

1) Family number: 65364083 (US2017095732A)

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Title: METHOD AND SYSTEM FOR INTERACTING WITH A VIRTUAL ENVIRONMENT

Abstract: A system for providing a more personalized virtual environment for a user, the system including one or more sensing devices that detect one or more physical, physiological, or biological parameters of the user and transmit the same to a game console or virtual reality controller that produces the virtual environment. The game console or virtual reality controller can analyze the sensor data and adjust one or more aspects of the virtual environment as a function of the sensor data. For example, the difficulty level or scariness level of a game can be decreased if the heart rate of the user exceeds a predetermined threshold.

Classifications:

International (IPC 8-9): A63F13/211 A63F13/212 A63F13/213

A63F13/215 A63F13/428 A63F13/67 A63F9/24 H04L29/06

H04L29/08 (Advanced/Invention)

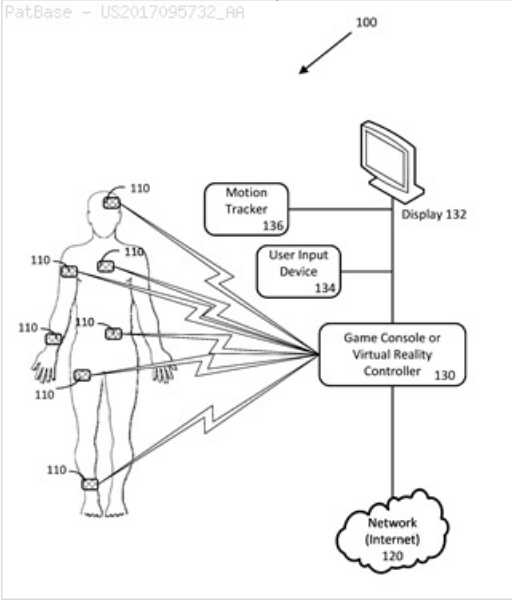
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A63F2300/105 A63F2300/8082 A63F13/26 A63F13/67 A63F13/213

A63F13/215

US: 463/31



Family:

Publication number	Publication date	Application number	Application date
CN108290070 A	20180717	CN201680070548	20160930
EP3356003 A1	20180808	EP20160852690	20160930
EP3356003 A4	20190403	EP20160852690	20160930
US2017095732 AA	20170406	US20160281960	20160930
WO17059215 A1	20170406	WO2016US54706	20160930

Priority:

US20150235793P 20151001 US20160281960 20160930 WO2016US54706 20160930

Probable Assignee: MC10 INC

Assignee(s): (std): MC10 INC

Inventor(s): (std): GHAFARI ROOZBEH ; MCGRANE BRYAN ; RAJ MILAN

Agent(s): HASELTINE LAKE LLP; CROSBY DAVID F ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KW KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

2) Family number: 54140138 (US2013162632A)

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Title: COMPUTER-AIDED SYSTEM FOR 360 DEGREES HEADS UP DISPLAY OF SAFETY/MISSION CRITICAL DATA

Abstract: A safety critical, time sensitive data system for projecting safety/mission critical data onto a display pair of Commercial Off The Shelf (COTS) light weight projection glasses or monocular creating an immersive omnidirectional HUD (Heads Up Display) system with 6 degrees of freedom movement with user immersion and user inputs and outputs. The system includes the display, haptic glove, haptic suit, vestibular interface, temperature emulation, smell emulation, and omnidirectional sound, the workstation, the application software, and inputs containing the safety/mission critical information (Current User Position, Total Collision Avoidance System-TCAS, Global Positioning System-GPS, Magnetic Resonance Imaging-MRI Images, CAT scan images. Weather data. Military troop data, real-time space type markings etc.). The workstation software processes the incoming safety/mission critical data and converts it into a three dimensional space for the user to immerse into the environment. Selecting any of the images may display available information about the selected item or may enhance the image, or moving hand or body

will generate enhanced environmental perception and awareness, as well as inputs and outputs. Predicted position vectors may be displayed as well as 3D terrain.

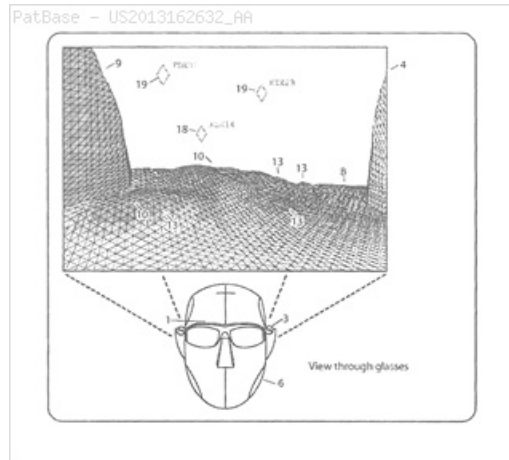
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G06T19/20 G09B21/00 G09B9/30 H04N13/02
H04N13/04 (Advanced/Invention)

CPC: G06T19/006 G02B27/017 G02B2027/0138 G02B2027/014
G02B2027/0187 G06F3/012 G06F3/014 G06F3/04815 G06T19/20
G06F3/013 G06F3/016 G09B9/302 G09B21/008 G06F3/04886

H04N13/279 H04N13/344 H04N13/383

US: 345/156 345/419



Family:

Publication number	Publication date	Application number	Application date
US2013162632 AA	20130627	US20120674671	20121112
US2017098333 AA	20170406	US20160380512	20161215
US9728006 BB	20170808	US20120674671	20121112

Priority:

US20090460552 20090720 US20110628998P 20111112 US20110629010P 20111112
US20120674671 20121112 US20160380512 20161215

Probable Assignee: REAL TIME COMPANIES LLC

Assignee(s): (std): REAL TIME COMPANIES LLC

Inventor(s): (std): COVE PATTY ; HIETT JOHN ; VARGA KENNETH A ; YOUNG JOEL

Agent(s): POLSINELLI PC

3) Family number: 43090228 (US2009087029A)

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Title: 4D GIS BASED VIRTUAL REALITY FOR MOVING TARGET PREDICTION

Abstract: The technology of the 4D-GIS system deploys a GIS-based algorithm used to determine the location of a moving target through registering the terrain image obtained from a Moving Target Indication (MTI) sensor or small Unmanned Aerial Vehicle (UAV) camera with the digital map from GIS. For motion prediction the target state is estimated using an Extended Kalman Filter (EKF). In order to enhance the prediction of the moving target's trajectory a fuzzy logic reasoning algorithm is used to estimate the destination of a moving target through synthesizing data from GIS, target statistics, tactics and other past experience derived information, such as, likely moving direction of targets in correlation with the nature of the terrain and surmised mission.

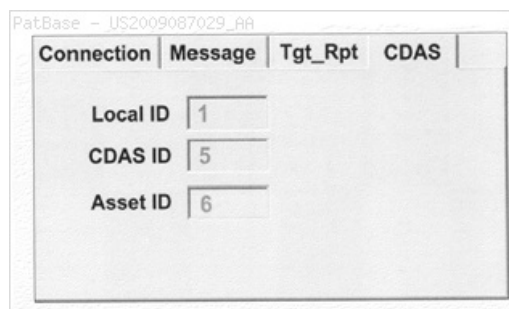
Classifications:

International (IPC 8-9): G06K9/00 (Advanced/Invention);
G06K9/00 (Core/Invention)

CPC: G06T7/277 G06K9/0063 G06K9/00208 G06K9/3241
G06T2207/10016 G06T2207/30212 G06T2207/30241

European: G06K9/00D1 G06K9/00V1 G06K9/32R1 G06T7/20K
S06T207/10016 S06T207/30212 S06T207/30241

US: 382/103 382/103P



Family:

Publication number	Publication date	Application number	Application date
US2009087029 AA	20090402	US20080229450	20080822
US8229163 BB	20120724	US20080229450	20080822

Priority:

US20070965855P 20070822 US20080229450 20080822

Probable Assignee: AMERICAN GNC CORP

Assignee(s): (std): AMERICAN GNC CORP ; COLEMAN NORMAN P ; LIN CHING FANG

Inventor(s): (std): LIN CHING FANG ; COLEMAN NORMAN P

Agent(s): DAVID AND RAYMOND PATENT FIRM; RAYMOND Y

Title: SYSTEMS AND METHODS FOR IMMERSIVE PHYSICAL INTERACTION WITH A VIRTUAL ENVIRONMENT

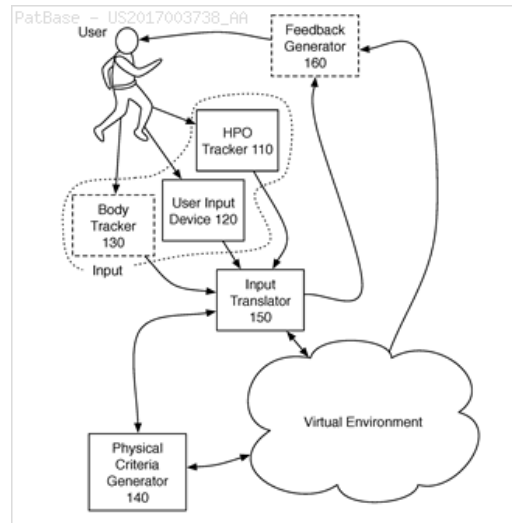
Abstract: A system for immersive physical interaction includes a hand position and orientation tracker that tracks a first hand position and a first hand orientation of a first hand of a user and tracks a second hand position and a second hand orientation of a second hand of the user; a physical criteria generator comprising a body physics simulator that simulates avatar motion and a constrained object interaction system that manages virtual object coupling; and an input translator that translates the first hand position and the first hand orientation into a first virtual hand position and a first virtual hand orientation of a user avatar in a virtual environment and translates the second hand position and the second hand orientation into a second virtual hand position and a second virtual hand orientation of the user avatar.

Classifications:

International (IPC 8-9): A63B24/00 A63B69/00 A63F13/211 A63F13/213 A63F13/216 A63F13/42 G06F3/01 G06F3/0484 H04L29/06 (Advanced/Invention)

CPC: G06F3/011 G06F3/017 A63F13/211 A63F13/42 A63F13/213 A63F13/216 A63F13/214 A63F13/428 A63F13/56 A63F13/57 A63F13/837 G06F1/163 G06F3/016

US: 345/156

**Family:**

Publication number	Publication date	Application number	Application date
US2017003738 AA	20170105	US20160181709	20160614
WO16205182 A1	20161222	WO2016US37346	20160614

Priority:

US20150175759P 20150615 US20160181709 20160614

Probable Assignee: SURVIOS INC

Assignee(s): (std): SURVIOS INC

Inventor(s): (std): BURBA NATHAN ; ELKIN EUGENE ; SILKEN ALEXANDER ; SILKIN ALEXANDER

Agent(s): SCHOX JEFFREY

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

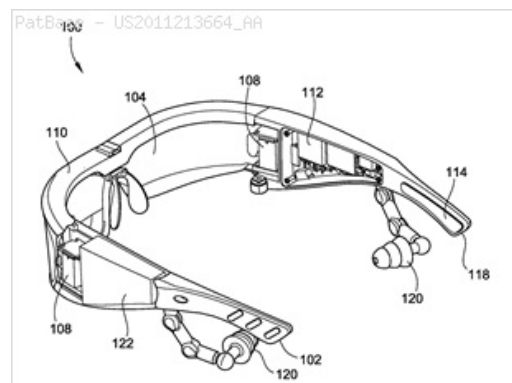
Title: LOCAL ADVERTISING CONTENT ON AN INTERACTIVE HEAD-MOUNTED EYEPiece

Abstract: This disclosure concerns an interactive head-mounted eyepiece including an optical assembly through which the user views a surrounding environment and displayed content. The displayed content includes a local advertisement, wherein the location of the eyepiece is determined by an integrated location sensor and wherein the local advertisement has a relevance to the location of the eyepiece. The head mounted eyepiece may also include an audio device and the displayed content may comprise local advertisements and audio.

Classifications:

International (IPC 8-9): G01C21/00 G02B27/00 G02B27/01 G02B27/02 G02B27/14 G02B5/18 G02B5/23 G02B5/30 G02B6/00 G02B7/00 G02C11/00 G02C11/04 G02C7/00 G02F1/1335 G02F1/13357 G03B21/26 G03H1/00 G06F1/16 G06F13/00 G06F17/00 G06F17/30 G06F3/00 G06F3/01 G06F3/03 G06F3/033 G06F3/0346 G06F3/041 G06F3/048 G06F3/0488 G06F3/14 G06K9/00 G06Q30/00 G06Q30/02 G06Q30/04 G06T15/00 G06T19/00 G09G5/00 G09G5/02 G09G5/10 G09G5/377 G10L19/00 H04N5/225 H04N5/232 H04N5/44 H04N5/64 H04N7/15 H04N7/18 (Advanced/Invention); A61B3/113 F21V8/00 G02B27/00 G02B27/01 G02B5/18 G02B5/30 G02B6/12 G03H1/22 G06F3/00 G06F3/01 G06T19/00 H04N13/04 H04N7/14 (Advanced/Non-invention)

CPC: G02B27/1066 G02B27/281 H04N7/15 G01C21/3629 G02B27/0149 G02B2027/0132 G02B2027/0123 G02B2027/0127 G02B2027/0134 G02B5/3058 G02C5/143 G02B6/0011 G02C7/08 G02C9/00 G06F3/012 G06F3/014 G06F21/32 G02B6/12019 A61B3/113 G02B2027/0112 G02B2027/113 G02B2207/115 H04N7/142 G06F1/1673 G06Q30/0261 G02B5/23 G02B7/008 G03H1/2294 G02C7/086 G02B2027/0147 G06F3/0481 G06F3/14 G02B5/30 G02B27/0176 G02B6/0038 G02B6/0045 G02B6/0053 G02B6/0056 G02B6/12009 G06F3/0227 G06F3/04815 G06F13/00 G06F3/167 G02B2027/011 G02B6/00 G02B27/0172 G05D1/0016 G06F3/165 G06F3/03547 G06F3/04842 G02B5/1842 G06F3/016 G06K9/00604 G06K9/00617 H04N5/44 H04N5/23293 H04N5/2254 G02C11/10 G06K9/00255 G06F3/0304 G06F3/0428 G06F2203/0331 G06F2203/0338 G02B2027/0138 G02B2027/0187 G02B27/017 G02B27/0093 G02B2027/014



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Priority:

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US20170433757 20170215

Probable Assignee: OSTERHOUT GROUP INC

Assignee(s): (std): BIETRY JOSEPH ; BORDER JOHN N ; CELLA CHARLES ; HADDICK JOHN D ; KING III ROBERT W ; OSTERHOUT GROUP INC ; LOHSE ROBERT MICHAEL ; KING ROBERT W ; MILLER GREGORY D ; NORTRUP ROBERT J ; NORTRUP EDWARD H ; MICROSOFT CORP ; MICROSOFT TECHNOLOGY LICENSING LLC ; MICROSOFT TECH LICENSING LLC ; WILDER KELLIE A ; POLINKO NICHOLAS R ; OSTERHOUT RALPH F ; STOVALL ROSS W

Assignee(s): OSTERHOUT GROUP INC153 TOWNSEND STREETSUITE 570SAN FRANCISCOCA94107US ; MICROSOFT CORPONE MICROSOFT WAYREDMONDWA98052-6399US

Inventor(s): (std): KING ROBERT W ; SHAMS NIMA L ; STOVALL ROSS W ; BORDER JOHN N ; MILLER GREGORY D ; BIETRY JOSEPH ; NORTRUP EDWARD H ; CELLA CHARLES ; NORTRUP ROBERT J ; OSTERHOUT RALPH F ; HADDICK JOHN D ; POLINKO NICHOLAS R ; KING III ROBERT W ; LOHSE ROBERT MICHAEL ; WILDER KELLIE A

Inventor(s): BORDER JOHN NUS ; LOHSE ROBERT MICHAELUS ; BIETRY JOSEPHUS ; HADDICK JOHN DUS

Agent(s): A J PARK; AJ PARK; BORDEN LADNER GERVAIS LLP; SMART AND BIGGAR; FINDLAY ALICE ROSEMARY; FISCHER MICHAEL MARIA; YAMAMOTO OSAMU; TAKEUCHI SHIGEO; ONO SHINJIRO; KOBAYASHI YASUSHI; NAKANISHI MOTOHARU; NAKAMURA SHOHO; GTC LAW GROUP LLP AND AFFILIATES; RACHAEL; MICKY; JIM; LEONARD; JEREMY; JUDY; MICAH; ALLEMAN HALL CREASMAN AND TUTTLE LLP; OKEY DAVID W

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY NZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

6) Family number: 32840349 (US2004110602A)

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Title: COMPUTER INTERACTIVE ISOMETRIC EXERCISE SYSTEM AND METHOD FOR OPERATIVELY INTERCONNECTING THE EXERCISE SYSTEM TO A COMPUTER SYSTEM FOR USE AS A PERIPHERAL

Abstract: A computer interactive isometric exercise system includes an effector, a sensor coupled at a selected location on the effector to measure a force applied by a user to the effector, where the applied force effects a strain on the effector, and control circuitry. The control circuitry includes a processor that receives and processes data corresponding to applied force information measured by the sensor for transference to a host computer. The processed data is transferred in a format compatible with the host computer and facilitates user interaction with the host computer in response to effector manipulation by the user. A plurality of effectors may further be combined together to form a system frame that provides a variety of isometric exercises for the user in combination with user interaction with the host computer.

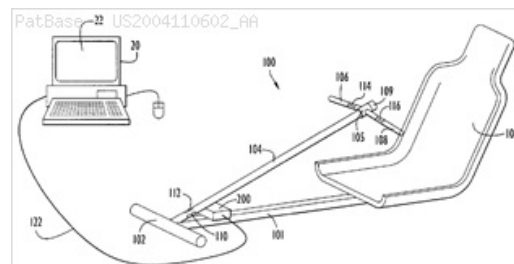
Classifications:

International (IPC 8-9): A61B5/22 A61H3/00 A63B21/00 A63B21/002 A63B22/00 A63B24/00 A63B69/00 A63B71/00 A63F13/00 A63F13/06 A63F13/10 A63F13/12 A63F9/20 A63F9/24 B32B3/04 F41G3/26 F41J9/14 G06F1/00 G06F17/00 G06F19/00 G06F3/01 G06K5/00 G09G5/00 H02J7/00 (Advanced/Invention); A63B22/00 A63B22/02 A63B23/04 G06Q50/00 (Advanced/Non-invention); A61B5/22 A61H3/00 A63B21/00 A63B21/002 A63B22/00 A63B24/00 A63B69/00 A63B71/00 A63F13/00 A63F13/02 A63F13/10 A63F13/12 A63F9/20 A63F9/24 B32B3/04 F41G3/00 F41J9/00 G06F17/00 G06F19/00 G06F3/01 G06K5/00 G09G5/00 H02J7/00 (Core/Invention); A63B22/00 A63B23/04 (Core/Non-invention); A63F (Subclass/Invention)

International (IPC 1-7): A63B21/00 A63B21/002 A63B71/00 A63F13/00 A63F9/24 G06F1/00 G06F17/00 G06F19/00 G06K5/00 **CPC:** A63B22/00 A63B22/02 A63B23/04 G06F3/01 A63B2208/0204 F41A33/00 G05G1/52 G06F3/0383 A63B69/0057 A63F13/02 A63F2300/1062 Y10S482/90 Y10S482/902 A63B21/225 A63B22/0056 A63B23/0429 A63B2225/20 G06F3/002 G06F3/033 A63F13/218 A63F13/42 A63F13/80 A63F13/21 A63F13/245 A63F13/47 A63F13/22 A63F2300/301 A63B21/002 A63B21/0023 A63B22/02 A63B24/00 A63B71/0009 A63B71/0622 A63B2071/0638 A63B2071/0644 A63B2220/13 A63B2220/51 A63B2225/50 A63F2300/1043 A63F13/06 A63F2300/1006 A63F2300/1018 A63F2300/1056

European: A63B21/002 A63B21/002B A63B23/12 A63B24/00 A63B71/00H A63B71/06D2 A63F13/02 A63F13/06 F41A33/00 G05G1/20 G05G1/52 G06F3/00B G06F3/01B G06F3/033 G06F3/038E K63B208/02B K63B21/002 K63B21/002B K63B21/22F K63B22/00P6 K63B22/02 K63B220/13 K63B220/51 K63B220/54 K63B225/20 K63B225/50 K63B23/04B4 K63B69/00N4 K63B71/06D2 K63B71/06D2C K63B71/06D2C3 K63F300/10A K63F300/10C K63F300/10M K63F300/10P K63F300/10S K63F300/30A

US: 210/100 235/380 235/380S 273/304 273/304P 320/114 320/114S 345/156 345/156S 463/36 463/36P 463/37 463/39 463/39P 482/1 482/51 482/53 482/8 482/8P 482/9 482/900 482/902 482/91 482/91P 482/91S 482/9P 482/9S D21/324 D21/325 D21/686 **JP F-Term:** 2C072 4C038 2C001 2C001/AA17 2C001/CA01 2C001/CA06 2C001/CB01 2C001/CB03 2C001/CC01 2C001/CC06



2C078 2C001/AA07 2C001/CB08 2C014

JP F-Index: A61B5/22/A A63B21/002 A63B69/00/A A63F13/00/F A63F13/06 A63F13/218 A63F13/245 A63F13/00/S A63F13/10 A63F13/12/C A63F13/42 A63F13/80/Z A63F9/24/S F41G3/26/Z F41J9/14

Locarno class: 21/01

Family:

Publication number	Publication date	Application number	Application date
AU2003268162 AA	20040630	AU20030268162	20030925
AU2003268162 AH	20040630	AU20030268162	20030925
CN101316630 A	20081203	CN200680033847	20060712
CN101553860 A	20091007	CN200680051812	20061128
EP1581847 A2	20051005	EP20030749111	20030925
EP1581847 A4	20120411	EP20030749111	20030925
EP1812125 A2	20070801	EP20050801916	20050929
EP1907073 A2	20080409	EP20060786848	20060712
EP1960063 A2	20080827	EP20060838450	20061128
JP2006508764 T2	20060316	JP20040559047T	20030925
JP2009501063 T2	20090115	JP20080521511T	20060712
JP2009520513 T2	20090528	JP20080542472T	20061128
KR20050085373 A	20050829	KR20057010181	20030925
US2004110602 AA	20040610	US20020309565	20021204
US2004180719 AA	20040916	US20040806280	20040323
US2005130742 AA	20050616	US20040975185	20041028
US2006097453 AA	20060511	US20050238127	20050929
US2006205565 AA	20060914	US20060372231	20060310
US2006217243 AA	20060928	US20060350284	20060209
US2007155589 AA	20070705	US20060562449	20061122
US2007298883 AA	20071227	US20070851460	20070907
US2008146336 AA	20080619	US20070930642	20071031
US7121982 BB	20061017	US20020309565	20021204
US7121982 C1	20140303	US20020309565	20021204
US7699755 BB	20100420	US20060350284	20060209
US7727117 BB	20100601	US20060372231	20060310
USD510391 S1	20051004	US20040217542F	20041119
USD514627 S1	20060207	US20040217554F	20041119
USD517124 S1	20060314	US20040217553F	20041119
WO04053629 A2	20040624	WO2003US26309	20030925
WO04053629 A3	20041209	WO2003US26309	20030925
WO05042119 A2	20050512	WO2004US35547	20041028
WO05042119 A3	20050818	WO2004US35547	20041028
WO05043322 A2	20050512	WO2004US35554	20041028
WO05043322 A3	20060302	WO2004US35554	20041028
WO06041725 A2	20060420	WO2005US35252	20050929
WO06041725 A3	20061109	WO2005US35252	20050929
WO07011573 A2	20070125	WO2006US26826	20060712
WO07011573 A3	20070412	WO2006US26826	20060712
WO07062237 A2	20070531	WO2006US45488	20061128
WO07062237 A3	20071129	WO2006US45488	20061128
WO07062238 A2	20070531	WO2006US45489	20061128
WO07062238 A3	20090430	WO2006US45489	20061128
WO09029568 A1	20090305	WO2008US74175	20080825

Priority:

US20020309565	20021204	US20020309565F	20021204	WO2003US26309	20030925
US20030514897F	20031029	US20030514897P	20031029	US20040806280F	20040323
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US20060562449	20061122	WO2006US45489	20061128	US20070968162P	20070827
US20070851460	20070907	US20070930642	20071031		

Probable Assignee: IA LABS CA LLC

Assignee(s): (std): FELDMAN PHILIP ; FELDMAN PHILLIP G ; GRIMM JASON ; SCHOTT JEFF ; POWERGRID FITNESS INC ; TSAI PETER ; MERRIL GREG ; IALABS CA LLC

Assignee(s): IMMERSION CORP ; NINTENDO CO LTD AND NINTENDO OF AMERICA INC ; IA LABS CA LLC ; FELDMAN PHILIP G

Inventor(s): (std): FELDMAN PHILIP ; GRIMM JASON ; MERRIL GREG ; TSAI PETER ; SCHOTT JEFF ; PETER TSAI ; JEFF SCHOTT ; JASON GRIMM ; GREG MERRIL ; PHILIP FELDMAN ; FELDMAN PHILLIP G ; FELDMAN PHILIP G

Agent(s): VERSCHT THOMAS KURT ALBERT ET AL; VERSCHT THOMAS KURT ALBERT; EDELL SHAPIRO FINNAN AND LYTLE LLC; EDELL SHAPIRO AND FINNAN LLC; SHAPIRO STUART B ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: BIMODAL USER INTERACTION WITH A SIMULATED OBJECT

Abstract: A method of providing user interaction with a computer representation of a simulated object, where the user can control the object in three dimensions. The method can provide for two distinct states: a "holding" state, and a "released" state. The holding state roughly corresponds to the user holding the simulated object (although other metaphors such as holding a spring attached to the object, or controlling the object at a distance can also be suitable). The released state roughly corresponds to the user not holding the object. A simple example of the two states can include the holding, then throwing of a ball. While in the holding state, the method provides force feedback to the user representation of forces that the user might experience if the user were holding an actual object. The forces are not applied when in the released state.

Classifications:

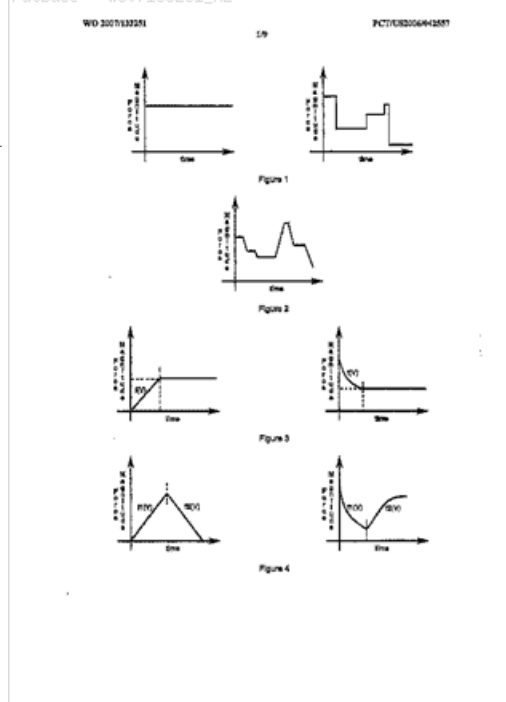
International (IPC 8-9): A63F13/00 G06F17/00 G06F3/00 G06F3/01 G06F3/033 G06F3/038 G06F3/048 G06F3/0481 G06F3/0482 G06F3/0483 G06F3/16 H02N6/00 H03K17/94 (Advanced/Invention); G06F17/00 G06F3/00 H02N6/00 (Core/Invention)

CPC: G06F3/016 G06F3/017

European: G06F3/01F G06F3/01G

US: 341/20 341/20S 345/157 345/157S 463/31 463/31P 715/700 715/701 715/701S 715/727 715/727S 715/849 715/849S 715/850 715/850S

PatBase - WO07133251_A2



Family:

Publication number	Publication date	Application number	Application date
US2006277466 AA	20061207	US20060433173	20060513
US2010261526 AA	20101014	US20100783386	20100519
US9804672 BB	20171031	US20100783386	20100519
WO07133251 A2	20071122	WO2006US42557	20061030
WO07133251 A3	20090522	WO2006US42557	20061030

Priority:

US20050681007P 20050513 US20060433173 20060513 US20100783386 20100519

Probable Assignee: NOVINT TECHNOLOGIES INC

Assignee(s): (std): ANDERSON BILL ; ANDERSON THOMAS G ; AVILES RICHARD ; AVILES WALTER ; FACEBOOK INC ; GRAFE V GERALD ; NOVINT TECHNOLOGIES INC ; JONES JAKE

Inventor(s): (std): ANDERSON THOMAS G ; JONES JAKE ; GRAFE V GERALD ; AVILES WALTER ; AVILES RICHARD ; ANDERSON BILL

Inventor(s): ANDERSON THOMAS

Agent(s): V GERALD GRAFE ESQ; GRAFE LAW OFFICE PC; FENWICK AND WEST LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: HAPTIC INTERACTION METHOD, TOOL AND SYSTEM

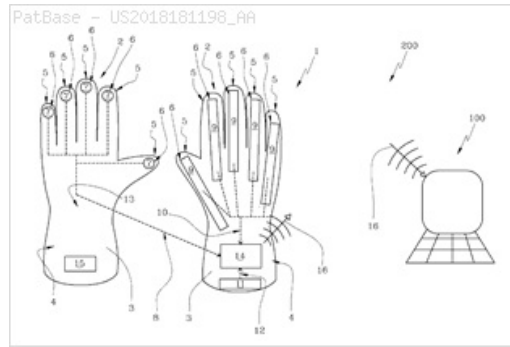
Abstract: The current technology concerns an improved method for communicating and processing motion output signals from haptic, wearable devices to the host system that runs, manages and modifies a type of an application.

Classifications:

International (IPC 8-9): G06F3/01 (Advanced/Invention);

G06T19/00 (Advanced/Non-invention)

CPC: A63F2300/8082 G06T19/006 G06F3/014 G06F3/016 G06F3/017



Family:

Publication number	Publication date	Application number	Application date
EP3340012 A1	20180627	EP20160206902	20161226
US2018181198 AA	20180628	US20170669857	20170804
US9996153 BA	20180612	US20170669857	20170804
WO18122107 A1	20180705	WO2017EP84170	20171221

Priority:

EP20160206902 20161226 US20170669857 20170804

Probable Assignee: CAPTOGLOVE LLC

Assignee(s): (std): CAPTOGLOVE INT LTD ; CAPTOGLOVE LLC

Inventor(s): (std): TROTTA PAOLO

Agent(s): BRANTSANDPATENTS BVBA; THORPE NORTH AND WESTERN

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

9) Family number: 61862561 (US2016077547A)

© PatBase

Title: SYSTEM AND METHOD FOR ENHANCED TRAINING USING A VIRTUAL REALITY ENVIRONMENT AND BIO-SIGNAL DATA

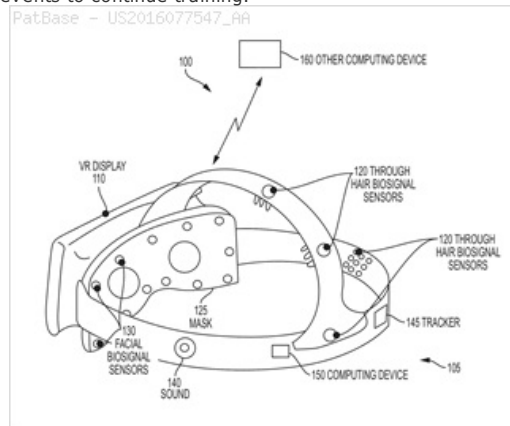
Abstract: A training apparatus has an input device and a wearable computing device with a bio-signal sensor and a display to provide an interactive virtual reality ("VR") environment for a user. The bio-signal sensor receives bio-signal data from the user. The user interacts with content that is presented in the VR environment. The user interactions and bio-signal data are scored with a user state score and a performance score. Feedback is given to the user based on the scores in furtherance of training. The feedback may update the VR environment and may trigger additional VR events to continue training.

Classifications:

International (IPC 8-9): A61B3/113 A61B5/00 A61B5/0402 A61B5/0476 A61B5/0484 A61B5/11 A61B5/16 G06F1/16 G06F19/00 G06F3/01 G06T19/00 G09G5/00 G16H40/67 H04N13/04 (Advanced/Invention); A61B5/0402 (Advanced/Non-invention)

CPC: G06F1/163 G06F3/015 A61B3/113 A61B5/165 A61B5/486 A61B5/1114 A61B5/7445 A61B5/6814 A61B2503/12 A61B2562/0219 A61B5/0402 A61B5/0006 A61B5/0022 A61B5/0024 A61B5/0476 A61B5/04842 A61B5/04845 A61B5/16 A61B5/6803 A61B5/6821 A61B5/6831 A61B5/7203 A61B5/7264 A61B5/744 A61B2560/0475 A61B2560/0493 A61B2562/125 A61B2562/164 A61B2562/166 G06F3/011 G06F3/012 G06F3/016 G06F19/00 G06F2203/011 G16H40/67

US: 345/8



Family:

Publication number	Publication date	Application number	Application date
US2016077547 AA	20160317	US20150851853	20150911
US2019033914 AA	20190131	US20180144854	20180927
US10120413 BB	20181106	US20150851853	20150911

Priority:

US20140048923P 20140911 US20150851853 20150911 US20180144854 20180927

Probable Assignee: INTERAXON INC

Assignee(s): (std): INTERAXON INC

Inventor(s): (std): CHABIOR MICHAEL APOLLO ; VIDYARTHI KAPIL JAY MISHRA ; RUPSINGH RAUL RAJIV ; TADICH PAUL V ; BARANOWSKI PAUL HARRISON ; AIMONE CHRISTOPHER ALLEN ; PINO LOCILLO LOU GIUSEPPE ; GARTEN ARIEL STEPHANIE ; COLEMAN TREVOR ; ASHBY MADELINE ; COLEMAN TREVOR CE

Agent(s): NORTON ROSE FULBRIGHT CANADA LLP

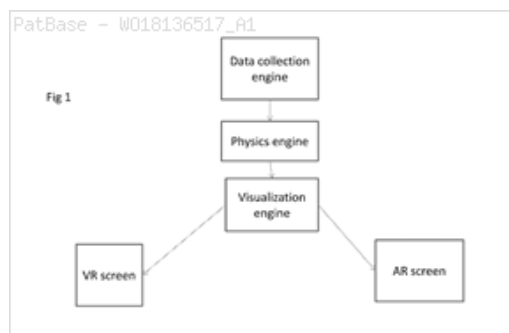
Title: AUGMENTED/VIRTUAL MAPPING SYSTEM

Abstract: According to the present teachings a system is provided having a landscape engine configured to take digital input and convert it into three dimensional at virtual reality dataset. The landscape engine is functionally coupled to a physics engine configured to physical rules to objects within the virtual reality dataset. A display engine is coupled to the physics engine to convert the dataset into first and second content streams.

Classifications:

International (IPC 8-9): G06F3/01 G06F3/0346 G06T15/00
G06T19/00 (Advanced/Invention)

CPC: G06T19/00 G06T17/05 G06F3/01 G06F3/0346 G06T2219/024



Family:

Publication number	Publication date	Application number	Application date
WO18136517 A1	20180726	WO2018US14056	20180117

Priority:

US20170447329P 20170117 US20170524317P 20170623

Probable Assignee: VIRTUAL SANDTABLE LLC

Assignee(s): (std): VIRTUAL SANDTABLE LLC

Inventor(s): (std): EUSEBI CHRISTOPHER ; LARUE JOSHUA ; SCHRADIN AARON

Inventor(s): EUSEBI CHRISTOPHER A

Agent(s): EUSEBI CHRISTOPHER A ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: TRAINING SYSTEM AND METHODS FOR DESIGNING, MONITORING AND PROVIDING FEEDBACK OF TRAINING

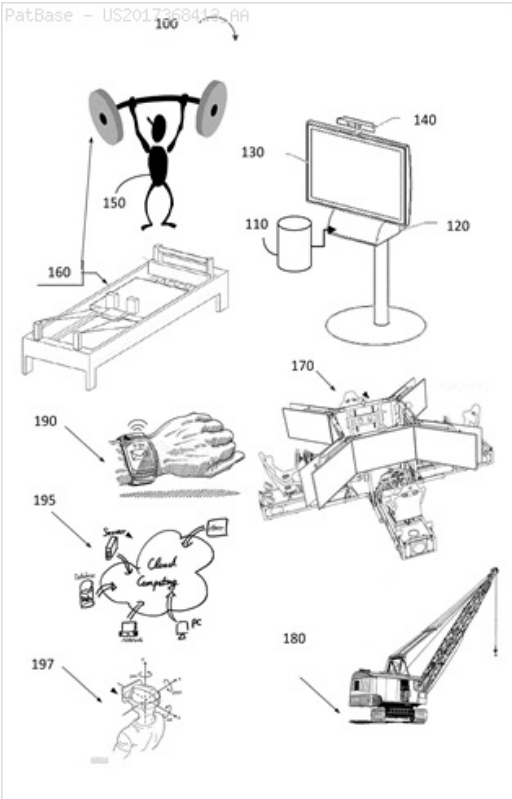
Abstract: Computing device enhanced training environment system comprising a computing device, I/O subsystem for permitting a user to enter at least one attribute of the training or of the trainee, a plurality of sensors for generating sensory information, a training environment in which a training activity takes place, a database containing training related information. The computing device enhanced training environment system configured for at least one of the following: design a training program for a plurality of users, monitor training program performance, monitor training performance, instruct a user about the training, determine and/or set difficulty level in training apparatus.

Classifications:

International (IPC 8-9): A63B24/00 (Advanced/Invention)

CPC: A63B24/0075 A63B24/0062 A63B2024/0071 A63B2024/0065

A63B2024/0081 A63B2024/0068 A61B5/00 A61B5/1123 A63B21/0628
A63B2071/0625 A63B2220/17 A63B2220/20 A63B2220/30 A63B2220/40
A63B2220/803 A63B2220/805 A63B2225/50 A63B2225/54 A63B2230/75
G06K9/00342 A61B5/1118



Family:

Publication number	Publication date	Application number	Application date
US2017368413 AA	20171228	US20170594562	20170513

Priority:

US20160307477P 20160312 US20170594562 20170513

Probable Assignee: SHAVIT ARIE
Assignee(s): (std): SHAVIT ARIE
Inventor(s): (std): SHAVIT ARIE