, the various leagues may be formed according to, or include divisions according to, geography, age, gender, nationality, sponsorship make-up, online availability, government censored category, financial capital, time logged in the world, time logged playing, or other like categories. Moreover, a single individual may identify with and control multiple online players. For instance, a person may be a have one online identity as a professional golfer, another online identity as an amateur soccer player, and yet another online identity as a novice motocross rider; there may be no limit to the number of players a single individual may control. Still further, various embodiments may provide for multiple individuals using physical movement to combine or aggregate the movement into the online actions of a single player. For example, one individual may control the lower portion (legs and feet) of a tennis player, while another individual may control the upper portions (torso, arms, hands, head) of the same tennis player; or one person may control the feet of an airplane pilot player, while another person could control hand movement of the same airplane pilot player. Hence, there may be a plurality of individuals providing real world physical movement to conglomerate the online actions of a single player.

[0023] One individual may control multiple players on a team or participating in an event. For example, the one individual may simultaneously wield multiple remotes (such as by holding one remote in a right hand and one remote in a left hand) to control multiple players at the same time. Moreover, one individual may control several players with a single remote by toggling between various players. For instance, the individual may control a quarterback by maneuvering the remote to control and direct a throw and pass of the virtual football. Then while the ball is in the air, the individual may toggle to a receiver and then use the remote to catch the thrown pass

[0024] Players that reach professional status may compete in tournaments that may have advertising sold at the tournament to companies. The companies may be virtual corporations with virtual holdings controlled by real world people or entities. Moreover, the corporations may be real world corporations that buy virtual advertising space. Individuals may pay virtual or real monies to enter portions of the MMOSTE world to be a spectator of a game or event played by other participants. Once virtual entrance is granted through payment, the spectator may have capability to view the game or event from a viewpoint, or from various other view points. Furthermore, the spectator may review event participation in instant replay. However, rules, protocol and parameters may be provided to prohibit a spectator from interfering with the athletic game or other event that is being viewed. Spectators may opt to be cheerleaders or sports broadcasters. In addition, individuals may pay using virtual or real dollars to enter the sporting event and wager as participants or spectators. For example, Player A may have a skill set of Professional and a

$1,000.00 in virtual dollars which may have a 100 to 1 exchange rate ($10.00 real dollars). He must pay $100.00 virtual dollars to enter a professional MMOSTE golf tournament ($1.00), but based on wagering, advertisers and sponsors the payout may be $5,000.00 for winning the tournament. Certain areas of the world may require payment to be a spectator which may also increase the winnings purse.

[0025] Current MMOs (Massive Multiplayer Onlines) can enable players to compete with and against each other on a grand scale, and sometimes to interact meaningfully with people around the world. The MMOSTE is different in that it requires a certain amount of skill in the physical world by using a remote similar to the Remote made and/or distributed by Nintendo®. The Remote may be able to sense movement and orientation. Accelerometers in the Remote may allow it to sense linear motion along three axes, as well as tilt. The controller features an optical sensor, allowing it to determine where it is pointing. In addition, the remote may comprise gyroscopes to help provide orientation and other ultra-sonic, sonic, and/or electromagnetic sensors facilitating three-dimensional position, direction, and movement. Various remote configurations and functionality may be provided. For example a remote may include microphones, speakers, lights, and movable components, enabling it to receive audio inputs, make noises, shine, glow, shake, rumble, vibrate, and/or have other user interactive functionality. Furthermore, a remote may be operable with multiple input devices. For instance, as steering wheel-type remote may simultaneously operate with a foot pedal or series of foot pedals inputs (such as a gas pedal, clutch pedal, and/or brake pedal) that may be communicatively linked to provide response similar to driving a vehicle. Moreover, a remote may operate with additional remotes or inputs devices such as rotatable structures (like bicycle pedals, or pulley systems) that may be utilized to generate inputs for simulating bike riding propulsive force, pulling of bow-strings, or swimming movements. Furthermore, a remote may be operable with floor sensors configured to detect when a person places a foot or other body part onto a floor portion having a sensor. Hence, such remote incorporations may be used to detect running, walking, hopping, dancing, jumping or other movements. Remotes may be configured to take on physical shape and appearance of real world objects. For example, a remote may be shaped like a gun, a sword, a tennis racquet, a snow-ski, a joy-stick, a steering wheel, a ball, a boxing glove, a baseball mitt, a scuba fin, a pen, a pencil, a paint brush, or any other shaped object having some real-world dimension.

[0026] Referring to FIG. **1** is shown an online server **10** attached to the world wide web **20**. Communications **21** between online server **10** and world wide web **20** may be had. A first remote **30**, second remote **40**, and third remote **50** having a first sensor **32**, a second sensor **42**, and a third sensor **52** are shown which are controlled by a first **36**, second **46** and third **56** user. The remotes **30**, **40**, **50** may have a first accelerometer **37**, second accelerometer **47** and third accelerometer **57** to detect movement and orientation. First **31/34/38/39**, second **41/45/48/49** and third **51/53/58/59** data signals may be transmitted from the remotes **30**, **40**, **50** through any known optical signal (such as LED—Light Emitting Diode), RF signal (such as Bluetooth, DECT (Digital Enhanced Cordless Telecommunications), DSRC (Dedicated Short Range Communications), HIPERLAN, HIPERMAN, IEEE 802.11, IRDA, RFID (Radio Frequency Identification), Ultra-wideband (UWB from WiMedia Alliance), WiFi, WiMAX, ZigBee, 3G, 3GPP, and Wireless USB), ultra-sonic signal, or any other operable electromagnetic signal. The rules of a game **60** and a machine readable program **70** may be stored on a local memory device or flash memory device or machine readable media such as magnetic disks, cards, tapes, and drums, punched cards and paper tapes, optical disks (DVD, CD), barcodes and magnetic ink characters or on a central or local server. The rules of a game **60** may be codified algorithmic elements, data charts, matrices, textual commands, time-based parameters, computer-language-based directives, or any other protocol that may provide for consistency and accuracy in generating, planning, conducting, monitoring, or viewing an online event.

[0027] The local server **90** may be a game console. The console **90** may be placed near a display **80** and may be oriented either horizontally or vertically. The front of the console **90** may feature a slot-loading media drive possibly illuminated by a light which may accept both 12 cm and 8 cm optical discs, for example from Nintendo's® prior console, the GameCube®. The Disc slot light may briefly illuminate when the console is turned on, when connected to a data service such as WiiConnect24 and when receiving new data, such as messages, and upon having selected "Bright" or "Dim" in the "Slot Illumination" settings for features such as WiiConnect24. The disc slot light may not stay illuminated during game play or when using other features of the console **90**. Two or more USB ports may located at the rear of the console **90**, and an SD card slot may hide behind a cover on the front of the console **90**. Also, to utilize an SD slot, a software update may be downloaded, so game saves might not be transferred to or from a system which has not been connected to the internet. A console **90** may communicate with an online server **10** and send signal data **91** via either wireless or wired communications channels. Moreover, a console **90** may be connected to the world wide web **20** and may transfer digital information **92** thereto and therefrom. The console **90** may also communicate information **98** with a display **80** via either wired or wireless communications channels. In addition, a console **90** may also communicate with a sensor bar **82**.

[0028] A display **80** such as a Liquid Crystal display (LCD), (LCD-based monitors can receive television and computer protocols (SVGA, DVI, PAL, SECAM, NTSC)), Cathode ray tube (CRT), Vector display, Plasma display, Surface-conduction electron-emitter display (SED), Video projector—implemented using LCD, CRT, Flat Panel, Rear projection, or other technologies such as Organic light-emitting diode (OLED) display may be provided. The display **80** may include, or be operable with a sensor bar **82**.

[0029] Similar to a light gun, the remotes **30**, **40**, **50** may have light sensors, or other sensors, **32**, **42**, **52** that may allow the remotes to detect where each remote is pointing in relation to a monitor or display unit **80**. Rather than using light from the screen itself, the remote **30**, **40**, **50** may also sense light from a sensor bar **82**, allowing consistent usage regardless of the type or size of display unit or television **80**. The sensor bar **82** may be about 20 cm in length and may feature ten infrared LEDs, with five LEDs being arranged at each end of the bar **82**. The bar **82** may be placed above or below the monitor **80**, and may optimally be centered. It is not necessary to point a remote directly at the sensor bar **82**, but pointing significantly away from the sensor bar **82** may disrupt position-sensing ability possibly due to the limited viewing angle of remote **30**, **40**, **50**. However, systems may be provided wherein multiple

sensor bars **82** may be positioned in multiple locations around a room or area relative to a display **80** and may facilitate remote sensing wherein the remote **30**, **40**, **50** may be operably pointed in any direction. Such an orientation may be amenable to event views displayed in 3-D by a virtual helmet worn by a user. The use of a sensor bar **82** may allow a remote **30**, **40**, **50** to be used as an accurate pointing device up to 5 meters (approx. 16 ft) away from the bar. Sensor information may be communicated between a remote **30**, **40**, **50** in the form of signal data **38**, **48**, **58**. This sensor information may be available in addition to, and supplemented by, a 3-axis acceleration sensor(s) in the remote **30**, **40**, **50**, providing six degrees of freedom in total. Rotation (roll) of the remote **30**, **40**, **50** around its major axis may also sensed by these accelerometers and may be used as tilt sensors relative to the constant force of gravity.

[0030] The remote also may feature an expansion port at the bottom which allows various functional attachments to be added to the controller. Additionally, the remote **30**, **40**, **50** may communicate with the console **90**. The communications may be signal data **39**, **49**, **59** and may be transmitted through wireless protocol or via wires. The remote **30**, **40**, **50** may be in communication with other remotes **30**, **40**, **50** sending signal data **34**, **45**, **53** between remotes via either wireless transmissions or wired transmissions.

[0031] A Nunchuk controller peripheral, such as a controller made by Nintendo® may be operable with or attached to the main controller. The Nunchuk may connect to the Remote via a wire such as long cord or may be in wireless communication with the remote, and its appearance while attached may resemble the nunchaku. It may feature an analog stick similar to the one found on the Nintendo® GameCube® controller and may also include two or more trigger buttons. It may work in tandem with the main controller **30**, **40** **50** in many games. Like the Remote **30**, **40**, **50**, the Nunchuk controller may also provide accelerometer(s) for three axis motion-sensing and tiltling, but may not include a speaker or rumbling features.

[0032] A Steering wheel controller may be used for certain games, such as Monster 4×4 World Circuit and GT Pro Series and other driving and racing games. The peripheral steering wheel, such as a steering wheel controller created by Thrustmaster, may be controlled by tilting the wheel forwards and backwards to shift gears. Other games may make use of this peripheral as well when using the same controls.

[0033] The position and motion tracking of the remote **30**, **40**, **50** may allow a user **36**, **46**, **56** to mimic actual game actions, such as swinging a tennis racket, driving a car or shooting a basket, instead of simply pushing buttons. Each sensor bar **82** and display unit **80** may be configured to communicate with a plurality of remotes **30**, **40**, **50** and/or online servers **10**.

[0034] An embodiment of a Massive Multiplayer Online Sports Teams and/or Event may include detail as in FIG. **1**, wherein numerated components are identified as follows:

[0035] **10**=online server

[0036] **20**=world wide web

[0037] **21**=communications between online server and world wide web

[0038] **30**=first remote

[0039] **31**=first data signals

[0040] **32**=first sensor

[0041] **34**=signal data communications between first remote and second remote

[0042] **36**=first user

[0043] **37**=first accelerometer

[0044] **38**=signal data communications between first remote and display

[0045] **39**=signal data communications between first remote and console

[0046] **40**=second remote

[0047] **41**=second data signals

[0048] **42**=second sensor

[0049] **44**=second accelerometer

[0050] **46**=second user

[0051] **45**=signal data communications between second remote and third remote

[0052] **48**=signal data communications between second remote and display

[0053] **49**=signal data communications between second remote and console

[0054] **50**=third remote

[0055] **51**=third data signals

[0056] **52**=third sensor

[0057] **53**=signal data communications between third remote and first remote

[0058] **56**=third user

[0059] **57**=third accelerometer

[0060] **58**=signal data communications between third remote and display

[0061] **59**=signal data communications between third remote and console

[0062] **60**=rules of game or event

[0063] **70**=computer readable program

[0064] **80**=display

[0065] **82**=sensor bar

[0066] **85**=communications between display unit and online server

[0067] **90**=game console/local server

[0068] **91**=communications between console and online server

[0069] **92**=communications between console and world wide web

[0070] **98**=communications between console and display

[0071] Embodiments of the present invention may include viewable images of an MMOSTE. For example, FIG. **2** depicts a view of an MMOSTE activity comprising a football game **100**. The football game **100** may be played at a virtual stadium **120** located in an online virtual world. The stadium may include a sports field **140** and various seating sections **102**, **130**. During the football game **100** multiple users may maneuver remotes (such as remotes **30**, **40**, **50** of FIG. **1**) to control players of various virtual teams. The players may be avatars or user controlled online embodiments of virtual athletes capable of participating in the football game **100**. For instance, one user (actually located in Singapore) may utilize a remote **30** (see FIG. **1**) to control a player **136** in the football game **100**, while another user (actually located in France) may utilize another remote **40** (see also FIG. **1**) to control another player, while yet a still different user (actually located in New York) may utilize a remote **50** (FIG. **1**) to control a player **156**, wherein the player **156** may be on an opposite team and competing against the team for which players **136** and **146** are playing. In this sense, users from anywhere in the world may combine together as a team of online connected players and compete in a single virtual location, such as the football stadium **120** in a football game **100** against another team of online connected players.

[0072] Spectators **160**, or other online participants in the MMOSTE, may also enter the stadium **120** and may view the game **100**. The view of the game may be provided from a perspective corresponding to a spectator's virtual location in the virtual stadium **120**, or spectators may have capability to view the game from one or more perspective views. For example, the view depicted in FIG. **1** may be a view provided by a virtual blimp operable with the MMOSTE. Spectators **160** and/or players **136**, **146**, **156** may need special permissions to enter the virtual stadium area **120** of the MMOSTE and thereby view or participate in the football game **100**. The special permissions may be granted according to governing protocol related to whether or not the users controlling the spectators **160** or players **136**, **146**, **156** have paid virtual or real monies to grant access therein. However, entrance into the stadium **120** may be given free access to all MMOSTE participants.

[0073] The players **136**, **146**, **156**, of the football game **100** may be novice, amateur, or professional MMOSTE user athletes. To play the game **100**, users control the players **136**, **146**, **156**, through physical three-dimensional movement of remotes, such as remotes **30**, **40**, **50** depicted in FIG. **1**. Certain users may develop acute proficiency in maneuvering the remotes to control players to throw, jump, pass, block, tackle, run, spin, juke and the like. Accordingly, highly proficient users may be accorded professional status, and be involved in online teams, divisions, leagues in highly competitive and very exciting/entertaining MMOSTE activities. As such, a stadium **120** may be constructed with modular parameters allow dozens to millions of spectators and/or player participants to view the game **100**. Moreover, various advertising means, such as virtual online signs, billboards, posters, seat covers, flyers, streaming audio, streaming video, banners, etc. may be available to MMOSTE participants. Furthermore, pop-up ads may be provided during the game. Passive adverting, such as computer generated participants with virtual clothing bearing trade names and or product names may also be available in MMOSTE activities. Still further, the game may include participant bands, cheerleaders, and half-time performances available for participant viewing and interaction.

[0074] Players **136**, **146**, **156** and/or spectators **160** may communicate with each other via chat functionality or via online A/V signal distribution. Hence, users may be able to see real life images of each other and hear each other as they may communicate through online means as related to parameters of the MMOSTE.

[0075] The game **100** may be governed by rules, such as rules **60** (see FIG. **1**). The rules may closely mimic rules of real life games. For example, standard football rules may be applied to play of the football game **100** by the players **136**, **146**, **156**. Furthermore, the game **100** may be officiated by computer program directed referees, or by real life users participating in the MMOSTE as officials. The officials may also use remotes, such as remotes **30**, **40**, **50**, to throw flags and or otherwise maneuver the online embodiment of the referee. Rules **60**, may include parameters corresponding to life-mimicking computer programmable attributes. For example, the game may include protocol to compensate for gravity, lighting (sunny, night-time, foggy) weather conditions (rain, snow, etc.) field conditions (grass turf, artificial turf), crowd noise (either computer generated, or generated in response to inputs provided by spectator **160** participants), and or other conditions typical to a real football game. The rules **60** may be executed by a single online server **10** or a bank or plurality of operatively linked servers, mainframe computers, personal computers and/or other computer program readable devices.

[0076] A console **90** may be portable having wireless communication capability. A display may also be portable and wireless. It is conceivable that users controlling players and/or spectators etc. may utilize portable devices to link to the world wide web and participate in MMOSTE activities using remotes, such as remotes **30**, **40**, **50** that may be operable with respect to the portable devices.

[0077] MMOSTE activities may comprise fantasy sports. For example, certain MMOSTE participants may control players, such as players **136**, **146**, **156**, wherein the users may be highly proficient players and may be accorded professional status, and be involved in online virtual teams, divisions, leagues in highly competitive and very exciting/entertaining MMOSTE activities. A massive multiplayer online fantasy sports event may comprise a fantasy sports player, wherein the player is an online participant on a virtual team in a massive multiplayer online sporting event. The online virtual sports players may accumulate game play statistics over time as they compete in various MMOSTE activities. Fantasy sport (also known as rotisserie, roto, or fairy-tale sport; or owner simulation) may comprise a game where fantasy sports owners (including other MMOSTE participants controlled by real-world users) build a fantasy team that competes against other MMOSTE fantasy sports owners based on the statistics generated by individual players or teams of a professional MMOSTE sport.

[0078] An MMOSTE virtual sport may include boxing, lacrosse, downhill skiing, tennis, table tennis, track events, sports car driving, golf, karate, ultimate fighting, diving, ballet, motocross, soccer, basketball, baseball, wrestling, gladiator sports, air sports (hang-gliding, helicopter, airplane), space sports (space-walking, spaceship racing), American football, badminton, Canadian football, cricket, curling, cycling, road bicycle racing, mountain bike racing, BMX, motor-cycle street-bike racing, monster-truck racing, roller-blading, ice-skating, snowboarding, snow-mobile racing, field Hockey, thoroughbred Horse racing, skateboarding, ice hockey, lacrosse, box/indoor lacrosse, mixed martial arts, rugby league, shooting, archery, swimming, scuba-diving, boating, water-skiing, triathlon or any other sports team or event such as any Olympic sporting event, and may also include battle events involving combat between online participants.

[0079] An MMOSTE fantasy sports embodiment may convert statistical performance by online participants into points that may compiled and totaled according to a roster selected by a MMOSTE participant manager that makes up a fantasy team. Point systems may be simple enough to be manually calculated by an MMOSTE participant "league commissioner." More complex variants may utilize computer modeling of MMOSTE sports and events based on statistical input generated by professional MMOSTE sports.

[0080] In fantasy sports pertaining to MMOSTE activities there may be the ability to trade, cut, and resign fantasy players, like a real sports owner. Accordingly, fantasy owners or managers may deal in real or virtual monies with other fantasy owners or managers, with computer managed systems, and/or with MMOSTE players/participants to dynamically maintain a fantasy sports roster. Fantasy sports tournaments involving prizes and awards in virtual properties/items/

monies or real properties/items/monies may be provided for MMOSTE fantasy leagues or groups. Furthermore MMOSTE fantasy sports may be associated with trade associations and writers associations.

[0081] MMOSTE events may comprise combat, battles or conflicts between online participants. The MMOSTE will have a combat protocol which is software program having algorithms and/or rules for determining how participants will interact when engaged in a combat, battle or conflict. For example, online participants may comprise members of a platoon or other war party engaged in battle with other online participants being members of an opposing platoon or war party. The warring online participants may utilize remotes (such as remotes **30**, **40**, **50** of FIG. **1**) to control virtual actions of soldiers or warriors. For instance, a user may wield a remote **30/40/50** in a manner like a sword enabling virtual sword-fighting engagement with another online participant. Moreover, a remote may be maneuvered in a manner similar to the actual handling of a firearm having a rifled or smooth-barrel, such as a gun, bazooka, RPG launcher, bow and arrow, dagger (to be thrown or wielded), hand-grenade, laser-cannon, future weapons which make use of futuristic high tech weapon systems and advanced materials, incendiary weapons which rely on combustible materials and an ignition mechanism to cause damage by fire, such as a flame-thrower, non-lethal weapons that are used to attack and subdue humans, but are designed to minimize the risk of killing the target, such as a TASAR, magnetic weapons that uses magnetic fields to accelerate and propel projectiles, or to focus charged particle beams, Melee weapons that operate as physical extensions of the user's body and directly impact their target, missiles or rockets which are guided to their target after launch, nuclear weapons that use radioactive materials to create nuclear fission and/or nuclear fusion detonations above a target ("air-burst") or at ground-level, primitive weapons which make no use of technological or industrial elements, instead being purely constructed of easily obtainable natural materials, such as rocks or sticks, ranged weapons cause a projectile to leave the user and (ideally) strike a target afterwards, suicide weapons are typically explosive in nature and exploit the willingness of their operator to not survive the attack to reach their target, anti-aircraft weapons target enemy aircraft, helicopters, missiles and any other aerial vehicles in flight, anti-fortification weapons which are designed to target enemy installations, including bunkers and fortifications, bunker buster bomb which is designed to travel almost 10 metres underground before detonating, toppling underground installations, anti-personnel weapons designed to attack people, either individually or in numbers. anti-radiation weapons target enemy sources of electronic radiation, particularly radar emitters, anti-ship weapons target enemy ships and vessels on water, anti-submarine weapons target enemy submarines and other underwater targets, anti-tank weapons are primarily used to defeat armored targets, but may be targeted against other less well armored targets. Area denial weapons are designed to target territory, making it unsafe or unsuitable for enemy use or travel, hunting weapons are designed particularly for use against animals or alien creatures for hunting purposes, infantry support weapons are designed to attack various threats to infantry units, supporting the infantry's operations, including heavy machine guns, mortars and pinpoint airstrikes ordered by the infantry, often to strike heavily defended positions, such as enemy camps or extensively powerful machine-gun nests, or other weapon to direct attack upon another online participant or virtual object such as a virtual vehicle (be it an automobile, boat, helicopter, airplane, hover-craft, space-craft) or a virtual structure (such as a building, a house, a bunker, a wall, a door, a window, a tree/bush/shrub, and/or a fort, etc.). MMOSTE battle events may take place in any environment such as in dry hot desert conditions, in freezing Antarctic conditions, in jungles, in an urban environment, at night, during the day, in outer space, on differing planets, underwater, in high wind/snow/rain/hail/sleet, in the past, in the present time, or in the future.

[0082] MMOSTE battle events may involve online participants directed by users maneuvering controlling remotes **30/40/50** and may also involve simulated, or computer-directed online participants. For instance, a battle involving actual real users riding as Calvary Officers on virtual horses and utilizing remotes **30/40/50** to wield weapons and fight opposing online participants and also to direct other online participants of their same regiment during the course of a battle by pointing directions of movement, may also include infantry participants directed by computer protocol and responsive to the directions provided by the users controlling the Calvary Officers. Furthermore, a battle vent may not involve recognizable armies or warring groups. Rather, participants may be pitted against each other in a renegade free-for-all, wherein a strategy for participation is kill-or-be-killed and/or form alliances. Still further, an MMOSTE conflict may provide multiple online participants each directed by users maneuvering a remote **30/40/50**, wherein the user-directed online participants engage and fight online participants directed by computer protocol.

[0083] Implements such as visual or audible indicators may be provided to identify whether an online participant is controlled buy a real-life user, or is computer controlled. Computer-directed participants may have many different offshoots. However, computer-directed participants can only interact with user-directed participants through scripted events or artificial intelligence (AI), or as guided by governing protocol pertinent to the MMOSTE.

[0084] There may be many types of computer-directed participants. There may be friendly computer-directed participants, who may be accordingly identified, and hostile computer-directed participants, who also may be accordingly identified. Moreover, disposition (friendly/hostile/neutral) may not be identified to make the event more intriguing. A neutral computer-directed participant may operate under protocol such that the participant will only attack if provoked.

[0085] Protocol also may be provided such that the interaction of computer-directed participants with real-life user directed participants is affected by a reputation the real-life user participants. For example, certain computer-directed participants may have more items available for use, borrowing, or purchase if a real-live user-directed participant has a higher reputation with them or their faction. Furthermore, standing with a faction may be increased or decreased by killing certain computer-directed participants or handing in items to certain computer-directed participants.

[0086] Computer-directed participants in MMOSTE environment such as major and minor cities can buy and sell merchandise, train class and profession skills, give quests, and provide a large percent of services that may be needed in the game. While some computer-directed participants may merely offer advice or further the story, other computer-directed participants may patrol around set paths to keep

cities defended against attacking user-directed online enemy participants or hostile computer-directed participants that may attempt to invade a city.

[0087] With continued reference to FIGS. **1-2** and further reference to FIG. **3**, as pertaining to embodiments of an MMOSTE battle event, online participants, such as players **236** and **246**, may utilize a remote, such as remote **30/40/50**, to control a character avatar within a persistent gameworld **200** or expansive battle environment. During the event player **236/246** participants may explore the landscape, fight monsters or other adversaries, and may also perform quests on behalf of computer-controlled characters or in alliance with other online participants controlled by real-life users. The player **236/246** participants may fight both computer protocol directed adversaries, such as adversaries **266** and/or **276**. Moreover, the player **236/246** participants may engage adversaries, such as adversary **256**, that are controlled by other MMOSTE users. For instance, an MMOSTE participant, such as player **236**, may utilize a remote, such as remote **30/40/50**, to wield a virtual sword **237** to engage and defeat a monster, such as adversary **266**. While, another MMOSTE participant, such as player **246**, may utilize a remote, such as remote **30/40/50**, to wield a virtual sword **247** to engage and defeat a monster, such as adversary **266** directed by another MMOSTE participant. Then, one or both of the players **236/246** may engage the adversary **276**. Combat protocol may govern how MMOSTE participants virtually engage and fight each other. An MMOSTE battle event may reward success or victory through money, items, ability increases, health benefits, and/or experience, which in turn may allow online participants to improve in skill and power. In addition, online participants may opt to take part in battles against other players, including both duels and fights against player characters allied with an enemy faction. Certain participants may rise in ranking to become leaders such as lieutenants, captains, generals, etc.

[0088] MMOSTE battle events, during the early and middle stages of gameplay, may be completed without the help of other online participants, particularly if the user controlling the participant is at a higher level than what the battle event suggests. Other portions of the battle environment, such as dungeons, field hospitals, battleships, control-ops bunkers, space-station landing ports, etc. may be designed to require other participants to work together for success. For example, dungeons, urban building flushes, or helicopter resues, may be designed for battle participant groups ranging from two to five players. However, other "raids" or conflicts may require up to 40 participants. It is conceivable that hundreds, thousands, or even millions of participants may be involved in a single battle event. The highest level, most complex dungeons, and/or other battle engagements may be designed to take online warring factions months of playtime and many attempts before they succeed. In particular, the game environments designed specifically for high-level participants may be much more raid-dependent (and time-consuming) than the relatively more casual experience of advancing one's participant through lower-level engagement areas.

[0089] To maximize massive online participation, MMOSTE sporting events and battle events may utilize server clusters, which may support various virtual environments, sometimes known as 'realms', to allow online participants to choose their preferred gameplay type, and to allow the MMOSTE game to support as many subscribers as possible. By way of example, users may have up to ten characters per realm and up to a maximum of fifty characters per account. There may be various generalized MMOSTE environments. For instance, there may be four battle event environments wherein players may control participants using remotes, such as remotes **30/40/50**: participant versus environment, participant versus participant, roleplaying participant versus environment) and roleplaying participant versus participant. The latter two may enforce a set of roleplaying rules based on computer operable governing protocol—participants can be penalized for not roleplaying.

[0090] Online participants may be tied to specific user accounts. User accounts can be used on all servers, battle environments, or realms. Moreover, online participants can be moved between servers in the same region (e.g., from one EU server to another) for a fee. Users can create up to a certain amount of participants (such as 10 participants) per realm or MMOSTE environment with a maximum total of participants (such as 50). Predetermined teams, nations, warring factions, clubs, gangs, cultures, races, classes, civilizations, or groups may be provided with respect to all or various MMOSTE server environments. For example, users may create online participants which serve as their avatars in an online world relative to Axis or Allied powers during World War II. When creating an MMOSTE online participant, the user may utilize a remote, such as remotes **30/40/50**, to choose from multiple different teams, nations, warring factions, clubs, gangs, cultures, races, classes, civilizations, or groups.

[0091] In addition to the teams, nations, warring factions, clubs, gangs, cultures, races, classes, civilizations, or groups, an online participant may choose one or more professions. The participants may choose to pair two related professions, thus allowing the participants to gather required materials, weapons, monies, lands, knowledge, and allegiances for the betterment of skill and extension of survivability. For instance, paired skills may include: mining and blacksmithing; piloting and aerospace engineering; skinning and leatherworking; herbalism and alchemy; nuclear engineering and submarining; and, mountaineering, and paramedic work.

[0092] Online participants can acquire various items in the MMOSTE event. Items can vary from resources such as herbs, raw ores, nuclear reactors, aircraft engines, maps, decoding keys, vehicles, space port entry keys, and other items to be retrieved for quests, raids or battles. Online participants can also equip different weapons and armor, either to customize their character avatar or improve abilities such as better attacks or defense skills. Items may classified by the color, sound, iconic designation or other classification means.

[0093] Players of higher skill levels can obtain mounts of varying appearances reaction times and virtual speeds depending on associated teams, nations, warring factions, clubs, gangs, cultures, races, classes, civilizations, or groups, and on participant history related to previous engagement. Moreover, higher skill levels may be purchased with either real or virtual moneys.

[0094] With continued reference to FIGS. **1-3** and further reference to FIGS. **4***a-d*, MMOSTE embodiments may comprise user input via motion capture or motion tracking devices and systems that may provide input relative to a person's body in 3-D space. For example, a first user **400** who desires to control an online participant, or avatar, in a MMOSTE activity may wear markers **410**, which may be located near joints in the first user's **400** body to help identify the user's 3-D motion, inter alia, by the positions or angles between the markers **410**. Acoustic, inertial, LED, magnetic or reflective

markers, or combinations of any of these, may be dynamically tracked, optimally at least two times the rate of the desired motion, to submillimeter positions. Furthermore, motion capture computer software may record the positions, angles, velocities, accelerations and impulses, providing an accurate digital representation of the user's **400** motion. Motion capture or motion tracking may involve the positioning of static sensors **500** in 3-D space around the user **400** to sense the user's **400** movements, wherein the sensors **400** may dynamically detect the moving position of the markers **410** corresponding to the first user **400**. A second user concurrently involved in an MMOSTE event may be a user **46**, as in FIG. **1**, or another user whose movement and orientation is detected by a motion capture device or system. Accordingly, the second user may use a remote **40**, wherein second data signals applicable to that remote **40** are communicated from a sensor **42** to an online server **10**.

[0095] Still further, motion capture or motion tracking devices and systems may be provided wherein the user **400** may wear a body suit **450** or other movement adaptive apparatus having sensors **420**, in addition or as opposed to markers **410**, located thereon, which sensors **420** may sense sonic and/or electromagnetic emissions provided by signal generators **600** positioned in 3-D space around the user **400**. Hence the combined sensors **420** on the body suit **450** or other movement adaptive apparatus may facilitate a determination of the user's **400** movement and spatial orientation, through a conglomeration of sensor **420** data. For example, a body suit **450** may be fitted with sensors **420**, having some similarity to sensors **32**, **42**, and **52** (see FIG. **1**), wherein the body suit **450** fitted sensors **420** may detect emissions from emitters or signal generators **600**, such as sensor bars **82** (see also FIG. **1**). The fitted sensors **420** may allow the entire body suit **450** or other movement adaptive apparatus, or portions thereof, to operate similar to remotes **30**/**40**/**50** (see further FIG. **1**) to detect where each sensor **420**, individually and in relation to the other sensors, is dynamically pointing in relation to various emitters or signal generators **600**, such as sensor bars **82**, positioned in 3-D space around the moving first user **400**. The detection of dynamic orientation may help facilitate the triangulation of the sensors **420** between positioned emitters **600** and thereby render anatomical reconstruction **700** of the user's **400** movement (see FIG. **4***b*) in a virtual 3-D environment, such as an MMOSTE environment **200** (see FIG. **3**). Moreover, triangulation may be facilitated by data derived by sensors **500** as detected from markers **420**.

[0096] Motion capture or motion tracking devices and/or systems operable with MMOSTE embodiments may comprise combinations of sensors **420** and markers **410** being locatable on a user **400** and operable to dynamically sense or reflect/emanate sonic or electromagnet emissions. For example, a body suit **450** may be fitted with both markers **410** and sensors **420**. The markers **410** on the body suit **450** may be detected by static sensors **500** in 3-D space around the user. Moreover, the fitted sensors **420** on the body suit **450** may concurrently sense sonic or electromagnetic emissions provided by signal generators **600** positioned in 3-D space around the user **400**. Furthermore, multiple users may wear body suits or other movement adaptive apparatus's and may move within a space corresponding to the same 3-D arrangement substantially relative to the multiple users. For instance, two or more users, such as a first user **400** and a second user, may utilize motion capture within a designated space to control online participants in MMOSTE activities.

[0097] As movement and orientation of the first user **400** is detected by a sensor **500** or sensors **420**, corresponding data may be communicated from the sensors **500** and/or **420** to an online server **10**. A first static sensor **500** may communicate data signals to the online server via hard wires or through wireless communications, such as communication **501**. The first static sensor **500** may communicate **561** to an emitter or signal generator **600**. In addition, sensors **420** may communicate data signals to the online server **10** through wireless communications, such as communication **421**. Furthermore, sensors **420** may communicate detection data to a processor **490** equipped for wireless data transmission. The processor **490** may be attached or fitted to the first user **400** and may transmit sensor(s) **420** data to the online server **10**, via communication transmissions **491**, thereby communicating the signal data from the sensor(s) **420** to the online server **10**.

[0098] Various means may be provided to detect user movement relative to motion capture and/or motion tracking for MMOSTE embodiments. For example, optical systems may triangulate the 3D position of a marker **410** between one or more cameras, such as sensors **500**, calibrated to provide overlapping projections. Tracking a large number of markers **410** or multiple users or expanding the capture area may be accomplished by the addition of more cameras in the 3-D space surrounding the users. Capturing/tracking systems may produce data with 3 degrees of freedom for each marker **410**, and rotational information may be inferred from the relative orientation of three or more markers **410**; for instance shoulder, elbow and wrist markers may provide the angle **415** of a user's **400** elbow. High resolution linear detectors may be provided to derive one dimensional positions, through the use of more sensors and more computations and yielding higher resolutions (sub millimeter down to 10 micrometers time averaged) and speeds than possible using area arrays.

[0099] Passive optical motion capture/tracking systems may use reflective markers **410** illuminated from strobes on emitters, such as a signal generator **600**, placed in 3-D space around the user **400** and may triangulate each marker **410** from its relative location on a 2D map. Data may be cleaned up with the aid of kinematic constraints and predictive gap filling algorithms. Passive systems typically use sensors **500** where a camera captures an image of a scene, reduces it to bright spots and finds the centroid. Sophisticated constraint software may be provided to reduce problems from marker **410** swapping since all markers may appear identical. Unlike active marker systems and magnetic systems, passive systems may not require the user **400** to wear wires or electronic equipment. Passive markers **410** may be spheres or hemispheres made of plastic or foam 25 to 3 mm in diameter with special retroreflective tape. User may need to be careful not to touch the markers **410** or get them dirty as this may change the reflective properties and cause errors.

[0100] Active optical systems are similar to passive optical, but rather than reflecting light back that is generated externally, the markers **410** themselves may be powered to emit their own light. The power to each marker **410** can be provided sequentially in phase with the capture system providing a unique identification of each marker **410** for a given capture frame, possibly at a cost to the resultant frame rate. The ability to identify each marker(s) **410** in this manner may be useful in real-time applications, such as substantially real-time MMOSTE activities. An alternative method of identifying markers **410** may be to do it algorithmically requiring extra processing of the data.

[0101] Magnetic motion capture/tracking systems may calculate position and orientation through the interaction of relative magnetic flux of three orthogonal coils on both a transmitter(s) and each receiver(s). The relative intensity of the voltage or current of the three coils may allow these systems to calculate both range and orientation by meticulously mapping the tracking volume. Useful results can be obtained with two-thirds the number of markers **410** required in optical systems; one on a user's **400** upper arm and one on the user's **400** lower arm for elbow position and angle **415**. The markers **410** are not occluded by nonmetallic objects but are susceptible to magnetic and electrical interference from metal objects in the environment, like rebar (steel reinforcing bars in concrete) or wiring, which may affect the magnetic field, and electrical sources such as monitors, lights, cables and computers. The sensor response is typically nonlinear, especially toward edges of the capture area. The wiring from the sensors may affect extreme performance movements of a user **400**. The capture volumes for magnetic systems are dramatically smaller than they are for optical systems. With the magnetic systems, there is a distinction between "AC" and "DC" systems: one uses square pulses, the other uses sine wave pulse.

[0102] Mechanical motion capture/tracking systems may directly track user **400** body joint angles, such as angle **415**, and are often referred to as exo-skeleton motion capture systems, due to the way the sensors are attached to the body. A user **400** may attach a skeletal-like structure to their body and as the user **400** moves so do the articulated mechanical parts, measuring the user's **400** relative motion. Mechanical motion capture systems are movement adaptive, typically real-time, relatively low-cost, free-of-occlusion, and wireless (untethered) systems that have unlimited capture volume. Typically, they are rigid structures of jointed, straight metal or plastic rods linked together with potentiometers that articulate at the joints of the user's **400** body. Performance capture, another form of user control available for operation with MMOSTE activities, may differ from standard motion capture due to the interactive nature of the performance, capturing not only the user's body, but also the hands and facial expression all at the same time, as opposed to capturing data for reference motion and rendering the performance motions together separately. When utilizing performance capture, a user **400** may interact with models of objects in the scene. For example, the user **400** may wield an actual sword or throw a real football. Moreover, the user **400** may jump over an actual wall, or slide into an actual base. The recorded performance data can be used to animate online participants or avatars. In motion capture/tracking operable MMOSTE embodiments, the movements of one or more users **400** may be sampled many times per second. High resolution motion capture sensor may be used to sample body, facial and finger movement at the same time.

[0103] Motion capture/tracking operations typically record only the movements of the user **400**, not his/her visual appearance. These movements of the user **400** may be recorded as animation data which may be mapped to a 3D model **800** (having general shape relative to a human, a giant robot, a monster, etc.) created by computer artist software protocol, to move the model the same way as the user **400** moves (see FIG. **4***c*). The 3-D model **800** may be, in a sense, an envelope of the rendered anatomical reconstruction **700** that may help facilitate visibility and mapping assessment of the 3-D model **800** with respect to an MMOSTE environment. This is comparable, in some measure, to an older technique of rotoscope where the visual appearance of the motion of an actor was filmed, then the film used as a guide for the frame by frame motion of a hand-drawn animated character. However, with regard to MMOSTE environments, the 3-D model **800** may be mapped, in substantial real time, to an MMOSTE environment, such as a football field in a stadium **120** (see FIG. **2**). The mapping of the model may correspond to various views available during MMOSTE activities, such as a perspective view corresponding to a spectator's virtual location in the virtual stadium **120**, a view provided by a virtual blimp operable with the MMOSTE, a view of the environment corresponding to the view of the 3-D model **800**, or any other view operable within the protocol governing MMOSTE operations.

[0104] If desired, a camera, sensor **500**, or emitter, such as a signal generator **600**, can pan, tilt, or dolly around the applicable 3-D space while the user **400** is moving and the motion capture/tracking system may capture the movable camera/sensor/emitter and any props as well. This may help facilitate computer generated characters, images and sets that may have the same perspective as the mappable images from the moving camera/sensor/emitter. A computer may process the data and display the movements of the user **400**, as inferred from the 3-D position of each marker **410** and/or fitted sensor **420**. If desired, a virtual camera/sensor/emitter can be tracked as well, providing further positioning in terms of objects in the applicable 3-D space and a corresponding MMOSTE environment. A related technique match moving may be utilized to derive **3**-D camera/sensor/emitter movement from a single 2-D image sequence without the use of photogrammetry. Moreover, MMOSTE user input technology may include full-frame imaging from many camera/sensor/emitter angles to record the exact position of every part of a user's **400** body, clothing, and/or hair for the entire duration of a MMOSTE activity session, resulting in a very high resolution of detail.

[0105] After or substantially concurrent with processing data relative to the mapping of the 3-D model **800**, software may export animation data, which computer animator software protocol can associate with the 3-D model **800** and manipulate using computer animation software enhancement features. For instance, the user **400** may be rendered as an online participant within a particular MMOSTE environment having visual and audio characteristics akin to that environment as directed by the user **400** and governed by software protocol. As particularly depicted in FIG. **4***d*, a user **400** may be rendered as a referee avatar **900** that may help to officiate a game **100** played on a football field in virtual stadium **120**. Accordingly, the user **400** may be rendered in an appropriate referee's uniform **910** and may be virtually fitted with cleats **920**, a flag **930**, and other virtual accoutrements specific to the role of that avatar **900** in a particular MMOSTE environment. The user **400** may direct, via a remote **30**/**40**/**50** or a motion capture/tracking system, the movements of the avatar referee **900** and the virtual use of any accoutrements operable by that online participant within the mandates of protocol governing the MMOSTE activity. Protocol may operate with a machine readable program with the rules of a game or event, such as a battle event, thereon to coordinate the first data signals and the second data signals in accordance with the game or event Real world feedback, relative to audible, or physical stimulation of a user, such as a user **36**, **46**, **56**, and/or **400**, may be provided by a remote **30**/**40**/**50** or motion capture/tracking system. For example, lights in a 3-D space may flash to simulate lightning

visible by a first user **400** in the applicable space, or a remote **30/40/50** may produce audible noises simulating sword clash sounds or taunting by opposing online participants.

[0106] Some MMOSTE activities may require online participants to virtually make additional impossible physical movements like animated super hero martial arts or stretching, squishing, detaching, and/or super-rotating of virtual body parts that are not possible with real users **36/46/56/400**. However, protocol may be provided wherein avatar characters may be rendered with super-physical abilities within an MMOSTE environment. Moreover, in biomechanics, sports contests and training, battle events, adventure quests and/or other MMOSTE activities, real time data may provide the necessary information to diagnose real life user problems or suggest ways to improve real life user performance, requiring remote detected and/or motion capture/tracking technology to capture motions up to, for instance, 180 miles per hour for a golf swing or a karate chop.

[0107] While this invention has been described in conjunction with the specific embodiments outlined above, it is evident that many alternatives, modifications and variations will be apparent to those skilled in the art. Accordingly, the embodiments of the invention as set forth above are intended to be illustrative, not limiting. Various changes may be made without departing from the spirit and scope of the invention as defined in the following claims.

What is claimed is:

1. A massive multiplayer online event comprising:
an online server connected to the world wide web;
a first remote having a first sensor to detect movement and orientation of a first user, wherein first data signals are communicated from said sensor to the online server;
a second remote having a second sensor to detect movement and orientation of a second user, wherein data signals are communicated from said sensor to the online server; and
a machine readable program having combat protocol thereon to coordinate the first data signals and the second data signals in accordance with the combat protocol.

2. The invention of claim **1**, wherein the first user and second user compete in a virtual combat or virtual battle using real world physical skills.

3. The invention of claim **1**, wherein the first user and the second user are rendered as avatars in a virtual environment.

4. The invention of claim **2**, wherein the virtual combat or virtual battle use a weapon selected from the group consisting of: a firearm, a bow and arrow, a dagger, a hand-grenade, a laser-cannon, a future weapon, an incendiary weapon, a non-lethal weapon, a magnetic weapon, a Mêlée weapon, a missile, a rocket, a nuclear weapon, a primitive weapon, a suicide weapons, an anti-aircraft, an anti-fortification, an anti-personnel weapon, an anti-radiation weapon, an anti-ship weapon, an anti-submarine weapon, and an anti-tank weapon.

5. A massive multiplayer online event comprising:
connecting at least 100 users to an online server connected to the world wide web;
providing a remote having a first sensor to detect movement and orientation of a first user, wherein first data signals are communicated from said sensor to the online server;
providing a remote having a second sensor to detect movement and orientation of a second user, wherein data signals are communicated from said sensor to the online server;
providing a combat protocol to coordinate the first data signals and the second data signals in accordance with the combat protocol; and
competing, using physical skills, between the first and second user to generate the first data signals and second data signals to arrive at an outcome based on the combat protocol.

6. A massive multiplayer online event comprising:
an online server connected to the world wide web;
a first sensor to detect movement and orientation of a first user, wherein first data signals are communicated from said sensor to the online server;
a second sensor to detect movement and orientation of a second user, wherein data signals are communicated from said sensor to the online server; and
a machine readable program with the rules of an event thereon to coordinate the first data signals and the second data signals in accordance with the event.

7. The invention of claim **6**, wherein the first sensor is a static sensor operable with a motion capture system.

8. The invention of claim **6**, wherein the first sensor is a user fitted sensor operable with a motion capture system.

9. The invention of claim **6**, wherein the first sensor is in a remote.

10. A massive multiplayer online fantasy sports event comprising a fantasy sports player, wherein the player is an online participant on a virtual team in a massive multiplayer online sporting event.

11. The invention of claim **10**, wherein the player is selected for a fantasy sports team by a real world fantasy sports owner.

12. An online marketing method comprising advertising products during a massive multiplayer online sports event.

13. The invention of claim **11**, wherein the products are real world products.

14. The invention of claim **11**, wherein the products are virtual products.

15. The invention of claim **11**, wherein the advertising is selected from the group consisting of: virtual online signs, billboards, posters, seat covers, flyers, streaming audio, streaming video, banners, and pop-up ads and passive advertising.

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