

Search history

Search mosquito counter or mosquitos counter (Results 1)

1:

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3:

Search [SP]: *** warning: ocr data - may be incomplete ***** please email the publication number to patbase@rws.com of any affected text for review ***la presente invencion se refiere al campo de la medicion y estimacion indirecta y no invasiva de poblaciones de insectos contenidos en un espacio cerrado con condiciones controladas.objeto de la invencion proporcionar un sistema que pueda estimar la cantidad de insectos en especial mosquitos dentro de un contenedor cerrado, con forma de medicion no invasiva.estado de la tecnica en el actual estado de la tecnica podemos encontrar diversos documentos como la solicitud de patente wo 2016135765 que revela un dispositivo para monitorear y capturar insectos de la poblacion de mosquitos, que comprende: un primer contenedor provisto de una primera pluralidad de elementos para atraer a los insectos al menos un segundo contenedor, colocado dentro del primer contenedor, y apoyado sobre el por medio de una pluralidad de tirantes, que comprende una base superior abierta y una base inferior, estando provisto el 1 5 10 15 20 25 segundo contenedor de una segunda pluralidad de elementos para atraer a los insectos al menos un dispositivo para generar un flujo de aire, que esta posicionado en la base inferior del segundo contenedor para aspirar los insectos cerca del dispositivo, desde el exterior hacia adentro del segundo contenedor a traves de la base superior abierta y al menos una bolsa perforada, colocada en la base superior abierta, que se extiende hasta el dispositivo para generar un flujo de aire, para monitorear y atrapar los insectos succionados dentro del dispositivo.la solicitud de patente cn 201210427713 revela un monitor, donde el monitor comprende una linterna, un cilindro, un ventilador electrico, una salida de aire, un cono, una pantalla, un cilindro adicional y una tolva, donde el cilindro esta dispuesto en la linterna, el ventilador electrico esta dispuesto en el cilindro, la salida de aire esta formada en un extremo del cilindro, el cono esta dispuesto en el otro extremo del cilindro, la pantalla esta dispuesta en el cono, el cilindro adicional esta dispuesto en el extremo pequeno del cono, y la tolva esta dispuesta en el cilindro adicional. el monitor tiene la ventaja de ser simple en cuanto a estructura, facil y conveniente para operar, y es capaz de ahorrar tiempo y trabajo y evitar que los mosquitos salgan volando.la solicitud de patente kr20120027787 proporciona un dispositivo de monitoreo que tiene funciones de conteo y erradicacion de plagas. este dispositivo usa un sensor que detecta el movimiento de las plagas en una carcasa exterior disenado para recoger las plagas. donde el dispositivo de monitoreo que tiene funciones de conteo y erradicacion de plagas incluye una carcasa exterior, una lampara de piloro, un ventilador de aspiracion, una cuchilla, un motor, un soporte, un sensor y un controlador. la carcasa exterior esta instalada de forma desmontable en el lado inferior de un cuerpo principal del dispositivo. la lampara del piloro atrae al mosquito al irradiar luz a traves de una ventana transparente. el ventilador de 2 succion esta instalado dentro del cuerpo principal. la cuchilla esta instalada en el lado inferior del ventilador de succion para matar al mosquito. el motor gira el ventilador de succion y la cuchilla. el soporte se fija al cuerpo principal usando una unidad de acoplamiento.5 teniendo en cuenta todo lo anterior no existe un dispositivo, sistema y o metodo que puedan estimar la poblacion de insectos en especial mosquitos dentro de un contenedor cerrado por medio de medicion no invasiva e indirecta.10 3 5 10 15 20 25 descripcion de la invencion la presente invencion revela un sistema, metodo y dispositivo contador de mosquitos. el sistema y dispositivo tienen un hardware y un programa de computador especializados para el correcto conteo de una poblacion de mosquitos dentro de un contenedor. el sistema tiene un mecanismo de agitacion que golpea el contenedor que contiene los mosquitos, luego se frena el mecanismo de agitacion y se procede a adquirir las senales acusticas por medio de un sensor acustico o microfono, luego los datos son enviados a un programa de computador el cual consta de una interfaz grafica, donde el programa de computador analiza la grabacion, filtra los datos y mediante un algoritmo de analisis de la onda acustica calcula el resultado de la cantidad de mosquitos contenidos en el contenedor.descripcion detallada de la invencion la figura 1 muestra un diagrama de bloques del sistema de conteo de mosquitos, el cual esta compuesto por un ordenador (100) y un dispositivo (200), el ordenador (100) tiene una interfaz de usuario de entrada de datos (130) que tiene perifericos de entrada que representan el raton (131) y teclado (132). esta interfaz de usuario puede ser seleccionada tambien de tipo tactil directamente sobre una pantalla. la interfaz de usuario esta vinculada al programa de computador (110) que procesa los datos adquiridos por el dispositivo (200).4 5 10 15 20 25 el dispositivo (200) esta alimentado por energia electrica (e) la cual puede ser tomada de la red domiciliaria o de otras fuentes de energia como baterias electricas o fuentes de energia solar. la energia electrica (e), es suministrada a traves de un conector (229) que es llevada a un convertidor acdc (228), para luego llevarla a un modulo rele (227) que permite habilitar el paso de energia al motor (250) el modulo de rele (227) tambien recibe senales del microcontrolador (224), donde el microcontrolador (224) esta comunicado con el multiconector usb (222).el dispositivo (200) adquiere los datos a traves de un sensor acustico (210), donde el sensor acustico es en preferencia un microfono condensador. los datos analogicos adquiridos por el sensor acustico (210) son enviados a traves de una conexion (211) hacia la consola de audio (221), que tiene conexion con el multiconector usb (222) que lleva los datos hacia el conector usb (223).el sensor acustico (210) es el encargado de adquirir las senales de audio que producen los insectos en el momento que estan volando dentro del contenedor.el microcontrolador (224) esta conectado a dispositivos perifericos de salida tales como pantalla (225) que puede ser seleccionada entre tipo lcd o equivalentes y diodos emisor de luz led (226), por medio de ellos se da retroalimentacion sobre el resultado de conteo de los mosquitos y estado del proceso de conteo.la figura 2 muestra un dispositivo (200) contador de mosquitos que incluye un sensor acustico (210) que es conectado a traves de una conexion (211) hacia una caja de componentes electronicos (220), donde la caja de componentes electronicos (220) comprende los elementos consola de audio (221), multiconector 5 5 10 15 20 25 usb (222), conector usb (223), el microcontrolador (224), pantalla (225), diodos emisor de luz led (226), modulo de rele (227), convertidor acdc (228) y conector (229), descritos como componentes y su interrelacion mostrados en la figura 1. la caja de componentes electronicos (220) puede ser ubicada sobre el costado lateral del compartimento (260) o en la parte inferior del mismo, o de forma distribuida de acuerdo al criterio del disenador.el dispositivo (200) tiene un mecanismo de agitacion compuesto por un motor (250), un eje (251) acoplado al motor (250) y paletas (252) que golpean el contenedor (240) que tiene los mosquitos en su interior. lo anterior para que los mosquitos se muevan y al generar el ruido pueda ser estimada la cantidad de mosquitos dentro del contenedor (240), a traves de la adquisicion de las senales de audio capturadas por medio del sensor acustico (210).el contenedor (240) tiene una pared perimetrica (241) con una tapa superior (242).el contenedor (240) y el mecanismo de agitacion estan ubicados dentro de un compartimento (260) el cual tiene una capa de aislamiento termico y acustico, preferentemente fibra sintetica o natural y ubicada en el interior del compartimento (260).la figura 3 muestra el metodo de conteo de mosquitos el cual incluye las etapas de a. etapa 310. calibrar el sensor acustico (210). donde se fijan los niveles cero de referencia. b. etapa 320. activar mecanismo de agitacion. donde gira el eje (251) acoplado al motor (250) y las paletas (252) golpean el contenedor (240). c. etapa 330. desactivar mecanismo de agitacion.6 5 10 15 20 25 d. etapa 340. adquirir senales acusticas a traves del sensor acustico (210). e. etapa 350. transmitir datos a ordenador (100). f. etapa 360. procesar datos en el programa de computador (110) con las senales adquiridas. g. etapa 370. calcular cantidad de mosquitos.la etapa f. incluye las subetapas f.1. separar la senal en tramos. f.2. calcular la transformada de fourier discreta en obtener la potencia espectral de la senal. cada tramo para f.3. calcular filtros correspondientes a la escala mel. f.4. sumar las energias en cada uno de los tramos. f.5. calcular el logaritmo de todas las energias de cada frecuencia mel. f.6. calcular la transformada de coseno discreta a todas las energias de cada frecuencia mel. los logaritmos de los valores obtenidos son los coeficientes de mel o mfccs, con estos coeficientes, se hace un analisis de correlacion de variables en la etapa de pruebas para encontrar las variables que predicen mejor los resultados del conteo.a partir de estos datos se concluyo que una regresion lineal con el cuarto coeficiente de mel modela el conteo de mosquitos con un coeficiente de determinacion mayor al 95 percent. por lo tanto, el numero de mosquitos o variable dependiente se calcula usando una ecuacion de primer grado de un modelo lineal y que tiene como la variable independiente el cuarto coeficiente cepstral de mel.los coeficientes de esta ecu (Results 1)

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7:

Title: METHOD AND APPARATUS FOR CAPACITIVELY SENSING PESTS

Abstract: A method and apparatus for capacitively sensing one or more pests is disclosed. The detector may be employed as either a passive detector and/or as a part of a combined detector and trap. The sensor system includes at least two sensor electrodes and a capacitance sensing circuit. When a non-capacitive object, such as a pest, approaches the sensor electrodes, the capacitance of the sensor electrodes increases due to the object having a higher dielectric constant than air. A capacitance sensing circuit detects the increased capacitance and provides an output signal that a pest has entered the area being monitored. The capacitance sensing circuit may also be constructed to measure the change in the electrode in order to determine the size and/or type of pest based on a characteristic change.

Classifications:

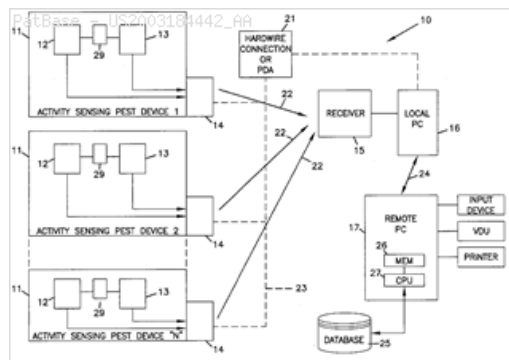
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International (IPC 1-7): A01M1/00 A01M1/04 A01M1/14 A01M1/22 A01M23/02 A01M23/30 A01M31/00 G08B21/00 G08B23/00

CPC: A01M1/026 A01M23/00 A01M31/002 A01M2200/011 A01M2200/012

European: A01M1/00 A01M1/02E A01M21/00 A01M23/00 A01M31/00A K01M200/011 K01M200/012 K01M201/01 K01M201/02

US: 250/221 340/54 340/540 340/540S 340/556 340/562 340/562S 340/573.1 340/573.100S 340/573.2 340/573.200P 340/870.16 340/870.160S 43/1 43/107 43/114 43/114S 43/132.1 43/132.100S 43/1S 43/58 43/58S 43/61 43/61P 43/74 43/98 43/98S 702/187 702/187P

**Family:**

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AT320183 E	20060415	AT20030746055T	20030326
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AU2003222088 AA	20031020	AU20030222088	20030326
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CA2476932 AA	20040818	CA20032476932	20030326
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DE60304049 D1	20060511	DE20036004049	20030326
DE60304049 T2	20061026	DE20036004049T	20030326
EP1489904 A1	20041229	EP20030746055	20030326
EP1489904 B1	20060315	EP20030746055	20030326
ES2265111 T3	20070201	ES20030746055T	20030326
US2003184442 AA	20031002	US20030400951	20030327
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US2003218543 AA	20031127	US20030401302	20030326
US2009192763 AA	20090730	US20090414155	20090330
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US8635806 BB	20140128	US20090414155	20090330
WO03084319 A1	20031016	WO2003US09361	20030326
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WO03084321 A1	20031016	WO2003US09363	20030326

Priority:

US20020368647P	20020329	US20020428479P	20021122	US20020428480P	20021122
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US20090414155	20090330				

Probable Assignee: ECOLAB INC

Assignee(s): (std): ECOLAB INC ; GARDNER JAMES P ; GARDNER JR JAMES P ; HOLZMAN LOUIS MARK ; LUND KRAIG S ; SKAFF STEPHEN X ; DEMATTIA DAVID N

Assignee(s): ECOL INC AB

Inventor(s): (std): GARDNER JAMES P ; GARDNER JAMES P JR ; GARDNER JR JAMES P ; GARDNER P ; HOLZMAN LOUIS MARK ; HOLZMAN MARK ; JAMES P ; JAMES P GARDNER ; DAVID N DEMATTIA ; DEMATTIA DAVID N ; DEMATTIA N ; KRAIG S LUND ; LOUIS MARK HOLZMAN ; LUND KRAIG S ; LUND S ; SKAFF STEPHEN X ; SKAFF X ; STEPHEN X SKAFF

Inventor(s): GARDNER ; JAMES P JR GARDNER ; JR JAMES P

Agent(s): CASSAN MACLEAN; CASSAN MACLEAN IP AGENCY INC; SHUMAKER AND SIEFFERT P A; MERCHANT AND GOULD PC; SHUMAKER AND SIEFFERT PA

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

Title: FLYING INSECT TRAPPING DEVICE AND FLYING INSECT TRAPPING SYSTEM

Abstract: A device for trapping flying insects and a system of such devices are disclosed. The device includes a supporting frame with an associated combustible fuel supply connected to a combustion device with a fan which is operated to generate an exhaust gas having carbon dioxide to attract flying insects. The insects are drawn into a trap chamber on the frame by suction where they are collected and/or killed. The device may further include various sensors to regulate fuel flow and fan speed in accordance with insect activity as influenced by environmental and other factors.

Classifications:

International (IPC 8-9): A01M1/02 A01M1/06 A01M1/10

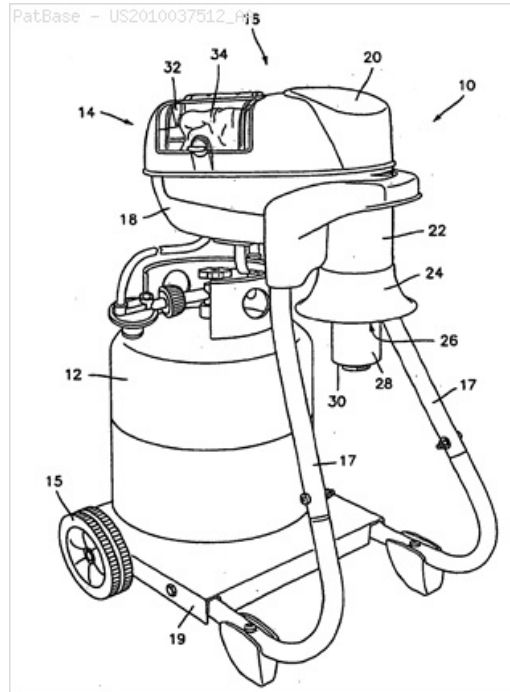
A01M1/12 (Advanced/Invention);

A01M1/00 A01M1/02 (Core/Invention)

CPC: A01M1/06 A01M1/023

European: A01M1/02C A01M1/06

US: 43/132.1 43/139 43/139P



Family:

Publication number	Publication date	Application number	Application date
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AU2007258277 BB	20130725	AU20070258277	20070614
CA2663465 AA	20090313	CA20072663465	20070614
CA2663465 C	20150120	CA20072663465	20070614
CN101657091 A	20100224	CN200780029874	20070614
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EP2031960 A2	20090311	EP20070796064	20070614
EP2031960 A4	20140326	EP20070796064	20070614
US2010037512 AA	20100218	US20070921182	20070614
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WO07146332 A2	20071221	WO2007US13867	20070614
WO07146332 A3	20080320	WO2007US13867	20070614

Priority:

US20060813695P 20060615 US20070921182 20070614 WO2007US13867 20070614

Probable Assignee: WOODSTREAM CORP

Assignee(s): (std): DURAND EMMA AMELIA ; ODDO ANTHONY SCOTT ; WOODSTREAM CORP US ; WOODSTREAM CORP

Assignee(s): GENERAL ELECTRIC CAPITAL COLLATERAL AGENT AS CORP ; ANTARES CAPITAL ADMINISTRATIVE AGENT AS CORP ; ANTARES CAPITAL ADMINISTRATIVE AGENT CORP AS ; ARES CAPITAL COLLATERAL AGENT AS CORP

Inventor(s): (std): DURAND EMMA AMELIA ; ODDO ANTHONY SCOTT ; AMELIA DURAND EMMA

Inventor(s): EMMA AMELIA DURAND

Agent(s): FREEHILLS PATENT ATTORNEYS; FPA PATENT ATTORNEYS PTY LTD; FREEHILLS PATENT AND TRADE MARK ATTORNEYS; HERBERT SMITH FREEHILLS; ROBIC; JOERGENSEN BJOERN BARKER ET AL; JACOBSON HOLMAN PLLC

Designated states: AE AG AL AM 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 SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

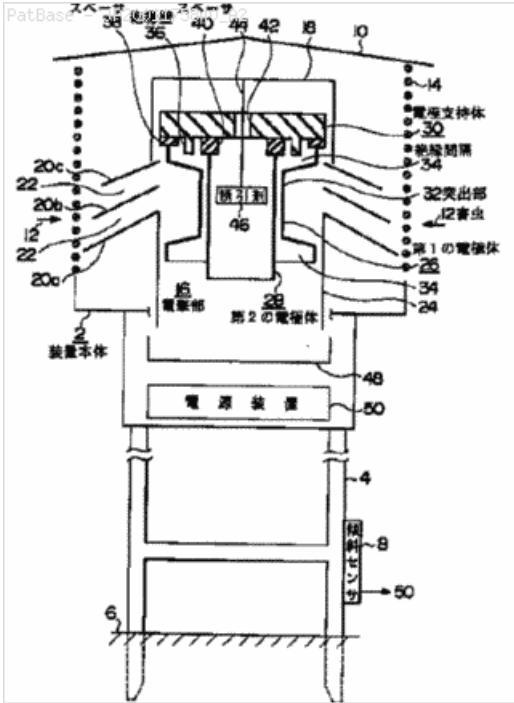
Title: HARMFUL INSECT COUNTER

Abstract: PROBLEM TO BE SOLVED: To provide a harmful insect counter which operates without being affected by environmental conditions and weather conditions, maintains constant counting precision, and has high stability.SOLUTION: This harmful insect counter gives an electric shock to attracted harmful insects (12) and count the harmful insects indirectly through the electric shock or count harmful insects having been given the electric shock directly and is improved in the counting precision of harmful insects, malfunction prevention, and safety by setting the arrangement style of 1st and 2nd electrode bodies (26, 28) and intervals corresponding to harmful insects (12), setting the insulation interval (34) between the electrode bodies (26, 28), and slanting a device main body (2) and stopping electrification in case of a fall.

Classifications:

International (IPC 8-9): G06M7/00 (Advanced/Invention)

International (IPC 1-7): G06M7/00



Family:

Publication number	Publication date	Application number	Application date
JP2001175840 A2	20010629	JP19990355595	19991215

Priority:

JP19990355595 19991215

Probable Assignee:

Assignee(s): (std):	KAWASAKI KIKO KK
Assignee(s):	KAWASAKI KIKO CO LTD
Inventor(s): (std):	SHIMURA HIRONARI

Title: Electronic grain probe insect counter (EGPIC)

Abstract: An automated system has been developed that can acquire and remotely display data indicative of infestation levels in stored agricultural commodities. The system accurately records and time stamps each insect detection, across a full range of pertinent species' sizes, as they drop through a probe containing a sensor head.

Classifications:

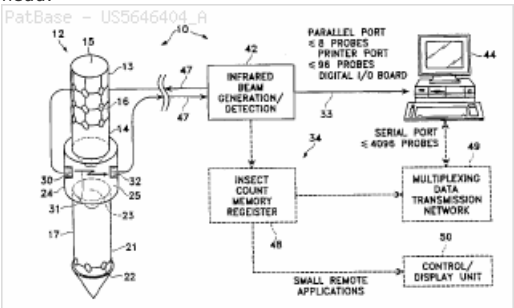
International (IPC 8-9): A01M1/02 G06M1/10
G06M11/00 (Advanced/Invention);
A01M1/02 G06M1/00 G06M11/00 (Core/Invention)

International (IPC 1-7): G01N21/00

CPC: A01M1/026 G06M1/101 G06M11/00

European: A01M1/02E A01M31/00A G06M1/10B G06M11/00

US: 250/338.1 250/358.1



Family:

Publication number	Publication date	Application number	Application date
US5646404 A	19970708	US19950390834	19950217

Priority:

US19950390834 19950217

Probable Assignee: OF FLORIDA RESEARCH FOUNDATION INC UNIV

Assignee(s): (std): US ARMY

Assignee(s): UNIVERSITY OF FLORIDA PO BOX ; UNIVERSITY OF FLORIDA RESEARCH FOU ; THE UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY OF AGRICULTURE ; KRUSS SERGEY ; OF FLORIDA RESEARCH FOUNDATION INC UNIV ; OF FLORIDA UNIV ; SECRETARY OF AGRICULTURE AS US GOV ; SECRETARY OF AGRICULTURE ROOM AS US GOV ; SECRETARY OF AGRICULTURE US ; THE UNITED STATES OF AMERICA AS REPRESENTED BY THE

Inventor(s): (std): COFFELT JAMES A ; KRUSS SERGEY ; LITZKOW CARL A ; SHUMAN DENNIS

Title: SENSOR OUTPUT ANALOG PROCESSING-A MICROCONTROLLER-BASED INSECT MONITORING SYSTEM

Abstract: A system for automated monitoring of pest insects in stored products to help identify insect species and improve reliability across adverse external conditions, including environmental, biological and aging. The system includes sensor units having a microcontroller which collects, analyzes, and stores data from at least one signal pulse created by an insect falling through the sensor unit.

Classifications:

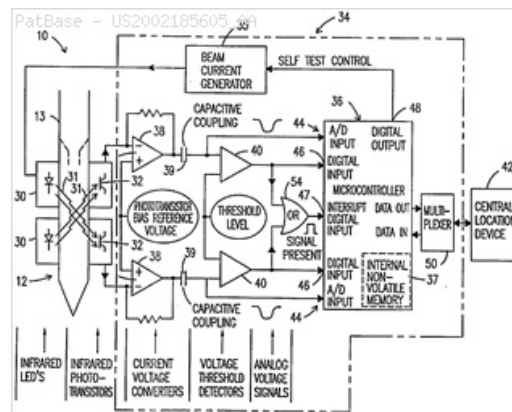
International (IPC 8-9): G01N15/14 G01N29/14 (Advanced/Invention)

International (IPC 1-7): G01J5/02 G01N29/14 G08B23/00

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European: G01N15/14G S01N15/14P

US: 250/336.1 250/338.1 250/341.1 250/341.7 250/341.700P 250/359.1 340/540 340/566 340/573.1 340/573.2

**Family:**

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AU2002256410 AA	20021111	AU20020256410	20020502
CA2446013 AA	20031028	CA20022446013	20020502
EP1393056 A1	20040303	EP20020725873	20020502
US2002185605 AA	20021212	US20020135503	20020501
US6707384 BA	20040316	US20010846277	20010502
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WO02088700 A1	20021107	WO2002US13682	20020502

Priority:

US20010846277 20010502 US20020135503 20020501 WO2002US13682 20020502

Probable Assignee: US AGRICULTURE

Assignee(s): (std): US OF AMERICA REPRESENTED B AS ; SHUMAN DENNIS ; US AGRICULTURE ; OPI SYSTEMS INC ; OPI SYSTEMS INC

Assignee(s): THE UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY OF AGRICUL TUR ; THE UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY OF AGRICULTURE ; THE UNITED STATES OF AMERICA AS REPRESENTED BY THE DEPARTMENT OF AGRICULTURE ; THE UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY OF AGRICULTURE ; SECRETARY OF AGRICULTURE US GOV ; SECRETARY OF AGRICUL TUR AS US GOV ; SECRETARY OF AGRICUL TURE US GOV AS ; SECRETARY OF AGRICULTURE US GOV AS ; SECRETARY OF AGRICULTURE AS US GOV ; SECRETARY OF AGRICULTURE US ; THE UNITED STATES OF AMERICA AS REPRESENTED BY THE ; THE UNITED STATES OF AMERICA REPRESENTED BY THE SE ; AGRICULTURE US SEC ; AGRICULTURE US SECRETARY ; CROMPTON R DAVID

Inventor(s): (std): CROMPTON R DAVID ; SHUMAN DENNIS

Inventor(s): CROMPTON R

Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; BORDEN LADNER GERVAIS LLP; FADO JOHN D; POULOS GAIL E; GAIL E; JOHN D

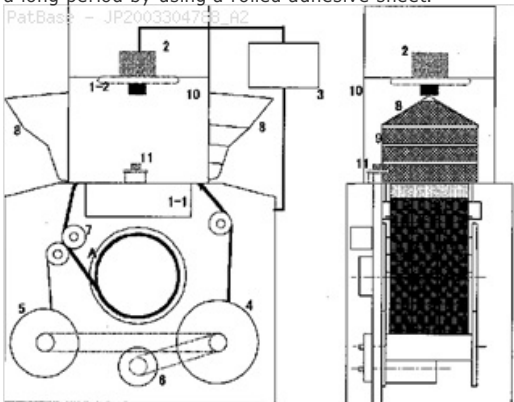
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK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

Title: HARMFUL INSECT COUNTER

Abstract: PROBLEM TO BE SOLVED: To provide a harmful insect counter enabling continuous counting of the number of exclusively the objective harmful insects for a long period by attracting the harmful insects of farm crops by a synthetic pheromone and capturing with an adhesive sheet. SOLUTION: Harmful insects are attracted by the synthetic pheromone 11 and captured on the exposed face of the adhesive sheet A. The image of the captured insects is photographed with light projecting means 1-1, 1-2 and an image-taking means 2 and the objective insects are discriminated and counted by an image-processing means 3. The counting of the insects can be continuously carried out over a long period by using a rolled adhesive sheet.

Classifications:

International (IPC 8-9): A01M1/00 A01M1/02 A01M1/14 G06M11/00 G06T7/60 (Advanced/Invention);
A01M1/00 A01M1/02 G06M11/00 G06T7/60 (Core/Invention)
International (IPC 1-7): A01M1/00 A01M1/02 A01M1/14 G06M11/00 G06T7/60



Family:

Publication number	Publication date	Application number	Application date
JP2003304788 A2	20031028	JP20020151586	20020417
JP3796526 B2	20060712	JP20020151586	20020417

Priority:

JP20020151586 20020417

Probable Assignee: HAYASAKA RIKO KK

Assignee(s): (std): FUKAYA KENICHI ; HAYASAKA RIKO KK ; HOKKAIDO GOVERNMENT ; NAKAO HIROSHI ; NAMI MICHITAKA ; OMURA ISAO ; TAKAHASHI HIROYUKI ; YATANI KAZUHIKO

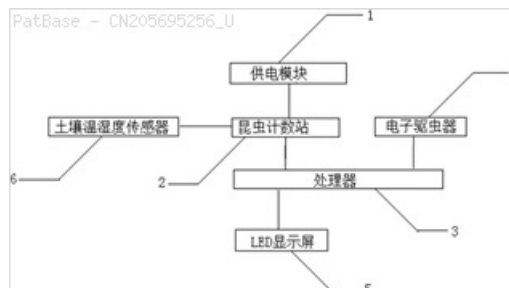
Inventor(s): (std): YATANI KAZUHIKO ; TANAKA MASARU ; TAKAHASHI HIROYUKI ; OMURA ISAO ; NAMI MICHITAKA ; NAKAO HIROSHI ; FUKAYA KENICHI

Title: ELECTRON EXPELLING PARASITE SYSTEM

Abstract: The utility model provides an electron expelling parasite system, including power module, power module counts the station with the insect and is connected, and insect count station is connected with the treater, and the treater is connected with electron expelling parasite ware and LED display screen respectively, and power module includes solar cell panel, and solar cell panel is connected with diode one end, and the diode other end is connected with the battery, and insect count station still is connected with soil temperature and humidity sensor. The utility model discloses a treater is transferred with insect figure, soil temperature and humidity data in insect count station, and the treater carries out data analysis and controls electron expelling parasite ware and carry out the expelling parasite, and the expelling parasite is efficient, and can be with the humiture data of acquireing, and the data display that the insect counter was gathered makes things convenient for the assurance of farmland managers to crop growth environment on the LED display screen.

Classifications:

International (IPC 8-9): A01M29/10 G06M11/00
H02J7/35 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
 CN205695256 U	20161123	CN201620427833U	20160512

Priority:

CN201620427833U 20160512

Probable Assignee: XI AN UNIVERSITY OF ARTS AND SCIENCE

Assignee(s): (std): XI AN UNIV OF ARTS AND SCIENCE ; XI AN UNIVERSITY OF ARTS AND SCIENCE

Inventor(s): (std): CAO XUETONG ; GAO YINSHENG ; JIN TING XIAOXUE ; LI HAO ; LI LI ; LI XUELIANG ; ZHANG PEI

Title: CROP PEST PREVENTS AND TREATS MONITORED CONTROL SYSTEM

Abstract: The utility model discloses a crop pest prevents and treats monitored control system, including central processing unit, central processing unit's input is connected with data acquisition module's output electricity, and central processing unit's input is connected with image acquisition module's output electricity, and central processing unit's input is connected with setting module's no. 1 output electricity, and central processing unit's output is connected with contrast module's no. 1 input electricity, and contrast module's no. 1 output is connected with central processing unit 0's no. 1 input electricity. The utility model discloses an it can carry out real time monitoring to the growing environment of crops to set up temperature sensor, humidity transducer and insect counter, has avoided traditional planting mode to need the on -the -spot investigation to practiced thrift the plenty of time, taken in real time the crop through image acquisition module, made grower according to on -the -spot image and data combination, judged the growth state of crop, it is not only efficient, and the precision is high, satisfied the production demand of modern agriculture's fast rhythm.

Classifications:

International (IPC 8-9): A01M29/18 G01D21/02
H04N7/18 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
 CN206420500 U	20170818	CN201720059581U	20170118

Priority:

CN201720059581U 20170118

Probable Assignee:

ZHENG XIANG

Assignee(s): (std):

ZHENG XIANG

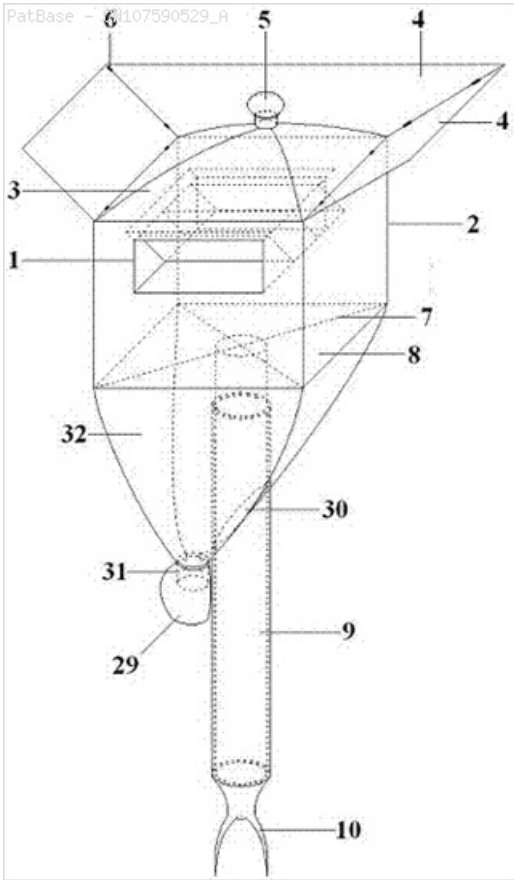
Inventor(s): (std):

ZHENG XIANG

Title: AUTOMATIC STATISTICAL MONITORING DEVICE FOR NUMBER OF INSECTS FOR AGRICULTURAL IOT (INTERNET OF THINGS)

Abstract: The invention discloses an automatic statistical monitoring device for the number of insects for an agricultural IOT (Internet of Things), and belongs to the technical field of the agricultural IOT. The device consists of an electric insect counter (1), an insect collection box (2), a dome (3), a solar cell panel (4), an insect inducing black light lamp (5), a connection plate clamp (6), a box bottom support (7), an inter-frame slit (8), a supporting column (9), a vertical column tip (10), an insect collection bag (29), an insect storage bag mouth (31), and an insect storage bag (32). The device is characterized in that the number of electric insect sound generation nets (12) is 3-5, and each electric insect sound generation net (12) form an inclined surface; a sound probe (14) can form asignal record through the recording of crack sound generated when insects touches the electric insect sound sound generation nets (12) and are electrically shocked, and a networking signal processor (15) transmits the signal to the outside for networking; a control box (18) is provided with a switch. The device is simple in manufacturing, is high in operability, is low in cost, and is remarkable in effect.

Classifications:
International (IPC 8-9): A01M1/04 A01M1/22
G06M1/10 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
 CN107590529 A	20180116	CN201610531655	20160707

Priority:

CN201610531655 20160707

Probable Assignee: HARBIN ACAD OF AGRICULTURAL SCIENCE

Assignee(s): (std): HARBIN ACAD OF AGRICULTURAL SCIENCE

Assignee(s): HARBIN ACADEMY OF AGRICULTURAL SCIENCE ; HARBIN MUNICIPAL ACADEMY OF AGRICULTURAL SCIENCES

Inventor(s): (std): CHEN BAIJIE ; LIU ZHIYANG ; MEN WANJIE

Title: Beneficial insect counting and packaging device

Abstract: An automated system has been developed to count and package beneficial insect larvae or eggs and includes a funnel-shaped container which sits in the top portion of a sensor head and a turntable with multiple containers located below the sensor head, for collecting larvae or eggs as they drop through the sensor head. The system accurately records the number and time stamps each insect larva or egg detection as they drop through a sensor head.

Classifications:

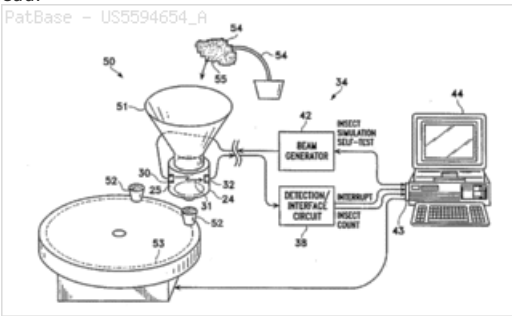
International (IPC 8-9): A01K67/033 G01V8/12 (Advanced/Invention);
A01K67/00 G01V8/12 (Core/Invention)

International (IPC 1-7): G06F17/00

CPC: A01K67/033 G01V8/12

European: A01K67/033 G01V8/12

US: 700/213 702/128



Family:

Publication number	Publication date	Application number	Application date
US5594654 A	19970114	US19950390833	19950217

Priority:

US19950390833 19950217

Probable Assignee: WALT DISNEY CO

Assignee(s): (std): US ARMY

Assignee(s): WALT DISNEY CO ; AGRICULTURE SECRETARY OF UNITED STATES OF AMERICA ; THE UNITED STATES OF AMERICA AS REPRESENTED BY THE ; THE UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY OF AGRICULTURE

Inventor(s): (std): COFFELT JAMES A ; KRUSSE SERGEY ; LITZKOW CARL A ; PETITT FREDERICK L ; SHUMAN DENNIS ; WIETLISBACH DAVID O

Title: POPULATION CONTROL USING ENGINEERED TRANSLOCATIONS

Abstract: Embodiments provided herein relate to systems for synthetically-engineered reciprocal chromosomal translocation for gene insertion into a population of organisms such as insects.

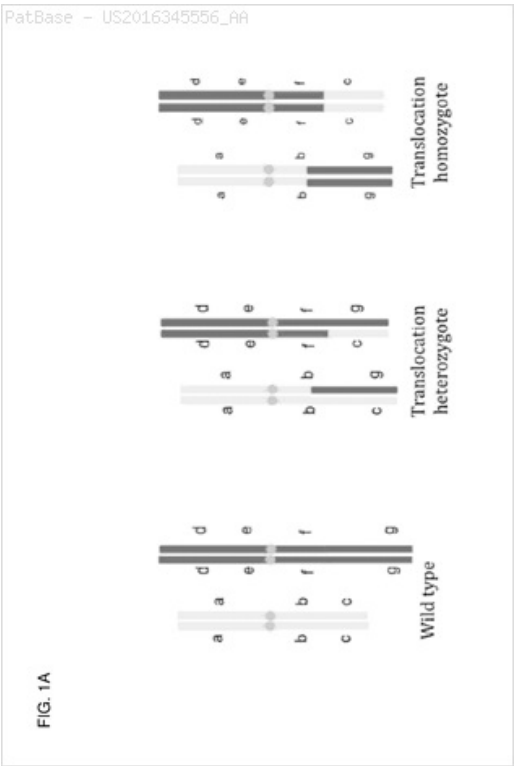
Classifications:

International (IPC 8-9): A01K67/033 (Advanced/Invention)

CPC: A01K67/0339 A01K2227/706 A01K2267/02 A01K2217/15

C12N15/8509

US: 800/13



Family:

Publication number	Publication date	Application number	Application date
US2016345556 AA	20161201	US20160164452	20160525

Priority:

US20150166281P 20150526 US20160164452 20160525

Probable Assignee: CALIFORNIA INST OF TECHN

Assignee(s): (std): CALIFORNIA INST OF TECHN

Assignee(s): CALIFORNIA INST OF TECHNOLOGY

Inventor(s): (std): AKBARI OMAR S ; BUCHMAN ANNA B ; HAY BRUCE A

Title: STAGING SURFACE FLYING INSECT TRAP

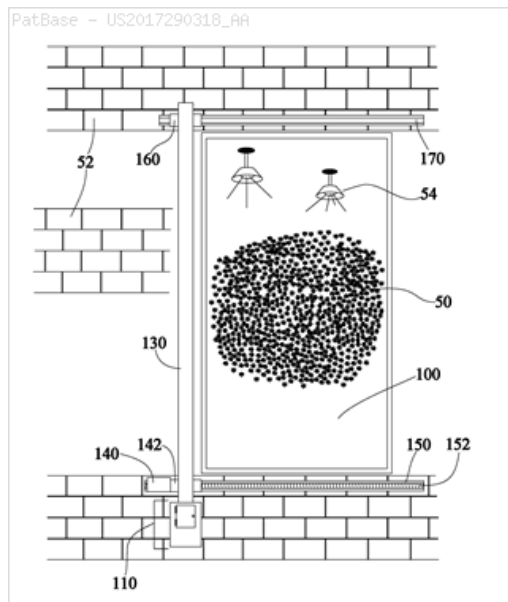
Abstract: Devices are embodied that eliminate flying insect pests in quite a different way than others devices have used in the past. If insects are attracted to a surface large enough to accommodate their numbers and allowed to gather for a time without being restrained or bothered, it is possible by way of these embodiments at a single location to eliminate insects in very large number on a daily basis. Depending on a device's size and embodiment, from several hundred to far in excess of one hundred thousand flying insects per twenty-four hour period can be eliminated.

Classifications:

International (IPC 8-9): A01M1/02 A01M1/06 A01M1/08 A01M1/10

A01M1/22 A01M1/24 A01N25/08 (Advanced/Invention)

CPC: A01M1/08 A01M1/023 A01M1/06 A01M1/106 A01M1/24 A01M1/223
A01M1/226 A01N25/08



Family:

Publication number	Publication date	Application number	Application date
■ US2017290318 AA	20171012	US20170484103	20170410

Priority:

US20160320610P 20160410 US20170484103 20170410

Probable Assignee:

BERGENGREN JOHN RODERIC

Assignee(s): (std):

BERGENGREN JOHN RODERIC

Inventor(s): (std):

BERGENGREN JOHN RODERIC

Search history

Search 1: converter ACDC (Results 153)
Search 2: motor+ and (agitator+ or shake+) and USB and acoustic (Results 320)
Search 3: motor* and (agitator* or shake*) and USB and acoustic (Results 569)
Search 4: motor* and (agitator* or shak*) and USB and acoustic (Results 867)
Search 5: 4 and acoustic sensor* (Results 154)
Search 6: insect agitator (Results 0)
Search 7: STA=(agitator and acoustic sensor) (Results 0)
Search 8: STA=(stirrer and acoustic sensor) (Results 1)
Search 9: motor* and (stirrer* or shak*) and USB and (acoustic sensor or microphone) (Results 1543)
Search 10: 9 and (insect* or mosquito*) (Results 53)
Search 11: STA=(motor* and stirrer* and USB and (acoustic sensor or microphone)) (Results 0)
Search 12: STAC=(motor* and (stirrer*) and USB and (acoustic sensor or microphone)) (Results 0)
Search 13: STAC=(motor* and (stirrer*) and (acoustic sensor or microphone)) (Results 2)
Search 14: motor* and stirrer* and acoustic sensor or microphone (Results 200)
Search 15: Mel frequenc+ (Results 1)
Search 16: Mel frequencies (Results 43)

Title: METHOD AND APPARATUS FOR SPEECH RECONSTRUCTION IN A DISTRIBUTED SPEECH RECOGNITION SYSTEM

Abstract: In a distributed speech recognition system (20) comprising a first communication device (22) which receives a speech input (34), encodes data representative of the speech input (36, 38), and transmits the encoded data (42) and a second remotely-located communication device (26) which receives the encoded data (44) and compares the encoded data with a known data set, the device (26) including a processor (92) with a program which controls the processor (92) to operate according to a method of reconstructing the speech input including the step (44) of receiving encoded data including encoded spectral data and encoded energy data. The method further includes the step (46, 48) of decoding the encoded spectral data and encoded energy data to determine the spectral data and energy data. The method also includes the step (50, 52) of combining the spectral data and energy data to reconstruct the speech input.

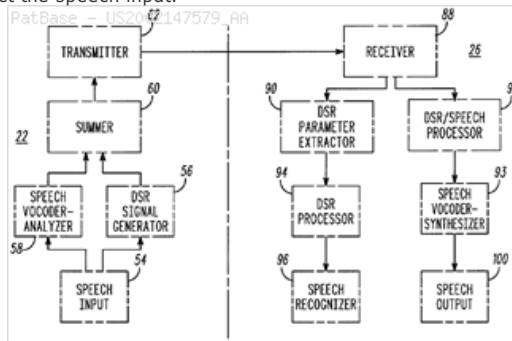
Classifications:

International (ipc 8-9): G10L15/00 G10L15/28 G10L15/30
G10L19/00 G10L19/093 G10L25/18 (Advanced/Invention);
G10L19/08 (Advanced/Non-invention);
G10L15/00 G10L19/00 (Core/Invention)

International (ipc 1-7): G10L11/04 G10L15/00 G10L15/28
G10L19/00 G10L15/30 G10L19/093 G10L25/18

European: G10L15/30 G10L19/00U S10L19/093 S10L25/18

US: 704/205 704/206 704/207 704/207P 704/E15.047 704/E15.047S
704/E19.008 704/E19.008S

**Family:**

Publication number	Publication date	Application number	Application date
AU2002243594 AA	20020819	AU20020243594	20020118
BRPI0206910 A	20041214	BR2002PI06910	20020118
CN1327405 C	20070718	CN20028005996	20020118
CN1552059 A	20041201	CN20028005996	20020118
DE60247273 D1	20150730	DE20026047273	20020118
EP1395978 A2	20040310	EP20020709089	20020118
EP1395978 A4	20050921	EP20020709089	20020118
EP1395978 B1	20150624	EP20020709089	20020118
EP2945154 A1	20151118	EP20150173401	20020118
US2002147579 AA	20021010	US20010775951	20010202
US6633839 BB	20031014	US20010775951	20010202
WO02062120 A2	20020815	WO2002US01481	20020118
WO02062120 A3	20031218	WO2002US01481	20020118

Priority:

US20010775951 20010202 EP20020709089 20020118 WO2002US01481 20020118

Probable Assignee: GOOGLE INC

Assignee(s): (std): MOTOROLA INC ; MOTOROLA MOBILITY LLC

Assignee(s): MOTOROLA MOBILITY LLC LIBERTYVILLE ; MOTOROLA MOBILITY INC ; RAMABADRAN TENKASI V ;
GOOGLE INC ; GOOGLE TECHNOLOGY HOLDINGS LLC ; JASIUK MARK A ; KUSHNER WILLIAM M ;
MEUNIER JEFFREY

Inventor(s): (std): KUSHNER WILLIAM M JASIUK MARK ; MARK A JASIUK ; TENKASI V RAMABADRAN ; WILLIAM M
KUSHNER ; RAMABADRAN TENKASI V ; MEUNIER JEFFREY ; KUSHNER WILLIAM M ; JASIUK MARK A ;
JEFFREY MEUNIER

Inventor(s): KUSHNER WILLIAM M ARLINGTON HEIGHTS ; JASIUK MARK A CHICAGO ; MEUNIER JEFFREY CHICAGO
; RAMABADRAN TENKASI V NAPERVILLE

Agent(s): SPLANEMANN PATENTANWALTE PARTNERSCHAFT; BOULT WADE TENNANT

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

Title: FEATURE EXTRACTION APPARATUS, FEATURE EXTRACTION METHOD, AND PROGRAM THEREOF

Abstract: Provided are techniques which offer an advantage of reduced time and reduced storage capacity required to calculate the feature value of AAC-format song data. A feature extraction unit includes: an MDCT coefficient extraction unit which extracts MDCT coefficients from AAC-format song data; a classification unit which locates the MDCT coefficients thus extracted by the MDCT coefficient extraction unit on **Mel frequency** regions so as to uniformly classify the MDCT coefficients into classes, the number of which is the same as that of a predetermined number of Mel filter banks; an integrating unit which extracts the MDCT coefficients classified by the classification unit by applying a predetermined window function, and integrates the MDCT coefficients thus extracted, in increments of the Mel filter banks; and a feature calculation unit which calculates the feature value by performing logarithmic cosine conversion of the integrated results obtained by the integrating unit.

Classifications:

International (IPC 8-9): G06F17/00 G06F17/30 G06F7/00 G10L11/00 G10L19/00 G10L21/00 G10L25/24 G10L25/45 G10L25/54 (Advanced/Invention);

G10L11/00 G10L19/00 (Core/Invention)

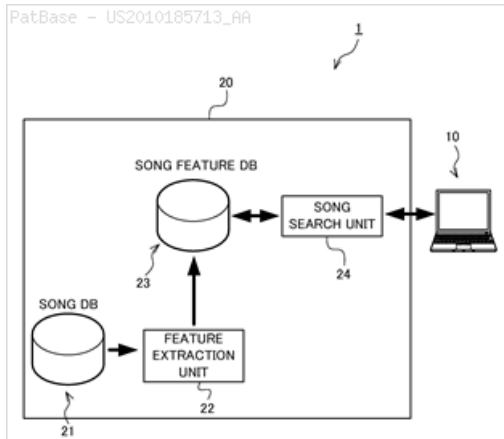
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European: G06F17/30U1 G06F17/30U3E G10L19/02

US: 700/94 700/94S 704/500 704/500S 704/E21.001 704/E21.001S 707/912 707/912S 707/916 707/916S 707/E17.008 707/E17.008S 707/E17.101 707/E17.101S 84/609 84/609P

JP F-Term: 5D045

JP F-Index: G10L11/00/101/H G10L11/00/301 G10L11/00/402/B G10L19/00/330/D G10L25/24 G10L25/45 G10L25/54



Family:

Publication number	Publication date	Application number	Application date
JP2010164762 A2	20100729	JP20090006702	20090115
JP5384952 B2	20140108	JP20090006702	20090115
US2010185713 AA	20100722	US20090572135	20091001
US8301284 BB	20121030	US20090572135	20091001

Priority:

JP20090006702 20090115

Probable Assignee: KDDI CORP

Assignee(s): (std): AOKI KEIKO ; HOASHI KEIICHIRO ; KANDA RYUICHI ; KDDI CORP ; YANAGIHARA HIROMASA

Inventor(s): (std): AOKI KEIKO ; HOASHI KEIICHIRO ; KANDA RYUICHI ; YANAGIHARA HIROMASA

Agent(s): BAINWOOD HUANG AND ASSOCIATES LLC ; BAINWOODHUANG

Title: METHOD AND APPARATUS FOR SPEECH RECONSTRUCTION WITHIN A DISTRIBUTED SPEECH RECOGNITION SYSTEM

Abstract: A method and apparatus for speech reconstruction within a distributed speech recognition system is provided herein. Missing MFCCs are reconstructed and utilized to generate speech. Particularly, partial recovery of the missing MFCCs is achieved by exploiting the dependence of the missing MFCCs on the transmitted pitch period P as well as on the transmitted MFCCs. Harmonic magnitudes are then obtained from the transmitted and reconstructed MFCCs, and the speech is reconstructed utilizing these harmonic magnitudes.

Classifications:

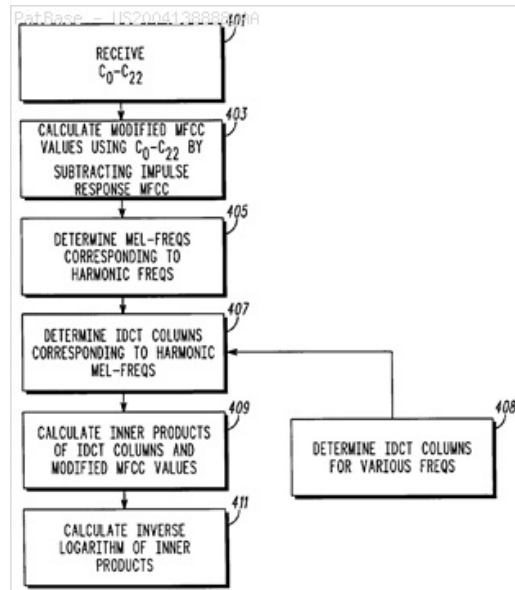
International (IPC 8-9): G10L11/00 G10L15/00 G10L15/28
G10L19/00 G10L19/14 G10L21/00 G10L21/02 (Advanced/Invention);
G10L15/02 G10L19/00 G10L21/00 (Advanced/Non-invention);
G10L15/00 G10L21/00 (Core/Invention);
G10L19/00 (Core/Non-invention)

International (IPC 1-7): G10L11/00 G10L13/04 G10L21/00

CPC: G10L15/02 G10L21/038 G10L25/24 G10L15/30

European: G10L15/30 G10L21/038 S10L15/02 S10L25/24

US: 704/205 704/234 704/243 704/256 704/262 704/262P
704/E15.047 704/E15.047S 706/14



Family:

Publication number	Publication date	Application number	Application date
BRPI0406765 A	20051220	BR2004PI06765	20040113
CN100371988 C	20080227	CN200480002185	20040113
CN1739143 A	20060222	CN200480002185	20040113
DE602004034087 D1	20111020	DE200460034087T	20040113
EP1588354 A2	20051026	EP20040701832	20040113
EP1588354 A4	20060301	EP20040701832	20040113
EP1588354 B1	20110824	EP20040701832	20040113
KR101059640 B1	20110825	KR20057013048	20040113
KR20050092112 A	20050920	KR20057013048	20040113
RU2005125737 A	20060110	RU20050125737	20040113
RU2366007 C2	20090827	RU20050125737	20040113
US2004138888 AA	20040715	US20030341726	20030114
US7027979 BB	20060411	US20030341726	20030114
WO04066269 A2	20040805	WO2004US00871	20040113
WO04066269 A3	20050127	WO2004US00871	20040113

Priority:

US20030341726 20030114 EP20040701832 20040113 WO2004US00871 20040113

Probable Assignee: GOOGLE INC

Assignee(s): (std): MOTOROLA INC ; RAMABADRAN TENKASI ; MOTOROLA MOBILITY INC

Assignee(s): MOTOROLA MOBILITY LLC ; MOTOROLA MOBILITY INC LIBERTYVILLE ; MOTOROLA INC A OF STATE OF DELAWARE CORP ; MOTOROLA INC A OF STATE OF DELAWARE CORP ; MOTOROLA INK ; GOOGLE INC ; GOOGLE TECHNOLOGY HOLDINGS LLC

Inventor(s): (std): RAMABADRAN TENKASI ; RAMABADRAN TENKASI V ; TENKASI RAMABADRAN

Inventor(s): TENKASI V RAMABADRAN ; RAMABADRAN TENKASI NAPERVILLE

Agent(s): SPLANEMANN PATENTANWALTE PARTNERSCHAFT; MCLEISH NICHOLAS ALISTAIR MAXWELL; SYLVIA; KENNETH A

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 GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: SPEECH RECOGNITION APPARATUS

Abstract: A voice recognition system (10) for improving the toughness of voice recognition for a voice input for which a deteriorated feature amount cannot be completely identified. The system comprises at least two sound detecting means (16 a, 16 b) for detecting a sound signal, a sound source localizing unit (21) for determining the direction of a sound source based on the sound signal, a sound source separating unit (23) for separating a sound by the sound source from the sound signal based on the sound source direction, a mask producing unit (25) for producing a mask value according to the reliability of the separation results, a feature extracting unit (27) for extracting the feature amount of the sound signal, and a voice recognizing unit (29) for applying the mask to the feature amount to recognize a voice from the sound signal.

Classifications:

International (IPC 8-9): G10L15/00 G10L15/20 G10L15/28

G10L21/02 H04B3/00 H04R3/00 (Advanced/Invention);

G10L15/00 H04B3/00 (Core/Invention)

CPC: G10L15/20 G10L21/028 G10L2021/02166

European: G10L15/20 G10L21/028 S10L21/0216M3

US: 381/94.7 381/94.700S 704/233 704/233P 704/E15.039

704/E15.039S 704/E21.004 704/E21.004S

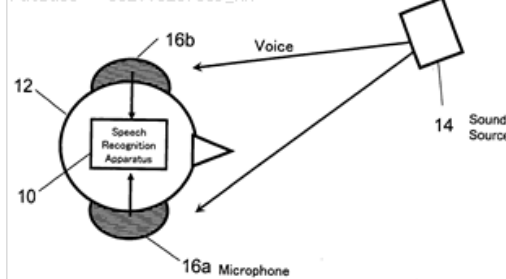
JP F-Term: 5D015 5D015/DD02 5D020 5D020/BB03 5D045 5D220

5D220/BA06 5D220/BC05

JP F-Index: G10L15/28/400 G10L21/02/201/C G10L21/02/202/A

G10L21/0272/100/A G10L21/028/C H04R3/00/320

PatBase - US2008167869_AA



Family:

Publication number	Publication date	Application number	Application date
DE602005031026 D1	20120119	DE200560031026T	20051202
EP1818909 A1	20070815	EP20050814282	20051202
EP1818909 A4	20091028	EP20050814282	20051202
EP1818909 B1	20111102	EP20050814282	20051202
JP2006059806 A1	20080605	JP20060546764T	20051202
JP4157581 B1	20081001	JP20060546764T	20051202
JP4157581 B2	20081001	JP20060546764T	20051202
US2008167869 AA	20080710	US20050792052	20051202
US8073690 BB	20111206	US20050792052	20051202
WO06059806 A1	20060608	WO2005JP22601	20051202

Priority:

US20040633351P 20041203

EP20050814282 20051202

US20050792052 20051202

WO2005JP22601 20051202

Probable Assignee: HONDA MOTOR CO LTD

Assignee(s): (std): HONDA MOTOR CO LTD ; NAKADAI KAZUHIRO ; OKUNO HIROSHI ; TSUJINO HIROSHI ; YAMAMOTO SHUNICHI

Assignee(s): HONDA MOTOR CO

Inventor(s): (std): NAKADAI KAZUHIRO ; OKUNO HIROSHI ; TSUJINO HIROSHI ; YAMAMOTO SHUNICHI

Inventor(s): YAMAMOTO SHUNICHI HONDA RES INST JAPAN CO LTD ; YAMAMOTO SHUNICHI HONDA RES INST JAPAN CO LTD WAKO SHI ; TSUJINO HIROSHI HONDA RES INST JAPAN CO LTD ; TSUJINO HIROSHI HONDA RES INST JAPAN CO LTD WAKO SHI ; OKUNO HIROSHI 205 3 1102 SANMONJI CHO ; NAKADAI KAZUHIRO HONDA RES INST JAPAN CO LTD ; NAKADAI KAZUHIRO HONDA RES INST JAPAN CO LTD WAKO SHI

Agent(s): MITSCHERLICH PATENT U RECHTSANWAELTE PARTMBB; RUPP CHRISTIAN; SQUIRE SANDERS AND DEMPSEY LLP; SQUIRE SANDERS AND DEMPSEY US LLP

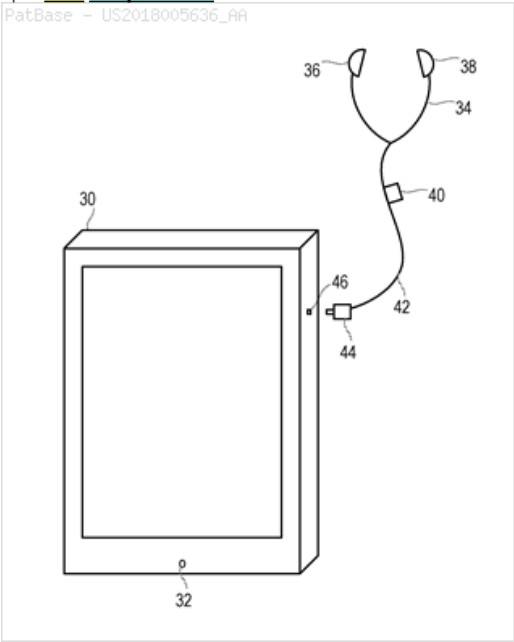
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Title: MICROPHONE UNIT COMPRISING INTEGRATED SPEECH ANALYSIS

Abstract: A microphone unit has a transducer, for generating an electrical audio signal from a received acoustic signal; a speech coder, for obtaining compressed speech data from the audio signal; and a digital output, for supplying digital signals representing said compressed speech data. The speech coder may be a lossy speech coder, and may contain a bank of filters with centre frequencies that are non-uniformly spaced, for example **mel frequencies**.

Classifications:

International (ipc 8-9): G10L15/00 G10L19/00 G10L19/02 G10L19/04 G10L19/16 G10L21/0208 G10L25/24 G10L25/78 H04R19/04 H04R3/00 (Advanced/Invention); H04R3/00 (Advanced/Non-invention)
CPC: G10L19/00 G10L19/02 G10L19/16 H04R3/005 G10L19/0019 G10L15/00 G10L21/0208 G10L25/24 G10L25/78 H04R3/00 H04R2201/003 H04R19/04



Family:

Publication number	Publication date	Application number	Application date
CN107251573 A	20171013	CN201580076624	20151222
GB201509483 A0	20150715	GB20150009483	20150602
GB201522666 A0	20160203	GB20150022666	20151222
GB201711576 A0	20170830	GB20170011576	20151222
GB2535002 A1	20160810	GB20150022666	20151222
GB2551916 A1	20180103	GB20170011576	20151222
US2018005636 AA	20180104	US20150538619	20151222
WO16102954 A1	20160630	WO2015GB54122	20151222

Priority:

US20140096424P 20141223 US20150538619 20151222 WO2015GB54122 20151222

Probable Assignee: CIRRUS LOGIC INT UK LTD

Assignee(s): (std): CIRRUS LOGIC INT SEMICONDUCTOR LTD ; CIRRUS LOGIC INT UK LTD

Inventor(s): (std): JOHN LAURENCE MELANSON ; JOHN PAUL LESSO ; LESSO JOHN PAUL ; MELANSON JOHN LAURENCE

Agent(s): OCONNELL DAVID CHRISTOPHER

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: SIGNAL PROCESSING SYSTEM FOR COMPARING A HUMAN-GENERATED SIGNAL TO A WILDLIFE CALL SIGNAL

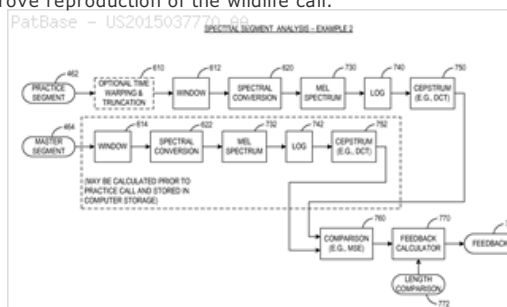
Abstract: Systems and methods for training users to more proficiently make wildlife calls, whether for hunting or other purposes, are described herein. For instance, an embodiment of an interactive learning system can train an enthusiast to more consistently and proficiently make calls that are efficacious with attracting wildlife. The system may implement advanced signal processing techniques that can compare a user-generated signal (attempting to mimic a wildlife call) with a prerecorded wildlife call. The system may provide feedback to the user to enable the user to assess his or her performance in reproducing the wildlife call. The user can use the feedback to improve reproduction of the wildlife call.

Classifications:

International (IPC 8-9): A01M31/00 G09B5/04
G09B5/06 (Advanced/Invention)

CPC: G09B5/04 G09B5/065

US: 434/247 434/319



Family:

Publication number	Publication date	Application number	Application date
US2015037770 AA	20150205	US20140449687	20140801
US2015037778 AA	20150205	US20140451100	20140804
US2017061807 AA	20170302	US20160352480	20161115
WO15017799 A1	20150205	WO2014US49439	20140801

Priority:

US20130861088P 20130801 US20140449687 20140801 US20140451100 20140804
US20160352480 20161115

Probable Assignee: PHILP STEVEN

Assignee(s): (std): BELL KARLTON ; GNIFFKE TERRY ; PHILP STEVEN ; SENEFSKY MARK

Assignee(s): CALIBER MEDIA GROUP INC

Inventor(s): (std): BELL KARLTON ; GNIFFKE TERRY ; PHILP STEVEN ; SENEFSKY MARK

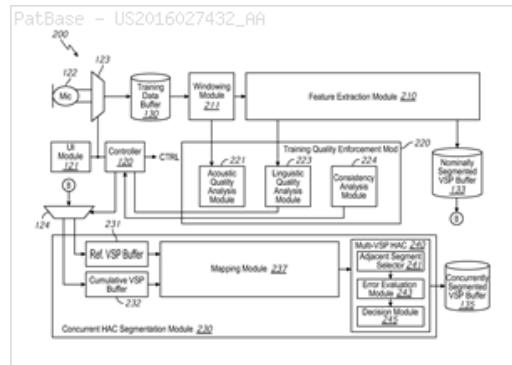
Agent(s): ALTMAN DANIEL E

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

Abstract: Various implementations disclosed herein include a training module configured to produce a set of segment templates from a concurrent segmentation of a plurality of vocalization instances of a VSP vocalized by a particular speaker, who is identifiable by a corresponding set of vocal characteristics. Each segment template provides a stochastic characterization of how each of one or more portions of a VSP is vocalized by the particular speaker in accordance with the corresponding set of vocal characteristics. Additionally, in various implementations, the training module includes systems, methods and/or devices configured to produce a set of VSP segment maps that each provide a quantitative characterization of how respective segments of the plurality of vocalization instances vary in relation to a corresponding one of a set of segment templates.

International (IPC 8-9): G10L15/00 G10L15/02 G10L15/04
G10L15/06 G10L15/12 G10L15/20 (Advanced/Invention);
G10L15/08 (Advanced/Non-invention)

US: 704/233 704/243



Publication number	Publication date	Application number	Application date
US2016027432 AA	20160128	US20150806736	20150723
US2016027438 AA	20160128	US20150806732	20150723
US9792898 BB	20171017	US20150806732	20150723
US9953633 BB	20180424	US20150806736	20150723

US20140029560P 20140727 US20150806732 20150723 US20150806736 20150723

Probable Assignee: MALASPINA LABS BARBADOS INC
Assignee(s): (std): MALASPINA LABS BARBADOS INC
Inventor(s): (std): CHU CLARENCE ; ANHARI ALIREZA KENARSARI
Agent(s): RONALD S ; RONALD

Title: VOICE RECOGNITION WITH SPEAKER ADAPTATION AND REGISTRATION WITH PITCH

Abstract: Voice recognition methods and systems are disclosed. A voice signal is obtained for an utterance of a speaker. A runtime pitch is determined from the voice signal for the utterance. The speaker is categorized based on the runtime pitch and one or more acoustic model parameters are adjusted based on a categorization of the speaker. The parameter adjustment may be performed at any instance of time during the recognition. A voice recognition analysis of the utterance is then performed based on the acoustic model.

Classifications:

International (IPC 8-9): G10L15/02 G10L15/06 G10L15/14

G10L15/28 G10L17/00 (Advanced/Invention);

G10L15/00 G10L17/00 (Core/Invention)

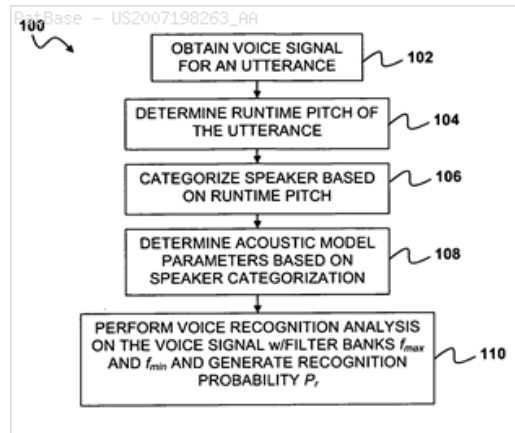
CPC: G10L17/00 G10L15/065 G10L25/90

European: G10L15/065 G10L17/00U S10L25/90

US: 704/207 704/208 704/246 704/246P 704/250 704/255 704/256 704/256.2 704/E15.009 704/E15.009S 704/E17.001 704/E17.001S 704/E17.003 704/E17.003S

JP F-Term: 5D015 5D015/GG01

JP F-Index: G10L15/02/300/D G10L15/02/300/K G10L15/06/310/S G10L15/07 G10L17/00/200/B G10L17/02



Family:

Publication number	Publication date	Application number	Application date
AT434252 E	20090715	AT20070756698T	20070206
CN101390155 A	20090318	CN200780006100	20070206
CN101390155 B	20120815	CN200780006100	20070206
DE602007001338 D1	20090730	DE200760001338T	20070206
EP1979894 A1	20081015	EP20070756698	20070206
EP1979894 B1	20090617	EP20070756698	20070206
ES2327468 T3	20091029	ES20070756698T	20070206
JP2009527801 T2	20090730	JP20080556492T	20070206
JP4959727 B2	20120627	JP20080556492T	20070206
US2007198263 AA	20070823	US20060358001	20060221
US2010324898 AA	20101223	US20100841101	20100721
US7778831 BB	20100817	US20060358001	20060221
US8050922 BB	20111101	US20100841101	20100721
WO07098316 A1	20070830	WO2007US61707	20070206

Priority:

US20060358001 20060221 WO2007US61707 20070206 US20100841101 20100721

Probable Assignee: SONY INTERACTIVE ENTERTAINMENT INC

Assignee(s): (std): CHEN RUXIN ; SONY COMP ENTERTAINMENT CORP ; SONY COMP ENTERTAINMENT INC ; SONY COMPUTER ENTERTAINMENT INC

Assignee(s): SONY NETWORK ENTERTAINMENT PLATFORM INC ; SONY INTERACTIVE ENTERTAINMENT INC ; SONY COMPUTER ENTERTAINMENT CORP

Inventor(s): (std): CHEN RUXIN ; RUXIN CHEN

Agent(s): TURNER JAMES ARTHUR; MORISHITA SAKAKI; JOSHUA D ISENBERG JDI PATENT; JDI PATENT; JOSHUA D

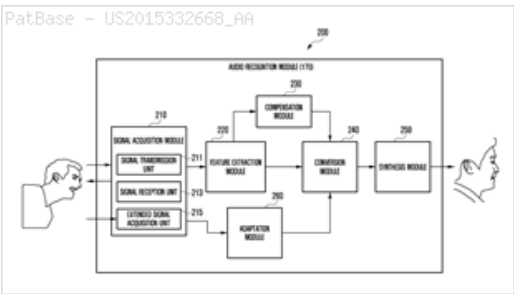
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Title: AUDIO SIGNAL RECOGNITION METHOD AND ELECTRONIC DEVICE SUPPORTING THE SAME

Abstract: An electronic device is provided. The electronic device includes a signal acquisition module configured to transmit a signal toward an object and receive an echo signal obtained by transformation of the signal through a collision with one surface of the object; a feature extraction module configured to extract a signal descriptor from the echo signal and analyze the extracted signal descriptor; a conversion module configured to convert the signal descriptor into an audio descriptor; and a synthesis module configured to convert the audio descriptor into an audio signal in a determined frequency band and output the converted audio signal.

Classifications:

International (IPC 8-9): G10L15/02 G10L15/22 G10L15/24
G10L15/26 G10L15/28 G10L21/003 (Advanced/Invention)
CPC: G10L15/26 G10L15/22 G10L21/003 G06K9/00335 G10L15/24
G10L15/02 G10L13/04
US: 704/205 704/207



Family:

Publication number	Publication date	Application number	Application date
EP2945156 A1	20151118	EP20150167396	20150512
KR20150130854 A	20151124	KR20140058014	20140514
US2015332668 AA	20151119	US20150712509	20150514

Priority:

KR20140058014 20140514

Probable Assignee: SAMSUNG ELECTRONICS CO LTD

Assignee(s): (std): SAMSUNG ELECTRONICS CO LTD

Assignee(s): SAMSUNG ELECTRONICS CO

Inventor(s): (std): BRONAKOWSKI LUKASZ ; GAJEWSKA DENDEK ELZBIETA ; LUKASIAK BOZENA ; TKACZUK JAKUB

Agent(s): JENKINS RICHARD GAVIN

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

Title: HEARING AID SYSTEM AND A METHOD OF OPERATING A HEARING AID SYSTEM

Abstract: A method of operating a hearing aid system (400) based on a classification of the current sound environment, which includes a measure of a beat probability and a hearing aid system for carrying out such a method.

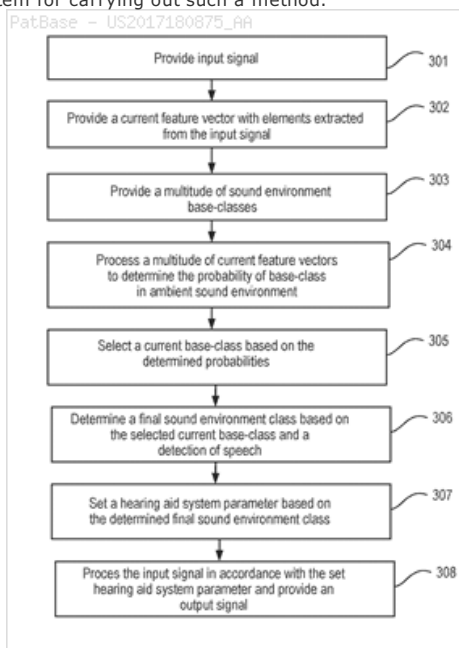
Classifications:

International (IPC 8-9): H04R25/00 (Advanced/Invention)

CPC: H04R25/353 H04R25/502 H04R2430/03 G10H2210/076

H04R2225/41 H04R25/505 G10H2210/041 G10H2210/046

G10H2250/055



Family:

Publication number	Publication date	Application number	Application date
EP3182729 A1	20170621	EP20160202119	20161205
US2017180875 AA	20170622	US20160380214	20161215
US9992583 BB	20180605	US20160380214	20161215

Priority:

DK20150000820 20151218

Probable Assignee: WIDEX A S

Assignee(s): (std): WIDEX AS

Assignee(s): WIDEX A S

Inventor(s): (std): THEILL JESPER

Agent(s): SUGHRUE MION PLLC

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

Title: DISTRIBUTED AUDIENCE MEASUREMENT SYSTEMS AND METHODS

Abstract: Systems and methods are disclosed for customizing, distributing and processing audio fingerprint data. One or more items of audio content are processed to generate pre-recorded audio fingerprints. After identifying one or more specific devices in accordance to panelist and/or household data from a central site, an activation message is communicated to the identified devices, together with the pre-recorded audio fingerprint in accordance with a predetermined schedule. After receiving the activation message, the portable device records the audio content, forms an audio fingerprint, and performs local matching to determine if a match exists. The matching result is then communicated back to the central site for further processing and analysis.

Classifications:

International (IPC 8-9): G06Q10/00 G06Q30/02 G10L19/018

G10L25/48 G10L25/51 G10L25/72 G10L25/81 H04H60/32

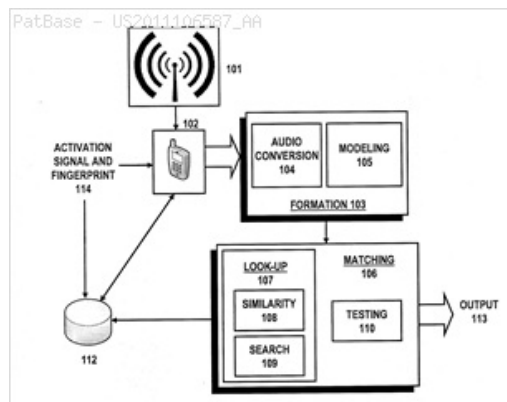
H04H60/58 (Advanced/Invention);

G06F17/00 (Advanced/Non-invention)

CPC: G06Q30/0204 H04H60/58 G10L25/81 G10L25/72 G10L25/51 G10L19/018 G10L25/48

European: G06Q30/0204 G10L19/018

US: 1/1 455/2.01 700/94 700/94S 705/7.33 705/7.33P 706/48 725/18 725/19

**Family:**

Publication number	Publication date	Application number	Application date
US2011106587 AA	20110505	US20090609204	20091030
US2015170673 AA	20150618	US20150628533	20150223
US2016329058 AA	20161110	US20160216077	20160721
US8990142 BB	20150324	US20090609204	20091030
US9437214 BB	20160906	US20150628533	20150223

Priority:

US20090609204 20091030 US20150628533 20150223 US20160216077 20160721

Probable Assignee: NIELSEN CO US LLC

Assignee(s): (std): JAIN ANAND ; LYNCH WENDELL ; NEUHAUSER ALAN ; ARSHI TAYMOOR ; NIELSEN CO US LLC

Assignee(s): NIELSEN HOLDINGS NV ; CITIBANK NA COLLATERAL AGENT FOR FIRST LIEN SECURED PARTIES AS ; NIELSEN AUDIO INC ; ARBITRON INC

Inventor(s): (std): ARSHI TAYMOOR ; JAIN ANAND ; LYNCH WENDELL ; NEUHAUSER ALAN

Agent(s): HANLEY FLIGHT AND ZIMMERMAN LLC

Title: FEATURE-DOMAIN CONCATENATIVE SPEECH SYNTHESIS

Abstract: A method for speech synthesis includes receiving an input speech signal containing a set of speech segments, and estimating spectral envelopes of the input speech signal in a succession of time intervals during each of the speech segments. The spectral envelopes are integrated over a plurality of window functions in a frequency domain so as to determine elements of feature vectors corresponding to the speech segments. An output speech signal is reconstructed by concatenating the feature vectors corresponding to a sequence of the speech segments.

Classifications:

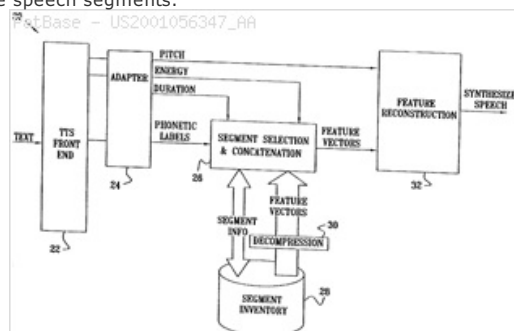
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International (ipc 1-7): G10L13/00 G10L15/26 G10L19/02

CPC: G10L13/07 G10L25/18

European: G10L13/07 S10L25/18

US: 704/203 704/205 704/207 704/258 704/258P 704/E13.01 704/E13.010S



Family:

Publication number	Publication date	Application number	Application date
IL135192 A0	20010520	IL20000135192	20000321
IL135192 A1	20040620	IL20000135192	20000321
US2001056347 AA	20011227	US20010901031	20010710
US6725190 BA	20040420	US19990432081	19991102
US7035791 BB	20060425	US20010901031	20010710

Priority:

US19990432081 19991102 US19990432081 19991102 US20010901031 20010710

Probable Assignee: NUANCE COMMUNICATIONS INC

Assignee(s): (std): IBM

Assignee(s): INT BUSINESS MACHINES ; INT BUSINESS MACHINES CORP ; INT BUSINESS MACHINES CORPORAITON ; INTIONAL BUSINESS MACHINES NEW ORCHARD ; NUANCE COMMUNICATIONS INC ; RON HOORY ; DAN CHAZAN ; GILAD COHEN

Inventor(s): (std): CHAZAN DAN ; COHEN GILAD ; DAN CHAZAN ; GILAD COHEN ; HOORY RON ; RON HOORY

Agent(s): REINHOLD COHN AND PARTNERS; BROWDY AND NEIMARK PLLC

Title: VOICE PROCESSING DEVICE

Abstract: In voice processing, a first distribution generation unit approximates a distribution of feature information representative of voice of a first speaker per a unit interval thereof as a mixed probability distribution which is a mixture of a plurality of first probability distributions corresponding to a plurality of different phones. A second distribution generation unit also approximates a distribution of feature information representative of voice of a second speaker as a mixed probability distribution which is a mixture of a plurality of second probability distributions. A function generation unit generates, for each phone, a conversion function for converting the feature information of voice of the first speaker to that of the second speaker based on respective statistics of the first and second probability distributions that correspond to the phone.

Classifications:

International (IPC 8-9): G10L13/00 G10L13/02 G10L13/033 G10L13/06 G10L21/00 G10L21/003 G10L21/007

G10L21/04 (Advanced/Invention);

G10L13/06 G10L21/00 (Advanced/Non-invention)

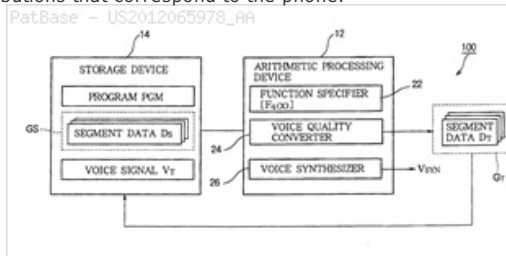
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European: G10L13/033 S10L21/013M

US: 1/1 704/258 704/258P 704/E13.001 704/E13.001S

JP F-Term: 5D045

JP F-Index: G10L13/06/130 G10L21/007 G10L21/04/120/D

**Family:**

Publication number	Publication date	Application number	Application date
DE602011016050 D1	20150611	DE201160016050T	20110914
EP2431967 A2	20120321	EP20110181174	20110914
EP2431967 A3	20131023	EP20110181174	20110914
EP2431967 B1	20150429	EP20110181174	20110914
JP2012083722 A2	20120426	JP20110191665	20110902
JP5961950 B2	20160803	JP20110191665	20110902
US2012065978 AA	20120315	US20110232950	20110914
US9343060 BB	20160517	US20110232950	20110914

Priority:

JP20100206562 20100915 JP20110191665 20110902 EP20110181174 20110914

Probable Assignee: YAMAHA CORP

Assignee(s): (std): VILLAVICENCIO FERNANDO ; YAMAHA CORP

Assignee(s): YAMAHA CORP HAMAMATSU SHI

Inventor(s): (std): VILLAVICENCIO FERNANDO

Inventor(s): VILLAVICENCIO FERNANDO HAMAMATSU SHI

Agent(s): KEHL ASCHERL LIEBHOF AND ETTMAYR PATENTANWALTE PARTNERSCHAFT; ETTMAYR ANDREAS; ASCHERL ANDREAS; OHBAYASHI AKIRA; MORRISON AND FOERSTER LLP

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

Title: SECURE CONTEXT-BASED COMPUTING

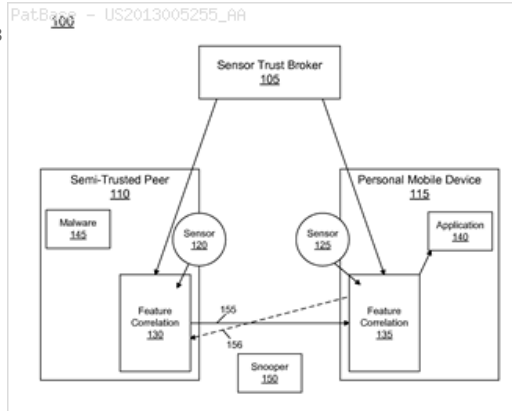
Abstract: An embodiment of the invention includes an article with instructions that enable a first unit to: (a) sense the first unit's local surroundings to determine sensed data; (b) receive and decrypt encrypted context data directly from a second unit (the second unit located nearby the first unit and the context data corresponding to the first unit's local surroundings); and (c) based on the sensed data and the decrypted context data, communicate directly with the second unit. Other embodiments are described herein.

Classifications:

International (IPC 8-9): H04B5/00 H04B7/00 H04W12/04 H04W12/08 H04W4/00 H04W88/02 H04W92/18 (Advanced/Invention); H04B5/00 H04W12/02 (Advanced/Non-invention)

CPC: H04W4/008 H04B5/00 H04W12/02 H04W12/04 H04W12/08 H04W4/70 H04W4/80

US: 455/41.2 455/410 455/411



Family:

Publication number	Publication date	Application number	Application date
CN103621128 A	20140305	CN201280032261	20120628
CN103621128 B	20170606	CN201280032261	20120628
DE602012039880 D1	20171228	DE201260039880T	20120628
EP2727390 A2	20140507	EP20120804789	20120628
EP2727390 A4	20150318	EP20120804789	20120628
EP2727390 B1	20171115	EP20120804789	20120628
US2013005255 AA	20130103	US20110171939	20110629
US8903315 BB	20141202	US20110171939	20110629
WO13003642 A2	20130103	WO2012US44731	20120628
WO13003642 A3	20130321	WO2012US44731	20120628

Priority:

US20110171939 20110629 EP20120804789 20120628 WO2012US44731 20120628

Probable Assignee: INTEL CORP

Assignee(s): (std): INTEL CORP ; KVETON BRANISLAV ; PERING TREVOR ; ZHAO MEIYUAN

Assignee(s): INTEL SANTA CLARA CORP

Inventor(s): (std): ZHAO MEIYUAN ; PERING TREVOR ; M ZHAO ; KVETON BRANISLAV

Inventor(s): KVETON BRANISLAV SAN JOSE ; PERING TREVOR SAN FRANCISCO ; ZHAO MEIYUAN SANTA CLARA

Agent(s): GODDAR HEINZ J; TROP PRUNER AND HU PC; RICHARDS II EE JACK

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 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 MZ NA NE NG NI NL NO NZ OM 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

Title: METHOD AND APPARATUS FOR CLASSIFYING DATA ITEMS BASED ON SOUND TAGS

Abstract: A method for grouping data items in a mobile device is disclosed. In this method, a plurality of data items and a sound tag associated with each of the plurality of data items are stored, and the sound tag includes a sound feature extracted from an input sound indicative of an environmental context for the data item. Further, the method may include generating a new data item, receiving an environmental sound, generating a sound tag associated with the new data item by extracting a sound feature from the environmental sound, and grouping the new data item with at least one of the plurality of data items based on the sound tags associated with the new data item and the plurality of data items.

Classifications:

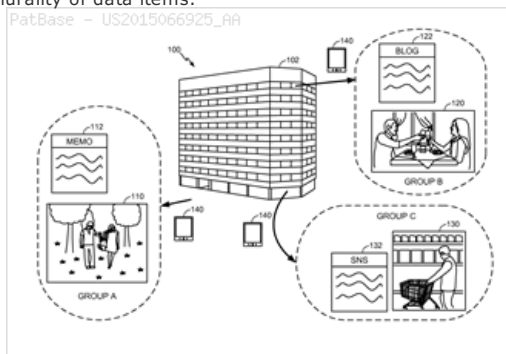
International (IPC 8-9): G06F17/30 (Advanced/Invention)

CPC: G06F17/30743 G06F17/30598 G06F17/30286

US: 707/737

JP F-Term: 5B075

JP F-Index: G06F17/30/170/E G06F17/30/210/A G06F17/30/210/D



Family:

Publication number	Publication date	Application number	Application date
CN105474212 A	20160406	CN201480046372	20140807
EP3039579 A1	20160706	EP20140761722	20140807
IN201647006276 A	20160708	IN201647006276	20160223
JP2016529637 T2	20160923	JP20160538939T	20140807
KR20160047485 A	20160502	KR20167005888	20140807
US2015066925 AA	20150305	US20130011437	20130827
WO15031022 A1	20150305	WO2014US50200	20140807

Priority:

US20130011437 20130827 WO2014US50200 20140807

Probable Assignee: QUALCOMM INC

Assignee(s): (std): QUALCOMM INC

Inventor(s): (std): CHO HYUN MOOK ; KIM DUCK HOON ; KIM TAESU ; PARK MIN KYU

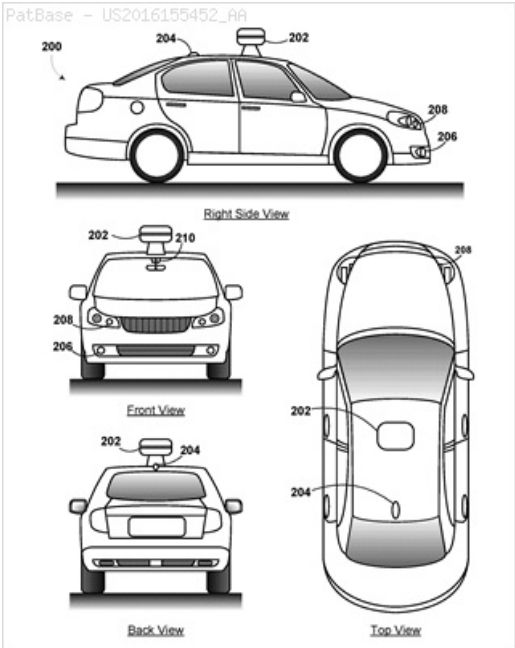
Agent(s): HOWE STEVEN; TOLER JEFFREY G

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 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

Title: METHOD FOR SIRE DETECTION BASED ON AUDIO SAMPLES

Abstract: The present disclosure provides methods and apparatuses that enable an apparatus to identify sounds from short samples of audio. The apparatus may capture an audio sample and create several audio signals of different lengths, each containing audio from the captured audio sample. The apparatus may process the several audio signals in an attempt to identify features of the audio signal that indicate an identification of the captured sound. Because shorter audio samples can be analyzed more quickly, the system may first process the shortest audio samples in order to quickly identify features of the audio signal. Because longer audio samples contain more information, the system may be able to more accurately identify features in the audio signal in longer audio samples. However, analyzing longer audio signals takes more buffered audio than identifying features in shorter signals. Therefore, the present system attempts to identify features in the shortest audio signals first.

Classifications:
International (IPC 8-9): G06F17/30 G08B29/18 G08B3/10 G08G1/00 G10L19/022 G10L19/06 G10L25/51 H04R29/00 (Advanced/Invention)
CPC: H04R29/00 G10L19/06 G10L19/022 G10L25/51 G08B3/10 G08B29/185 G06F17/30743 H05K999/99
US: 1/1 381/56



Family:

Publication number	Publication date	Application number	Application date
US2016155452 AA	20160602	US20160004232	20160122
US2018018981 AA	20180118	US20170718524	20170928
US9275136 BA	20160301	US20130095199	20131203
US9842602 BB	20171212	US20160004232	20160122

Priority:

US20130095199 20131203 US20160004232 20160122 US20170718524 20170928

Probable Assignee: GOOGLE INC

Assignee(s): (std): GOOGLE INC ; WAYMO LLC

Assignee(s): GOOGLE LLC ; WAYMO HOLDING INC

Inventor(s): (std): ROBLEK DOMINICK ; ROBLEK DOMINIK ; SHARIFI MATTHEW

Agent(s): MCDONNELL BOEHNEN HULBERT AND BERGHOFF LLP

Title: SYSTEMS AND METHODS FOR ENCODING AUDIO SIGNALS

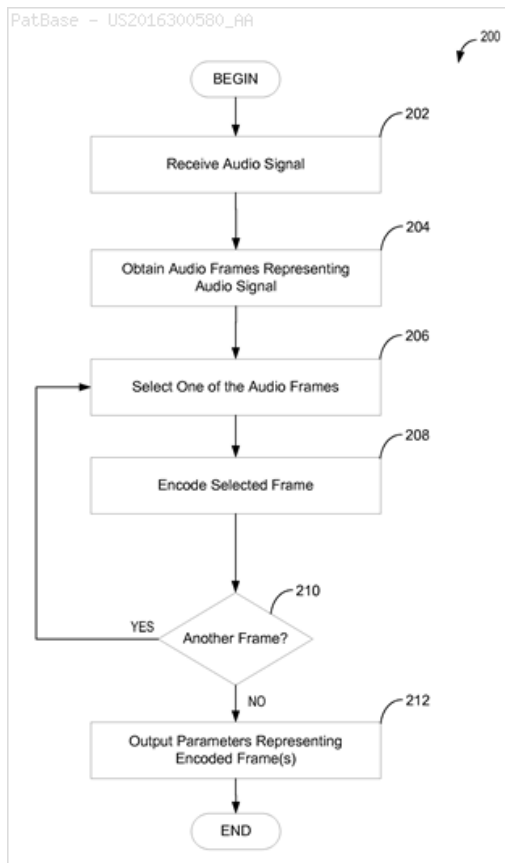
Abstract: Some embodiments relate to techniques for encoding an audio signal represented by a plurality of frames including a first frame. The techniques include using at least one computer hardware processor to perform: obtaining an initial discrete spectral representation of the first frame; obtaining a primary discrete spectral representation of the initial discrete spectral representation at least in part by estimating a phase envelope of the initial discrete spectral representation and evaluating the estimated phase envelope at a discrete set of frequencies; calculating a residual discrete spectral representation of the initial discrete spectral representation based on the initial discrete spectral representation and the primary discrete spectral representation; and encoding the residual discrete spectral representation using a plurality of codewords.

Classifications:

International (IPC 8-9): G10L19/00 G10L19/02 (Advanced/Invention)

CPC: G10L19/02 G10L19/032 G10L19/038

US: 704/500



Family:

Publication number	Publication date	Application number	Application date
US2016300580 AA	20161013	US20150680360	20150407
US9564140 BB	20170207	US20150680360	20150407

Priority:

US20150680360 20150407

Probable Assignee:

NUANCE COMMUNICATIONS INC

Assignee(s): (std):

NUANCE COMMUNICATIONS INC

Inventor(s): (std):

SHECHTMAN SLAVA ; SORIN ALEXANDER

Agent(s):

WOLF GREENFIELD AND SACKS PC

Title: Method and system for low bit rate speech coding with speech recognition features and pitch providing reconstruction of the spectral envelope

Abstract: A method for encoding a digitized speech signal so as to generate data capable of being decoded as speech. A digitized speech signal is first converted to a series of feature vectors using for example known **Mel-frequency** Cepstral coefficients (MFCC) techniques. At successive instances instance of time a respective pitch value of the digitized speech signal is computed, and successive acoustic vectors each containing the respective pitch value and feature vector are compressed so as to derive therefrom a bit stream. A suitable decoder reverses the operation so as to extract the features vectors and pitch values, thus allowing speech reproduction and playback. In addition, speech recognition is possible using the decompressed feature vectors, with no impairment of the recognition accuracy and no computational overhead.

Classifications:

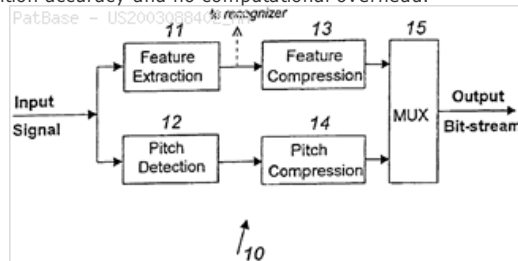
International (IPC 8-9): G10L15/02 G10L19/02 (Advanced/Invention); G10L15/00 G10L19/00 (Core/Invention)

International (IPC 1-7): G10L101/02 G10L101/04 G10L11/04 G10L15/02 G10L19/02 G10L19/12

CPC: G10L15/02 G10L19/02

European: G10L15/02 G10L19/02

US: 704/207 704/223 704/243 704/E15.004 704/E19.01



Family:

Publication number	Publication date	Application number	Application date
GB200023864 A0	20001115	GB20000023864	20000929
GB2357231 A1	20010613	GB20000023864	20000929
GB2357231 B2	20040609	GB20000023864	20000929
US2003088402 AA	20030508	US20020291590	20021112
US6678655 BB	20040113	US20020291590	20021112

Priority:

US19990410085 19991001 US20020291590 20021112

Probable Assignee: NUANCE COMMUNICATIONS INC

Assignee(s): (std): IBM

Assignee(s): IBM CORP ; INT BUSINESS MACHINES CORP ; NUANCE COMMUNICATIONS INC

Inventor(s): (std): CHAZAN DAN ; HOORY RON ; SILVERA EZRA ; ZIBULSKI MEIR ; ZILBULSKI MEIR

Inventor(s): MEIR ZILBULSKI ; RON HOORY ; DAN CHAZAN ; EZRA SILVERA

Title: PATTERN MATCHING SYSTEM

Abstract: A circuit for pattern matching on the frequency axis comprises a first transformation section having an adaptive filter generally identical to an adaptive finite impulse response filter with its delay elements having been replaced by all-pass filters, for performing frequency transformation on input pattern data from said memory means, a second transformation section having an adaptive filter generally identical to an adaptive finite impulse response filter with its delay elements having been replaced by all-pass filters, for performing frequency transformation on reference pattern data from the memory, and a control section for calculating a distance between the output data from the first transformation section and the second transformation section, controlling parameters of filters of at least one of the first and second transformation sections so as to minimize this distance, and generating a pattern matching residual output on the frequency axis based on the minimum distance.

Classifications:**International (IPC 8-9):** G01R23/16 G01R23/167 G10L15/00

G10L15/02 G10L15/10 G10L17/00 G10L21/04 (Advanced/Invention); G01R23/16 G10L17/00 G10L21/00 (Core/Invention)

International (IPC 1-7): G01R23/167 G10L3/00 G10L3/02 G10L5/06 G10L7/06 G10L9/14 G10L9/18**CPC:** G10L15/00**European:** G10L15/00 T05K999/99**US:** 381/45 381/50 704/241 704/251**JP F-Term:** 5D015 5D015/CC00 5D015/CC07 5D015/FF03 5D015/HH05 5D015/LL02 5D045 5D045/BA01 5D015/CC02 5D015/CC11 5D015/CC17 5D015/CC18 5D015/HH00 5D015/HH07 2G029 5D015/HH04**JP F-Index:** G10L15/02/300/F G10L15/10/300/Z G10L3/00/531/L G10L3/00/545 G10L5/06/A G10L9/14/301/B G10L11/00/101/Z G10L19/00 G10L19/00/600 G10L25/03 G10L3/02/A G10L15/12/C G01R23/167 G10L15/02/300/B G10L15/02/300/K G10L5/06/B

PatBase - US4916743_A

U.S. Patent Apr. 10, 1990

Sheet 1 of 12

4,916,743

FIG. 1

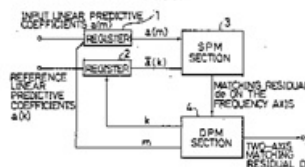
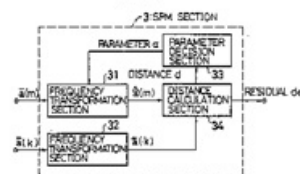


FIG. 2

**Family:**

Publication number	Publication date	Application number	Application date
CA1334689 A1	19950307	CA19880565459	19880429
EP0290190 A2	19881109	EP19880303794	19880427
EP0290190 A3	19890712	EP19880303794	19880427
EP0290190 B1	19911009	EP19880303794	19880427
JP1908008 C3	19950224	JP19870104632	19870430
JP6040277 B4	19940525	JP19870104632	19870430
JP63271399 A2	19881109	JP19870104632	19870430
JP63273897 A2	19881110	JP19870106421	19870501
JP63273900 A2	19881110	JP19870106420	19870501
JP63274997 A2	19881111	JP19870108818	19870506
JP63274999 A2	19881111	JP19870108815	19870506
US4916743 A	19900410	US19880186577	19880427

Priority:

JP19870104632 19870430	JP19870106420 19870501	JP19870106421 19870501
JP19870108815 19870506	JP19870108818 19870506	CA19880565459 19880429

Probable Assignee: OKI ELECTRIC IND CO LTD**Assignee(s):** (std): OKI ELECTRIC IND CO LTD**Assignee(s):** OKI ELECTRIC INDUSTRY CO ; OKI ELECTRIC INDUSTRY CO LTD ; OKI ELECTRIC INDUSTRY COMPANY LIMITED ; SATO TAKURA ; SUZUKI YUKIO ; TAKIZAWA YUMI ; SATO SHINICHI ; ANDO HIROMI ; FUKASAWA ATSUSHI ; OKI ELECTRIC IND ; OKI ELECTRIC IND CO**Inventor(s):** (std): ANDO HIROMI ; ANDO HIROMI C O OKI ELECTRIC I ; FUKASAWA ATSUSHI ; FUKASAWA ATSUSHI OKI ELECTRIC ; FUKAZAWA ATSUSHI ; SATO SHINICHI ; SATO SHINICHI C O OKI ELECTRIC ; SATO TAKURO ; SATO TAKURO ; SATO TAKURO C O OKI ELECTRIC I ; SUZUKI YUKIO ; SUZUKI YUKIO C O OKI ELECTRIC ; TAKIZAWA YUMI ; TAKIZAWA YUMI C O OKI ELECTRIC**Inventor(s):** TAKIZAWA YUMI C O OKI ELECTRIC IND CO ; TAKIZAWA YUMI C O OKI ELECTRIC INDUSTRY CO ; SUZUKI YUKIO C O OKI ELECTRIC IND CO ; SUZUKI YUKIO C O OKI ELECTRIC INDUSTRY CO ; SATO TAKURO C O OKI ELECTRIC IND CO ; SATO TAKURO C O OKI ELECTRIC INDUSTRY CO ; SATO SHINICHI C O OKI ELECTRIC IND CO ; SATO SHINICHI C O OKI ELECTRIC INDUSTRY CO ; FUKASAWA ATSUSHI OKI ELECTRIC IND CO ; FUKASAWA ATSUSHI OKI ELECTRIC INDUSTRY CO ; ANDO HIROMI C O OKI ELECTRIC IND CO ; ANDO HIROMI C O OKI ELECTRIC INDUSTRY CO**Agent(s):** FETHERSTONHAUGH AND CO**Designated states:** GB NL SE

Title: SPEECH-BASED SPEAKER RECOGNITION SYSTEMS AND METHODS

Abstract: The illustrative embodiments described herein provide systems and methods for authenticating a speaker. In one embodiment, a method includes receiving reference speech input including a reference passphrase to form a reference recording, and receiving test speech input including a test passphrase to form a test recording. The method includes determining whether the test passphrase matches the reference passphrase, and determining whether one or more voice features of the speaker of the test passphrase matches one or more voice features of the speaker of the reference passphrase. The method authenticates the speaker of the test speech input in response to determining that the reference passphrase matches the test passphrase and that one or more voice features of the speaker of the test passphrase matches one or more voice features of the speaker of the reference passphrase.

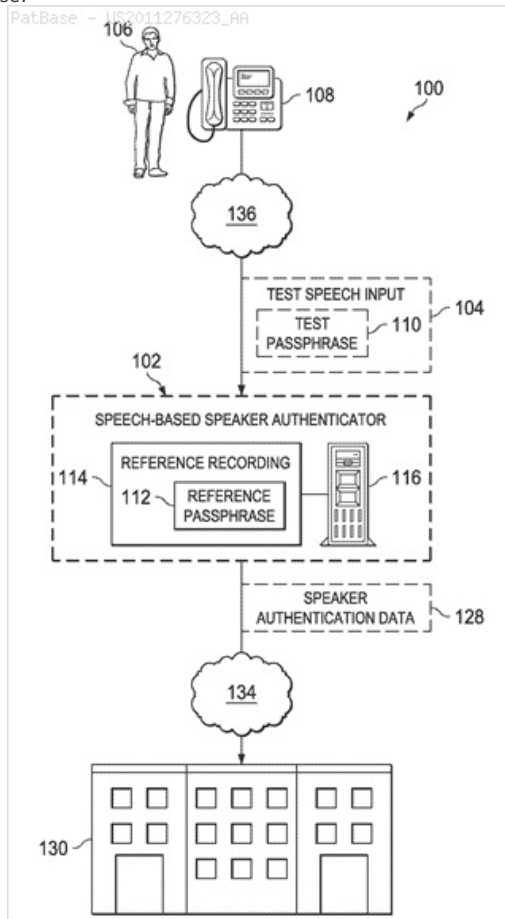
Classifications:

International (IPC 8-9): G10L11/04 G10L15/00 G10L15/06 G10L17/00 G10L17/24 G10L21/00 (Advanced/Invention)

CPC: G10L17/24 G06F21/32 G10L17/08 G10L21/02 G10L21/0208 G10L25/78

European: G06F21/32 G10L17/08 G10L17/24 G10L21/02 G10L25/78 S10L21/0208

US: 370/250 370/435 379/88.02 704/207 704/207P 704/231 704/237 704/237S 704/241 704/243 704/243S 704/246 704/246S 704/253 704/256.8 704/270 704/270S 704/E11.006 704/E11.006S 704/E15.007 704/E15.007S 704/E17.002 704/E17.002S 704/E21.001 704/E21.001S

**Family:**

Publication number	Publication date	Application number	Application date
US2011276323 AA	20111110	US20100775110	20100506
US2015039313 AA	20150205	US20140301895	20140611
US8775179 BB	20140708	US20100775110	20100506

Priority:

US20100775110 20100506 US20140301895 20140611

Probable Assignee: SENAM CONSULTING INC

Assignee(s): (std): SENAM CONSULTING INC ; SEYFETDINOV SERGE OLEGOVICH

Inventor(s): (std): SEYFETDINOV SERGE OLEGOVICH

Agent(s): ROSS JOYNER PLLC; KENNETH T

Title: METHOD AND APPARATUS FOR NOISE SUPPRESSION WITHIN A DISTRIBUTED SPEECH RECOGNITION SYSTEM

Abstract: A method and apparatus for noise suppression within a distributed speech recognition system is provided herein.

Mel-frequency cepstral coefficients (MFCCs) values are converted to filter bank outputs (F'0 through F'22). The filter bank outputs are then used by a noise suppressor (303) for channel energy estimation, noise energy estimation, etc. Noise-suppression takes place on F'0 through F'22 and the noise-suppressed filter bank outputs F''0 through F''22 are converted back to MFCC values.

Classifications:

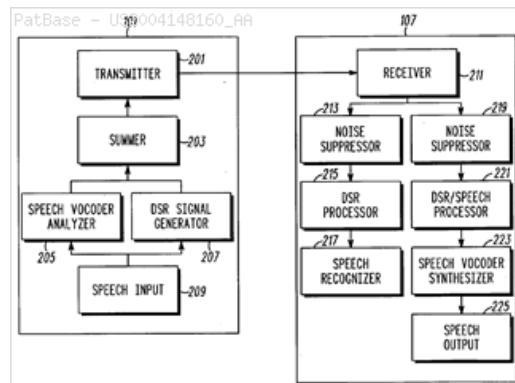
International (ipc 8-9): G10L15/28 G10L19/02
G10L21/02 (Advanced/Invention);
G10L15/00 G10L19/00 G10L21/00 (Core/Invention)

International (ipc 1-7): G10L19/12 H04R

CPC: G10L15/30 G10L19/02 G10L21/0208

European: G10L15/30 G10L19/02 G10L21/0208 S10L21/0208

US: 704/221 704/221P 704/E15.047 704/E15.047S 704/E19.01
704/E19.010S 704/E21.004 704/E21.004S



Family:

Publication number	Publication date	Application number	Application date
BRPI0406937 A	20060103	BR2004PI06937	20040120
US2004148160 AA	20040729	US20030349840	20030123
WO04068893 A2	20040812	WO2004US01282	20040120
WO04068893 A3	20040930	WO2004US01282	20040120

Priority:

US20030349840 20030123 WO2004US01282 20040120

Probable Assignee: MOTOROLA INC

Assignee(s): (std): MOTOROLA INC ; RAMABADRAN TENKASI

Inventor(s): (std): RAMABADRAN TENKASI ; RAMABADRAN TENKASI V

Inventor(s): TENKASI V RAMABADRAN

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 GW HR HU ID IE IL IN IS IT JP KE
KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG
PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA
ZM ZW

Title: VOICE RECOGNITION WITH PARALLEL GENDER AND AGE NORMALIZATION

Abstract: Methods and apparatus for voice recognition are disclosed. A voice signal is obtained and two or more voice recognition analyses are performed on the voice signal. Each voice recognition analysis uses a filter bank defined by a different maximum frequency and a different minimum frequency and wherein each voice recognition analysis produces a recognition probability r_i of recognition of one or more speech units, whereby there are two or more recognition probabilities r_i . The maximum frequency and the minimum frequency may be adjusted every time speech is windowed and analyzed. A final recognition probability P_F is determined based on the two or more recognition probabilities r_i .

Classifications:

International (IPC 8-9): G10L15/00 G10L15/14 G10L15/28

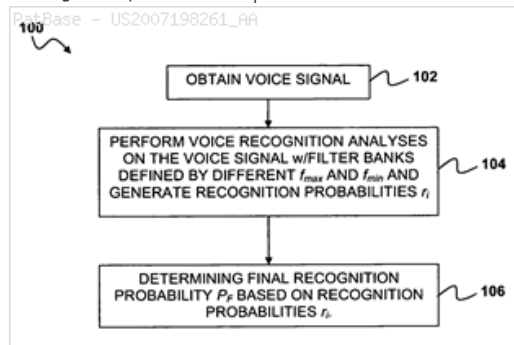
G10L17/00 (Advanced/Invention);

G10L15/00 (Core/Invention)

CPC: G10L15/065 G10L15/32

European: G10L15/065 G10L15/32

US: 704/207 704/208 704/240 704/240P 704/246 704/250 704/255
704/256 704/256.2 704/E15.009 704/E15.009S 704/E15.049
704/E15.049S



Family:

Publication number	Publication date	Application number	Application date
US2007198261 AA	20070823	US20060358272	20060221
US8010358 BB	20110830	US20060358272	20060221

Priority:

US20060358272 20060221

Probable Assignee: SONY INTERACTIVE ENTERTAINMENT INC

Assignee(s): (std): SONY COMP ENTERTAINMENT INC ; SONY COMPUTER ENTERTAINMENT INC

Assignee(s): SONY INTERACTIVE ENTERTAINMENT INC ; SONY NETWORK ENTERTAINMENT PLATFORM INC

Inventor(s): (std): CHEN RUXIN

Agent(s): JOSHUA D ISENBERG JDI PATENT; JDI PATENT; JOSHUA D

Title: INTERACTIVE LANGUAGE PRONUNCIATION TEACHING

Abstract: Techniques for language instruction and teaching are described. Methods focus on the sound distinctions that learners have trouble discriminating. Learners practice discriminating these sounds. A learning system is developed using databases of speech from people discriminating these sounds. An embodiment of a method according to the present disclosure can utilize sets of words that differ by only a single syllable containing a sound that is difficult to pronounce, as a way to teach the pronunciation of a word. The sets of similar words can be of a desired number or have a desired number of constituent members. Embodiments of systems can include user interfaces and a automated speech recognition system, including suitable automated speech recognition software, that can interact with a user, e.g., in a pedagogical setting. Related software products including computer-readable instructions resident in a computer-readable medium are described. HMM and DTW algorithms may be used for the embodiments.

Classifications:

International (IPC 8-9): G09B19/00 G09B19/06 G09B5/00

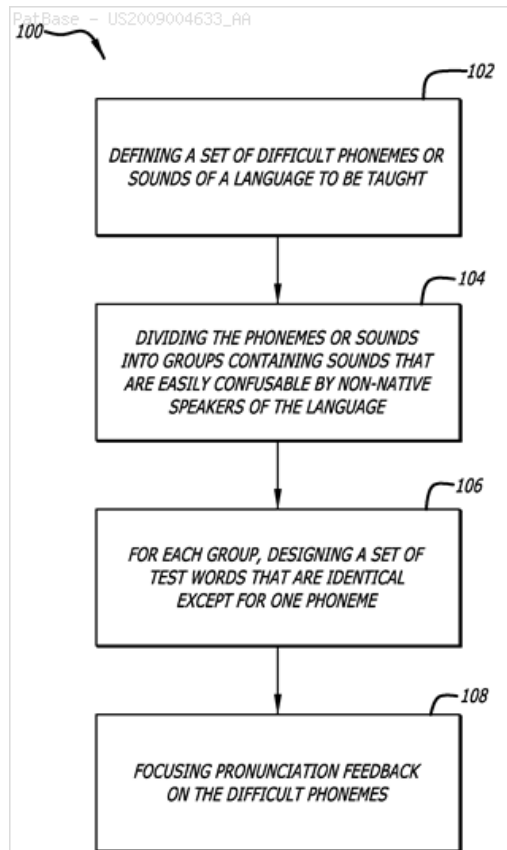
G10L15/12 G10L15/14 (Advanced/Invention);

G09B19/00 G09B19/06 G09B5/00 G10L15/00 (Core/Invention)

CPC: G09B19/04

European: G09B19/04

US: 434/169

**Family:**

Publication number	Publication date	Application number	Application date
US2009004633 AA	20090101	US20080165258	20080630
WO09006433 A1	20090108	WO2008US68837	20080630

Priority:

US20070947268P 20070629 US20070947274P 20070629 US20080165258 20080630

Probable Assignee: ALELO INC

Assignee(s): (std): ALELO INC ; JOHNSON WILLIAM LEWIS ; MERON JORAM ; VALENTE ANDRE

Inventor(s): (std): JOHNSON W LEWIS ; JOHNSON WILLIAM LEWIS ; MERON JORAM ; VALENTE ANDRE

Agent(s): MCDERMOTT WILL AND EMERY LLP; BROWN MARC E 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 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 SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: SYSTEM AND METHOD FOR DETECTING REPEATED PATTERNS IN DIALOG SYSTEMS

Abstract: Embodiments of a method and system for detecting repeated patterns in dialog systems are described. The system includes a dynamic time warping (DTW) based pattern comparison algorithm that is used to find the best matching parts between a correction utterance and an original utterance. Reference patterns are generated from the correction utterance by an unsupervised segmentation scheme. No significant information about the position of the repeated parts in the correction utterance is assumed, as each reference pattern is compared with the original utterance from the beginning of the utterance to the end. A pattern comparison process with DTW is executed without knowledge of fixed end-points. A recursive DTW computation is executed to find the best matching parts that are considered as the repeated parts as well as the end-points of the utterance.

Classifications:

International (IPC 8-9): G10L15/00 G10L15/04 G10L15/10

G10L15/12 (Advanced/Invention);

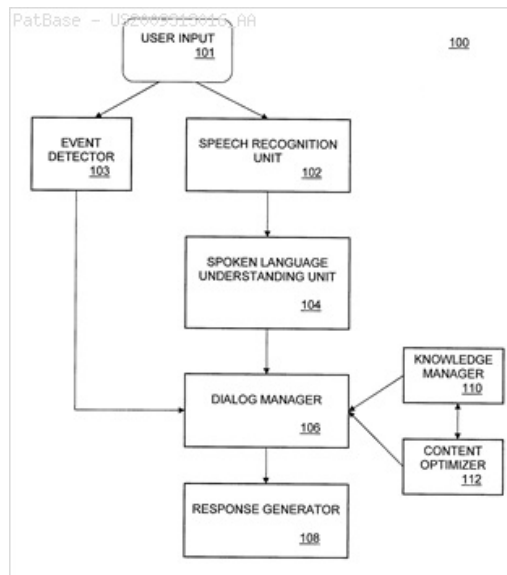
G10L15/00 (Core/Invention)

CPC: G10L15/12 G10L15/22

European: G10L15/22 S10L15/12

US: 704/238 704/239 704/241 704/241P 704/253 704/E15.001

704/E15.001S



Family:

Publication number	Publication date	Application number	Application date
US2009313016 AA	20091217	US20080139401	20080613
US8140330 BB	20120320	US20080139401	20080613

Priority:

US20080139401 20080613

Probable Assignee: ROBERT BOSCH GMBH

Assignee(s): (std): BOSCH GMBH ROBERT ; CEVIK MERT ; WENG FULIANG

Assignee(s): ROBERT BOSCH GMBH

Inventor(s): (std): CEVIK MERT ; WENG FULIANG

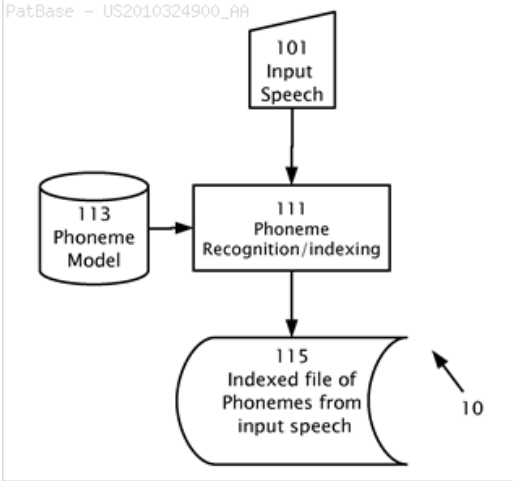
Agent(s): COURTNEY STANIFORD AND GREGORY LLP; DERGOSITS AND NOAH LLP; GEOFFREY T

Title: SEARCHING IN AUDIO SPEECH

Abstract: A computerized method of detecting a target word in a speech signal. A speech recognition engine and a previously constructed phoneme model is provided. The speech signal is input into the speech recognition engine. Based on the phoneme model, the input speech signal is indexed. A time-ordered list is stored representing n-best phoneme candidates of the input speech signal and phonemes of the input speech signal in multiple phoneme frames. The target word is transcribed into a transcription of target phonemes. The time-ordered list of n-best phoneme candidates is searched for a locus of said target phonemes. While searching, scoring is based on the ranking of the phoneme candidates among the n-best phoneme candidates and based on the number of the target phonemes found. A composite score of the probability of an occurrence of the target word is produced. When the composite score is higher than a threshold, start and finish times are output which bound the locus. The start and finish times are input into an algorithm adapted for sequence alignment based on dynamic programming for aligning a portion of the phoneme frames with the target phonemes.

Classifications:

International (IPC 8-9): G10L15/00 G10L15/04 (Advanced/Invention)
CPC: G10L15/12 G10L2015/025
European: G10L15/12
US: 369/25.01 704/235 704/251 704/254 704/254P 704/E15.005 704/E15.005S



Family:

Publication number	Publication date	Application number	Application date
US2010324900 AA	20101223	US20090488097	20090619
US8321218 BB	20121127	US20090488097	20090619

Priority:

US20090488097 20090619

Probable Assignee: LNTS LINGUISTECH SOLUTION LTD

Assignee(s): (std): COHEN TOV RABIN ; FAIFKOV RONEN ; L N T S LINGUISTECH SOLUTIONS LTD ; SIMONE ADAM

Assignee(s): LNTS LINGUISTECH SOLUTION LTD ; LNTS LINGUISTECH SOLUTIONS LTD

Inventor(s): (std): COHEN TOV RABIN ; FAIFKOV RONEN ; SIMONE ADAM

Agent(s): LAW OFFICE OF MICHAEL E KONDOUDIS

Title: PROCEDIMIENTO PARA DETECTAR COPIA DE AUDIO Y VIDEO EN FLUJOS MULTIMEDIA PROCEDURE TO DETECT AUDIO COPY OF AND VIDEO IN FLOWS MULTIMEDIA (Machine translation)

Abstract: Source: UY32951A [ES] Esta invencion propone una deteccion multimodal de copias de video. En primer lugar extrae huellas de audio y video independientemente que representan los cambios en el contenido Propone entonces dos estrategias de deteccion de copia alternativas. La coincidencia de consulta total considera que el video de consulta aparece en su totalidad en el video consultado. La coincidencia de consulta parcial considera que solo aparece parte de la consulta. O bien para la consulta total o bien para cada subsegmento en el algoritmo de consulta parcial, se computa la correlacion cruzada con transformadas de fase entre todos los pares de firmas y se acumulan para formar una senal de correlacion cruzada fusionada. En el algoritmo de consulta total, los candidatos con mejor alineacion se recuperan y se usa un producto escalar normalizado para obtener una puntuacion de coincidencia final. En la consulta parcial, se crea un histograma con alineaciones optimas para cada subsegmento y solo los mejores se consideran y se procesan adicionalmente como en la consulta total. Se usa un umbral para determinar si existe una copia.

Machine translation: This invention proposes video a multimodal copy detection. In the first place it extracts tracks of audio and video independently that the changes in the content represent Proposes then two strategies of alternative copy detection. The coincidence of total consultation considers that the consultation video appears in its totality in the consulted video. The coincidence of partial consultation considers that single it appears part of the consultation. Either for the total consultation or for each subsegment in the algorithm of partial consultation, the correlation crossed is computed transformed of phase between all the pairs of companies and they are accumulated to form a signal of crossed correlation fused. In the algorithm of total consultation, the candidates with better alignment recover and a product is used to climb standardized to obtain a score of final coincidence. In the partial consultation, a histogram with optimal alignments for each subsegment is created and single the best ones are considered and they are processed additionally as in the total consultation. A threshold is used to determine if a copy exists.

Classifications:

Family:

Publication number	Publication date	Application number	Application date
UY32951 A1	20101231	UY20100032951	20101015

Priority:

ES20090022138 20091016

Probable Assignee: TELEFONICA SA

Assignee(s): (std): TELEFONICA SA

Assignee(s): TELEFONICA S A

Inventor(s): (std): RAMIREZ NURIA OLIVER ; OBRADOR PERE ESPINOSA ; MIRO XAVIER ANGUERA

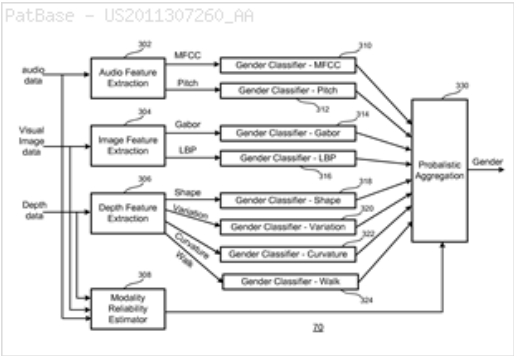
Inventor(s): XAVIER ANGUERA MIRO ; NURIA OLIVER RAMIREZ ; PERE ESPINOSA OBRADOR

Title: MULTI-MODAL GENDER RECOGNITION

Abstract: Gender recognition is performed using two or more modalities. For example, depth image data and one or more types of data other than depth image data is received. The data pertains to a person. The different types of data are fused together to automatically determine gender of the person. A computing system can subsequently interact with the person based on the determination of gender.

Classifications:

International (IPC 8-9): A63F13/06 A63F13/213 G06F3/01 G06F3/038 G06F3/048 G06K9/40 G06K9/62 G06N5/02 G10L21/00 (Advanced/Invention)
CPC: G06F3/017 G06F3/038 G06F2203/0381 G06K9/00369
European: G06F3/01G G06F3/038 G06K9/00H1 S06F203/0381
US: 382/159 382/260 704/275 704/275P 704/E21.001 704/E21.001S 706/52 706/52S 706/54 706/54S 715/764 715/764S 715/866 715/866S



Family:

Publication number	Publication date	Application number	Application date
CN102262440 A	20111130	CN201110170752	20110613
CN102262440 B	20140723	CN201110170752	20110613
US2011307260 AA	20111215	US20100813675	20100611
US8675981 BB	20140318	US20100813675	20100611

Priority:

US20100813675 20100611

Probable Assignee: MICROSOFT TECHNOLOGY LICENSING LLC

Assignee(s): (std): KIPMAN ALEX ABEN ATHAR ; MICROSOFT CORP ; ZHANG ZHENGYOU

Assignee(s): MICROSOFT TECHNOLOGY LICENSING LLC ; MICROSOFT

Inventor(s): (std): KIPMAN ALEX ABEN ATHAR ; ZHANG ZHENGYOU

Agent(s): JUDY; PETER; MICKY

Title: METHOD AND APPARATUS FOR GROUPING CLIENT DEVICES BASED ON CONTEXT SIMILARITY

Abstract: A method for grouping a plurality of client devices is disclosed. The method includes receiving sound descriptors from the plurality of client devices. The sound descriptors are extracted from the environmental sound. Each of the sound descriptors is transmitted to a server, which determines a similarity of the sound descriptors received from the client devices. The server groups the plurality of client devices into at least one similar context group based on the similarity of the sound descriptors.

Classifications:

International (IPC 8-9): G06F15/16 G06F17/30 G06Q30/02
G06Q50/10 G10L15/10 H04B3/00 H04L29/08 H04W4/04 H04W4/08
H04W4/20 (Advanced/Invention)

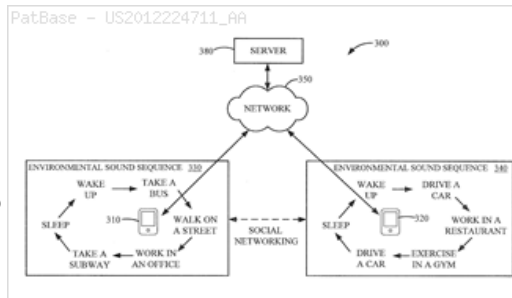
CPC: H04L67/18 H04W4/043 H04W4/08 H04W4/21

European: H04L29/08N17

US: 381/77 709/204

JP F-Term: 5B049 5B075 5D015 5L049 5L049/BB08 5L049/CC11

JP F-Index: G06F17/30/110/G G06F17/30/340/A G06Q30/02/150
G06Q30/02/470 G06Q50/00/300 G10L15/10/500/Z G06F17/30/210/D
G06F17/30/310/Z



Family:

Publication number	Publication date	Application number	Application date
CN103370920 A	20131023	CN201280007509	20120216
EP2681895 A1	20140108	EP20120707427	20120216
IN06201CN2013 A	20140926	IN2013CN06201	20130801
JP2014515844 T2	20140703	JP20130556645T	20120216
JP2016066366 A2	20160428	JP20150234821	20151201
JP6062379 B2	20170118	JP20130556645T	20120216
KR20130108661 A	20131004	KR20137020608	20120216
KR20160041055 A	20160415	KR20167008160	20120216
US2012224711 AA	20120906	US20120371057	20120210
WO12121854 A1	20120913	WO2012US25425	20120216

Priority:

US20110449517P 20110304 US20120371057 20120210 JP20130556645T 20120216
WO2012US25425 20120216

Probable Assignee: QUALCOMM INC

Assignee(s): (std): HWANG KYU WOONG ; KIM TAESU ; QUALCOMM INC

Inventor(s): (std): HWANG KYU WOONG ; KIM TAESU ; KIM TAE SU

Agent(s): LOVELESS IAN MARK; TOLER JEFFREY G

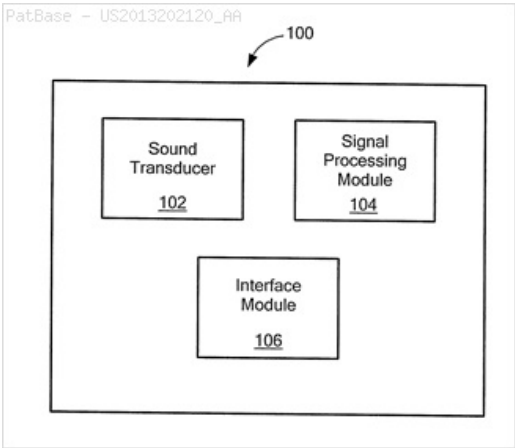
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU
CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL
IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT
MW MX MY MZ NA NE NG NI NL NO NZ OM 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

Title: METHODS AND APPARATUS FOR ACOUSTIC EVENT DETECTION

Abstract: Methods and apparatus to identify a type of acoustic event **Mel Frequency** Cepstral Coefficients (MFCCs). In one embodiment, received sound is processed using the MFCCs to locate a peak for comparison with a stored event to determine if the peak corresponds to the acoustic event.

Classifications:

International (IPC 8-9): G01S5/22 G08B13/16
H04R29/00 (Advanced/Invention);
G01S5/20 H04R3/00 (Advanced/Non-invention)
CPC: G08B13/1672 G01S5/20 G01S5/22 G10H2210/00
G10H2210/041 H04R3/00 H04R2410/00 H04R2499/11
US: 1/1 381/56



Family:

Publication number	Publication date	Application number	Application date
US2013202120 AA	20130808	US20120364862	20120202
US9218728 BB	20151222	US20120364862	20120202

Priority:

US20120364862 20120202

Probable Assignee: RAYTHEON CO

Assignee(s): (std): BICKEL BRADY R ; COLE ROBERT J ; COMI GABRIEL D ; GLICK BRYAN D ; SCHADLER STEPHEN ; JAMES DAVID C ; ROBERTS MEGAN J ; STAPH JASON A ; RAYTHEON CO

Inventor(s): (std): BICKEL BRADY R ; COLE ROBERT J ; COMI GABRIEL D ; GLICK BRYAN D ; JAMES DAVID C ; ROBERTS MEGAN J ; SCHADLER STEPHEN ; STAPH JASON A

Agent(s): DALY CROWLEY MOFFORD AND DURKEE LLP

Title: AUDIO ANALYSIS APPARATUS

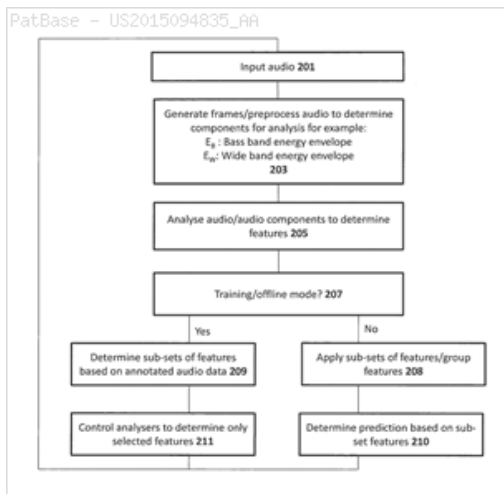
Abstract: An apparatus comprising: an analyser determiner configured to determine at least one sub-set of analysers, wherein the sub-set of analysers are determined from a set of possible analysers; at least one analyser module comprising the sub-set of analysers configured to analyse at least one audio signal to generate at least two analysis features; at least one predictor configured to determine from the at least two analysis features the presence or absence of at least one accentuated point within the at least one audio signal.

Classifications:

International (IPC 8-9): G06F3/16 G06N5/04 G06N99/00 G10H1/00 (Advanced/Invention)

CPC: G10H2210/051 G10H2210/076 G10H2250/641 G06F3/165 G06N99/005 G06N5/04 G10H1/00 G10H2210/061 G10H2250/131 G10H1/0008

US: 700/94



Family:

Publication number	Publication date	Application number	Application date
EP2854128 A1	20150401	EP20140186150	20140924
GB201317204 A0	20131113	GB20130017204	20130927
GB2518663 A1	20150401	GB20130017204	20130927
US2015094835 AA	20150402	US20140494220	20140923

Priority:

GB20130017204 20130927

Probable Assignee: NOKIA CORP

Assignee(s): (std): NOKIA CORP

Inventor(s): (std): CURCIO IGOR ; CURCIO IGOR DANILO DIEGO ; ERONEN ANTTI ; ERONEN ANTTI JOHANNES ; LEPPAENEN JUSSI ; LEPPAENEN JUSSI ARTTURI ; LEPPANEN JUSSI ARTTURI ; ROININEN MIKKO ; ROININEN MIKKO JOONAS

Inventor(s): JUSSI ARTTURI LEPPANEN ; ANTTI ERONEN

Agent(s): NOKIA CORP

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

Title: METHOD AND SYSTEM FOR IDENTIFYING LOCATION ASSOCIATED WITH VOICE COMMAND TO CONTROL HOME APPLIANCE

Abstract: The present invention relates to a method for controlling a home appliance located in assigned room with voice commands in home environment. The method comprises the steps of: receiving a voice command by a user; recording the received voice command; sampling the recorded voice command and feature extracting from the recorded voice command; determining room label by comparing the extracted features of the voice command with feature references, wherein the room label is associated with the feature references; assigning the room label to the voice command; and controlling the home appliance located in the assigned room in accordance with the voice command.

Classifications:

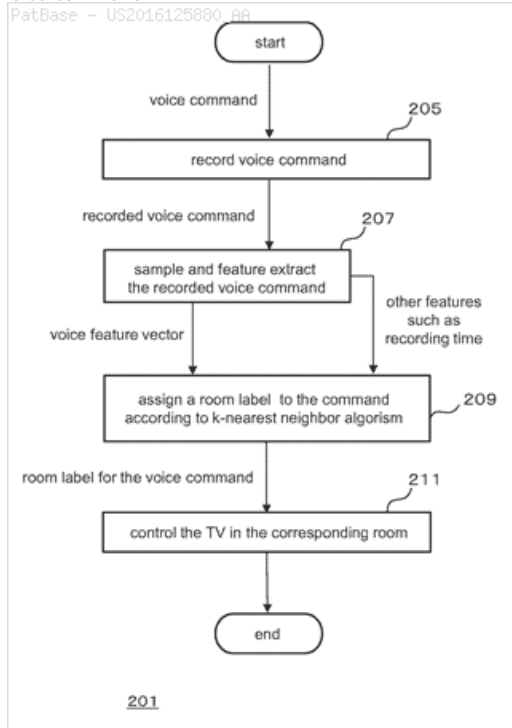
International (IPC 8-9): G06F3/16 G10L15/00 G10L15/02 G10L15/10 G10L15/22 G10L15/28 G10L25/06 G10L25/18 G10L25/24 G10L25/51 (Advanced/Invention); G10L25/24 (Advanced/Non-Invention)

CPC: G10L25/51 G10L25/06 G06F3/167 G10L15/22 G10L2015/228 G10L25/24

US: 704/275

JP F-Term: 5B026 5D015 5D045

JP F-Index: G06F3/16/630 G10L15/00/200/G G10L15/02/300/D G10L15/10/200/W G10L15/28/500 G10L25/18 G10L25/51



Family:

Publication number	Publication date	Application number	Application date
CN105308679 A	20160203	CN201380076839	20130528
EP3005346 A1	20160413	EP20130885491	20130528
EP3005346 A4	20170201	EP20130885491	20130528
JP2016524724 T2	20160818	JP20160515589T	20130528
KR20160014625 A	20160211	KR20157034002	20130528
US2016125880 AA	20160505	US20130894518	20130528
WO14190496 A1	20141204	WO2013C N076345	20130528

Priority:

WO2013CN076345 20130528

Probable Assignee: THOMSON LICENSING

Assignee(s): (std): THOMSON LICENSING ; THOMSON LICENSING SA ; ZHANG ZHIGANG ; ZHANG YANFENG ; XU JUN

Assignee(s): THOMSON LICENSING THOMSON LICENSING ; THOMSON LICENSING S A

Inventor(s): (std): XU JUN ; ZHANG YANFENG ; ZHANG ZHIGANG

Agent(s): ROSSMANITH MANFRED; OHNUKI SHINSUKE; ITOH TADAHIKO; ITOH TADASHIGE; LIU SHEN AND ASSOCIATES

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 MZ 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

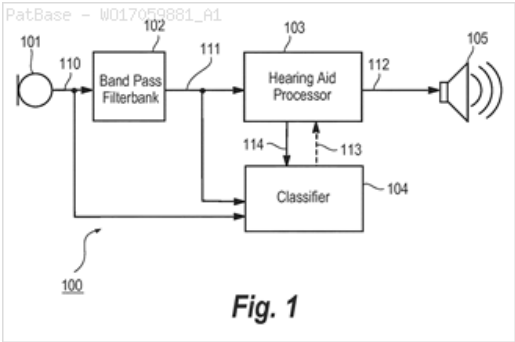
Title: HEARING AID SYSTEM AND A METHOD OF OPERATING A HEARING AID SYSTEM

Abstract: A method of operating a hearing aid system (100) based on a classification of the current sound environment and a hearing aid system (100) for carrying out the method.

Classifications:

International (IPC 8-9): G10L21/02 (Advanced/Invention)

CPC: G10L21/02 H04R2225/41 H04R25/50 H04R25/552 H04R2460/03



Family:

Publication number	Publication date	Application number	Application date
WO17059881 A1	20170413	WO2015EP72919	20151005

Priority:

WO2015EP72919 20151005

Probable Assignee: WIDEX AS

Assignee(s): (std): WIDEX AS

Assignee(s): WIDEX A S

Inventor(s): (std): NIELSEN JAKOB

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: SYSTEM AND METHOD FOR NEURAL NETWORK BASED SPEAKER CLASSIFICATION

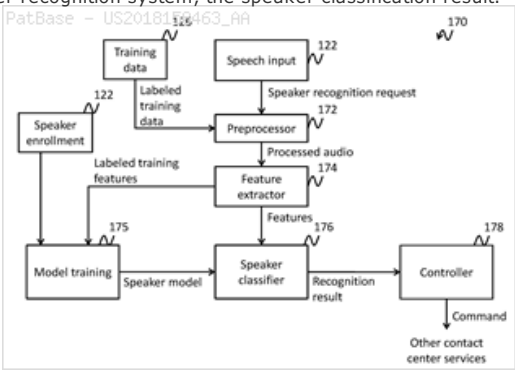
Abstract: A method for classifying speakers includes: receiving, by a speaker recognition system including a processor and memory, input audio including speech from a speaker; extracting, by the speaker recognition system, a plurality of speech frames containing voiced speech from the input audio; computing, by the speaker recognition system, a plurality of features for each of the speech frames of the input audio; computing, by the speaker recognition system, a plurality of recognition scores for the plurality of features; computing, by the speaker recognition system, a speaker classification result in accordance with the recognition scores; and outputting, by the speaker recognition system, the speaker classification result.

Classifications:

International (IPC 8-9): G10L17/04 G10L17/12 G10L17/16

G10L17/18 G10L25/45 (Advanced/Invention)

CPC: G10L17/04 G10L25/45 G10L17/18



Family:

Publication number	Publication date	Application number	Application date
US2018158463 AA	20180607	US20170835318	20171207
WO18106971 A1	20180614	WO2017US65196	20171207

Priority:

US20160431120P 20161207 US20170835318 20171207

Probable Assignee: INTERACTIVE INTELLIGENCE GROUP INC

Assignee(s): (std): INTERACTIVE INTELLIGENCE GROUP INC

Inventor(s): (std): CHELUVARAJA SRINATH ; CHELVARAJA SRINATH ; GANAPATHIRAJU ARAVIND ; IYER ANANTH N ; GE ZHENHAO ; IYER ANANTH ; SUNDARAM RAM

Agent(s): LEE SHAUN P

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: Automatic speech recognition method by comparing identification patterns based on amplitudes and phases determined by spectral analysis of speech signal

Abstract: The method involves outputting a speech building block that is selected by comparing an identification pattern, defined based on amplitudes determined by spectral analysis of the speech signal, with identification patterns associated with speech building blocks. In addition, for the selection of the speech building block to be output, an identification pattern that is based on phases determined from spectral analysis is compared with identification patterns associated with speech building blocks. Independent claims are also included for: (a) a digital data structure for storing identification patterns (b) a computer program of automatic speech recognition (c) A storage medium (d) an apparatus for speech recognition.

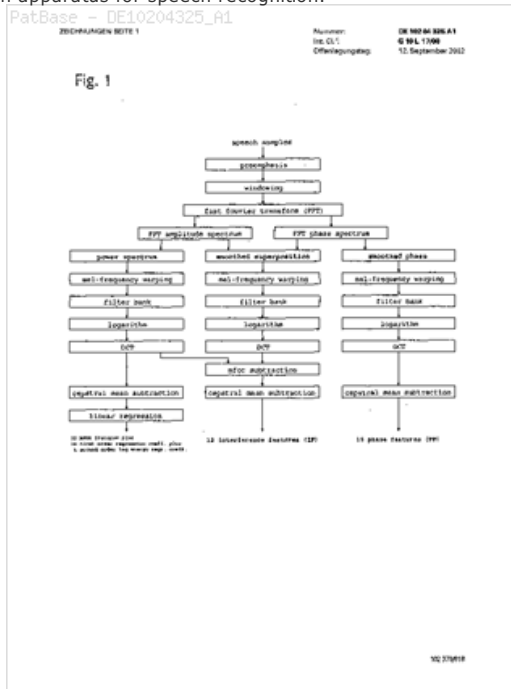
Classifications:

International (IPC 8-9): G10L15/02 (Advanced/Invention);
G10L15/00 (Core/Invention)

International (IPC 1-7): G10L15/02 G10L17/00

CPC: G10L15/02

European: G10L15/02



Family:

Publication number	Publication date	Application number	Application date
DE10204325 A1	20020912	DE20021004325	20020201
DE10204325 B4	20051020	DE20021004325	20020201

Priority:

DE20011004356 20010201 DE20021004325 20020201

Probable Assignee: AIXPLAIN AG

Assignee(s): (std): AIXPLAIN AG ; VBV VITAMIN B VENTURE GMBH

Inventor(s): (std): SCHLUETER RALF

Title: PHONEME MODEL FOR SPEECH RECOGNITION

Abstract: A sub-phoneme model given acoustic data which corresponds to a phoneme. The acoustic data is generated by sampling an analog speech signal producing a sampled speech signal. The sampled speech signal is windowed and transformed into the frequency domain producing **Mel frequency** cepstral coefficients of the phoneme. The sub-phoneme model is used in a speech recognition system. The acoustic data of the phoneme is divided into either two or three sub-phonemes. A parameterized model of the sub-phonemes is built, where the model includes Gaussian parameters based on Gaussian mixtures and a length dependency according to a Poisson distribution. A probability score is calculated while adjusting the length dependency of the Poisson distribution. The probability score is a likelihood that the parameterized model represents the phoneme. The phoneme is subsequently recognized using the parameterized model.

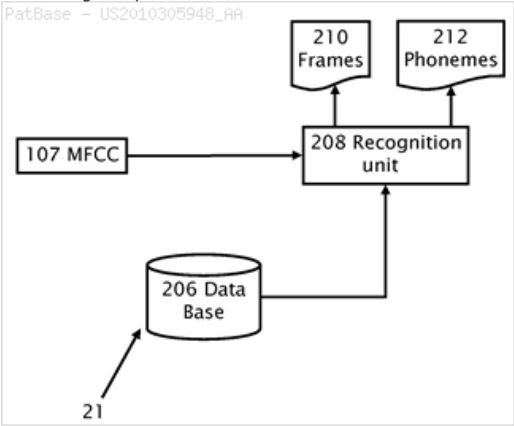
Classifications:

International (IPC 8-9): G10L15/28 (Advanced/Invention)

CPC: G10L15/02 G10L2015/025

European: G10L15/02

US: 704/255 704/255P 704/E15.001 704/E15.001S



Family:

Publication number	Publication date	Application number	Application date
US2010305948 AA	20101202	US20090475879	20090601

Priority:

US20090475879 20090601

Probable Assignee: LNTS LINQUISTECH SOLUTION LTD
Assignee(s): (std): BUDNOVICH ROMAN ; ENTELIS AVRAHAM ; SIMONE ADAM
Assignee(s): LNTS LINQUISTECH SOLUTION LTD
Inventor(s): (std): BUDNOVICH ROMAN ; ENTELIS AVRAHAM ; SIMONE ADAM
Agent(s): LAW OFFICE OF MICHAEL E KONDOUDIS

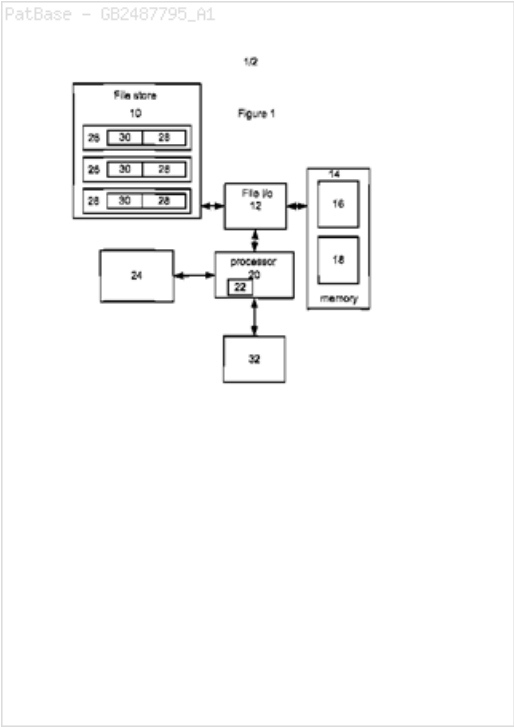
Title: DATA INDEXING

Abstract: A computer implemented method provides a plurality of audio data files 26, each comprising a header 30 and audio signal data 28, and configures a database by providing a plurality of associations, each indicating an association between a respective one of the plurality of data files and an index data value to enable the data file to be indexed in the database, wherein the index data value has a dependence upon frequency content of the audio signal. In some cases the frequency content of the audio signal comprises a plurality of frequency data windows. The processor 20 applies a transform such as a Fourier transform to each data window (100, 110 fig. 2) to determine spectral or frequency content (100a, 110a fig. 2) and writes the spectral content data to a second memory area 18 of memory 14. The index may be based on a centre of gravity of a weighted average of frequency content.

Classifications:

International (IPC 8-9): G06F17/30 G11B27/10 (Advanced/Invention)

CPC: G06F17/30743 G06F17/3074 G11B27/10



Family:

Publication number	Publication date	Application number	Application date
GB201102075 A0	20110323	GB20110002075	20110207
GB2487795 A1	20120808	GB20110002075	20110207

Priority:

GB20110002075 20110207

Probable Assignee: SLOWINK LTD

Assignee(s): (std): SLOWINK LTD

Assignee(s): SLOWINK LIMITED

Inventor(s): (std): CABRERA JUAN ; CHANNER FADIL ; CHOUDHRY HUSSAN ; REHMAN AMIN UR

Inventor(s): AMIN UR REHMAN ; FADIL CHANNER ; HUSSAN CHOUDHRY ; JUAN CABRERA

Title: CONTINUOUS SPEECH RECOGNITION

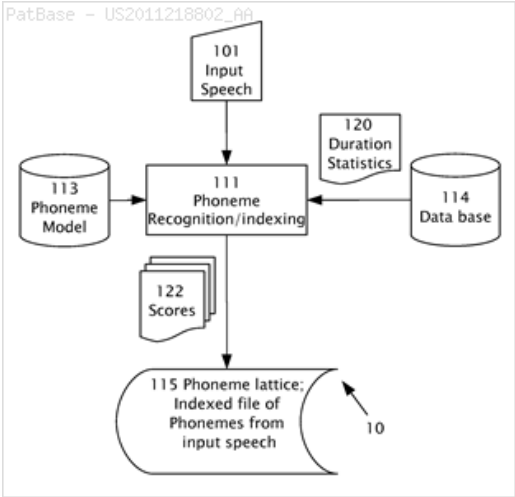
Abstract: A computerized method for continuous speech recognition using a speech recognition engine and a phoneme model. The computerized method inputs a speech signal into the speech recognition engine. Based on the phoneme model, the speech signal is indexed by scoring for the phonemes of the phoneme model and a time-ordered list of phoneme candidates and respective scores resulting from the scoring are produced. The phoneme candidates are input with the scores from the time-ordered list. Word transcription candidates are typically input from a dictionary and words are built by selecting from the word transcription candidates based on the scores. A stream of transcriptions is outputted corresponding to the input speech signal. The stream of transcriptions is re-scored by searching for and detecting anomalous word transcriptions in the stream of transcriptions to produce second scores.

Classifications:

International (IPC 8-9): G10L15/04 (Advanced/Invention)

CPC: G10L15/04

US: 704/211 704/211P 704/254 704/254S 704/E15.005 704/E15.005S



Family:

Publication number	Publication date	Application number	Application date
US2011218802 AA	20110908	US20100719140	20100308

Priority:

US20100719140 20100308

Probable Assignee:

L N T S LINGUISTECH SOLUTION LTD

Assignee(s): (std):

BOUGANIM SHLOMI HAI ; LEVANT BORIS

Assignee(s):

L N T S LINGUISTECH SOLUTION LTD

Inventor(s): (std):

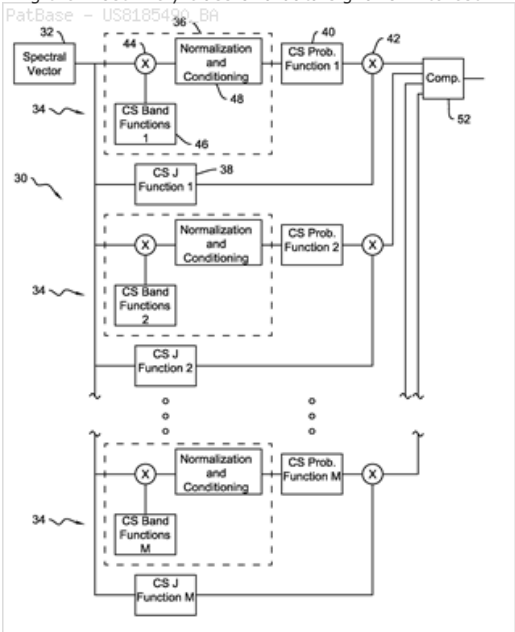
BOUGANIM SHLOMI HAI ; LEVANT BORIS

Title: CLASS-SPECIFIC ITERATED SUBSPACE CLASSIFIER

Abstract: A method is provided for calculating a class-specific iterated subspace for a classification system utilized in a computing system. Training data in the specific class for the class-specific iterated subspace is collected. A linear orthogonal transform is applied transforming the data into at least one bin. Magnitude squared bins are calculated and used as columns of a matrix. Orthonormal vectors of this matrix are selected and a J function is calculated. The J function and orthonormal starting vectors are used to obtain the class-specific iterated subspace for each class. The method further applies these class-specific iterated subspaces in a classification system for determining the most likely class of a data signal of interest.

Classifications:

International (IPC 8-9): G06F15/18 G06F17/00
G06N5/02 (Advanced/Invention)
CPC: G06N99/005
European: G06N99/00L
US: 706/12 706/48



Family:

Publication number	Publication date	Application number	Application date
US8185490 BA	20120522	US20090536157	20090805

Priority:

US20090536157 20090805

Probable Assignee: UNITED STATES OF AMERICA NAVAL UNDERSEA WARFARE CENTER DIVISION NEWPORT OFFICE OF COUNSEL

Assignee(s): (std): BAGGENSTOSS PAUL M ; US NAVY

Assignee(s): SECRETARY OF NAVY AS US GOV ; SECRETARY OF NAVY US GOV AS ; THE UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY OF THE NAVY ; UNITED STATES OF AMERICA NAVAL UNDERSEA WARFARE CE ; UNITED STATES OF AMERICA NAVAL UNDERSEA WARFARE CENTER DIVISION NEWPORT OFFICE OF COUNSEL

Inventor(s): (std): BAGGENSTOSS PAUL M

Agent(s): JAMES M; MICHAEL P; JEAN PAUL A

Title: Method for utilizing formant frequencies in speech recognition

Abstract: A speech recognizer which utilizes hypothesis testing to determine formant frequencies for use in speech recognition. A pre-processor (36) receives speech signal frames and utilizes linear predictive coding to generate all formant frequency candidates. An optimum formant selector (38) operates with a comparator (40) to select from the formant candidates those formants which best match stored reference formants. A dynamic time warper (42) and high level recognition logic (44) operate to determine whether or not to declare a recognized word.

Classifications:

International (IPC 8-9): G10L15/02 G10L15/08
G10L15/10 (Advanced/Invention)

International (IPC 1-7): G10L5/06 G10L9/02

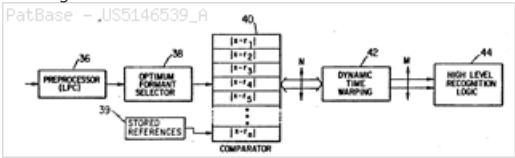
CPC: G10L15/02 G10L25/15

European: G10L15/02 G10L9/06 S10L25/15

US: 395/2 704/241 704/254 704/E15.004

JP F-Term: 5D015 5D015/CC00 5D015/CC04 5D015/CC07
5D015/CC13 5D015/CC18 5D015/FF00 5D015/HH04 5D015/HH07

JP F-Index: G10L15/02/300/B G10L5/06/B G10L9/02/301/A G10L9/02/301/B



Family:

Publication number	Publication date	Application number	Application date
JP2055073 C3	19960523	JP19850269204	19851129
JP62090000 A2	19870424	JP19850269204	19851129
JP7092680 B4	19951009	JP19850269204	19851129
US5146539 A	19920908	US19880270427	19881108

Priority:

US19840676687 19841130 US19880270427 19881108

Probable Assignee: TEXAS INSTRUMENTS INC

Assignee(s): (std): TEXAS INSTR INC TI ; TEXAS INSTRUMENTS INC

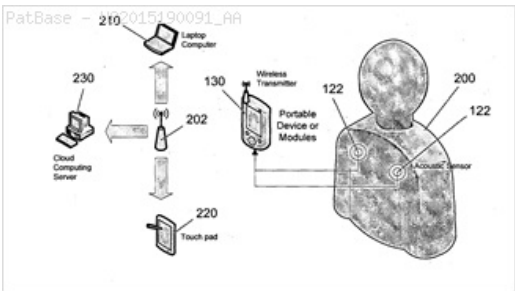
Inventor(s): (std): AARU GEIRII REONAADO ; CHEN YEUNUNG ; DODDINGTON GEORGE R ; IEUNANGU CHIEN ; JIYOOJI AARU DODEINTON ; LEONARD R GARY

Title: DEVICE, SYSTEM AND METHOD FOR DETECTION OF FLUID ACCUMULATION

Abstract: A method of detecting a level of fluid accumulation in an internal organ of a subject is proposed, as well as a system for carrying out the method. The method comprises: providing at least one classifier trained to distinguish between two or more levels of fluid accumulation; acquiring an audio signal (110) generated by said internal organ; and processing, using at least one processor (134), said audio signal (110) by: performing feature extraction to generate at least one feature vector from the audio signal; and assigning a fluid level from the two or more levels to the audio signal by passing the at least one feature vector to the at least one classifier.

Classifications:

International (IPC 8-9): A61B5/00 A61B5/08 A61B7/04
G06F19/00 (Advanced/Invention)
CPC: G06K2209/05 A61B5/4875 A61B7/04 A61B5/7267 A61B5/7278
A61B5/726 A61B5/7225 A61B5/7275 A61B2562/0204
A61B2560/0475 G06K9/00496
US: 600/586



Family:

Publication number	Publication date	Application number	Application date
SG10201701120R A1	20170427	SG20171001120	20130814
SG11201501079T A1	20150330	SG20151101079	20130814
US2015190091 AA	20150709	US20130421505	20130814
WO14027962 A1	20140220	WO2013SG00345	20130814

Priority:

US20120682992P 20120814 US20130421505 20130814 WO2013SG00345 20130814

Probable Assignee: NANYANG TECHNOLOGICAL UNIV

Assignee(s): (std): UNIV NANYANG TECH

Assignee(s): NANYANG TECHNOLOGICAL UNIV

Inventor(s): (std): SER WEE ; YANG FENG ; YU JUFENG ; YU JUNFENG

Agent(s): MARKS AND CLERK SINGAPORE LLP; WATKIN TIMOTHY LAWRENCE HARVEY

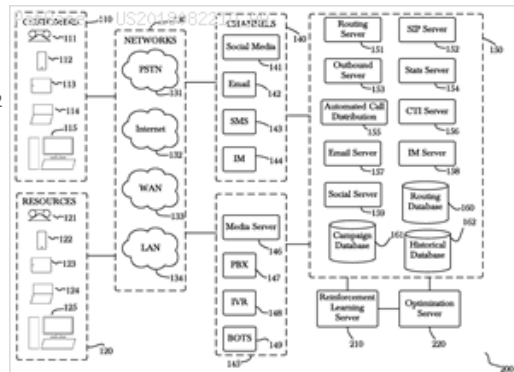
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Title: SYSTEM AND METHOD FOR OPTIMIZING COMMUNICATIONS USING REINFORCEMENT LEARNING

Abstract: A system and method for automatically optimizing states of communications and operations in a contact center, using a reinforcement learning module comprising a reinforcement learning server and an optimization server introduced to existing infrastructure of the contact center, that, through use of a model set up as a partially observable Markov chain with a Baum-Welch algorithm used to infer parameters and rewards added to form a partially observable Markov decision process, is solved to provide an optimal action policy to use in each state of a contact center, thereby ultimately optimizing states of communications and operations for an overall return.

Classifications:

International (IPC 8-9): G06K9/62 G06N3/04 G06N3/08 G06N7/00 G06N99/00 G06Q10/06 G10L13/047 G10L15/14 G10L15/16 G10L15/18 G10L25/63 H04M3/51 H04M3/523 (Advanced/Invention) **CPC:** G06N99/005 G06N7/005 H04M3/5141 H04M3/5191 H04M3/5232 H04M3/5175 G10L15/1822 G10L15/16 G10L15/14 G06F2203/011 G10L13/047 G10L13/10 G06N3/04 G06N3/08 G10L25/63 G10L15/30 G06K9/6297 G06Q10/06311 H04M2203/402

**Family:**

Publication number	Publication date	Application number	Application date
US2018082210 AA	20180322	US20160268611	20160918
US2018082213 AA	20180322	US20170442667	20170225
US2018082679 AA	20180322	US20170661341	20170727
US2018121766 AA	20180503	US20180876767	20180122
WO18053438 A1	20180322	WO2017US52087	20170918

Priority:

US20160268611 20160918 US20170441538P 20170102 US20170442667 20170225
 US20170516672P 20170608 US20170661341 20170727 US20180876767 20180122

Probable Assignee: NEWVOCEMEDA LTD

Assignee(s): (std): NEWVOCEMEDA LTD ; NEWVOICEMEDIA LTD ; NEWVOICEMEDIA US INC

Assignee(s): SILICON VALLEY BANK

Inventor(s): (std): GALVIN BRIAN ; GALVN BRAN ; MCCORD ALAN ; UNITT ASHLEY ; UNTT ASHLEY

Agent(s): GALVIN BRIAN R

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

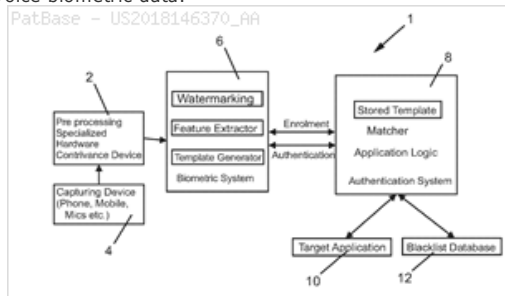
Title: METHOD AND APPARATUS FOR SECURED AUTHENTICATION USING VOICE BIOMETRICS AND WATERMARKING

Abstract: An apparatus including a computer processor, and a computer memory. The computer processor may be programmed to receive a voice input of a first person and a request for authorization by the first person to access an account from an authorized computer software application; to perform audio watermark recognition technology on the voice input to determine if the voice input satisfies expected audio watermark data stored in the computer memory for a first authorized person; to perform voice biometric technology on the voice input to determine if the voice input satisfies expected voice biometric data stored in the computer memory for the first authorized person; and to produce an output to the authorized computer software application to indicate that the voice input is from the first authorized person, based at least in part on the voice input satisfying expected audio watermark data and expected voice biometric data.

Classifications:

International (IPC 8-9): G06F17/30 G10L17/06 G10L19/018
H04L29/06 H04W12/06 (Advanced/Invention)

CPC: H04W12/06 H04L63/0861 G10L19/018 G06F17/30743
G10L17/06 G06F17/30864



Family:

Publication number	Publication date	Application number	Application date
US2018146370 AA	20180524	US20160358563	20161122

Priority:

US20160358563 20161122

Probable Assignee: KRISHNASWAMY ASHOK

Assignee(s): (std): KRISHNASWAMY ASHOK ; RAM CHANDRASEKAR MOHAN

Inventor(s): (std): KRISHNASWAMY ASHOK ; RAM CHANDRASEKAR MOHAN

Search history

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1:

Search fn=(68203680) (Results 1)

2:

Search fn=(68203680) (Results 1)

3:

Search [SP]: *** warning: ocr data - may be incomplete ***** please email the publication number to patbase@rws.com of any affected text for review ***la presente invencion se refiere al campo de la medicion y estimacion indirecta y no invasiva de poblaciones de insectos contenidos en un espacio cerrado con condiciones controladas.objeto de la invencion proporcionar un sistema que pueda estimar la cantidad de insectos en especial mosquitos dentro de un contenedor cerrado, con forma de medicion no invasiva.estado de la tecnica en el actual estado de la tecnica podemos encontrar diversos documentos como la solicitud de patente wo 2016135765 que revela un dispositivo para monitorear y capturar insectos de la poblacion de mosquitos, que comprende: un primer contenedor provisto de una primera pluralidad de elementos para atraer a los insectos al menos un segundo contenedor, colocado dentro del primer contenedor, y apoyado sobre el por medio de una pluralidad de tirantes, que comprende una base superior abierta y una base inferior, estando provisto el 1 5 10 15 20 25 segundo contenedor de una segunda pluralidad de elementos para atraer a los insectos al menos un dispositivo para generar un flujo de aire, que esta posicionado en la base inferior del segundo contenedor para aspirar los insectos cerca del dispositivo, desde el exterior hacia adentro del segundo contenedor a traves de la base superior abierta y al menos una bolsa perforada, colocada en la base superior abierta, que se extiende hasta el dispositivo para generar un flujo de aire, para monitorear y atrapar los insectos succionados dentro del dispositivo.la solicitud de patente cn 201210427713 revela un monitor, donde el monitor comprende una linterna, un cilindro, un ventilador electrico, una salida de aire, un cono, una pantalla, un cilindro adicional y una tolva, donde el cilindro esta dispuesto en la linterna, el ventilador electrico esta dispuesto en el cilindro, la salida de aire esta formada en un extremo del cilindro, el cono esta dispuesto en el otro extremo del cilindro, la pantalla esta dispuesta en el cono, el cilindro adicional esta dispuesto en el extremo pequeno del cono, y la tolva esta dispuesta en el cilindro adicional. el monitor tiene la ventaja de ser simple en cuanto a estructura, facil y conveniente para operar, y es capaz de ahorrar tiempo y trabajo y evitar que los mosquitos salgan volando.la solicitud de patente kr20120027787 proporciona un dispositivo de monitoreo que tiene funciones de conteo y erradicacion de plagas. este dispositivo usa un sensor que detecta el movimiento de las plagas en una carcasa exterior disenado para recoger las plagas. donde el dispositivo de monitoreo que tiene funciones de conteo y erradicacion de plagas incluye una carcasa exterior, una lampara de piloro, un ventilador de aspiracion, una cuchilla, un motor, un soporte, un sensor y un controlador. la carcasa exterior esta instalada de forma desmontable en el lado inferior de un cuerpo principal del dispositivo. la lampara del piloro atrae al mosquito al irradiar luz a traves de una ventana transparente. el ventilador de 2 succion esta instalado dentro del cuerpo principal. la cuchilla esta instalada en el lado inferior del ventilador de succion para matar al mosquito. el motor gira el ventilador de succion y la cuchilla. el soporte se fija al cuerpo principal usando una unidad de acoplamiento.5 teniendo en cuenta todo lo anterior no existe un dispositivo, sistema y o metodo que puedan estimar la poblacion de insectos en especial mosquitos dentro de un contenedor cerrado por medio de medicion no invasiva e indirecta.10 3 5 10 15 20 25 descripcion de la invencion la presente invencion revela un sistema, metodo y dispositivo contador de mosquitos. el sistema y dispositivo tienen un hardware y un programa de computador especializados para el correcto conteo de una poblacion de mosquitos dentro de un contenedor. el sistema tiene un mecanismo de agitacion que golpea el contenedor que contiene los mosquitos, luego se frena el mecanismo de agitacion y se procede a adquirir las senales acusticas por medio de un sensor acustico o microfono, luego los datos son enviados a un programa de computador el cual consta de una interfaz grafica, donde el programa de computador analiza la grabacion, filtra los datos y mediante un algoritmo de analisis de la onda acustica calcula el resultado de la cantidad de mosquitos contenidos en el contenedor.descripcion detallada de la invencion la figura 1 muestra un diagrama de bloques del sistema de conteo de mosquitos, el cual esta compuesto por un ordenador (100) y un dispositivo (200), el ordenador (100) tiene una interfaz de usuario de entrada de datos (130) que tiene perifericos de entrada que representan el raton (131) y teclado (132). esta interfaz de usuario puede ser seleccionada tambien de tipo tactil directamente sobre una pantalla. la interfaz de usuario esta vinculada al programa de computador (110) que procesa los datos adquiridos por el dispositivo (200).4 5 10 15 20 25 el dispositivo (200) esta alimentado por energia electrica (e) la cual puede ser tomada de la red domiciliaria o de otras fuentes de energia como baterias electricas o fuentes de energia solar. la energia electrica (e), es suministrada a traves de un conector (229) que es llevada a un convertidor acdc (228), para luego llevarla a un modulo rele (227) que permite habilitar el paso de energia al motor (250) el modulo de rele (227) tambien recibe senales del microcontrolador (224), donde el microcontrolador (224) esta comunicado con el multiconector usb (222).el dispositivo (200) adquiere los datos a traves de un sensor acustico (210), donde el sensor acustico es en preferencia un microfono condensador. los datos analogicos adquiridos por el sensor acustico (210) son enviados a traves de una conexion (211) hacia la consola de audio (221), que tiene conexion con el multiconector usb (222) que lleva los datos hacia el conector usb (223).el sensor acustico (210) es el encargado de adquirir las senales de audio que producen los insectos en el momento que estan volando dentro del contenedor.el microcontrolador (224) esta conectado a dispositivos perifericos de salida tales como pantalla (225) que puede ser seleccionada entre tipo lcd o equivalentes y diodos emisor de luz led (226), por medio de ellos se da retroalimentacion sobre el resultado de conteo de los mosquitos y estado del proceso de conteo.la figura 2 muestra un dispositivo (200) contador de mosquitos que incluye un sensor acustico (210) que es conectado a traves de una conexion (211) hacia una caja de componentes electronicos (220), donde la caja de componentes electronicos (220) comprende los elementos consola de audio (221), multiconector 5 5 10 15 20 25 usb (222), conector usb (223), el microcontrolador (224), pantalla (225), diodos emisor de luz led (226), modulo de rele (227), convertidor acdc (228) y conector (229), descritos como componentes y su interrelacion mostrados en la figura 1. la caja de componentes electronicos (220) puede ser ubicada sobre el costado lateral del compartimento (260) o en la parte inferior del mismo, o de forma distribuida de acuerdo al criterio del disenador.el dispositivo (200) tiene un mecanismo de agitacion compuesto por un motor (250), un eje (251) acoplado al motor (250) y paletas (252) que golpean el contenedor (240) que tiene los mosquitos en su interior. lo anterior para que los mosquitos se muevan y al generar el ruido pueda ser estimada la cantidad de mosquitos dentro del contenedor (240), a traves de la adquisicion de las senales de audio capturadas por medio del sensor acustico (210).el contenedor (240) tiene una pared perimetrica (241) con una tapa superior (242).el contenedor (240) y el mecanismo de agitacion estan ubicados dentro de un compartimento (260) el cual tiene una capa de aislamiento termico y acustico, preferentemente fibra sintetica o natural y ubicada en el interior del compartimento (260).la figura 3 muestra el metodo de conteo de mosquitos el cual incluye las etapas de a. etapa 310. calibrar el sensor acustico (210). donde se fijan los niveles cero de referencia. b. etapa 320. activar mecanismo de agitacion. donde gira el eje (251) acoplado al motor (250) y las paletas (252) golpean el contenedor (240). c. etapa 330. desactivar mecanismo de agitacion.6 5 10 15 20 25 d. etapa 340. adquirir senales acusticas a traves del sensor acustico (210). e. etapa 350. transmitir datos a ordenador (100). f. etapa 360. procesar datos en el programa de computador (110) con las senales adquiridas. g. etapa 370. calcular cantidad de mosquitos.la etapa f. incluye las subetapas f.1. separar la senal en tramos. f.2. calcular la transformada de fourier discreta en obtener la potencia espectral de la senal. cada tramo para f.3. calcular filtros correspondientes a la escala mel. f.4. sumar las energias en cada uno de los tramos. f.5. calcular el logaritmo de todas las energias de cada frecuencia mel. f.6. calcular la transformada de coseno discreta a todas las energias de cada frecuencia mel. los logaritmos de los valores obtenidos son los coeficientes de mel o mfccs, con estos coeficientes, se hace un analisis de correlacion de variables en la etapa de pruebas para encontrar las variables que predicen mejor los resultados del conteo.a partir de estos datos se concluyo que una regresion lineal con el cuarto coeficiente de mel modela el conteo de mosquitos con un coeficiente de determinacion mayor al 95 percent. por lo tanto, el numero de mosquitos o variable dependiente se calcula usando una ecuacion de primer grado de un modelo lineal y que tiene como la variable independiente el cuarto coeficiente cepstral de mel.los coeficientes de esta ecu (Results 1)

Search insect counter (Results 11)

5:

Search 5 and insects counter (Results 0)

6:

Search 5 or insects counter (Results 12)

7:

Search 7 and acoustic+ (Results 3)

8:

Search 7 and MEL (Results 0)

9:

Search motor+ and processor+ and USB and acoustic and sensor+ and (shak+ or agitator or pallet+) (Results 65)

10:

Title: STOCK SUPPLY BASED MODIFIABLE SELECTION SYSTEM AND METHOD FOR INGESTIBLE MATERIAL PREPARATION SYSTEM AND METHOD

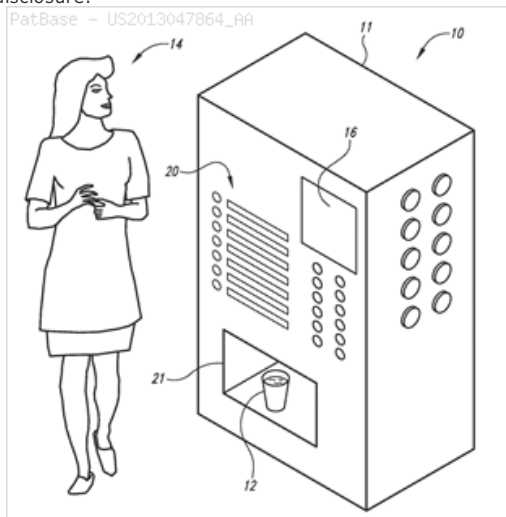
Abstract: A computationally implemented system and method that is designed to, but is not limited to: electronically directing control of at least partial preparation of the one or more selected ingestible products subsequent to and based at least in part upon the selection of the at least one candidate ingestible product as the at least one selected ingestible product via the electronically enabled input in response to the electronically outputted one or more selection menus and prior to preparation of the one or more selected ingestible products for ingestion by the particular individual living being of the selected ingestible products, the at least partial preparation of the one or more selected ingestible products occurring within a vicinity of the electronically outputting of the electronically outputted one or more selection menus. In addition, other method aspects are described in the claims, drawings, and text forming a part of the present disclosure.

Classifications:

International (IPC 8-9): A23L1/00 A23P1/00 A23P1/08 A47J27/00 A47J27/14 A47J31/44 A47J37/00 B08B3/04 B08B7/00 B67D1/08 B67D1/12 G01N33/02 G05B15/02 G06F15/16 G06F17/00 G06F17/30 G06F19/00 G06F3/048 G06F7/00 G06K15/00 G06K5/00 G06K7/01 G06Q10/00 G06Q10/06 G06Q10/08 G06Q10/10 G06Q20/00 G06Q20/18 G06Q20/32 G06Q20/34 G06Q30/00 G06Q30/02 G06Q30/06 G06Q50/00 G06Q50/12 G06Q50/22 G06Q50/24 G06Q50/28 G06Q99/00 G07F11/00 G07F11/62 G07F13/06 G07F17/00 G07F9/00 G07F9/02 G09B19/00 G16H10/60 H04L29/08 (Advanced/Invention); G06F19/00 G06Q10/10 G06Q20/00 G06Q20/20 G06Q30/02 G06Q30/06 G06Q50/02 G06Q50/12 (Advanced/Non-invention)

CPC: G07F9/02 G06Q30/02 G07F11/002 B08B1/002 B08B3/00 B08B3/12 G06Q50/01 G07F7/00 B08B1/003 B08B3/08 G09B19/00 G07F9/00 G07F9/026 G07F11/62 G07F13/065 G06Q50/22 B67D1/0884 B67D1/0888 B67D1/12 B67D1/1243 G06Q10/06 G06Q30/0633 G06Q20/341 G06Q20/322 G06Q10/087 G06Q30/0627 A47J31/44 G06Q10/083 G06Q20/34 G06Q20/32 G06Q30/0226 G06Q30/0238 G05B15/02 G06F3/048 G06F17/30241 G06F19/3462 G06F19/3481 G06F19/3456 G06Q50/12 B33Y30/00 B33Y50/02 G06Q20/18 A23P2020/253 A23P1/086 G07F7/0893 G07F9/006 G07F9/105 G07F13/025 G07F13/04 G07F7/08 G06Q10/08 G06Q50/04 Y02P90/30 A23P1/08 G07F17/0071 A23P30/00 A23L35/00 G06Q50/24 G06F19/325 A47J27/14 A47J37/00 G06Q30/0601 G06Q30/0621 G06Q10/101 G06Q20/204 G06Q50/02 G07F9/023 G07F17/0078 Y02A90/22 Y02A90/26 G09B19/0092 G07F17/0092 G07F17/26 G07F17/42 G06F19/3475 G06Q10/10 G06Q30/0631 H04L67/22 H04L67/306 G07F17/0064 G06Q50/00 G06Q50/28 G07F11/70 G06Q20/00 G06F19/00 H05K999/99 A23L5/00 A23P10/00 A23P20/00 A23P20/20

US: 1/1 134/18 134/57R 134/58R 425/166 426/231 426/531 426/87 700/117 700/232 700/233 700/235 700/236 700/237 700/238 700/240 700/244 700/90 700/97 705/1.1 705/15 705/2 705/26.7 705/3 705/317 705/330 709/204 99/325 99/450.1 99/485 99/486



Family:

Publication number	Publication date	Application number	Application date
US2013047864 AA	20130228	US20120435591	20120330
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Priority:

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Probable Assignee: ELWHA LLC

Assignee(s): (std): LEVIEN ROYCE A ; YOUNG CHRISTOPHER CHARLES ; MALAMUD MARK A ; HOLMAN PAUL ; STEPHENSON NEAL ; ELWHA LLC A LTD LIABILITY COMPANY OF THE STATE OF DELAWARE ; ELWHA LLC A LTD LIABILITY CO OF STATE OF DELAWARE ; ELWHA LLC A LTD LIABILITY CO OF SATE OF DELAWARE ; ELWHA LLC

Assignee(s): ELWHA LLC A LIABILITY CO OF SATE OF DELAWARE LTD ; ELWHA LLC A LIABILITY CO OF STATE OF DELAWARE LTD ; ELWHA LLC A LIMITED LIABILITY COMPANY OF THE STATE OF DELAWARE

Inventor(s): (std): HOLMAN PAUL ; LEVIEN ROYCE A ; MALAMUD MARK A ; STEPHENSON NEAL ; YOUNG CHRISTOPHER CHARLES

Title: SYSTEM AND METHODS FOR RAISED TOUCH SCREENS

Abstract: A touch sensitive display assembly includes a touch screen and a button array. The touch screen is configured to display one or more input keys. The button array includes one or more buttons corresponding to the one or more input keys. The button array is formed by a substrate attached to a button membrane thereby creating a set of button cavities corresponding to the input keys. The button cavities are configured to be inflated and deflated by a pump coupled to a fluid reservoir. The cavities can be inflated/deflated together, in subsets, and/or individually. In some embodiments, the button array is sandwiched between a touch sensing layer and a display of the touch screen. In other embodiments, the button array can be located either above or below the touch screen.

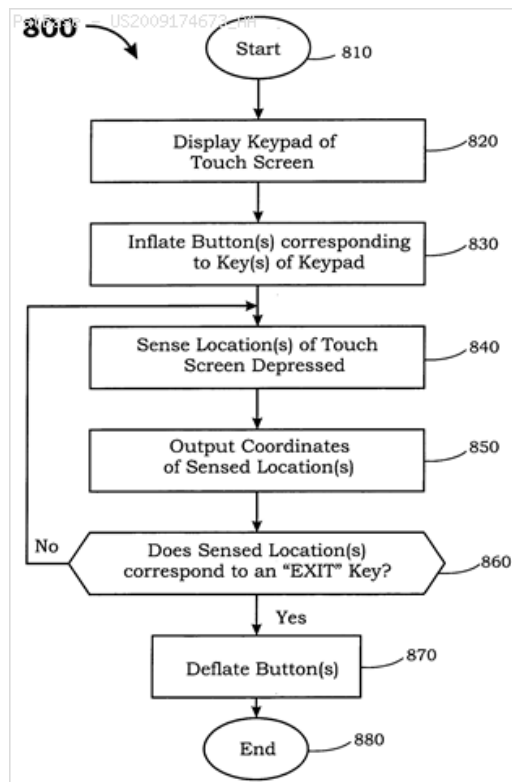
Classifications:

International (IPC 8-9): F04B43/10 F04B43/113 F04B45/073 G06F G06F1/16 G06F3/01 G06F3/02 G06F3/0354 G06F3/041 G06F3/044 G06F3/045 G06F3/046 G06F3/047 G06F3/0488 G06F3/0489 G08B6/00 G08C21/00 G09G5/00 H01H13/14 H01H13/70 H01H13/84 H01H13/85 H01H9/16 H03K17/967 (Advanced/Invention); G06F3/041 G09B21/00 (Advanced/Non-invention); G06F3/041 G08C21/00 (Core/Invention)

CPC: H01H2211/002 H01H2217/042 H01H9/16 H03K17/967 H01H2215/05 G06F3/039 H03K17/9622 G06F2203/04102 H01H13/85 G09G2300/0404 G06F3/03545 G06F2203/04105 G09G2300/0426 H03K2217/960755 G08B6/00 G06F3/0416 G06F1/1616 G06F1/1692 G06F2203/04103 G06F3/03547 G06F3/04895 G06F2203/014 G06F3/023 H03K17/972 H03K17/98 H03K2217/96062 G06F3/045 G06F3/0414 G09G2300/04 F04B43/10 F04B43/113 F04B45/073 F04B45/0736 G06F3/0202 G06F3/04886 H01H13/84 H01H2215/046 H01H2217/018 H01H2223/062 G06F3/0412 G06F2203/04107 G06F3/0488 G06F2203/04809 G06F3/046 G06F3/04883 G06F3/016 G06F3/041 G06F3/044 G06F3/042 G06F1/1626 G06F1/1643 G06F2200/1632 G06F2200/1634 H05K999/99

European: G06F3/02A G06F3/0354P G06F3/0488T G06F3/0489G H01H13/84 H03K17/967 S06F203/04809 T01H211/002 T01H215/046 T01H217/018 T01H217/042

US: 1/1 178/18.01 178/18.010S 200/600 340/407.02 340/407.2 345/156 345/168 345/168P 345/173 345/173P 345/173S 345/174 345/174P 434/114

**Family:**

Publication number	Publication date	Application number	Application date
■ CN101971124 A	20110209	CN200980101667	20090105
■ CN101971124 B	20131113	CN200980101667	20090105
■ CN102725716 A	20121010	CN201080058153	20101221
■ CN102725716 B	20160413	CN201080058153	20101221
■ CN102782617 A	20121114	CN201080057602	20101221
■ CN102782617 B	20151007	CN201080057602	20101221
■ CN104428739 A	20150318	CN201380037293	20130516
■ CN104428739 B	20170606	CN201380037293	20130516
■ CN105260110 A	20160120	CN201510549061	20100705
■ CN105518593 A	20160420	CN201480049164	20140908
■ DE602009035039 D1	20160107	DE200960035039T	20090703
■ EP2250544 A1	20101117	EP20090701045	20090105
■ EP2250544 A4	20140917	EP20090701045	20090105
■ EP2250544 B1	20161228	EP20090701045	20090105
■ EP2384466 A1	20111109	EP20090836551	20090703
■ EP2384466 A4	20130522	EP20090836551	20090703
■ EP2384466 B1	20151125	EP20090836551	20090703
■ EP2517089 A1	20121031	EP20100843563	20101221
■ EP2517089 A4	20160309	EP20100843563	20101221
■ EP2850509 A2	20150325	EP20130790554	20130516
■ EP2850509 A4	20160106	EP20130790554	20130516
■ IN05342DN2010 A	20130927	IN2010DN05342	20100723
■ JP2011508935 T2	20110317	JP20100541559T	20090105
■ JP2015520455 T2	20150716	JP20150512852T	20130516
■ JP5406210 B2	20140205	JP20100541559T	20090105
■ KR101551993 B1	20150909	KR20107017351	20090105
■ KR20100136446 A	20101228	KR20107017351	20090105
■ KR20150027088 A	20150311	KR20147035029	20130516
■ TW201531897 A	20150816	TW20140132779	20140923
■ US2009174673 AA	20090709	US20080969848	20080104

US2009174687 AA	20090709	US20090319334	20090105
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Priority:

US20080969848	20080104	US20090319334	20090105	WO2009US00037	20090105
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Probable Assignee: TACTUS TECHNOLOGY INC

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Assignee(s): SILICON VALLEY BANK ; TACTUS TECHNOLOGIES ; TACTUS TECHNOLOGY INC MOUNTAIN VIEW

Inventor(s): (std): ANVAR DAVID ; CALUB BEN GURON ; CIESLA CRAIG M ; CIESLA CRAIG MICHAEL ; DEL ROSARIO CARL ; GREGORY KYLE ; GRINSTEAD FORREST ; JENKINS JONATHON ; KNAPP NATHAN ; MICAH YAIRI B ; MICHAEL CIESLA CRAIG ; MILLER BRANDON GREGORY ; RAK ROMAN ; RAY CURTIS ; RAY MICHAEL ; RAY ROB ; RAY ROBERT ADRIAN ; SAAL NATE ; SHIMSHAK MAX ; SHIMSHAK MAXWELL HARSHORN ; YAIRI MICAH B ; YAIRIM MICAH B ; YAIRIM MICHAH B ; YAIRI MICAH ; WONG SIMONA ; WONG AMY LAI ; SAAL NATHANIEL MARK ; SAAL NATHANIEL ; ROSARIO CARL DEL ; RAY CURTIS A ; MILLER BRANDON ; MENIGOZ RON ; MARK SAAL NATHANIEL ; KREVOR DAVID HENRY ; KREVOR DAVID ; JENKINS JONATHAN ; JASTRZEBSKI MICHAEL ; HAMMERSLEY MICHAEL ; GREGORY KYLE K ; GARCIA MARIO S ; GARCIA MARIO ; CULVER TODD A ; CRAIG CIESLA MICHAEL ; CIESLA CRAIG ; CALUB BEN

Inventor(s): YAIRIM MICHAH B PALO ALTO ; CIESLA CRAIG MICHAEL MOUNTAIN VIEW

Agent(s): LAMB RICHARD ANDREW ; STANNERS DAVID RALPH ; HIGGS JONATHAN ; KITA AOYAMA INT PATENT BUREAU ; KANG LIM ; SCHOX PLC ; JEFFREY ; PETER ; PADOWITZ ; PADOWITZ ALCE ; 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 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

Title: DEVICES SYSTEMS AND METHODS FOR MEDICAMENT DELIVERY

Abstract: Certain exemplary embodiments comprise an apparatus, comprising: a compressed gas container; a plurality of vials adapted to store a liquid medicament, each vial defining a longitudinal axis, the longitudinal axes of the plurality of vials parallel and non-co-axial, the plurality of vials fluidly coupleable to an actuating portion of a contents of the gas container; and a plurality of pistons, each piston adapted to move within a corresponding vial from the plurality of vials, the plurality of pistons adapted to, in response to discharge of the actuating portion of the contents of the compressed gas container, transfer at least a portion of the liquid medicament from the plurality of vials and through a needle that is extendable into a patient.

FDA Data:

Application number	Active ingredient	Proprietary name	Applicant	Date of approval
201739	EPINEPHRINE	AUVI-Q	INTELLIJECT	Aug 10, 2012
201739	EPINEPHRINE	AUVI-Q	KALEO INC	Aug 10, 2012
201739	EPINEPHRINE	AUVI-Q	KALEO INC	Nov 17, 2017
201739	EPINEPHRINE	AUVI-Q	SANOFI AVENTIS US	Aug 10, 2012
205787	NALOXONE HYDROCHLORIDE	EVZIO	KALEO INC	Apr 3, 2014
209862	NALOXONE HYDROCHLORIDE	EVZIO	KALEO INC	Oct 19, 2016

Classifications:

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International (IPC 1-7): A61K9/22 A61M37/00

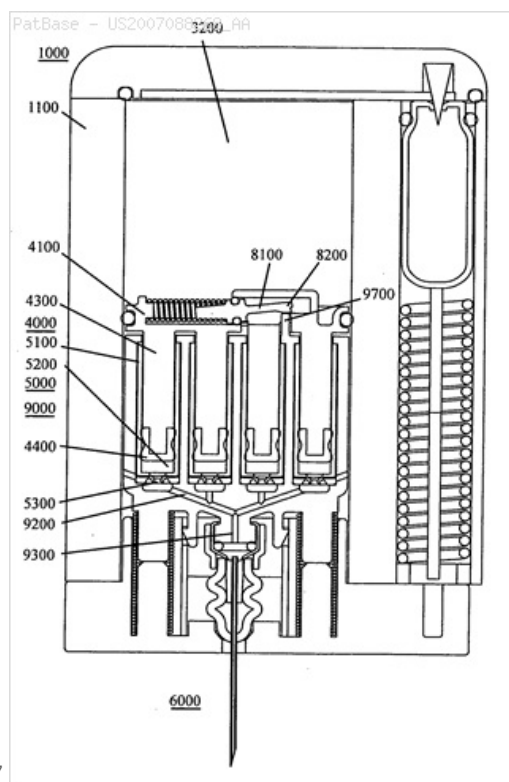
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Family:

Publication number	Publication date	Application number	Application date
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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 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 MZ NA NE NG NI NL NO NZ OM PE 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: PRINTHEAD SUPPORT ASSEMBLY

Abstract: An inkjet printhead assembly includes a hollow elongate member defining ink supply channels. The ink supply channels are in fluid communication with an elongate slot in and extending at least partly along the elongate member. A plurality of printhead segment carriers is received and secured in neighbouring arrangement within the slot, and at least one printhead segment is mounted to each printhead segment carrier.

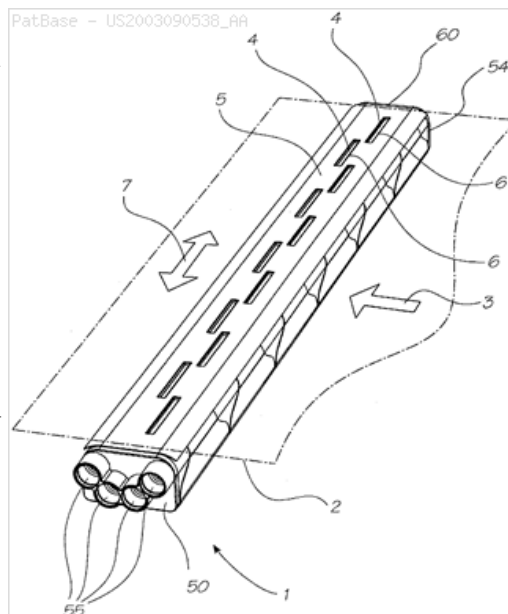
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235/439 235/454 235/462.01 235/462.03 235/462.04 235/462.38 235/462.43 235/462.44 235/462.440P 235/462.45 235/462.46
235/472.01 235/472.02 235/494 235/494P 250/566 250/566P 283/74 283/85 29/890.1 29/890.100P 341/13 345/156 345/156P
345/158 345/173 345/176 345/179 345/179P 345/180 345/9 345/9P 346/140.01 346/140.1 347/13 347/19 347/19P 347/2 347/2P
347/40 347/40P 347/42 347/42P 347/45 347/45P 347/49 347/49P 347/49S 347/5 347/58 347/65 347/65P 347/85 348/E03.021
348/E3.021 348/E30.21 348/E30.21S 358/1.1 358/1.12 358/1.120S 358/1.13 358/1.14 358/1.140P 358/1.15 358/1.150P 358/1.16
358/1.18 358/1.180P 358/1.180S 358/1.8 358/1.9 358/1.900P 358/11.8 358/3.28 358/3.280P 358/32.8 358/402 358/403 358/440
358/442 358/442S 358/453 358/462 358/473 358/474 358/474S 358/539 358/539P 379/100.07 380/259 380/259S 380/270
380/51 380/55 382/119 382/119P 382/182 382/186 382/188 382/203 382/312 382/313 382/314 382/314S 382/317 386/109
386/241 386/248 386/353 386/46 400/88 400/88P 401/195 455/411 455/411P 455/414.1 455/414.100P 455/414.4 455/415
455/418 455/419 455/420 455/550.1 455/556.1 455/556.100P 455/556.2 455/557 455/564 455/66.1 705/1 705/14.1 705/14.4
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707/999.201 707/999.201S 707/E17.067 707/E17.067S 707/E17.109 707/E17.109S 709/206 709/206S 713/150 713/182 713/182P
713/186 713/186P 715/211S 715/221 715/229 715/234 715/243 715/247S 715/268S 715/505 715/506 715/507 715/700

Family:

Publication number	Publication date	Application number	Application date
 AU055999 A0	19990617	AU1999PQ00559	19990525
 AU130499 A0	19990722	AU1999PQ01304	19990630
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 CN1371321 A	20020925	CN20008012299	20000630
 CN1565845 A	20050119	CN200410063364	20000630
 CN1818848 A	20060816	CN200410081742	20000524
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Priority:

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Probable Assignee: SILVERBROOK RESEARCH PTY LTD

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Title: LED SIGN

Abstract: A system for displaying an image comprising at least one display apparatus. Each display apparatus including at least one light bar having a plurality of light emitting diodes mounted thereto. At least one support joining each light bar to a rotation mechanism. The rotation mechanism being constructed and arranged to rotate the light bars at a predetermined rate of rotation. The system also includes a controller in electrical communication with each of the plurality of light emitting diodes, and the rotation mechanism of each of the at least one display apparatus. The controller constructed and arranged to control the predetermined rate of rotation and selectively activate the light emitting diodes to produce at least one image capable of being perceived by a viewer.

Classifications:

International (IPC 8-9): B60Q1/26 B64D47/06 F21K9/20 F21K99/00 F21V23/00 F21V3/04 F21V5/04 F21V9/04 G01S1/00 G01S1/70 G01S19/48 G05B15/02 G05B19/00 G06F13/10 G06F13/40 G06F13/42 G06F17/30 G06Q20/10 G06Q20/14 G06Q30/00 G06Q30/02 G06Q30/04 G06Q50/06 G07C9/00 G08B13/00 G08B13/196 G08B13/22 G08B31/00 G08B5/22 G09F21/04 G09F9/33 G09G3/00 G09G3/32 H04B10/00 H04B10/02 H04B10/04 H04B10/07 H04B10/10 H04B10/11 H04B10/114 H04B10/116 H04B10/40 H04B10/50 H04B10/80 H04B3/54 H04J14/02 H04L12/28 H04N7/18 H04Q11/00 H04W12/08 H04W4/02 H05B33/08 H05B37/00 H05B37/02 (Advanced/Invention);

F21Y101/02 H04B10/12 H04J14/00 (Advanced/Non-invention);

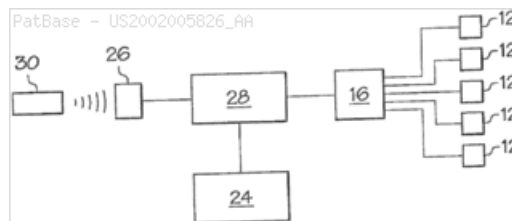
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International (IPC 1-7): G06F12/14 G08B21/00 G08B5/22 G08G1/087 G08G1/0965 G09F11/00 G09G3/00 G09G3/32

CPC: B60Q1/2696 B64D47/06 G09F21/04 G09G3/001 G08B13/22 B64D2203/00 B60Q1/2611 B60Q2900/30 G09F9/33 G09G3/005 G06Q20/102 Y10S436/90 G08B13/19613 G08B13/19645 G08B13/19647 G08B13/19652 G08B13/19663 G08B13/19671 G08B31/00 G06F17/30244 H04N7/183 G07C9/00158 H05B33/0863 H05B33/0884 H04B10/00 G01S1/70 H05B37/0263 H05B37/0272 G06F3/011 H04L12/282 G06F1/163 G06F3/012 G06F3/013 G06F3/014 G06F3/017 G06F3/0304 G06F3/0325 G06Q30/00 H04B10/11 H04B10/1149 H05B33/0845 H04B10/502 H04W4/025 H04Q11/0003 H05B33/0842 H04L63/00 G06F13/102 G06F13/4081 H04N7/181 G08B13/19667 H04B3/54 H05B37/0227 H05B33/0854 H05B33/0872 F21K9/30 F21Y2101/02 F21K9/20 H04B10/1143 F21Y2101/00 G08B13/19665 H04N7/18 H05B37/0218 H05B33/0869 H04B10/0705 H04W12/08 F21V5/04 F21V3/049 H05B33/0815 F21V23/003 H05B33/0857 F21Y2115/10 H04B10/116 H04B10/802 G06F13/4072 G06F13/4282 H04B10/40 G06Q50/06 G06Q20/145 G06Q30/0207 G06Q30/04 H04K1/10 H04K3/22 H04K3/90 H04K2203/22 H05K999/99

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US: 1/1 315/131 315/151 315/152 315/154 315/292 315/294 315/312 315/318 340/293 340/293P 340/425.5 340/425.500S 340/5.81 340/5.83 340/540 340/541 340/541P 340/550 340/815.4 340/815.400S 340/815.45 340/815.450P 340/937 342/357.06 342/357.31 342/357.310S 345/82 345/82P 348/143 348/143S 348/148 348/159 348/159P 348/E7.085 348/E70.85S 359/152 382/115 382/118 398/115 398/115P 398/116 398/118 398/127 398/128 398/128P 398/130 398/135 398/135P 398/137 398/139 398/172 398/183 398/25 398/45 398/96 436/900 700/275 705/40 710/305 710/305P 713/200



Family:

Publication number	Publication date	Application number	Application date
US2002005826 AA	20020117	US20010858339	20010515
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Priority:

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US20170602922 20170523

Probable Assignee: FEDERAL LAW ENFORCEMENT DEVELOPMENT SERVICES INC

Assignee(s): (std): 911 EMERGENCY PRODUCTS INC ; BROWN PAUL R ; FED LAW ENFORCEMENT INC ; FED LAW ENFORCEMENT DEV SERVIC ; FED LAW ENFORCEMENT DEV SERVICES INC ; FED LAW ENFORCEMENT DEV SERVICES ; LECLAIRE JAMES ; FED LAW ENFORCEMENT DEVELOPMENT SERVICES INC ; FED LAW ENFORCEMENT DEVELOPMENT SERVICES INC ; PEDERSON JOHN C ; SNOWY VILLAGE INC ; SEVERSON DAN ; SEVERSON CATHY JO ; SEVERSON CATHY J ; ZIMMERMAN JAMES ; MIKKELSEN BRENT ; VOGT TIMOTHY J ; PEDERSON JOHN

Assignee(s): WEITZEL JOHN P ; VIDAS ARRETT AND STEINKRUAS PA ; VIDAS ARRETT AND STEINKRAUS PA ; FEDERAL LAW ENFORCEMENT DEVELOPMENT SERVICES INC ; FEDERAL LAW ENFORCEMENT DEVELOPMENT SERVICES ; FEDERAL LAW ENFORCEMENT INC ; FEDERAL LAW ENFORCEMENT DEVELOPMENT SERVICE INC ; JOHN P WEITZEL ; FEDERAL LAW ENFORCEMENT DEVELOPMENT SERVICES INC ; E P SURVIVORS LLC ; EP SURVIVORS LLC

Inventor(s): (std): SEVERSON CATHY J ; SEVERSON CATHY JO ; SEVERSON DAN ; ZIMMERMAN JAMES ; VOGT TIMOTHY J ; PEDERSON CATHY JO ; MIKKELSEN BRENT ; LECLAIRE JAMES ; BROWN PAUL R ; PEDERSON JOHN C ; PEDERSON JOHN

Inventor(s): SEVERSON CATHY

Agent(s): VIDAS ARRETT AND STEINKRAUS PA; VIDAS ARRETT AND STEINKRAUS; VOIGT II EDWIN E; VOIGT EDWIN E II; VOIGT EDWIN E

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: DRUG DOSE CARTRIDGE FOR AN INHALER DEVICE

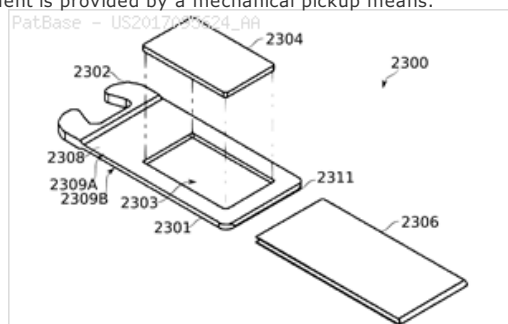
Abstract: Devices and methods are described for preparing, managing, and/or administering metered doses of substances for vaporized administration. In some embodiments, dose cartridges comprising at least one botanical substance include a heating element integrated into the cartridge in close contact with the botanical substance. In some embodiments, cartridge-mounted doses are stored in a magazine, optionally in carousel form, before use. Transport of a cartridge from a magazine to an electrically operated vaporizing chamber which activates the heating element is provided by a mechanical pickup means.

Classifications:

International (IPC 8-9): A24F47/00 A61J1/03 A61K A61K31/05 A61K31/09 A61K31/122 A61K31/137 A61K31/343 A61K31/352 A61K31/36 A61K31/366 A61K31/465 A61K31/473 A61K31/48 A61K31/55 A61K36/185 A61K36/81 A61K45/00 A61K9/00 A61K9/72 A61M A61M11/04 A61M13/00 A61M15/00 A61M15/06 A61M16/00 A61M16/10 A61M16/14 A61M16/20 A61N65/00 A61P1/00 A61P1/04 A61P1/08 A61P1/14 A61P11/00 A61P11/06 A61P13/10 A61P15/00 A61P17/02 A61P17/04 A61P19/02 A61P21/00 A61P25/00 A61P25/04 A61P25/08 A61P25/14 A61P25/16 A61P25/18 A61P25/20 A61P25/22 A61P25/24 A61P25/30 A61P25/32 A61P27/06 A61P29/00 A61P31/04 A61P31/14 A61P31/18 A61P35/00 A61P35/02 A61P9/10 A61P9/12 G06F19/00 H05B1/02 (Advanced/Invention); A24F47/00 A61J1/03 A61M11/02 A61M11/04 (Advanced/Non-invention); A24F47/00 A61M15/00 (Core/Invention); A24F47/00 (Core/Non-invention)

CPC: A61M15/0065 A61K36/185 A61K9/007 H05B1/025 A61M15/0028 A61M15/0045 A61K31/352 A61K9/0073 A61M2205/36 A61M2205/3334 A61M2205/3368 A61M15/0051 A61M2205/0216 A61K36/81 A61K31/465 A61M2205/3331 A61M15/0003 A61M16/14 A61M15/06 A61M2205/3303 A61M2205/502 A61M16/20 A61K31/05 A61M2205/3569 A61M2205/3592 A61M15/0066 A24F47/008 A61M11/02 A61M15/0001 A61M15/0013 A61M15/0015 A61M15/0091 A61M11/041 A61M15/0021 A61M15/005 A61M2205/52 A61M15/002 A61M11/042

US: 128/203.14 128/203.27



Family:

Publication number	Publication date	Application number	Application date
AU2015283589 AA	20160107	AU20150283589	20150630
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Priority:

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Probable Assignee: SYQE MEDICAL LTD

Assignee(s): (std): SYQE MEDICAL LTD

Assignee(s): SHLOMO ALMOG ; SETH KINDLER ; AARON SCHORR ; ALMOG SHLOMO ; ASAF KROLL ; BINYAMIN SCHWARTZ ; SCHORR AARON ; KROLL ASAF ; SCHWARTZ BINYAMIN ; DAVIDSON PERRY ; KINDLER SETH ; LIFSHITZ ROEE ; PERRY DAVIDSON ; ROEE LIFSHITZ

Inventor(s): (std): ALMOG SHLOMO ; ASAF KROLL ; BINYAMIN SCHWARTZ ; DAVIDSON PERRY ; KINDLER SETH ; KROLL ASAF ; LIFSHITZ ROEE ; PERRY DAVIDSON ; ROEE LIFSHITZ ; SCHORR AARON ; SCHWARTZ BENNY ; SCHWARTZ BINYAMIN ; AARON SCHORR

Inventor(s): AARON SCRORR ; SETH KINDLER ; SHLOMO ALMOG

Agent(s): IP SENTINELS PATENT AND TRADEMARK ATTORNEYS; INTEGRAL IP; VOGEL ANDREAS; EHRLICH GAL 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 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 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

Title: MONITORING REMOVAL AND REPLACEMENT OF TOOLS WITHIN AN INVENTORY CONTROL SYSTEM

Abstract: An inventory control system is described that includes a tool storage device including a drawer or a tray providing a pallet, wherein the pallet includes storage locations for objects; a sensing device configured to form an image of the storage locations; and a data processor configured to determine presence or absence of the pallet and presence or absence of objects within the storage locations of the pallet using the information from the image.

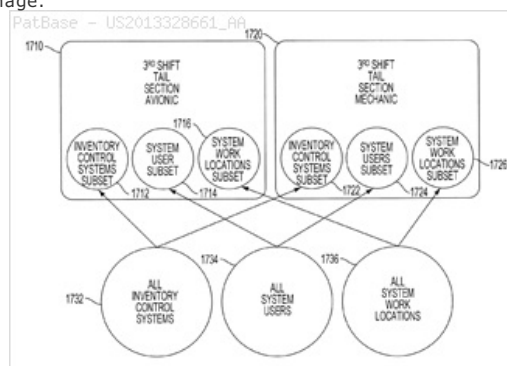
Classifications:

International (IPC 8-9): A47F3/02 B25H3/00 B25H3/02 G06F3/0486 G06K9/00 G06Q10/08 G07C9/00 (Advanced/Invention)

CPC: G07C9/00039 G06F3/0486 G06K9/00771 G07C9/00912

G06Q10/087 G07C9/00111 B25H3/00 B25H3/028 G07C9/00031 G07C9/00896

US: 340/5.7 340/568.1 382/103 705/28 715/769



Family:

Publication number	Publication date	Application number	Application date
CN104486975 A	20150401	CN201380039633	20130612
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CN107283374 A	20171024	CN201710474785	20130612
EP2858536 A1	20150415	EP20130804853	20130612
EP2858536 A4	20160427	EP20130804853	20130612
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WO13188580 A2	20131219	WO2013US45489	20130612
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WO14088640 A2	20140612	WO2013US45469	20130612
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Priority:

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Probable Assignee: SNAP ON INC

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Title: SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR COLLABORATION AND SYNCHRONIZATION OF MEDIA CONTENT ON A PLURALITY OF MEDIA PLAYERS

Abstract: A system, method and computer program product is provided which facilitates the collaborative selection and synchronous playing of digital media on a plurality of networked media players. Various embodiments of the invention provides for a plurality of media players in processing communications which enables individual users of the media players to form a collaborative group; whereby the collaborative group of users may jointly suggest, approve, reject, vote, or otherwise select the media item to be synchronously played upon their individual media players. In some embodiments of the present invention, at least one of the media players is assigned a role of designated media coordinator. Each of the plurality of media players includes a processor, a communications infrastructure coupled to the processor, a secondary memory coupled to the communications infrastructure having retrievably stored therein one or more media items playable by the processor, a transceiver coupled to the communications infrastructure, a main memory coupled to the processor and at least one collaboration program stored in at least a portion of the memory. The collaboration program having instructions executable by the processor to exchange parameters among the individual media players to enable the collaborative selection and synchronous playing selected media items.

Classifications:

International (IPC 8-9): A63B21/00 A63B22/00 A63B71/00 A63F13/00 A63F9/24 F41A33/00 G01C21/00 G01C21/32 G01S19/03 G01S19/05 G01S19/11 G01S19/21 G01S19/25 G01S19/29 G01S19/46 G01S19/48 G01S3/02 G01S5/14 G05B19/18 G06F12/00 G06F15/16 G06F15/173 G06F17/00 G06F17/30 G06F19/00 G06K7/00 G06K5/00 G06K7/00 G06N5/00 G06Q30/00 G06T15/70 G08B1/08 G09G5/00 G10H1/00 G10H1/18 G10H7/00 G10L11/04 G10L21/00 G11B21/08 G11B27/10 H03G3/00 H03G3/20 H03G3/32 H04B7/00 H04K1/00 H04L12/56 H04M1/00 H04M11/04 H04Q7/20 (Advanced/Invention);

G01S19/14 H04W4/12 H04W4/14 H04W8/08 H04W88/14

H04W92/02 (Advanced/Non-invention);

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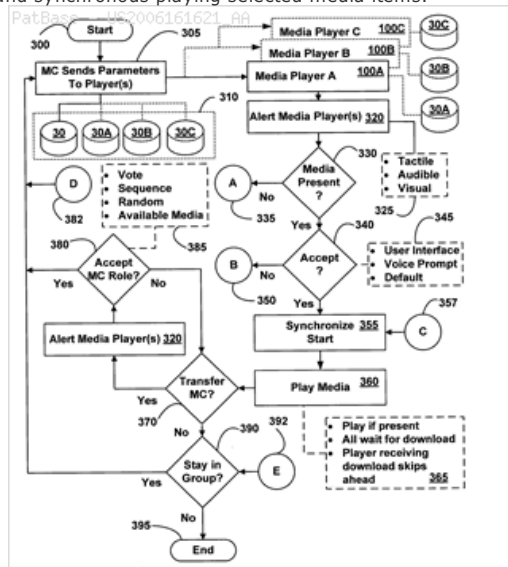
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US: 1/1 1/1P 235/375 235/375S 235/380 235/380P 235/435 235/435P 273/138.1 273/138.100P 340/539.11 340/539.110S 340/539.13 342/357.08 342/357.17 342/357.29 342/357.31 342/357.310S 342/357.4 342/357.400P 342/357.42 342/357.48 342/357.59 342/357.590S 342/357.64 342/357.640S 342/357.68 342/367 342/367P 342/450 342/450S 345/173 345/173P 345/473 348/E7.071 348/E70.71S 369/30.08 369/30.080S 370/399 370/399P 381/104 381/104S 381/57 381/57P 434/11 434/11P 434/130 434/130S 434/305 434/305S 455/404.2 455/404.200P 455/414.1 455/446 455/466 455/466P 455/575.1 455/575.100 463/37 463/39 463/39P 463/39S 463/40 463/40S 463/42 463/42S 463/7 463/7P 482/8 482/8P 482/9 482/9S 700/3 700/3P 700/94 700/94P 701/207 701/208 701/208S 701/213 701/213P 701/409 701/409S 701/433 701/433P 701/469 701/469P 701/516 701/516S 704/206 704/206P 704/270 704/271 704/272 704/275 704/E15.041 704/E15.041S 705/1 705/1.1 705/14 705/14.52 705/14.520P 705/14.58 705/14.580S 705/14.64 705/14.640S 705/14.66 705/14.660S 705/15 705/15S 705/2 705/4 705/40 705/5 705/59 705/7 705/7.11 707/1 707/1.04 707/205 707/3 707/5 707/6 707/822 707/828 707/999.001 707/999.001S 707/999.003 707/999.003S 707/999.005 707/999.005S 707/999.006 707/999.006S 707/999.104 707/999.104S 707/999.107 707/999.107S 707/999.205 707/999.205S 707/E17.005 707/E17.005S 707/E17.009 707/E17.009S 707/E17.018 707/E17.018S 707/E17.068 707/E17.068S 707/E17.093 707/E17.093S 707/E17.102 707/E17.102S 707/E17.108 707/E17.108S 707/E17.109 707/E17.109S



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709/217 709/219 709/223 709/224 709/231 709/232 709/246 713/186 713/186P 714/1 715/716 725/100 725/102 725/88 84/612
84/615 G9B/27.002 G9B/27.002S G9B/27.019 G9B/27.021 G9B/27.051 G9B/27.051S G9B/5.198 G9B/5.198S G9B/7.094
G9B/7.094S

Family:

Publication number	Publication date	Application number	Application date
CA2597308 AA	20070808	CA20062597308	20060207
GB200715004 A0	20070912	GB20070015004	20070801
GB2437221 A1	20071017	GB20070015004	20070801
IN03780CN2007 A	20071221	IN2007CN03780	20070830
US2006161621 AA	20060720	US20050223368	20050909
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WO06086439 A2	20060817	WO2006US04373	20060207
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Priority:

US20050644417P	20050115	US20050648197P	20050127	US20050648157P	20050128
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Probable Assignee: GOOGLE INC

Assignee(s): (std): GOOGLE INC ; OUTLAND RES ; OUTLAND RES LLC ; OUTLAND RES L L C ; ROSENBERG LOUIS B ; ROSENBERG LOUIS

Assignee(s): OUTLAND RESEARCH L L C ; OUTLAND RESEARCH ; OUTLAND RESEARCH LLC ; GOOGLE LLC ; LG DISPLAY CO LTD ; LOUIS B ROSENBERG

Inventor(s): (std): LOUIS ROSENBERG B ; ROSENBERG LOUIS ; ROSENBERG LOUIS B

Inventor(s): LOUIS B ROSENBERG

Agent(s): BORDEN LADNER GERVAIS LLP; LAW OFFICE OF PHILIP A STEINER; SINSHEIMER SCHIEBELHUT BAGGETT; SINSHEIMER JUHNKE LEBENS AND MCIVOR LLP; LEBENS THOMAS F; THOMAS F; SINSHEIMER JUHNKE LEBENS AND MCLVOR LLP; MORRIS AND KAMLAY 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 GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: SMART DEVICE

Abstract: An Internet of Thing (IoT) device includes a camera coupled to a processor; and a wireless transceiver coupled to the processor. Blockchain smart contracts can be used with the device to facilitate secure operation.

Classifications:

International (IPC 8-9): A42B3/04 A61B5/00 A61B5/0205 A61B5/0404

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A63F13/212 B33Y10/00 G01L5/00 G01P15/08 G01P15/18 G06F1/16

G06F19/00 G06F3/00 G06F3/01 G06K9/00 G06K9/78 G06N5/04

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H04W84/18 (Advanced/Invention);

A63B21/072 A63B69/00 A63B69/02 A63B69/06 A63B69/16 A63B69/36

A63B71/08 A63B71/10 A63B71/12 A63B71/14 G06K9/62 H04B1/04

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CPC: A63B24/0075 A63B2230/04 A63B2230/50 A63B24/0006

A63B2208/0204 A63B24/0021 H04B1/38 G06K9/6277 H04N7/185

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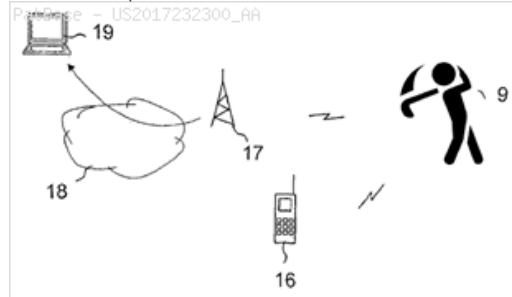
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H04B1/04 H04L67/10 H04N5/2257 H04N7/18



Family:

Publication number	Publication date	Application number	Application date
US2017232300 AA	20170817	US20170586199	20170503
US2017312578 AA	20171102	US20170626087	20170617
US2017312614 AA	20171102	US20170626099	20170617
US2017318360 AA	20171102	US20170624014	20170615
US2018001183 AA	20180104	US20170407255	20170117
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US2018078843 AA	20180322	US20170807138	20171108
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US2018133583 AA	20180517	US20170821718	20171122
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US9717958 BA	20170801	US20170407257	20170117
US9849364 BB	20171226	US20170586199	20170503
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Priority:

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Probable Assignee:

TRAN BAO

Assignee(s): (std):

TRAN BAO

Inventor(s): (std):

TRAN HA ; TRAN BAO

Agent(s):

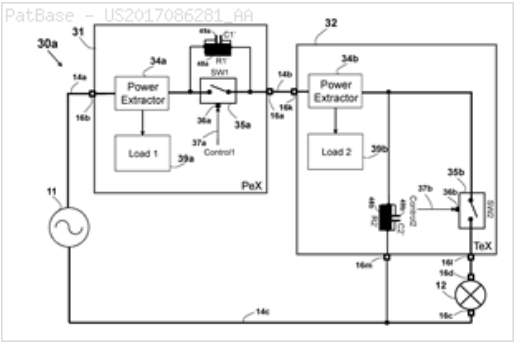
TRAN AND ASSOCIATES

Title: METHOD AND APPARATUS FOR POWER EXTRACTION IN A PRE-EXISTING AC WIRING INFRASTRUCTURE

Abstract: A method and apparatus for extracting power in a switch location, and in a load location for use in a pre-existing infrastructure of switching AC power to a lamp (or other load) via a two terminal switch device. The switch is replaced with a module including a first controlled switch (such as a triac or relay) and a first impedance (such as a capacitor) connected in parallel, and another module including a second controlled switch (such as a triac or relay) and a second impedance (such as a capacitor) connected in parallel, is installed at the load location. In an 'off' state where the two controlled switches are in 'open' state, current is flowing via the impedances, but not through the load, so that power extractor circuits in the modules, connected in series to the impedances, extract low power for DC powering logic and other loads in the modules.

Classifications:

International (IPC 8-9): A01G31/02 A01G7/04 B01D61/14 C02F1/42 G08C17/02 G08C19/12 H02J3/14 H02J3/28 H05B37/02 H05B39/08 (Advanced/Invention); A01G25/16 A01G27/00 A01G31/00 A01G9/02 F21V23/04 G05B15/02 H02M1/00 H04W84/12 (Advanced/Non-invention)
CPC: H05B37/0227 H02J3/14 F21V23/04 H04W84/12 H02M2001/0006 H05B39/086 H05B39/088 A01G31/02 A01G7/045 C02F1/42 B01D61/147 A01G27/005 A01G31/00 A01G9/02 A01G7/04 A01G2031/006 G05B15/02 A01G25/16 H05B37/0272
US: 315/283



Family:

Publication number	Publication date	Application number	Application date
EP3243195 A2	20171115	EP20150876754	20151202
US2017086281 AA	20170323	US20160359797	20161123
US2017265287 AA	20170914	US20170600719	20170520
US2018092313 AA	20180405	US20170832789	20171206
US9839103 BB	20171205	US20160359797	20161123
US9867263 BB	20180109	US20170600719	20170520
WO16110833 A2	20160714	WO20151L51172	20151202
WO16110833 A3	20160825	WO20151L51172	20151202

Priority:

US20150100078P 20150106 WO20151L51172 20151202 US20160359797 20161123
US20170600719 20170520 US20170600716 20170520 US20170832789 20171206

Probable Assignee: CMOO SYSTEMS LTD

Assignee(s): (std): CMOO SYSTEMS ITD ; CMOO SYSTEMS LTD

Inventor(s): (std): AVRAHAMY AVRAHAM

Agent(s): BECKER KURIG STRAUS; MAY PATENTS LTD; MAY PATENTS LTD C O DORIT SHEM TOV; BINDER SHEM TOV DORIT

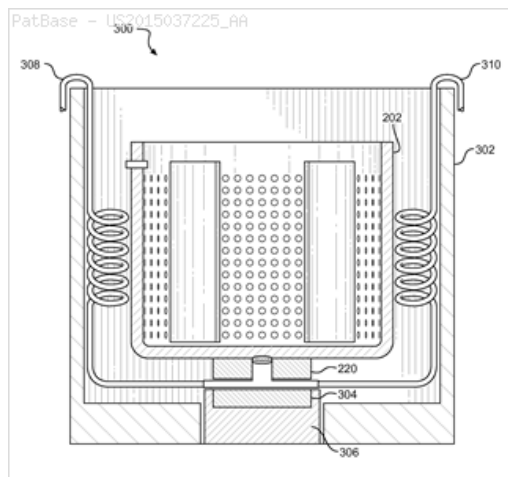
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Title: SYSTEMS, METHODS, AND APPARATUS FOR RESUSPENDING CELLS IN SOLUTION

Abstract: Systems, apparatus, methods, and articles of manufacture provide for resuspending and/or collecting blood and/or other types of cells in solution. In one embodiment, cells may be recovered from used surgical sponges and/or other types of surgical articles.

Classifications:

International (IPC 8-9): A61B19/00 A61B90/00 A61B90/98 A61K35/14 A61M1/02 B01D17/12 B01D33/70 B01D35/18 B01D35/20 B01F11/00 B01F3/08 B01F9/00 B01L3/00 C12N5/02 G01N33/50 (Advanced/Invention)
CPC: B01L3/508 G01N33/5094 B01L2300/04 B01L2300/0663 B01L2300/0681 B01L2300/18 B01L2400/0403 A61M1/0272 A61B90/70 A61B90/98 A61B2090/0805 A61M1/0281 B01D33/70 B01D35/30 B01D36/04 B01F11/0002 B01F11/0088
US: 1/1 134/105 134/109 134/110 134/135 134/56R 210/134 210/143 210/149 210/173 210/175 210/184 210/257.1 210/330 210/359 210/383 210/87 210/91 366/144 366/219 366/224 366/232 366/240 366/279 366/347 422/256 424/93.73 435/283.1 435/286.5 435/287.1 435/307.1 435/325 604/19 604/322 604/323 604/326



Family:

Publication number	Publication date	Application number	Application date
AU2014296024 AA	20150205	AU20140296024	20140801
AU2014296024 BB	20171130	AU20140296024	20140801
AU2018201420 AA	20180322	AU20180201420	20180227
EP3027736 A2	20160608	EP20140832666	20140801
EP3027736 A4	20170315	EP20140832666	20140801
US2015037225 AA	20150205	US20140300316	20140610
US2015037305 AA	20150205	US20130060663	20131023
US2016199831 AA	20160714	US20140909470	20140801
US8945376 BA	20150203	US20140300316	20140610
US9452021 BB	20160927	US20130060663	20131023
WO15017814 A2	20150205	WO2014US49461	20140801
WO15017814 A3	20150416	WO2014US49461	20140801

Priority:

US20130861953P	20130802	US20130060663	20131023	US20140300316	20140610
AU20140296024	20140801	US20140909470	20140801	WO2014US49461	20140801
AU20180201420	20180227				

Probable Assignee: ALL CELL RECOVERY LLC

Assignee(s): (std): ALL CELL RECOVERY LLC ; CORDISCO MICHAEL CHRISTOPHER

Inventor(s): (std): CODISCO MICHAEL C ; CORDISCO MICHAEL C ; CORDISCO MICHAEL CHRISTOPHER ; CORDISCO MICHAEL C

Agent(s): FB RICE; FB RICE PTY LTD; DERRY PAUL STEFAN; FINCHAM DOWNS LLC; MICHAEL D; DOWNS MICHAEL D

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 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

Title: LID BASED AMOUNT SENSOR

Abstract: A device for determining the amount of a substance in a container includes an amount sensor disposed within the container, a transmitter coupled to the sensor and configured to transmit an output thereof, and an electrical power source powering the sensor and the transmitter.

Classifications:

International (IPC 8-9): G01C25/00 G01F15/06 G01F22/00 G01F23/00 G01F23/20 G01F23/22 G01F23/26 G01F23/28 G01F23/292 G01F23/296 G01F23/30 G06F15/00 G06F17/00 G06F17/30 G06F19/00 G06F7/04 G06Q10/00 G06Q10/08 G06Q20/20 G06Q50/00 G06Q50/22 G06Q50/24 G06Q90/00 G08B1/00 G08B17/00 G08B21/00

G08C19/00 (Advanced/Invention);

G01F22/00 G01F23/00 G01F23/22 G01F23/284 G01F23/296 G01F23/30 G06F15/00 G06F17/00 G06F17/30 G06F19/00 G06F7/02 G06Q10/00

G06Q50/00 G06Q90/00 G08B21/00 (Core/Invention)

CPC: G06F17/30707 G06F17/3071 G06Q10/08 G06Q10/0875

G06Q30/0283 G01F15/063 G01F23/0076 G01F23/14 G01F23/20

G01F23/24 G01F23/263 G01F23/28 G01F23/292 G01F23/2962 G01F23/30

G01F23/2928 G01F23/0061 G01F23/26 G01F23/284 G07F17/0092

G07F11/40 A61J7/0418 A61J7/0436 A61J7/0454 A61J7/0463 A61J7/049

A61J2205/10 A61J2205/60 A61J2205/70 G06F19/3462 G06F19/3475

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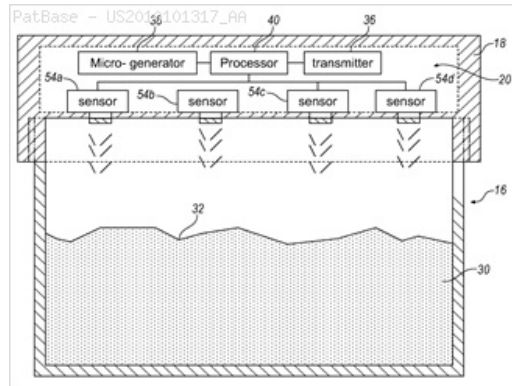
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K61J7/04B1D K61J7/04B3A2

US: 340/5.92 340/5.920P 340/540 340/540P 340/572.1 340/621 340/622 340/623 340/624 340/625 340/626 340/627 340/686.1 702/1 702/116 702/116P 702/188 702/188S 705/2 705/28 705/28P 705/28S 705/29 705/29P 705/2P 705/3 705/3P 705/400 705/400S 73/149 73/149P 99/285

**Family:**

Publication number	Publication date	Application number	Application date
BRPI0905201 A2	20110322	BR2009PI05201	20091023
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US2010102930 AA	20100429	US20080256500	20081023
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Priority:

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US20170615369 20170606		

Probable Assignee: WHIRLPOOL CORP

Assignee(s): (std): ASHRAFZADEH FARHAD ; BUENDIA GARCIA ALI R ; MCCOY RICHARD A ; WHIRLPOOL CO ; YUAN YINGQIN

Assignee(s): WHIRLPOOL CORP

Inventor(s): (std): MCCOY RICHARD A ; FARHAD ASHRAFZADEH ; BUENDIA GARCIA ALI R ; ASHRAFZADEH FARHAD ; YUAN YINGQIN ; YINGQIN YUAN

Inventor(s): RICHARD A MCCOY ; ALI R BUENDIA GARCIA

Agent(s): GUERCI ALESSANDRO; WHIRLPOOL PATENTS CO MD 0750; MCGARRY BAIR PC; ROBERT A; CLIFTON G

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

Title: AUTOMATED PHARMACY ADMIXTURE SYSTEM (APAS)

Abstract: An Automated Pharmacy Admixture System (APAS) may include a manipulator that transports medical containers such as bags, vials, or syringes about a substantially aseptic admixing chamber. In a preferred implementation, a gripper assembly is configured to substantially universally grasp and retain syringes, IV bags, and vials of varying shapes and sizes. In an illustrative embodiment, a gripping device may include claws configured to grasp a plurality of different types of IV bags, each type having a different fill port configuration. Embodiments may include a controller adapted to actuate a transport assembly to place a fill port of the bag, vial or syringe into register with a filling port such as a cannula located at a filling station, or be equipped with carousel transport systems that are adapted to convey bags, vials, and syringes to the admixture system and deliver constituted medications in bags, vials or syringes to an egress area.

Classifications:

International (IPC 8-9): A61B18/18 A61B19/00 A61J1/00 A61J1/05 A61J1/14 A61J1/16 A61J1/20 A61J3/00 A61J7/00 A61L2/00 A61L2/08 A61L2/10 A61M1/00 A61N5/00 B01F11/00 B01F13/10 B01F15/00 B01J19/08 B65B1/04 B65B1/30 B65B3/00 B65B31/02 B65B39/00 B65B55/08 B65B55/16 B65B59/00 B65G1/137 B65G59/00 B66C1/42 B67D7/02 G01F11/00 G01N21/00 G01N23/00 G05B15/00 G06F17/00 G06F17/30 G06F19/00 G06F7/00 G07F11/00 G07F11/16 G07F11/44 G07F11/48 G07F11/54 G07F11/70 H01J37/20 (Advanced/Invention); A61J3/00 (Advanced/Non-invention); A61B19/00 A61J1/00 A61J1/05 A61J1/14 A61J3/00 A61L2/08 A61L2/10 B65B1/04 B65B3/00 B65B31/02 B65B55/02 B65B55/04 B65B59/00 B66C1/42 B67D7/00 G01F11/00 G06F17/00 G06F17/30 G06F19/00 G06F7/00 (Core/Invention); A61J3/00 (Core/Non-invention)

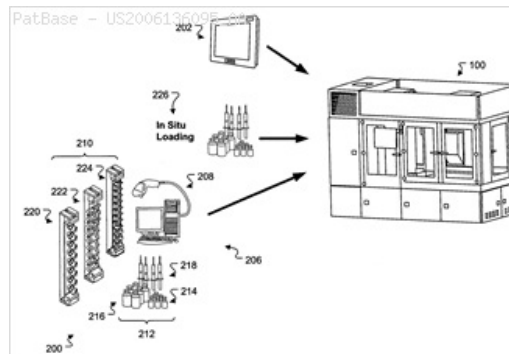
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US: 141/1 141/114 141/130 141/192 141/1P 141/27 141/330 141/330S 141/5 141/94 221/123 221/130 221/191 221/197 221/198 221/2 221/9 250/435 250/455.11 250/455.110S 250/492.1 250/492.100S 294/902 318/568.11 318/568.16 318/568.19 318/568.2 318/568.21 414/403 414/411 414/729 414/729P 422/1 422/121 422/186 422/186.3 422/186.300S 422/186S 422/22 422/22S 422/24 422/24P 422/305 422/400 422/509 422/62 422/63 604/29 604/411 604/414 604/414P 604/905 606/15 606/7 700/213 700/214 700/216 700/216P 700/216S 700/228 700/230 700/230P 700/231 700/231S 700/232 700/235 700/239 700/239S 700/240 700/240P 700/241 700/242 700/244 700/245 700/245P 700/245S 700/258 700/260 700/90 707/705 707/705S 707/E17.009 707/E17.009S 901/31 901/31S



Family:

Publication number	Publication date	Application number	Application date
AT532496 E	20111115	AT20060751430T	20060426
CA2592109 AA	20070622	CA20052592109	20051222
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EP1889197 A2	20080220	EP20060751430	20060426
EP1889197 A4	20091014	EP20060751430	20060426
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EP2083784 A2	20090805	EP20070864247	20071109
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EP2083784 B1	20160127	EP20070864247	20071109

EP2125043 A1	20091202	EP20080714670	20080222
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EP2457549 A1	20120530	EP20110008863	20060426
EP2457549 B1	20160608	EP20110008863	20060426
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IN02745CN2009 A	20090821	IN2009CN02745	20090515
IN05212DN2007 A	20070817	IN2007DN05212	20070706
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NATURE PARK WAYWINNIPEGM1R3P 0X8CA

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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: SYSTEM AND METHOD FOR NEAR-FIELD ELECTROMAGNETIC RANGING

Abstract: A system for measuring distance between a first locus and a second locus includes: (a) at least one beacon device; a respective beacon device of the at least one beacon device being situated at the first locus and transmitting a respective electromagnetic signal; and (b) at least one locator device; a respective locator device of the at least one locator device being situated at the second locus and receiving the respective electromagnetic signal. The respective locator device is situated at a distance from the respective beacon device within near-field range of the respective electromagnetic signal. The respective locator device distinguishes at least two characteristics of the respective electromagnetic signal. The respective locator device employs the at least two characteristics to effect the measuring.

Classifications:

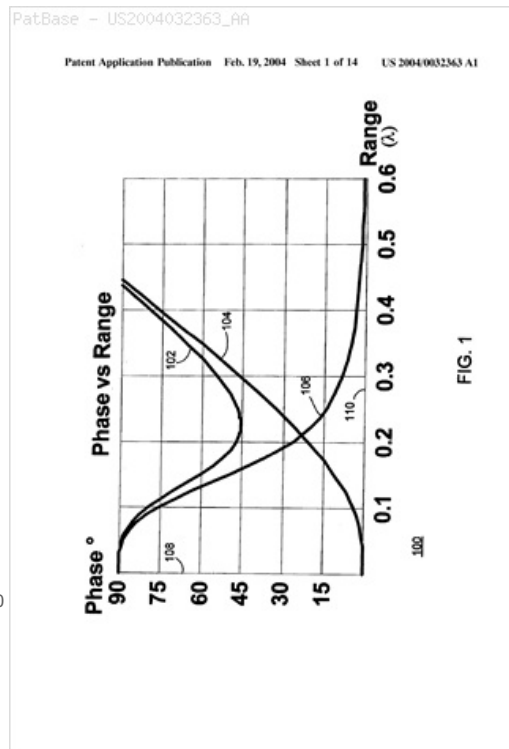
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International (IPC 1-7): G01S11/06 G01S13/08 G01S13/36 G01S13/84 G01S13/87 G01S5/14

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US: 1/1 235/385 235/385P 29/600 340/435 340/539.22 340/572.1 340/8.1 340/825.49 342/118 342/118S 342/125 342/125P 342/125S 342/126 342/126S 342/127 342/127P 342/127S 342/133 342/133S 342/139 342/139S 342/146 342/146S 342/165 342/165P 342/174 342/174P 342/174S 342/22 342/22S 342/28 342/28S 342/368 342/450 342/450S 342/451 342/453 342/458 342/458P 342/90 342/95 342/95S 343/718 343/787 343/787S 343/788 343/788P 343/866 343/867 343/867S 434/218 455/41.1 455/456.1 700/215 700/215S 700/225 700/225P 700/226 700/226S 700/229 726/11 726/11S 726/13 726/13P 726/22 726/22S

**Family:**

Publication number	Publication date	Application number	Application date
AT375523 E	20071015	AT20030788291T	20030730
AU2003256987 AA	20040303	AU20030256987	20030730
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CN1688895 A	20051026	CN20038023688	20030730
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EP1537439 A2	20050608	EP20030788291	20030730
EP1537439 A4	20051012	EP20030788291	20030730
EP1537439 B1	20071010	EP20030788291	20030730
EP1829155 A2	20070905	EP20050857056	20051208
EP1829155 A4	20110427	EP20050857056	20051208
GB201222187 A0	20130123	GB20120022187	20110607
GB2493891 A1	20130220	GB20120022187	20110607
GB2493891 B2	20141008	GB20120022187	20110607
IN00795MN2007 A	20070914	IN2007MN00795	20070531
IN03803KN2012 A	20160826	IN2012KN03803	20121204
JP2008524588 T2	20080710	JP20070546755T	20051208
KR20150039222 A	20150409	KR20157006369	20070831
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US2006244673 AA	20061102	US20060473595	20060623
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Priority:

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Probable Assignee: Q TRACK CORP

Assignee(s): (std): BARRON JAMES MATTHEW ; BEUCHER PETER J ; COMPSTON ANDREW ; DEPIERRE ROBERT E ; DEPIERRE ROBERT EDWARD ; ENTEGRIS INC ; SCHANTZ HANS GREGORY ; TRACK CORP G ; SIWIAK KAZIMIERZ ; GABIG JEROME SYLVESTER ; Q TRACK CORP ; RICHARDS ERIC ; LANGFORD DAVID WESLEY ; SCHANTZ HANS GEGORY ; RICHARDS JUSTIN ; SCHANTZ HANS G ; RICHARDS ERIC ALEXANDER ; FLUHLER JAMES DAVID ; RICHARDS ERIC A ; TRACK CORP Q ; TRACK INC Q ; WOLENEC GLENN W ; WILLIAMS JR TIMMY P ; UNDEN ALFRED H ; WOLENEC GLENN ; UNDEN ALFRED HANS ; ADVANCED TECH MATERIALS

Assignee(s): ADVANCED TECHNOLOGY MATERIALS INC ; Q TRACK A CORP OF ALABAMA CORP ; Q TRACK INC ; G TRACK CORP

Inventor(s): (std): DEPIERRE ROBERT EDWARD ; GABIG JEROME S ; GREGORY LANGFORD DAVID WESLEY ; HANS GREGORY SCHANTZ ; ROBERT EDWARD DEPIERRE ; SCHANTZ HANS GREGORY ; SIWIAK KAZIMIERZ ; WOLENEC GLENN ; WILLIAMS JR TIMMY P ; WESLEY LANGFORD DAVID ; SIWIAK KAZIMIEREZ ; SCHANTZ HANS G ; SCHANTZ HANS ; RICHARDS JUSTIN ; LANGFORD DAVID WESLEY ; FLUHLER JAMES DAVID ; DEPIERRE ROBERT E ; DEPIERRE ROBERT ; GREGORY SCHANTZ HANS ; XU CHONGYING ; WOLENEC GLENN W ; RICHARDS ERIC ALEXANDER ; RICHARDS ERIC A ; RICHARDS ERIC ; NAITO DONN ; LANGFORD DAVID W ; JOHN GREGG ; HENDRIX BRYAN C ; WOLENEC GLENN P ; WODJENSKI MICHAEL J ; UNDEN ALFRED HANS ; UNDEN ALFRED H ; SCOTT BATTLE ; SCHANTZ HANS GEGORY ; GREGG JOHN ; GABIG JEROME SYLVESTER ; FLUHLER JAMES D ; DONN NAITO ; COMPSTON ANDREW ; CLEARY JOHN M ; CHONGYING XU ; BEUCHER PETER J ; BATTLE SCOTT ; BARRON JAMES MATTHEW ; ARNO JOSE I ; WERNER STEPHEN A ; RICHARDS JAMES LEE ; PITTMAN CHRISTOPHER DAVID

Inventor(s): ALFRED HANS UNDEN ; ERIC A RICHARDS ; ROBERT E DEPIERRE ; HANS G SCHANTZ ; WOLENEC GLENN PHILIP ; GABIG JEROME ; BEUCHER PETER ; LANGFORD DAVID ; FLUHLER JAMES ; LANGFORD DAVID WESLEY SCHANTZ HANS GREGORY

Agent(s): JAMES RICHARDS ; HANS SCHANTZ ; LAW OFFICE OF DONALD D MONDUL ; JAMES ; RICHARDS JAMES ; MARK P ; KAHLER MARK P

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 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 MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU 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 YU ZA ZM ZW

Title: COVERAGE ROBOTS AND ASSOCIATED CLEANING BINS

Abstract: An autonomous coverage robot includes a chassis, a drive system configured to maneuver the robot, and a cleaning assembly. The cleaning assembly includes a cleaning assembly housing and at least one driven sweeper brush. The robot includes a controller and a removable sweeper bin configured to receive debris agitated by the driven sweeper brush. The sweeper bin includes an emitter disposed on an interior surface of the bin and a receiver disposed remotely from the emitter on the interior surface of the bin and configured to receive an emitter signal. The emitter and the receiver are disposed such that a threshold level of accumulation of debris in the sweeper bin blocks the receiver from receiving emitter emissions. The robot includes a bin controller disposed in the sweeper bin and monitoring a detector signal and initiating a bin full routine upon determining a bin debris accumulation level requiring service.

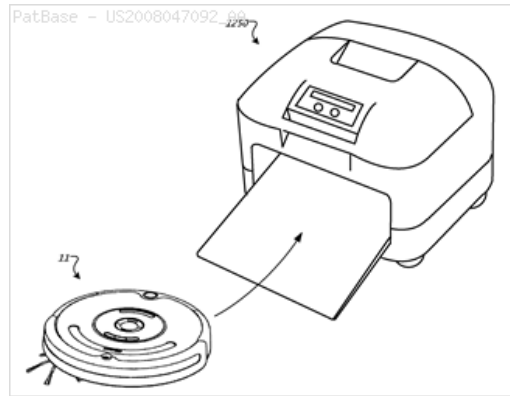
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**Family:**

Publication number	Publication date	Application number	Application date
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Priority:

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Probable Assignee: IROBOT CORP

Assignee(s): (std): IROBOT CORP ; WON CHIKYUNG ; SVENDSEN SELMA ; LOWRY JED ; SWETT DAVID ; SCHNITTMAN MARK ; KAPOOR DEEPAK RAMESH ; LANDRY GREGG W ; OZICK DANIEL N ; DEVLIN JOHN ; DUBROVSKY ZIVTHAN A ; HICKEY STEPHEN A

Assignee(s): IROBOT BEDFORD CORP

Inventor(s): (std): DEVLIN JOHN ; DUBROVSKY ZIVTHAN A ; HICKEY STEPHEN A ; KAPOOR DEEPAK R ; KAPOOR DEEPAK RAMESH ; LANDRY GREGG W ; LOWRY JED ; OZICK DANIEL N ; SCHNITTMAN MARK ; SCHNITTMAN MARK STEVEN ; SVENDSEN SELMA ; SWETT DAVID ; SWETT DAVID ORRIN ; WON CHIKYUNG

Inventor(s): WON CHIKYUNG TEWKSBURY ; SWETT DAVID WALTHAM ; SVENDSEN SELMA ANDOVER ; SCHNITTMAN MARK CAMBRIDGE ; SCHNITTMAN MARK SOMERVILLE ; LOWRY JED DUXBURY ; OZICK DANIEL ; LANDRY GREGG ; HICKEY STEPHEN A SOMERVILLE ; KAPOOR DEEPAK ; DUBROVSKY ZIVTHAN A LEXINGTON ; DUBROVSKY ZIVTHAN A WALTHAM ; DEVLIN JOHN TEWKSBURY ; DUBROVSKY ZIVTHAN

Agent(s): PETERREINS SCHLEY PATENT U RECHTSANWALTE; PETERREINS FRANK; SCHLEY JAN MALTE; PETERREINS SCHLEY; LEHMANN MARIA ISABEL; FISH AND RICHARDSON PC; FISH AND RICHARDSON P C

Designated states: AE AG AL AM 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 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 SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

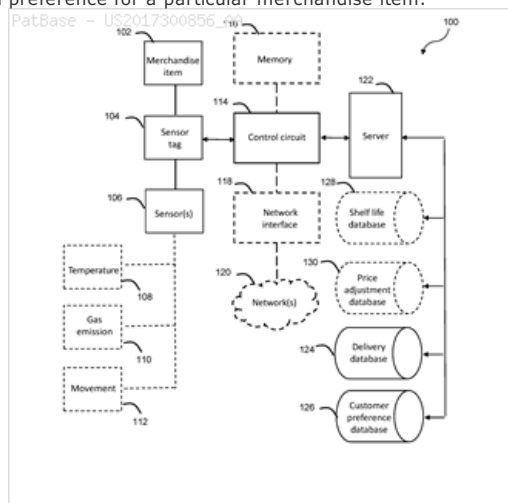
Title: SYSTEMS AND METHODS FOR COMPARING FRESHNESS LEVELS OF DELIVERED MERCHANDISE WITH CUSTOMER PREFERENCES

Abstract: In some embodiments, apparatuses and methods are provided herein useful to delivery of merchandise with freshness levels matched to customer preferences. In some embodiments, there is provided a system including: merchandise items intended for delivery to various destinations; sensor tags measuring freshness levels of the merchandise; a delivery database containing delivery information for the merchandise; a customer preference database including customer preference of freshness level for merchandise; and a control circuit that receives sensor measurements, determines a measured freshness level, and compares the measured freshness level with a customer's freshness level preference for a particular merchandise item.

Classifications:

International (IPC 8-9): F01B7/20 G02B27/22 G05B19/19 G06F17/00 G06F17/30 G06F17/50 G06F3/01 G06F3/048 G06K19/07 G06K7/10 G06N5/02 G06Q10/00 G06Q10/02 G06Q10/06 G06Q10/08 G06Q10/10 G06Q20/00 G06Q20/10 G06Q20/18 G06Q20/20 G06Q20/38 G06Q30/00 G06Q30/02 G06Q30/06 G06Q50/00 G06Q50/18 G06Q50/28 G06Q90/00 G06T11/60 G06T7/70 G09F3/00 G10L15/08 G10L15/22 G10L25/51 H04H60/46 H04W4/02 (Advanced/Invention); G06F3/16 (Advanced/Non-invention)

CPC: G06Q30/0201 G06Q30/0203 G06F17/30604 G06Q30/0204 G06Q50/01 G06Q10/0832 G06Q10/087 G06K7/10366 G06K19/0717 G06Q30/0239 G06Q30/0269 G06Q30/0631 G06Q10/083 G06Q30/0643 G06Q30/0282 G06F3/011 G06F3/167 G06Q30/0625 G06Q90/00 G06Q20/20 G06Q30/0205 G06Q10/0637 G06Q30/016 G06Q10/0837 G06Q30/0255 G06Q30/0271 G06Q30/0268 G06Q50/28 G06Q30/02 G06Q10/08 G06Q20/203 G06Q30/06 G06Q30/0617 G06T11/60 G06T7/70 G06T2200/24 G06Q30/0635 G06Q30/0639 G06Q30/0633 G06K7/10297 Y04S50/14 G06Q10/0835 G06Q10/10 G06Q10/0834 G06Q30/0609 G06Q20/382 G06Q30/0283 G06Q30/0281 G06Q30/0627 G06Q30/0641 G06Q10/063112 G05B19/19 G05B2219/41091 G06N5/025 G06Q10/0836 G06Q20/18 G06F17/50 G06Q20/102 G06Q10/08355 G06K7/10861 G06Q10/0833 G06Q50/188 G06Q30/0613 G10L2015/088 G10L25/51 G10L15/08 G10L2015/223 G10L15/22 G06Q30/0621 G06Q30/0261 G06Q30/0242 G06Q30/0254



Family:

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Probable Assignee: WAL MART STORES INC

Assignee(s): (std): WAL MART STORES INC

Assignee(s): WALMART APOLLO LLC

Inventor(s): (std): O BRIEN V ; WLKNSON BRUCE W ; TOVEY DAVID ; STALLCUP MARK A ; MUSAN PARVEZ ; MCHALE BRAN G ; MATTNGLY TODD D ; KIRTHIGAIVASAN BALARAMAN ; JONES NATHAN G ; HICKS GREGORY A ; WILKINSON BRUCE WALTER ; VUKIN GREG N ; VALKOV ANTON ; O BRIEN V JOHN J ; O BRIEN JOHN J ; MUSANI PARVEZ ; MCHALE BRIAN GERARD ; MATTINGLY TODD ; JONES NICHOLAUS A ; HIGH DONALD R ; WILKINSON BRUCE W ; WEBB TIM W ; VASGAARD AARON J ; TODD JASON R ; TAYLOR ROBERT J ; MORGAN STARLA C ; MCHALE BRIAN G ; MATTINGLY TODD D ; JONES MATTHEW A ; JOHNSON CLINT E ; HOUDEK HEIS ROBIN ; CANTRELL ROBERT L ; ATCHLEY MICHAEL D ; PUTCHA SAI PHANEENDRA SRI HARSHA VISWANATH

Inventor(s): MULGUND ROHIT

Agent(s): KRATZ RUDY ET AL; MENGHINI SCOTT J ET AL; FREELAND STEVEN M ET AL; ENOS SEAN K

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 TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: AUTOMATED HAZARD HANDLING ROUTINE ENGAGEMENT

Abstract: Disclosed herein are example embodiments for automated hazard handling routine engagement. For certain example embodiments, at least one machine, such as an unoccupied flying vehicle (UFV), may: (i) detect at least one motivation to engage at least one automated hazard handling routine of the UFV; or (ii) engage at least one automated hazard handling routine of a UFV based at least partially on at least one motivation. However, claimed subject matter is not limited to any particular described embodiments, implementations, examples, or so forth.

Classifications:

International (IPC 8-9): B64C19/00 B64C39/02 B64D45/00 F41G7/00

F41G7/22 F41G9/00 G01C21/00 G01S19/14 G01S19/21 G01S19/39

G01S19/42 G05D1/00 G05D1/10 G05D1/12 G06F17/10 G06G7/78

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B64C33/00 B64C39/02 F41H11/02 (Advanced/Non-invention)

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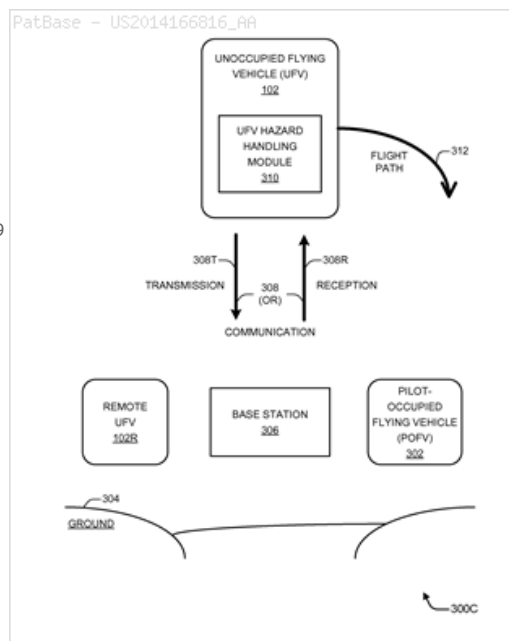
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US: 1/1 244/175 244/190 701/2 701/301 701/302 701/412 701/486



Family:

Publication number	Publication date	Application number	Application date
US2014166816 AA	20140619	US20120731363	20121231
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Priority:

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Probable Assignee: ELWAH LLC

Assignee(s): (std): CORP OF STATE OF DELAWARE ELWAH LLC A LTD LIABILITY ; ELWAH LLC ; ELWAH LLC ; ELWAH LLC A LTD LIABILITY CORP OF STATE OF DELAWARE ; OF STATE OF DELAWARE ELWAH LLC A LTD LIABILITY CORP ; LIABILITY CORP OF STATE OF DELAWARE ELWAH LLC A LTD ; ELWAH LLC A LTD LIABILITY CORP STATE DELAWARE ; STATE OF DELAWARE ELWAH LLC A LTD LIABILITY CORP OF

Assignee(s): OF STATE OF DELAWARE ELWAH LLC ALIMITED LIABILITY CORP ; STATE OF DELAWARE ELWAH LLC A LIABILITY OF CORP LTD ; ELWAH LLC A LIABILITY OF THESTATE OF DELAWARE CORP LTD ; ELWAH LLC A LIABILITY CO OF STATE OF DELAWARE LTD ; ELWAH LLC A LIABILITY OF STATE OF DELAWARE CORP LTD ; OF STATE OF DELAWARE ELWAH LLC A LIABILITY CORP LTD ; LIABILITY OF STATE OF DELAWARE ELWAH

LLC A CORP LTD

Inventor(s): (std): LEVEN ROYCE A ; LEVIEN ROYCE A ; LORD RCHARD T ; LORD RICHARD T ; LORD ROBERT W ; MALAMUD
MARK A ; RINALDO JOHN D ; RINALDO JR JOHN D ; RNALDO JR JOHN D ; WOOD JR LOWELL L ; WOOD
LOWELL L

Title: PROVIDING ASSISTANCE

Abstract: Methods, devices, and systems that receive a signal corresponding to a selected portion of a manual related to an aspect of an electronic device, and provide an assistance correlating to the selected portion of the manual through a user interface of the electronic device different from the manual.

Classifications:

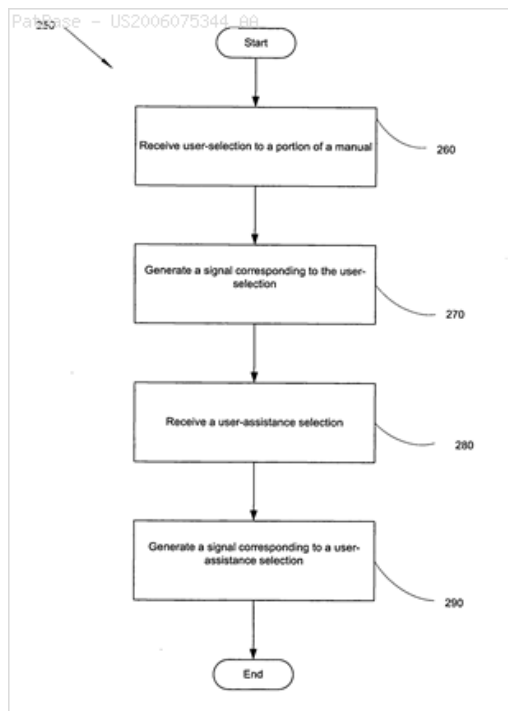
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**Family:**

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■ CN101300541 A	20081105	CN200580044439	20051025
■ EP1825396 A2	20070829	EP20050824191	20051025
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Probable Assignee: INVENTION SCIENCE FUND I LLC

Assignee(s): (std): INVENTION SCIENCE FUND I LLC ; SEARETE LLC ; JUNG EDWARD K Y ; LEVIEN ROYCE A ; MALAMUD MARK A ; RINALDO JOHN D JR ; JUNG EDWARD K ; RINALDO JOHN D ; INV SCIENCE FUND 1 LLC ; INV SCIENCE FUND I LC ; INVENT SCIENCE FUND I LLC ; RINALDO JR JOHN D ; LORD ROBERT W ; SEARETE LLC A LTD LIABILITY CO ; WOOD JR LOWELL L

Assignee(s): ELWHA LLC ; SEARETE LLC A LIABILITY CORPORAITON OF STATE OF DELAWARE LTD ; SEARETE LLC A LIABILITY OF STATE OF DELWARE ; SEARETE LLC A LIABILITY OF STATE OF DELWARE CORP L ; SEARETE LLC A LIABILITY OF CORP LTD ; SEARETE LLC A LIABILITY OF STATE OF DELWARE CORP LTD ; SEARETE LLC A LIABILITY OF STATE OF DELAWARE CORP LTD ; MODERN GEOGRAPHIA LLC ; SEARETE LLC A LIABILITY OF STATE OF DELAWARE ; SEARETE LLC A LIABILITY OF STATE OF DELAWARE CORP ; INVENTION SCIENCE FUND 1 LLC ; INVENTION SCIENCE FUND I LC ; SEARETE LLC A LIABILITY CORP LTD

Inventor(s): (std): JUNG EDWARD K ; JUNG EDWARD K Y ; LEVIEN ROYCE A ; LORD ROBERT W ; MALAMUD MARK A ; RINALDO JOHN D ; RINALDO JOHN D JR ; RINALDO JR JOHN D ; WOOD JR LOWELL L ; WOOD LOWELL L ; WOOD LOWELL L JR

Inventor(s): WOOD LOWELL LJR ; WOOD LOWELL ; RINALDO JOHN DJR ; RINALDO JOHN ; MALAMUD MARK ; LORD ROBERT ; JUNG EDWARD KY ; LEVIEN ROYCE ; JUNG EDWARD

Agent(s): SEARETE LLC SUITE 110; SEARETE LLC CLARENCE T TEGREENE; SEARETE LLC; SEARETE LLC, SUITE 110; IV SUITER SWANTZ PC LLO; SUITER SWANTZ PC LLO; MARGARET M

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 GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: ELECTRICAL POWER GENERATION SYSTEMS AND METHODS REGARDING SAME

Abstract: A solid or liquid fuel to plasma to electricity power source that provides at least one of electrical and thermal power comprising (i) at least one reaction cell for the catalysis of atomic hydrogen to form hydrides, (ii) a chemical fuel mixture comprising at least two components chosen from: a source of H₂O catalyst or H₂O catalyst; a source of atomic hydrogen or atomic hydrogen; reactants to form the source of H₂O catalyst or H₂O catalyst and a source of atomic hydrogen or atomic hydrogen; one or more reactants to initiate the catalysis of atomic hydrogen; and a material to cause the fuel to be highly conductive, (iii) a fuel injection system such as a railgun shot injector, (iv) at least one set of electrodes that confine the fuel and an electrical power source that provides repetitive short bursts of low-voltage, high-current electrical energy to initiate rapid kinetics of the hydride reaction and an energy gain due to forming hydrides to form a brilliant-light emitting plasma, (v) a product recovery system such as at least one of an augmented plasma railgun recovery system and a gravity recovery system (vi) a fuel pelletizer or shot maker comprising a source of hydrogen and a source of H₂O, a dripper and a water bath to form fuel pellets or shot, and an agitator to feed shot into the injector, and (vii) a power converter capable of converting the high-power light output of the cell into electricity such as a concentrated solar power device comprising a plurality of ultraviolet (UV) photoelectric cells or a plurality of photoelectric cells, and a UV window.

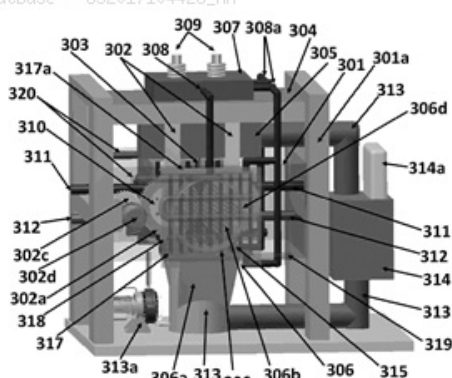
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US: 310/306

PatBase - US2017104426_A0

**Family:**

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Probable Assignee: BRILLIANT LIGHT POWER INC

Assignee(s): (std): BLACKLIGHT POWER INC ; BRILLIANT LIGHT POWER INC ; MILLS RANDELL LEE

Assignee(s): MILLS RANDELL L

Inventor(s): (std): MILLS RANDELL L ; MILLS RANDELL LEE ; RANDELL L MILLS

Agent(s): SPRUSON AND FERGUSON; RIDOUT AND MAYBEE LLP; UEXKUELL AND STOLBERG; ADOLF MARTUA
PANGGABEAN MAROLITA SETIATI; SWEET MARK D

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
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Title: MOTOR SYSTEM FOR VEHICLE STEERING AND LOCOMOTION

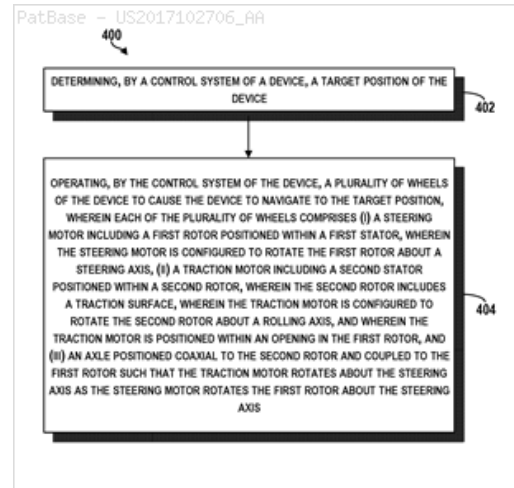
Abstract: The present disclosure provides an example motor system. The motor system includes a steering motor with a first rotor positioned within a first stator. The steering motor is configured to rotate the first rotor about a steering axis. The motor system also includes a traction motor including a second stator positioned within a second rotor. The second rotor includes a traction surface defining a wheel. The traction motor is configured to rotate the second rotor about a rolling axis, and the traction motor is positioned within an opening in the first rotor. The motor system also includes an axle positioned coaxial to the second rotor and coupled to the first rotor such that the traction motor rotates about the steering axis as the steering motor rotates the first rotor about the steering axis.

Classifications:

International (IPC 8-9): B25J5/00 B60K17/30 B60K7/00 B62D5/04 B62D6/00 B62D63/04 B62D7/02 B65G37/00 B66C13/22 B66F9/06 B66F9/075 G05B19/418 G05D1/00 G05D1/02 H02K11/20 H02K13/00 (Advanced/Invention)

CPC: B60K7/0007 B62D5/0403 B62D5/046 B62D6/00 B62D63/04 B66C13/22 B66F9/063 B66F9/07568 B66F9/07572 B60K2007/0061 B62D5/0418 B62D6/002 B62D7/023 B60Y2400/602 B60K2007/0092 G05D2201/0216 B60K17/30 B60K2007/0038 B60Y2200/62 G05D1/0212 G05D1/0088 B25J5/007 B60K7/00 H02K11/20 H02K13/003

US: 701/41

**Family:**

Publication number	Publication date	Application number	Application date
■ CN108136898 A	20180608	CN201680058363	20160928
■ EP3331718 A1	20180613	EP20160854103	20160928
■ KR20180039178 A	20180417	KR20187009545	20160928
■ TW201730073 A	20170901	TW20160132459	20161006
■ TWI627114 B	20180621	TW20160132459	20161006
■ US2017102706 AA	20170413	US20160375381	20161212
■ US9582001 BA	20170228	US20150876923	20151007
■ US9823659 BB	20171121	US20160375381	20161212
■ WO17062243 A1	20170413	WO2016US54113	20160928

Priority:

US20150876923 20151007 WO2016US54113 20160928 US20160375381 20161212

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Agent(s): THORNILEY PETER; MCDONNELL BOEHNEN HULBERT AND BERGHOFF LLP; PRINGLE JORDAN J

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

Title: Apparatus and method for determination of the adequacy of dialysis by non-invasive near-infrared spectroscopy

Abstract: Methods and apparatus for non-invasive tissue urea concentrations during or subsequent to hemodialysis using near-infrared spectroscopy are discussed. Near-infrared tissue spectra can be obtained by projecting near-infrared radiation into skin on the underside of human forearms and capturing the light reflected back and out through the tissue. An index matching medium is used to couple the tissue to the analyzer. The tissue spectrum collected preferably includes primarily diffuse reflected light reflected from the inner dermis. Multiple tissue spectra of known urea concentration are used to build a model from which the urea concentration of an unknown sample can be devised. The model is based on a partial least squares algorithm applied to multiple tissue scans and concomitant blood sample urea measurements. This model is then applied to an unknown tissue spectra.

Classifications:

International (IPC 8-9): A61B A61B10/00 A61B5/00 A61B5/117 A61B5/145 A61B5/1455 A61B5/1495 A61B6/00 B08B7/00 B60K28/06 G01J3/00 G01J3/02 G01J3/10 G01J3/28 G01J3/42 G01J3/427 G01J4/00 G01N21/00 G01N21/21 G01N21/27 G01N21/35 G01N21/47 G01N21/49 G01N21/64 G01N21/65 G01N33/48 G01N33/487 G01N37/00 G02B27/00 G02B6/12 G02B6/42 G02B6/44 G05B19/00 G05B23/00 G06F7/04 G08B13/14 (Advanced/Invention); A61B5/00 A61B5/103 A61B5/145 B08B7/00 G01J3/02 G01N21/47 G01N21/64 (Advanced/Non-invention); A61B10/00 A61B5/00 A61B5/117 A61B5/145 A61B6/00 G01J3/00 G01N21/00 G01N21/25 G01N21/31 G01N21/47 G01N21/63 G01N21/64 G01N33/487 G02B27/00 G02B6/12 G02B6/42 G02B6/44 G06F7/02 G08B13/14 (Core/Invention); A61B5/103 (Core/Non-invention); A61B G01N (Subclass/Invention)

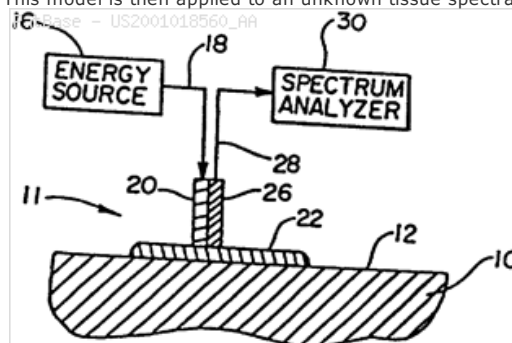
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US: 180/272 180/272S 250/341.6 252/408.1 252/408.100S 29/407.01 340/5.53 340/5.530S 340/5.82 340/573.1 340/576 356/300 356/300S 356/301 356/317 356/317S 356/319 356/320 356/321 356/322 356/323 356/325 356/326 356/328 356/369 356/369S 356/39 356/39S 356/51 385/100 385/114 385/114S 385/115 385/14 385/14P 385/901 398/79 422/82.05 422/82.050S 422/82.09 422/82.090S 436/164 436/164S 436/165 436/165S 436/166 436/166S 436/8 436/8P 514/937 600/300 600/300P 600/306 600/306P 600/309 600/309S 600/310 600/310P 600/310S 600/314 600/314P 600/316 600/316P 600/316S 600/317 600/317P 600/322 600/322P 600/322S 600/326 600/336 600/342 600/365 600/365P 600/407 600/473 600/473S 600/475 600/476 600/476P 600/476S 600/477 600/477P 600/477S 600/478 600/573 600/573P 606/13 606/13S 606/2 606/2S 701/45 701/45P



Family:

Publication number	Publication date	Application number	Application date
AT550984 E	20120415	AT20030718220T	20030404
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EP1379846 A1	20040114	EP20020725413	20020328
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EP1494577 B1	20120328	EP20030718220	20030404
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US2015208983 A9	20150730	US20100145927	20100123
US5823951 A	19981020	US19970844501	19970418
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WO07106612 A2	20070929	WO2007US60997	20070124
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US20120444989	20120412	US20120542898	20120706	US20130944389	20130717
US20140250125	20140410	US20150638834	20150304		

Probable Assignee: TRUTOUCH TECHNOLOGIES INC

Assignee(s): (std): HULL L EDWARD ; MARWOOD NEAL EDIGER ; JOHNSON ROBERT ; JOHNSON ROBERT D ; MAYNARD JOHN D ; HULL EDWARD L ; MATTER NATHANIEL ; LAAKSONEN BENTLEY ; MCNALLY JAMES ; MILLS MIKE ; MAYNARD JOHN ; JOHNSON ROB ; MEIGS ANDREW D ; LAZARO OSCAR ; ABBINK RUSSELL ; ABBINK RUSSELL E ; BIRNKRAANT DASHIELL A ; BROWN CHRISTOPHER D ; DI MAURO MAURIZIO A ; DI MAURO MAURIZIO ANDREA ; GARDNER CRAIG M ; EDIGER MARWOOD N ; EDIGER MARWOOD NEAL ; HAASS MICHAEL H ; HULL EDWARD ; GRUNER WILLIAM ; HENDEE SHONN ; INLIGHT SOLUTIONS INC ; MEDICI INSTR LLC ; ROBINSON M R ; ROBINSON M RIES ; VANSLYKE STEPHEN J ; ROBINSON RIES M ; VERALIGHT INC ; RIDDER TRENT D ; RIO GRANDE MEDICAL TECH INC ; UNIV NEW MEXICO ; VER STEEG BEN ; RIDDER TRENT ; TRUTOUCH TECHNOLOGIES INC ; STEEG BEN V ; ROSS ALAN ; RIO GRAND MEDICAL TECHNOLOGIES ; ROBINSON MARK RIES ; STEEG BEN VER ; TRU TOUCH TECHNOLOGIES INC

Assignee(s): MIRACULINS INCUNIT 201-179 MCDERMOT AVEWINNIPEGM1R3B 0S1CA ; VERALIGHT INC800 BRADBURY SEALBUQUERQUENM87106US ; VERALIGHT INC ALBUQUERQUE ; MIRACULINS INC ; ROBINSON MARK R ; ROHRSCHEIB MARK ; OF NEW MEXICO UNIV ; NUNEZ DAVID J ; NUNEZ DAVID ; STROHL STEVEN T ; NOVAK MATTHEW J ; ROWE ROBERT K ; THE UNIVERSITY OF NEW MEXICO ; RIO GRAND MEDICAL TECHNOLOGIES INC ; NEW MEXICO UNIV ; NEW MEXICO UNIV OF ; UNIVERSITY OF NEW MEXICO ; RIO GRANDE MEDICAL TECHNOLOGIES INC ; ROBINSON M ; HULL L ; MESSERSCHMIDT ROBERT G ; MEDICI INSTRUMENTS LLC ; INLIGHT SOLUTIONS INC800 BRADBURY S.E.ALBQUQUERQUENM87106US ; HAASS MICHAEL J ; GARDNER CRAIG ; JONES HOWLAND D T ; JONES HOWLAND

Inventor(s): (std): ABBINK RUSSELL E ; DAVIS HERBERT ; DAVIS HERBERT T ; DAVIS HERBERT T III ; DAVIS III HERBERT T ; DI MAURO MAURIZIO A ; EDIGER MARWOOD N ; GARDNER CRAIG M ; HAASS MICHAEL H ; HERBERT T ; MIKE MILLS ; NEAL EDIGER MARWOOD ; ROBERT HULL L EDWARD MARWOOD N ; ROBERT K ROWE ; ROBINSON M R ; ROBINSON MARK RIES ; ROWE ROBERT ; ROWE ROBERT K ; STEPHEN J VANSLYKE ; TRENT RIDDER ; VANSLYKE STEPHEN ; VANSLYKE STEPHEN J ; MATTER NATHANIEL ; BENTLEY LAAKSONEN ; BEN VER STEEG ; ROSS ALAN ; ROHRSCHEIB MARK ; ROHRSCHEIB M ; ROBINSON RIES M ; ROBINSON MARK R ; ROBINSON M ROHRSCHEIB C GARDNE ; ROBINSON M RIES ; STEEG BEN VER ; STEEG BEN V ; VER STEEG BEN ; STROHL STEVEN T ; RIDDER TRENT D ; RIDDER TRENT ; MESSERSCHMIDT ROBERT G ; MESSERSCHMIDT R G ; MESSERSCHMIDT M R ROBINSON R G ; MEIGS ANDREW D ; MCNALLY JAMES ; MAYNARD JOHN D ; MAYNARD JOHN ; MARWOOD NEAL EDIGER ; LAZARO OSCAR ; LAAKSONEN BENTLEY ; JONES HOWLAND D T ; JONES HOWLAND ; JONES HOWARD ; JOHNSON ROBERT D ; JOHNSON ROBERT ; JOHNSON ROB ; NUNEZ DAVID J ; NUNEZ DAVID ; NOVAK MATTHEW J ; MILLS MIKE ; HULL L EDWARD ; HULL EDWARD L ; HULL EDWARD ; HENDEE SHONN ; HAASS MICHAEL J ; GRUNER WILLIAM ; GARDNER CRAIG ; GARDNER C ; EDIGER MARWOOD NEAL ; DI MAURO MAURIZIO ANDREA ; BROWN CHRISTOPHER D ; BIRNKRAANT DASHIELL A ; ABBINK RUSSELL ; ROBERT JOHNSON ; EDWARD HULL L

Inventor(s): HULL L EDWARD MARWOOD NEAL EDIGER BROWN ; EDIGER MARWOOD ; ROBINSON M ; DAVID NUNEZ ; CRAIG GARDNER ; C GARDNER ; HOWARD JONES ; HULL L ; MICHAEL J HAASS ; HULL L EDWARD MARWOOD NEAL EDIGER BROWN CHRISTOPHER D ; MARK ROHRSCHEIB ; MARK RIES ROBINSON ; MARK R ROBINSON ; M ROHRSCHEIB C GARDNER M R ROBINSON ; M ROHRSCHEIB ; M R ROBINSON R G MESSERSCHMIDT ; M R ROBINSON ; MATTHEW J NOVAK ; R G MESSERSCHMIDT ; STEVEN T STROHL ; STEEG BEN ; RUSSELL E ABBINK ; ROBERT G MESSERSCHMIDT ; ROBERT D JOHNSON ; WILLIAM GRUNER ; MEIGS ANDREW ; VANSLYKE STEPHEN J ALBUQUERQUE ; ROWE ROBERT K CORRALES ; HULL EDWARD LUS ; HULL L EDWARD MARWOOD NEAL EDIGER BROWN CHRISTOPHE ; III HERBERT T ; JOHNSON ROBERTUS ; EDIGER MARWOOD NEALUS ; DI MAURO MAURIZIO ; DAVIS HERBERT T III CORRALES ; BIRNKRAANT DASHIELL ; BROWN CHRISTOPHER ; BROWN CHRISTOPHER DUS ; DAVIS

Agent(s): GRIFFITH HACK ; CASSAN MACLEAN ; CASSAN MACLEAN IP AGENCY INC ; RIDOUT AND MAYBEE LLP ; BORDEN LADNER GERVAIS LLP ; VOSSIUS AND PARTNER PATENTANWAELE RECHTSANWAELE MBB ; VOSSIUS AND PARTNER ; HART DEBORAH MARY ; KITA AOYAMA INT PATENT BUREAU ; INLIGHT SOLUTIONS INC ; GENERAL COUNSEL INLIGHT SOLUTIONS INC ; V GERALD GRAFE ESQ ; V GERALD GRAFE ESQ GENERAL COUNSEL ; V GERALD GRAFE ; CROMPTON SEAGER AND TUFTS LLC ; V GERALD ; DAVID M ; GRAFE V GERALD

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 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 MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU 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 YU ZA ZM ZW

Title: GLOBAL RESOURCE LOCATOR

Abstract: The present disclosure relates to methods and apparatus for accurately calculating time with a Miniature Atomic Clock along with other components that can receive process and communicate information to enable locating, identifying, and tracking physical Assets and data contained within the Assets. More specifically, the present disclosure presents a Global Resource Locating (GRL) device and service that may be adhered or inserted in the Asset, which may be built in or attached to a second Asset, wherein the device may comprise a receiver and a trilateration mechanism. In some aspects, the Asset may comprise a product, organism, produce, or component of a logistics based operational process and marketing based Asset movement and usage analysis.

Classifications:

International (IPC 8-9): G01S5/00 G01S5/02 G01S5/10 G01S5/14

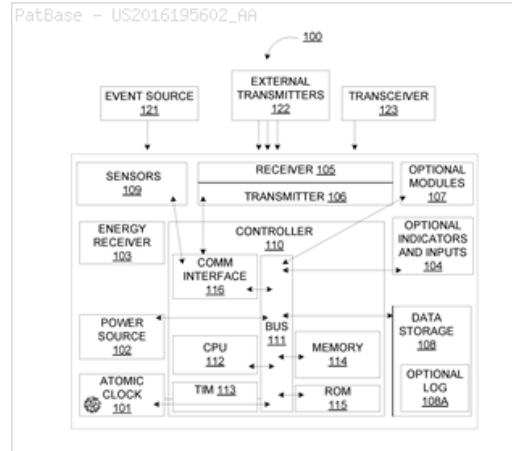
G07B15/02 G08B1/08 H04B1/59 H04W12/04

H04W12/08 (Advanced/Invention);

G06Q10/08 (Advanced/Non-invention)

CPC: G01S5/10 G01S5/0036 G01S5/0221

US: 701/517



Family:

Publication number	Publication date	Application number	Application date
CA2973006 AA	20170704	CA20162973006	20160105
CA2973006 AA	20160714	CA20162973006	20160105
CN107408324 A	20171128	CN201680012540	20160105
EP3243190 A1	20171115	EP20160735315	20160105
JP2018512076 T2	20180510	JP20170554245T	20160105
US2016195602 AA	20160707	US20160988103	20160105
US2018052218 AA	20180222	US20170803163	20171103
US2018088206 AA	20180329	US20170820797	20171122
US2018172799 AA	20180621	US20180887047	20180202
US9841494 BB	20171212	US20160988103	20160105
WO16112037 A1	20160714	WO2016US12223	20160105

Priority:

US20150100033P	20150105	US20150117946P	20150218	US20150189427P	20150707
US20160988103	20160105	WO2016US12223	20160105	US20170803163	20171103
US20170589384P	20171121	US20170820797	20171122	US20180887047	20180202

Probable Assignee: LOCATORX INC

Assignee(s): (std): LOCATORX INC ; RESOCATOR INC

Assignee(s): MEADOW WILLIAM

Inventor(s): (std): MEADOW WILLIAM ; MEADOW WILLIAM D

Agent(s): BORDEN LADNER GERVAIS LLP; SMITH JEREMY ROBERT; KITA AOYAMA INT PATENT BUREAU; ROGERS TOWERS PA; JOSEPH P; KINCART JOSEPH

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 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

Title: TRACKING AND CONTROL OF PERSONAL EFFECTS

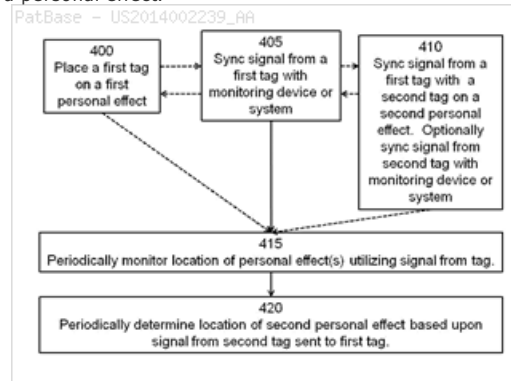
Abstract: One or more location and status monitoring tags, locks, or luggage may be used in conjunction with a monitoring or controlling device or system to indicate the whereabouts and condition of a personal effect.

Classifications:

International (IPC 8-9): A45C13/18 A45C13/24 G07C9/00 G08B13/14 G08B13/24 G09F3/03 H04W4/12 (Advanced/Invention); G08B21/24 (Advanced/Non-invention)

CPC: A45C13/18 A45C13/24 G07C2209/62 G08B13/1427 G08B21/24 H04W4/12 G07C2209/63 G07C9/00896 G08B13/2462

US: 1/1 340/5.61 340/572.1

**Family:**

Publication number	Publication date	Application number	Application date
AU2013284447 AA	20140103	AU20130284447	20130627
AU2013284447 BB	20160922	AU20130284447	20130627
CA2877371 AA	20141218	CA20132877371	20130627
EP2866604 A1	20150506	EP20130736715	20130627
MX2014015502 A1	20150319	MX20140015502	20130627
US2014002239 AA	20140102	US20130929717	20130627
US2016189507 AA	20160630	US20160063980	20160308
US9443366 BB	20160913	US20130929717	20130627
WO14004930 A1	20140103	WO2013US48372	20130627

Priority:

US20120665278P 20120627 US20130929717 20130627 WO2013US48372 20130627
US20160063980 20160308

Probable Assignee: TREEFROG DEVELOPMENTS INC

Assignee(s): (std): TREEFROG DEV INC ; TREEFROG DEVELOPMENTS INC

Assignee(s): TREEFROG DEVELOPMENTS INC15110 AVENUE OF SCIENCESAN DIEGOC92128US ; BANK OF AMERICA NA ADMINISTRATIVE AGENT AS ; OTTER PRODUCTS LLC ; RAYNER GARY

Inventor(s): (std): RAYNER GARY ; RAYNER GARY A

Inventor(s): RAYNER GARYUS ; GARY RAYNER

Agent(s): PHILLIPS ORMONDE FITZPATRICK; SMART AND BIGGAR; MINTZ LEVIN COHN FERRIS GLOVSKY AND POPEO LLP; CLEARY JAMES P 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 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 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

Title: SYSTEMS, METHODS, AND DEVICES FOR CONVERTING AND COMMISSIONING WIRELESS SENSORS

Abstract: In one embodiment the present invention is an encoder for commissioning RFID transponders and includes a housing encasing a motor assembly, wireless communication means for transferring instructions and data from and to a remote host, on-board memory, a processor, and an antenna with corresponding mechanism to encode and verify a programmable RFID transponder within a protective enclosure. The present invention further includes novel methods for commissioning RFID transponders, as well as methods for recycling and reusing various components including the protective enclosure and RFID transponders.

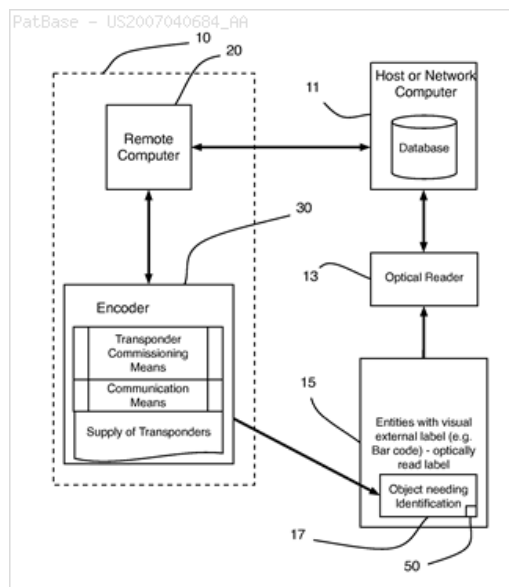
Classifications:

International (IPC 8-9): B65C11/00 B65C9/18 G05B11/01 G06F17/00 G06F21/44 G06F7/00 G06K19/077 G06K7/00 G06K7/01 G06K7/10 G06Q10/08 G06T1/00 G08B13/14 G08B13/24 H04L9/08 H04L9/32 H04Q5/22 (Advanced/Invention); B65C9/00 B65C9/40 G06K17/00 (Advanced/Non-invention); G06F17/00 G06F7/00 G06K7/00 G08B13/14 (Core/Invention)

CPC: G06K1/18 G06K19/07758 G08B13/2417 G06F21/44 G06F2221/2143 G06Q10/087 H04L9/083 H04L9/0891 H04L9/3226 H04L9/3234 H04L2209/805 B65C11/006 B65C2009/0003 B65C2009/404 G06K19/077 G06K2017/0041 G06K19/07716 B65C9/1865 G06K7/0095 G06K7/10336 G06K7/10465 G06K7/10544 H05K999/99

European: B65C11/00C B65C9/18B G06K1/18 G06K19/077 G06K19/077C G06K19/077T3 G06K7/00M G06K7/10A8C G06K7/10A9E G06K7/10S G06Q10/087 G08B13/24B1G1 H04L9/08F2H H04L9/08T H04L9/32J H04L9/32K L65C9/00A L65C9/40K2 S06K17/00W4 T04L209/80A

US: 1/1 235/375 235/375P 235/435 235/435S 235/439 235/439S 235/462.01 235/462.010S 340/10.1 340/10.100P 340/10.2 340/10.42 340/10.420P 340/10.51 340/10.510S 340/5.8 340/572.1 340/572.100P 340/572.100S 340/572.8 340/572.800S 340/693.5 380/270 700/225 700/225S



Family:

Publication number	Publication date	Application number	Application date
US2007040684 AA	20070222	US20060465712	20060818
US2007125836 AA	20070607	US20060550376	20061017
US2009314829 AA	20091224	US20080124768	20080521
US2010283584 AA	20101111	US20100820109	20100621
US2010289627 AA	20101118	US20100841744	20100722
US2011018689 AA	20110127	US20100891959	20100928
US2012256732 AA	20121011	US20120526520	20120619
US2016162773 AA	20160609	US20160042993	20160212
US2018005100 AA	20180104	US20170707828	20170918
US7551087 BB	20090623	US20060550376	20061017
US7830258 BB	20101109	US20060465712	20060818
US8159349 BB	20120417	US20100891959	20100928
US8228198 BB	20120724	US20100820109	20100621
US8917159 BB	20141223	US20100841744	20100722
US9272805 BB	20160301	US20120526520	20120619
US9798967 BB	20171024	US20160042993	20160212
WO12011979 A1	20120126	WO2011US30608	20110330

Priority:

US20050709713P	20050819	US20050729737P	20051024	US20060805777P	20060626
US20060465712	20060818	US20060550376	20061017	US20070939603P	20070522
US20070767471	20070622	US20080124768	20080521	US20090228160P	20090724
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US20160042993	20160212	US20170707828	20170918		

Probable Assignee: ADASA INC

Assignee(s): (std): ADASA INC ; CAMPBELL DANIEL ; CAMPBELL DANIEL SHIHADY ; GURNEY MICHAEL ; HADLOCK MICHAEL ; MCALLISTER CLARKE ; MCALLISTER CLARKE W ; PHILLIPS KENNETH ; MCALLISTER CLARKE WILLIAM ; MINTZER TIMOTHY ; MCALLISTOR CLARKE

Inventor(s): (std): CAMPBELL DANIEL ; CAMPBELL DANIEL SHIHADY ; GURNEY MICHAEL ; HADLOCK MICHAEL ; MCALLISTER CLARKE ; MCALLISTER CLARKE W ; MCALLISTOR CLARKE ; PHILLIPS KENNETH ; MINTZER TIMOTHY ; MCALLISTER CLARKE WILLIAM

Agent(s): PETER A HAAS ESQUIRE; PETER A; PETER A HAAS ESQUIRE LLC; FAY KAPLUN AND MARCIN LLP

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 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 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 PE PG PH PL PT RO RS RU 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

Abstract: A robotic omniwheel for motion comprising various components such as in wheel motor assemblies with brake, supportive hub and axle assemblies, strut and yoke assemblies for suspension, a motor device having controller for steering motion, a motorized universal joint for rocking motion, an active transmission rod to uniquely engage lift and expansion which are managed by a drive logic system comprising status control system and sensor array, laser radar, GPS, and as well a navigational control system including wireless remote control for communication and monitoring motion states for transport and to monitor power levels therein. As well, an electrical system includes battery array to furnish power for the robotic omniwheel array assemblies and to the electrical components via power cable. Accordingly, a navigational system can control components by a cell phone device and by a remote controller device with toggle switches, and also by a remote control panel having touch screen monitor and thusly allowing the robotic omniwheel array to move about in a holonomic manner for transport.

International (IPC 8-9): A63C17/01 A63C17/12 B60B19/00 B60K17/30 B60K31/00 B60K7/00 B60L11/18 B60W50/08 B62199/00 B62K11/00 B62K11/02 B62K21/00 B62K21/12 B62K21/26 B62K23/02 B62K25/02 B62K5/08 G05D1/00 G05D1/02 (Advanced/Invention)
CPC: B60K17/30 B60K2007/0038 B60K2007/0092 G05D1/0276 B60K31/0058 A63C17/01A A63C17/12 B60Y2200/91 A63C2203/12 G05D1/0016 G05D1/0088 G05D1/0278 G05D1/0231 G05D1/0257 B62K11/007 B62K25/02 B60B19/003 B62K2204/00 B62K17/00 B62K21/12 B62K23/02 B62K21/26 B62K11/02 B62K5/08 B62199/00 B60L11/1822 B60L2200/12 B60W2420/52 B60W2710/20 B62J2099/0013 B62J2099/004 B62K2207/00 B62K2207/02 B62K2207/04 B62K2700/22 G05D2201/0206 B60K7/0007 B60W50/082

FIG. 1 is a perspective view of a heliostatic chamber for transport. The device includes a central vertical shaft (1) and a curved arm (2). The top of the shaft is fitted with a top assembly (10, 11, 12) and a bottom assembly (3, 4, 5). A label '25' with an arrow points to the top assembly.

Publication number	Publication date	Application number	Application date
US2014318879 AA	20141030	US20130872054	20130426
US2017106737 AA	20170420	US20160269842	20160919
US2017106738 AA	20170420	US20160331820	20161022
US2017106739 AA	20170420	US20160379474	20161214
US2017190335 AA	20170706	US20170451405	20170306
US9586471 BB	20170307	US20130872054	20130426
US9902253 BB	20180227	US20160269842	20160919

US20100655569 20100104	US20130872054 20130426	US20160269842 20160919
US20160331820 20161022	US20160379474 20161214	US20170451405 20170306

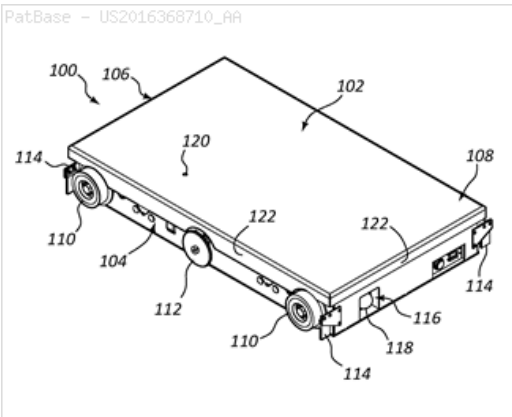
PatBase PDF Export - Page: 57 26/06/2018

Title: AUTOMATED LIFTING STORAGE CART

Abstract: An apparatus for lifting a load on an automated lifting cart, including a lifting surface vertically movable relative to the lifting cart, two pairs of cams positioned underneath the lifting surface having cam profiles shaped to lift the lifting surface upon rotation of the cams, a pair of encoders reading a rotation property of each pair of cams, and a controller configured to control movement of the pairs of cams by synchronizing the rotation properties of the pairs of cams by matching output from the encoders. Additionally, methods of lifting a load using an automated lifting cart including cams with a movement profile and a load profile, and methods of synchronizing drive shafts in a lifting cart using torque current measurements sent from a lead motor to a lag motor.

Classifications:

International (IPC 8-9): B62B3/06 B65G1/04 B65G1/06 B66F9/065 (Advanced/Invention)
CPC: B65G1/065 B65G1/0414 B65G1/0421
US: 414/279 414/286



Family:

Publication number	Publication date	Application number	Application date
CA2978538 AA	20170901	CA20152978538	20150303
CN107074445 A	20170818	CN201580022216	20150303
EP3114051 A1	20170111	EP20150758349	20150303
EP3114051 A4	20171115	EP20150758349	20150303
US2016368710 AA	20161222	US20160257803	20160906
US2017081121 AA	20170323	US20150123843	20150303
WO15134529 A1	20150911	WO2015US18530	20150303

Priority:

US20140948311P 20140305 US20150123843 20150303 WO2015US18530 20150303
US20160257803 20160906

Probable Assignee: SWISSLOG LOGISTICS INC

Assignee(s): (std): PAS LLC ; SWISSLOG LOGISTICS INC ; SWISSLOGISTICS INC

Assignee(s): TIPTON RODNEY ; RAMANKUTTY MOHAN ; BRUMM CHRISTOPHER ; MITCHELL PAT

Inventor(s): (std): BRUMM CHRISTOPHER ; MITCHELL PAT ; RAMANKUTTY MOHAN ; TIPTON RODNEY

Agent(s): OYEN WIGGS GREEN AND MUTALA LLP; PATENTANWALTE U RECHTSANWALT WEISS ARAT AND PARTNER MBB; RANDALL JOSHUA N

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 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

Abstract: A wearable device may include: an analog watch unit that includes a time indicating unit that indicates time, and a drive unit that drives the time indicating unit; a touch screen that senses an input for adjusting the drive unit; and a control unit that controls the drive unit in response to the sensed input.

International (IPC 8-9): G04B19/04 G04G17/04 G04G21/00 G04G21/08
G04G5/00 G04G9/00 G06F3/0488 (Advanced/Invention)

CPC: G06F3/0488 G04G21/08 G04G9/00 G04B19/04 G04C17/0091
G04G9/02 G04G5/00 G04G17/04 G04G21/025 G04G21/04 G06F1/1

FIG. 10 is an exploded perspective view of a smartwatch assembly. The assembly includes a watch case (101) with a bezel (110) and a back cover (111). The bezel (110) is shown in an exploded position relative to the watch case (101). The watch case (101) includes a front face (121) and a back face (151). The front face (121) includes a display area (131) and a camera lens (141). The back face (151) includes a camera lens (142) and a sensor (143). The watch case (101) is shown in an exploded position relative to a strap (102). The strap (102) includes a buckle (122) and a strap body (152). The strap body (152) includes a strap band (161) and a strap buckle (180). The strap (102) is shown in an exploded position relative to the watch case (101). The watch case (101) is shown in an exploded position relative to a strap (102). The strap (102) includes a buckle (122) and a strap body (152). The strap body (152) includes a strap band (161) and a strap buckle (180). The strap (102) is shown in an exploded position relative to the watch case (101).

Publication number	Publication date	Application number	Application date
■ CN106687870 A	20170517	CN201580048463	20150911
■ EP3191900 A1	20170719	EP20150840607	20150911
■ IN201747011238 A	20170407	IN201747011238	20170329
■ KR20160030821 A	20160321	KR20150003606	20150109
■ KR20160030832 A	20160321	KR20150068284	20150515
■ TW201621491 A	20160616	TW20150130044	20150911
■ US2016109861 AA	20160421	US20150852367	20150911
■ WO16039587 A1	20160317	WO2015KR09588	20150911

KR20140120502	20140911	KR20150003606	20150109	US20150102701P	20150113
KR20150068284	20150515	US20150852367	20150911	WO2015KR09588	20150911

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 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

Title: WIRELESS MOSTION SENSOR SYSTEM AND METHOD

Abstract: A wireless motion sensor system comprising a wearable inertial measurement unit, a wireless signal relay unit, and a data analysis server can be used in low power sensing and control applications, such as continuous monitoring and recording of motion and other parameters before, during, and after the occurrence of an unpredictable event. Data from the inertial measurement unit could be analyzed and presented on a graphical presentation unit.

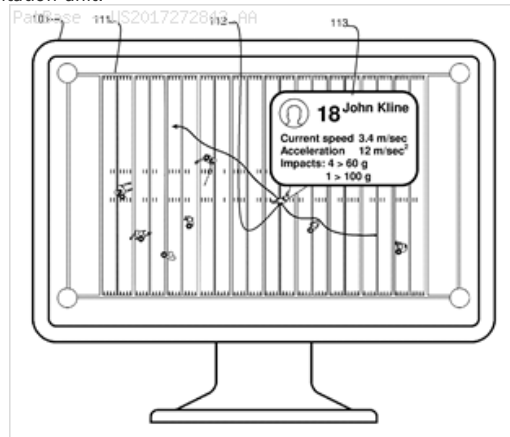
Classifications:

International (IPC 8-9): A01K29/00 A63B24/00

H04Q9/00 (Advanced/Invention)

CPC: H04Q2209/43 A01K29/005 A63B24/0003 A63B24/0062 G08C17/02

H04Q9/00



Family:

Publication number	Publication date	Application number	Application date
■ US2017272842 AA	20170921	US20160070189	20160315
■ US2018139518 AA	20180517	US20170851711	20171221
■ US9900669 BB	20180220	US20160070189	20160315

Priority:

US20040624335P	20041102	US20050263710	20051031	US20090590897	20091116
US20120573945	20121015	US20160070189	20160315	US20170851711	20171221

Probable Assignee: TOUMA PIERRE A

Assignee(s): (std): TOUMA PIERRE ; TOUMA PIERRE A

Inventor(s): (std): BACHAALANI ELIAS ; BACHAALANY ELIAS ; MURR HADI ; MAALOUF IMAD ; TOUMA PIERRE A

Title: SUBMERSIBLE DRONE HAVING ACTIVE BALLAST SYSTEM

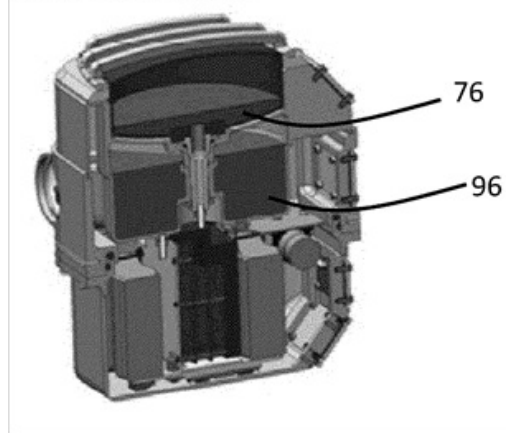
Abstract: A submersible inspection drone used for inspection can include a ballast system used to control depth of the submersible inspection drone. The submersible can be configured to communicate to a base station using a wireless transmitter and receiver. The ballast system can include a pressure vessel for storing fluid and a bag for inflating and deflating as it receives a fluid. Buoyancy of the submersible inspection drone can be provided by change in density of the pressure vessel as a compressible gas is expanded when the ballast bag is caused to inflate or deflate. A pump can be used to draw fluid from the ballast bag and store the fluid in the pressure vessel. In one form the pressure vessel can include a compressible fluid and an incompressible fluid, where the incompressible fluid is used to inflate and deflate the bag.

Classifications:

International (IPC 8-9): B08B9/00 B62D55/32 B63G8/00 B63G8/22
E04H4/16 F16L55/46 G01M3/38 G01N1/22 G02B23/24 G05D1/00
G06F17/50 G06T15/20 G06T17/20 G06T7/00 G21C17/013
H01F27/12 (Advanced/Invention)

CPC: B63G8/22 B63G2008/005 B63G8/001 G21C17/013 B63G8/00
E04H4/1654 G02B23/2492 H01F27/12 G05D1/0692 B08B9/023 B25J9/00
F16L55/46 G01N1/10 G01N1/22 G01N21/88 G01N2001/021
G01N2001/1031 G01N2201/0218 G05D1/0044 G01M3/38 B62D55/32
G05D1/0022 G05D1/0038 B08B9/00 G06T17/20 G06T7/97 G06T7/55
G06F17/5009 B63B2702/12 G06T15/205

PatBase - US2018154995_AA

**Family:**

Publication number	Publication date	Application number	Application date
US2018154995 AA	20180607	US20170834396	20171207
US2018158232 AA	20180607	US20170835178	20171207
WO18104779 A1	20180614	WO2017IB01618	20171207
WO18104780 A2	20180614	WO2017IB01619	20171207
WO18104781 A1	20180614	WO2017IB01620	20171207
WO18104782 A2	20180614	WO2017IB01622	20171206
WO18104783 A2	20180614	WO2017IB01628	20171206
WO18104786 A1	20180614	WO2017IB01631	20171206
WO18104790 A1	20180614	WO2017IB01643	20171207
WO18104794 A1	20180614	WO2017IB01671	20171207

Priority:

US20160431316P 20161207	US20160431317P 20161207	US20160431319P 20161207
US20160431321P 20161207	US20160431323P 20161207	US20160431325P 20161207
US20160431328P 20161207	US20160431329P 20161207	US20160431332P 20161207
US20160431334P 20161207	US20160431338P 20161207	US20170834396 20171207
US20170835178 20171207		

Probable Assignee: ABB SCHWEIZ AG**Assignee(s):** (std): ABB SCHWEIZ AG

Inventor(s): (std): CHEIM LUIZ ; CHOI SANGUEN ; COLE GREGORY ; EAKINS WILLIAM ; FUHLBRIGGE THOMAS ; LASKO DANIEL ; MORATO CARLOS ; NICHOLAS NOLAN ; PATEL POORVI ; RAKUFF STEFAN ; ROSSANO GREGORY ; SHAH HARSHANG ; SHARMA SAUMYA ; STAAB HARALD ; ZHANG BIAO ; SALM ANDREW

Inventor(s): SALM ANDREW M ; ROSSANO GREGORY F ; NICHOLAS NOLAN W ; LASKO DANIEL T ; FUHLBRIGGE THOMAS A ; EAKINS WILLIAM J ; EAKINS WILLIAM JOHN ; COLE GREGORY A ; CHEIM LUIZ V

Agent(s): FIORENTINO LUCA ET AL; FIORENTINO LUCA

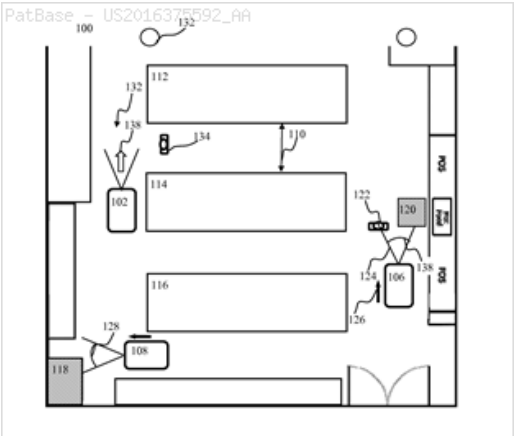
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Title: APPARATUS AND METHODS FOR SAFE NAVIGATION OF ROBOTIC DEVICES

Abstract: Apparatus and methods for navigation of a robotic device configured to operate in an environment comprising objects and/or persons. Location of objects and/or persons may changed prior and/or during operation of the robot. In one embodiment, a bistatic sensor comprises a transmitter and a receiver. The receiver may be spatially displaced from the transmitter. The transmitter may project a pattern on a surface in the direction of robot movement. In one variant, the pattern comprises an encoded portion and an information portion. The information portion may be used to communicate information related to robot movement to one or more persons. The encoded portion may be used to determine presence of one or more object in the path of the robot. The receiver may sample a reflected pattern and compare it with the transmitted pattern. Based on a similarity measure breaching a threshold, indication of object present may be produced.

Classifications:

International (IPC 8-9): B25J11/00 B25J19/06 B25J5/00 B25J9/16 B60Q1/54 B60Q9/00 G01B11/14 G01B17/00 G01P3/36 G01S17/00 G01S17/02 G01S17/46 G01S17/89 G01S17/93 G01S7/51 G05D1/02 G06K9/00 G06K9/20 G06K9/62 (Advanced/Invention); G01S13/93 G01S15/93 G05D1/02 (Advanced/Non-invention)
CPC: B25J19/06 B25J9/1674 B25J9/1676 B25J11/0085 B60Q1/54 B60Q9/008 Y10S901/01 G06K9/00664 G06K9/6215 G06K9/6212 G06K9/2036 G06K9/209 B25J5/00 G05D1/0242 G05D1/0214 G01S7/51 G01S13/931 G01S15/931 G01S17/003 G01S17/026 G01S17/46 G01S17/89 G01S17/936 G05D1/0238 G06K9/00771 G06K9/00805
US: 382/153 700/250 700/255 901/1



Family:

Publication number	Publication date	Application number	Application date
US2016375592 AA	20161229	US20150749423	20150624
US2016378117 AA	20161229	US20150752688	20150626
US9840003 BB	20171212	US20150749423	20150624
US9873196 BB	20180123	US20150752688	20150626

Priority:

US20150749423 20150624 US20150752688 20150626

Probable Assignee:

BRAIN CORP

Assignee(s): (std):

BRAIN CORP

Inventor(s): (std):

RICHERT MICAH ; SZATMARY BOTOND

Agent(s):

GAZDZINSKI AND ASSOCIATES PC

Title: TIRE INSPECTION APPARATUS AND METHOD

Abstract: Described is an anomaly detector apparatus 10 for detecting an anomaly in a tire comprising: a source of coherent light 18 to shine the light 27 directly onto the tire surface 24 and the light being reflected 32 from the tire; a stressing apparatus 12 which can stress the tire; a reflected light receiving apparatus 40 for receiving the light 32 reflected directly from the tire surface 24 when the tire is in a stressed and unstressed condition; a processor 44 which compares images of reflected light from the reflected light receiving apparatus 40 when the tire is stressed and unstressed thereby ascertaining an anomaly in the tire and generates an output from the comparison; and a display apparatus 46 electronically connected to the processor for displaying the output from the processor.

Classifications:

International (IPC 8-9): B60C19/00 G01B11/16 G01B9/02 G01M17/02 G01N21/00 G01N21/88 G06F19/00 (Advanced/Invention); G01B11/16 G01M17/02 (Advanced/Non-invention); G01B11/16 G01B9/02 G01M17/02 (Core/Invention)

International (IPC 1-7): G01B11/16 G01B9/02 G01N21/00 G01N21/88

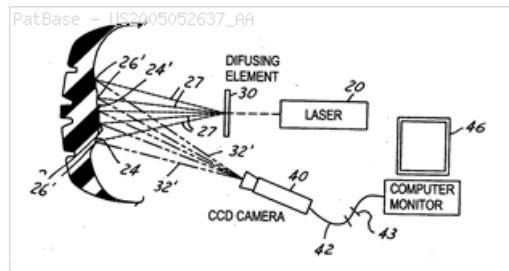
CPC: G01N21/8806 G01N21/8851 G01N21/954 G01N2021/8887

G01N2021/9548 G01B11/162 G01M17/027

European: G01B11/16B G01B11/16B2 G01M17/02G G01N21/88K

G01N21/954 S01N21/88P S01N21/88P6 S01N21/954 S01N21/954B

US: 356/237.1 356/237.100P 356/237.2 356/237.200P 356/35.5 356/520 702/108 702/108P

**Family:**

Publication number	Publication date	Application number	Application date
AU2004272541 AA	20050324	AU20040272541	20040830
AU2004272541 BB	20080117	AU20040272541	20040830
CA2538643 AA	20060310	CA20042538643	20040830
CA2538643 C	20111220	CA20042538643	20040830
CN100472175 C	20090325	CN200480026183	20040830
CN1849496 A	20061018	CN200480026183	20040830
EP1664670 A2	20060607	EP20040782653	20040830
EP1664670 A4	20110518	EP20040782653	20040830
IN00801KN2006 A	20070413	IN2006KN00801	20060403
IN240596 B	20100521	IN2006KN00801	20060403
JP2007505313 T2	20070308	JP20060526147T	20040830
JP4881158 B2	20120222	JP20060526147	20040830
KR20060132801 A	20061222	KR200607004740	20040830
US2005052637 AA	20050310	US20030659466	20030910
US2005200838 AA	20050915	US20050067256	20050225
US2005264796 AA	20051201	US20050066672	20050225
US2008147347 AA	20080619	US20070998787	20071130
US6934018 BB	20050823	US20030659466	20030910
US7187437 BB	20070306	US20050067256	20050225
US7436504 BB	20081014	US20050066672	20050225
WO05025894 A2	20050324	WO2004US28219	20040830
WO05025894 A3	20050506	WO2004US28219	20040830
WO06093752 A1	20060908	WO2006US06254	20060222
WO06093752 B1	20061109	WO2006US06254	20060222
WO06093753 A2	20060908	WO2006US06259	20060222
WO06093753 A3	20070510	WO2006US06259	20060222

Priority:

US20030659466 20030910 WO2004US28219 20040830 US20050066672 20050225
US20050067256 20050225 US20070998787 20071130

Probable Assignee: SHEAROGRAPHICS LLC

Assignee(s): (std): MALKAN DAVID ; MALKAN DAVID D ; SHAW EUGENE ; SHAW EUGENE L ; WRIGHT FORREST S ; SHEAROGRAPHICS LLC

Assignee(s): SHEROGRAPHICS LLC ; SHEAROGRAPHICS LCC ; SHEAR GRAPHICS LLC ; RAVEN ENGINEERING INC

Inventor(s): (std): EUGENE SHAW ; FORREST S WRIGHT ; MALKAN DAVID ; MALKAN DAVID D ; SHAW EUGENE ; SHAW EUGENE L ; SHAW EUGENE WRIGHT FORREST S ; WRIGHT FORREST S

Inventor(s): WRIGHT FORREST ; RIGHT FORREST S

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; SIM AND MCBURNEY; WILLIAM J SCHRAMM REISING ETHINGTON BARNES KISSELLE PC; WILLIAM J SCHRAMM WILLIAM J SCHRAMM PC; REISING ETHINGTON BARNES KISSELLE PC; WILLIAM J; SCHRAMM WILLIAM J

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 GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: APPARATUS FOR POSITIONING AN AUTOMATED LIFTING STORAGE CART AND RELATED METHODS

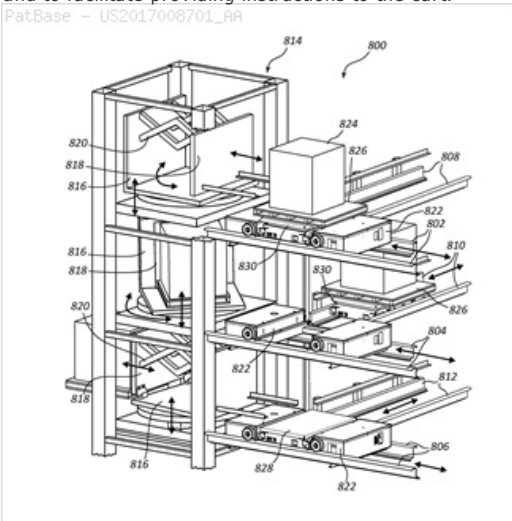
Abstract: A system for positioning a lifting cart in an automated storage facility is described. In one example, the system includes a motorized lifting cart configured to move about a railway of a storage area. An encoder on the cart reads a property of rotation of a rotating element on the cart, and a controller may receive the property of rotation from the encoder and convert it to a rotation count of the rotating element. The rotating element may be an encoder shaft, drive shaft, and like elements. Some systems include a signal emitter or photo sensor to position the lifting cart and to facilitate providing instructions to the cart.

Classifications:

International (IPC 8-9): B62B3/06 B65G1/00 B65G1/02 B65G1/04 B65G1/137 (Advanced/Invention)

CPC: B65G1/137 B65G2209/06 B62B3/06 B65G1/0492

US: 701/19



Family:

Publication number	Publication date	Application number	Application date
CA2974281 AA	20170718	CA20152974281	20150122
EP3097026 A1	20161130	EP20150740813	20150122
EP3097026 A4	20171108	EP20150740813	20150122
US2017008701 AA	20170112	US20150115067	20150122
WO15112665 A1	20150730	WO2015US12366	20150122

Priority:

US20140931416P 20140124 US20150115067 20150122 WO2015US12366 20150122

Probable Assignee: SWISSLOG LOGISTICS INC

Assignee(s): (std): PAS LLC ; SWISSLOG LOGISTICS INC

Assignee(s): TERRILL MIKE ; TIPTON RODNEY ; RAMANKUTTY MOHAN ; BRUMM CHRISTOPHER ; MITCHELL PAT

Inventor(s): (std): BRUMM CHRISTOPHER ; MITCHELL PAT ; RAMANKUTTY MOHAN ; TERRILL MIKE ; TIPTON RODNEY

Agent(s): OYEN WIGGS GREEN AND MUTALA LLP; PATENTANWALTE U RECHTSANWALT WEISS ARAT AND PARTNER MBB; RANDALL JOSHUA N

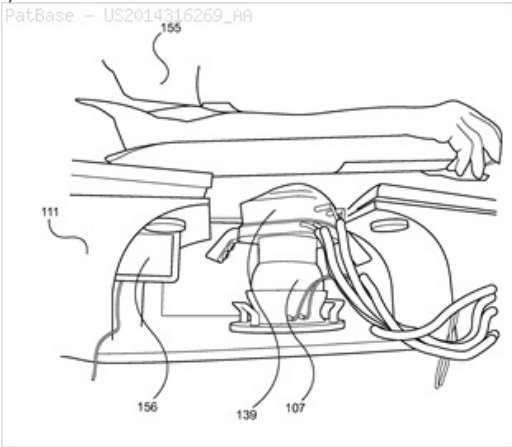
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Title: TRANSDUCERS, SYSTEMS, AND MANUFACTURING TECHNIQUES FOR FOCUSED ULTRASOUND THERAPIES

Abstract: A system to apply ultrasound energy to a region surrounding blood flow in a blood vessel from a position outside a patient includes: a therapeutic ultrasound transducer comprising a plurality of transducer elements; and a processor configured to control the plurality of transducer elements; wherein the processor is configured to change phase inputs to the transducer elements to move a focus of the transducer at least 1 cm in a first plane which is substantially along a plane of the transducer elements of the therapeutic ultrasound transducer and at least 1 cm in a second plane orthogonal to the first plane; and wherein the processor is further configured to position the focus of the transducer in sequential positions offset from the blood flow in the blood vessel according to a pattern pre-determined by an operator of the system.

Classifications:

International (IPC 8-9): A61B5/05 A61B8/00 A61N7/00
A61N7/02 (Advanced/Invention)
CPC: A61B2017/00725 A61B2018/00023 A61N7/02 A61N2007/0065
A61N2007/0082 A61N2007/0095 A61B6/12 A61B6/487 A61B8/0841
A61B8/085 A61B8/4254 A61B8/4281 A61B8/4416 A61B8/4494
A61B8/4245 A61B8/4209 A61B2090/378 A61B2034/2063 A61N2007/0091
A61B2090/3937 A61B2090/395
US: 600/439 602/1



Family:

Publication number	Publication date	Application number	Application date
CN104936517 A	20150923	CN201480003300	20140307
EP2964086 A1	20160113	EP20140780306	20140307
EP2964086 A4	20170215	EP20140780306	20140307
US2014316269 AA	20141023	US20140201851	20140308
WO14164363 A1	20141009	WO2014US22141	20140307

Priority:

US20130775542P 20130309 US20130786420P 20130315 WO2014US22141 20140307
US20140201851 20140308

Probable Assignee: KONA MEDICAL INC

Assignee(s): (std): GERTNER MICHAEL ; KONA MEDICAL INC ; ZHANG JIMIN

Inventor(s): (std): GERTNER MICHAEL ; ZHANG JIMIN

Agent(s): FOSTER MARK CHARLES; CHAN GERALD

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
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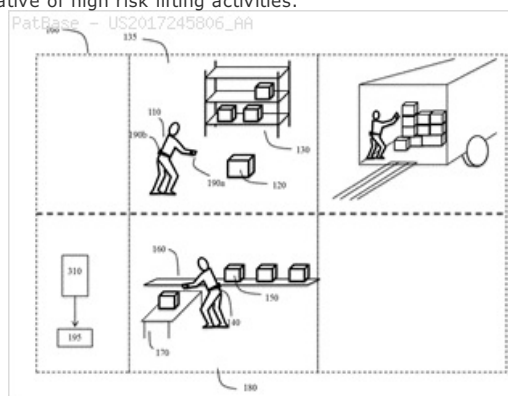
Title: SYSTEM AND METHOD FOR MONITORING SAFETY AND PRODUCTIVITY OF PHYSICAL TASKS

Abstract: Methods and systems for monitoring workplace safety and evaluating risks is provided, the method comprising receiving signals from at least one wearable device, identifying portions of the signals corresponding to physical activities, excerpting the portions of the signals corresponding to the physical activities, and calculating risk metrics based on measurements extracted from the excerpted portions of the signals, the risk metric indicative of high risk lifting activities.

Classifications:

International (IPC 8-9): A61B5/00 A61B5/11 A61B5/22 G06Q10/00 G08B21/00 (Advanced/Invention)

CPC: A61B5/0024 A61B5/1122 A61B5/681 A61B5/7405 A61B5/7475 A61B2503/20 A61B2562/0219 G06F19/3481 A61B5/6838 A61B5/1118 A61B5/1121 A61B5/0022 A61B5/6824 A61B2560/0223 A61B5/1116 A61B5/6823 G06Q10/00 G08B21/00 A61B5/7275 G08B21/043 G08B21/0446 G16H50/30 G06F19/00



Family:

Publication number	Publication date	Application number	Application date
EP3253290 A1	20171213	EP20160747074	20160202
US2017245806 AA	20170831	US20170594177	20170512
US2017347965 AA	20171207	US20150660578	20150317
US9833197 BA	20171205	US20150660578	20150317
WO16126639 A1	20160811	WO2016US16062	20160202
WO17197308 A1	20171116	WO2017US32483	20170512

Priority:

US20140953934P 20140317 US20150110630P 20150202 US20150660578 20150317
WO2016US16062 20160202 US20160335070P 20160512 US20170594177 20170512

Probable Assignee: ONE MILLION METRICS CORP

Assignee(s): (std): ONE MILLION METRICS CORP

Inventor(s): (std): RUIZ DE VILLA ENRIQUE ; YOUSSELY SELIM ; JANOOS FIRDAUS ; ELHAWARY HAYTHAM ; BANSAL ADITYA

Agent(s): RGT; MYERS WOLIN LLC; WOLIN HARRIS A

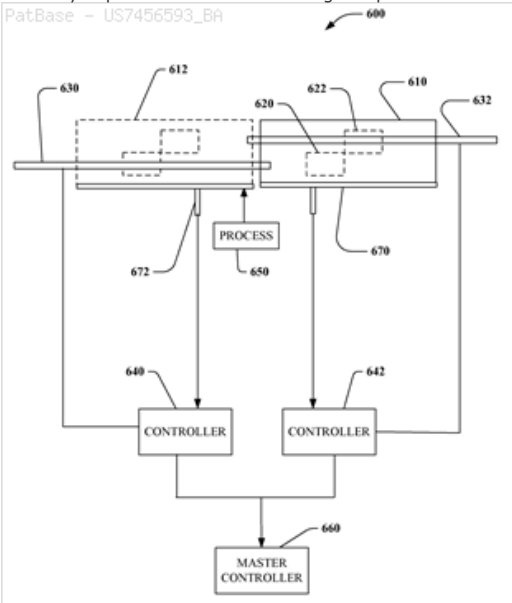
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KH KM KN KP KR KW KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN 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

Title: DIRECT DRIVE TRANSPORT SYSTEM

Abstract: A system, method and apparatus for controlling a linear stage a pallet is described herein. In one aspect, a conveyor system includes a conveyor pallet that includes a first mobile magnetic component and a second mobile magnetic component. A first stationary magnetic component can magnetically engage the first mobile magnetic component. A second stationary magnetic component can magnetically engage the second mobile magnetic component. A first controller can activate a first magnetic displacement between the first stationary magnetic component and the first mobile magnetic component when the conveyor pallet is in a first range of positions. A second controller can activate a second magnetic displacement between the second stationary magnetic component and the second mobile magnetic component when the conveyor pallet is in a second range of positions.

Classifications:

International (IPC 8-9): B65G43/10 B65G54/02 G05B19/19 G05B19/418
H02K41/00 H02K41/02 (Advanced/Invention);
B65G54/00 G05B19/19 G05B19/418 H02K41/00
H02K41/02 (Core/Invention)
CPC: Y02P90/04 Y02P90/18 Y02P90/28 B65G54/02
European: B65G54/02
US: 318/135 318/567 318/569



Family:

Publication number	Publication date	Application number	Application date
DE202007019591 U1	20140424	DE200720019591U	20070410
DE602007031640 D1	20130912	DE200760031640T	20070410
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EP1845428 A3	20080625	EP20070007365	20070410
EP1845428 B1	20130717	EP20070007365	20070410
US7456593 BA	20081125	US20060279219	20060410

Priority:

US20060279219 20060410 EP20070007365 20070410

Probable Assignee: ROCKWELL AUTOMATION INC

Assignee(s): (std): ANORAD CORP

Assignee(s): ANORAD CORP SHIRLEY ; ROCKWELL AUTOMATION INC ; ROCKWELL AUTOMATION TECHNOLOGIES INC

Inventor(s): (std): CHIRIGNAN CLAUDE ; FLORESTA JOHN ; SAFRANEK STEPHEN R ; SOMMERHALTER FREDERICK A JR ; SOMMERHALTER JR FREDERICK A ; STOLLBERGER CHRIS

Agent(s): GRUENECKER PATENT U RECHTSANWAELTE PARTG MBB; ENGLAENDER KLAUS; GRUENECKER KINKELDEY STOCKMAIR AND SCHWANHAEUSSER; AMIN TUROCY AND CALVIN LLP; KUSZEWSKI ALEXANDER R; ALEXANDER R

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL PL PT RO RS SE SI SK TR

Title: ACOUSTIC SENSORY NETWORK

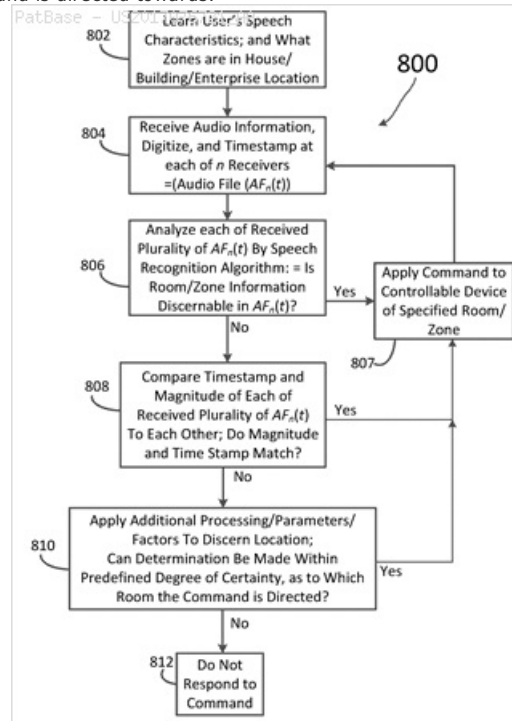
Abstract: A system is provided for determining which controllable device an audible command is directed towards. The system comprises two or more controllable devices, two or more electronic devices, each of which is adapted to receive the audible command, add a respective electronic device identifier to the received audible command, time and date stamp the received audible command, and transmit the respective time and date stamped versions of the audible command, and wherein each of the two or more electronic device are further adapted to controller respective ones of the two or more controllable devices, and a central processor adapted to receive each of the transmitted time and date stamped versions of the audible command and perform processing based on the time and date stamp, wherein the electronic device that reports the earlier time and date stamp, as ascertained by the respective electronic device identifier and a comparison of each of the time and date stamps performed by the central processor, is the electronic device to which the audible command is directed towards.

Classifications:

International (IPC 8-9): G05B19/042 G10L15/22 G10L15/30 G10L21/0208 (Advanced/Invention)

CPC: G10L15/22 G10L2015/223 G10L15/30 G05B19/042 G05B2219/2642 G05B15/02 G05B19/0426 G10L21/0208

US: 700/275 704/275

**Family:**

Publication number	Publication date	Application number	Application date
US2017076721 AA	20170316	US20160261296	20160909
US2017092272 AA	20170330	US20160376846	20161213
US2017097621 AA	20170406	US20150850904	20150910

Priority:

US20140048722P 20140910 US20150216971P 20150910 US20150850904 20150910
 US20160261296 20160909 US20160376846 20161213

Probable Assignee: CRESTRON ELECTRONICS INC

Assignee(s): (std): BARGETZI FRED ; CRESTRON ELECTRONICS INC ; STENE JOSH ; SEFERIAN ARA ; LABOSCO MARK

Inventor(s): (std): ACKMANN EVAN ROBERT ; BARGETZI FRED ; LABOSCO MARK ; PAVLIK JOHN ; JACOBSON DOUG ; BERGATZI FRED ; STENE JOSH ; SEFERIAN ARA

Title: EMERGENCY SUPPLIES PRE-POSITIONING AND ACCESS CONTROL METHOD

Abstract: One provides (101) a plurality of carriable containers having emergency supplies contained therein wherein each of these carriable containers is readily carriable by an average adult human. These carriable containers are then placed (103) within one or more corresponding controlled access containers as are provided at one or more publicly accessible locations (102). Prior to a triggering catastrophic event, one or more specific authorized beneficiaries are then preauthorized (104) to have catastrophic event-based access to one or more of these carriable containers. So configured, the authorized beneficiary(s) will in turn have access to the corresponding emergency supplies that are contained within the carriable container when a triggering catastrophic event occurs.

Classifications:

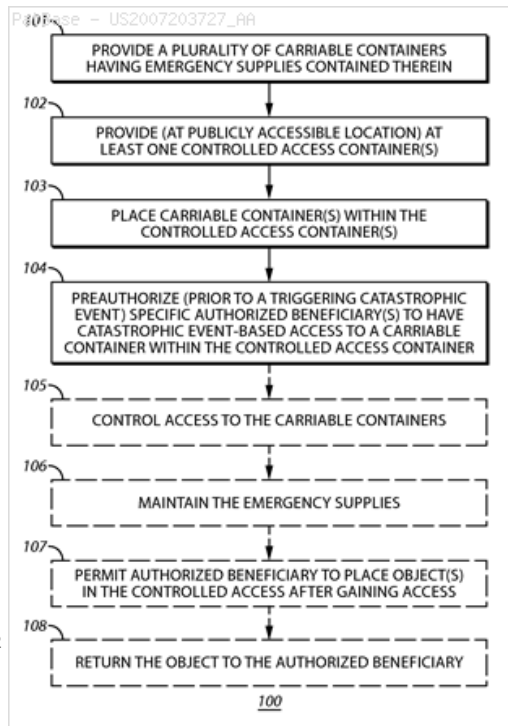
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A01B71/00 A45F5/00 A47F1/00 A61B17/32 A61B5/00 B01D46/00 B42D1/00 B60J1/00 B62D53/00 B62D59/00 B63B35/44 B65B3/04 B65G15/00 D02G3/00 E02D29/00 E04B1/00 E04B1/34 E04H1/00 F02M37/04 G01C21/20 G01T1/02 G05B19/418 G05B21/00 G05D1/02 G06F15/16 G06F17/30 G06F21/00 G06F9/44 G06F9/46 G06Q10/00 G06Q30/00 G06Q40/00 G06Q50/00 G06Q99/00 G09B19/00 G21F3/00 H04H1/00 H04L9/00 H04M11/04 (Core/Invention)

CPC: G06Q30/0283 G08B27/008 H04H20/59 H04H60/23 G06Q30/02 G06Q90/00 G06Q50/00 G06Q30/04 G06Q10/06 G06Q50/163 G06Q50/30 G06Q30/00 G06Q30/0214 G06Q30/0217 G06Q30/0226 G06Q30/0227 G06Q30/0231 G06Q30/0233 G07F17/0042 E04H9/08 E04H9/12 F41H5/24 G06Q10/10 A62B31/00 B63C9/02 A62B99/00 A62B1/02 E04H9/06 H04L63/10 G07C9/00087 B01D46/0023 B01D46/0036 B01D2273/30 G21F3/00 G06Q30/06 G06Q30/0633 G06Q10/087 A61B50/10 A61B50/13 A61B50/312 G06Q40/08 A45C15/00 G06Q10/08 G06Q50/265 G06Q99/00 G06Q10/02 G06Q50/26 Y02A50/454 Y02A50/14 G16H40/20 G16H50/80 A47K11/026 G06Q20/401 G06Q50/22 E04H9/14 G06Q10/00 G06Q50/10 G06F19/00

European: A45C15/00 A47K11/02C A61B19/02F A61B19/02P4D A62B1/02 A62B31/00 A62B99/00 B01D46/00D4 B01D46/00F60 B63C9/02 E04H9/06 E04H9/08 E04H9/12 E04H9/14 F41H5/24 G06F19/32G G06Q10/00 G06Q10/02 G06Q10/06 G06Q10/08 G06Q10/08E G06Q10/10 G06Q20/401 G06Q30/00 G06Q30/02 G06Q30/0214 G06Q30/0217 G06Q30/0226 G06Q30/0227 G06Q30/0231 G06Q30/0233 G06Q30/0283 G06Q30/04 G06Q30/06 G06Q40/08 G06Q50/00 G06Q50/163 G06Q50/22 G06Q50/26 G06Q50/265 G06Q50/30 G06Q90/00 G06Q99/00 G07C9/00B6D4 G07F17/00D G07F7/00D G08B27/00T G21F3/00 H04H20/59 K61B19/02F2 K62B99/00 L01D273/30 S06F19/34S T04H60/23 T04L29/06S10 T04L63/10 Y04S50/12

US: 141/10 180/14.1 180/14.100P 198/321 224/101 235/382.5 235/382.500S 250/472.1 250/519.1 345/85P 379/37 379/37P 434/236 434/236S 455/3.01 455/3.010 52/169.6 52/3 52/741.1 52/741.100S 52/745.05 52/745.050P 52/79.1 52/79.100S 600/300 600/300P 701/23 705/1 705/1.1 705/1.100P 705/14.16 705/14.160P 705/14.19 705/14.190S 705/14.27 705/14.270S 705/14.28 705/14.280S 705/14.31 705/14.310S 705/14.33 705/14.330S 705/2 705/26.8 705/2P 705/314 705/314P 705/325 705/325S 705/400 705/400P 705/5 705/500 705/500P 705/52 705/52P 705/5P 705/75 705/75S 707/802 707/802S 707/E17.005 707/E17.005S 726/2 726/2S 96/222 96/222P

**Family:**

Publication number	Publication date	Application number	Application date
US2007203727 AA	20070830	US20060456472	20060710
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WO07115184 A3	20071221	WO2007US65658	20070330
WO07121248 A2	20071025	WO2007US66441	20070411
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Priority:

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Probable Assignee: SOVEREIGN DEED LLC

Assignee(s): (std): BOTOS MATTHEW J ; MOORE BARRETT H ; SEIDEL GREGORY E ; SOVEREIGN DEED LLC

Inventor(s): (std): BOTOS MATTHEW J ; MOORE BARRETT H ; SEIDEL GREGORY E

Inventor(s): MOORE BARRETT

Agent(s): FITCH EVEN TABIN AND FLANNERY; KRATZ RUDY; KRATZ RUDY I; KRUEGER JAMES P; KRATZ RUDY I ET AL; SAMPLES KENNETH H ET AL

Designated states: AE AG AL AM 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 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 SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: METHOD AND NETWORK FOR SELECTIVELY CONTROLLING THE UTILITY A TARGET

Abstract: A distribution control system is provided to support the controlled and selective changing of utility for a target. The target with controlled utility may be an electronic device, or alternatively, may be a tangible media, such as an optical disc. The distribution control system has a target with a change effecting device and a restricted access key. An activation device retrieves or generates an authorization key, and sends the authorization key to the target. The authorization key may be sent to the target wirelessly, for example, using a radio frequency signal. The target has logic that uses the restricted access key and the authorization key to change the utility of the target. In one example, the activation device retrieves the authorization key from a network operation center (NOC) by sending a target identifier to the NOC, and the NOC retrieves the authorization key for the identified target. The activation device may also connect to other systems for obtaining approval to change the utility of the target. For example, the authorization key may be sent to the target upon receiving payment, password, or other confirmation.

Classifications:

International (IPC 8-9): G05B19/00 G06F17/00 G06F17/30 G06F7/00 G06K17/00 G06K19/00 G06K19/06 G06K19/07 G06Q99/00 G07G1/12 G07G1/14 G08B13/14 G08C19/00 H04B1/00 H04B5/02 H04B7/00 H04B7/26 H04H40/00 H04H60/09 H04L9/00

H04L9/32 (Advanced/Invention);

G06F17/00 G06F17/30 G08C19/00 H04B7/26 H04L9/32 (Advanced/Non-invention);

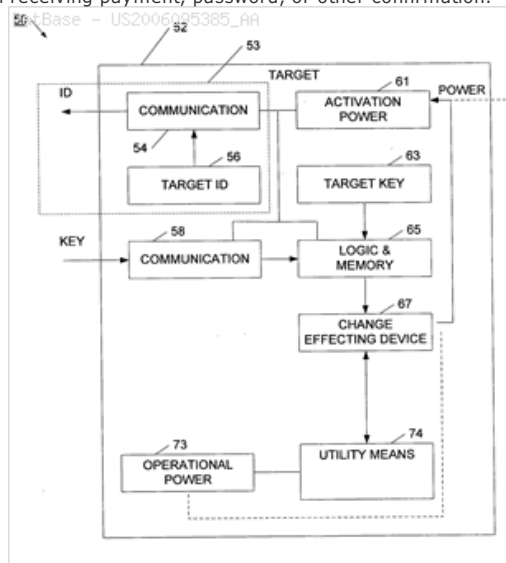
G05B19/00 G06F17/00 G06F17/30 G06F7/00 G06K17/00 G06K19/00 G06K19/06 G06K19/07 G08B13/14 G08C19/00 H04B1/00 H04B5/02 H04B7/00 H04B7/26 H04H40/00 H04H60/09 H04L9/00 H04L9/32 (Core/Invention)

International (IPC 1-7): H04L9/00

CPC: H04L63/06 A63F2300/532 A63F2300/5586 G06F21/88 G06F2221/2149 G06Q20/382 H04L63/10 G07C9/00111 H04L9/0894 H04L2209/805 H04L63/08 G06Q20/206 G07C9/00309 G08B13/2417 G08B21/0213 G08C17/02 H04B5/0056 H04L63/0428 G08C19/00 Y02D70/166 Y02D70/26 Y02D70/42

European: G06F21/88 G06Q20/206 G06Q20/382 G07C9/00B10 G07C9/00E4 G08B13/24B1G1 G08B21/02A1D G08C17/02 H04B5/00R H04L29/06C6C H04L63/06 H04L63/08 H04L63/10 K63F300/53C K63F300/55R S06F221/2149 T04L63/04B T04L9/08

US: 1/1 1/1P 235/492 235/492P 235/492S 340/10.1 340/10.100S 340/13.25 340/13.250P 340/13.26 340/13.260P 340/5.61 340/5.610P 340/5.74 340/5.740S 340/572.8 340/572.800S 340/825.72 455/420 455/420S 455/70 455/70P 705/18 705/18S 705/64 705/64P 707/1 707/104.1 707/999.001 707/999.001S 707/999.107 707/999.107S 726/30 726/30S

**Family:**

Publication number	Publication date	Application number	Application date
■ CN101438528 A	20090520	CN200580044786	20051026
■ CN101444034 A	20090527	CN200580047874	20051207
■ EP1810440 A2	20070725	EP20050813034	20051026
■ EP1829273 A2	20070905	EP20050853233	20051207
■ EP1854240 A2	20071114	EP20060735634	20060221
■ IN02281CN2007 A	20070907	IN2007CN02281	20070528
■ IN03027CN2007 A	20070907	IN2007CN03027	20070706
■ JP2008518361 T2	20080529	JP20070539066T	20051026
■ JP2008523506 T2	20080703	JP20070545586T	20051207
■ JP2008537197 T2	20080911	JP20070556395T	20060221
■ KR20070085486 A	20070827	KR20077012015	20051026
■ KR20070111453 A	20071121	KR20077015680	20070709
■ US2006095385 AA	20060504	US20050259185	20051026
■ US2006100983 AA	20060511	US20050259578	20051026
■ US2006119487 AA	20060608	US20050295867	20051207
■ US2006123055 AA	20060608	US20050296081	20051207
■ US2006131432 AA	20060622	US20050296082	20051207
■ US2006132285 AA	20060622	US20050296547	20051207
■ US2006192653 AA	20060831	US20060358352	20060221
■ US2007194945 AA	20070823	US20060532073	20060914
■ US2008090527 AA	20080417	US20070753606	20070525
■ WO06047582 A2	20060504	WO2005US38538	20051026
■ WO06047582 A3	20090416	WO2005US38538	20051026
■ WO06063051 A2	20060615	WO2005US44264	20051207
■ WO06063051 A3	20090430	WO2005US44264	20051207
■ WO06089280 A2	20060824	WO2006US06065	20060221
■ WO06089280 A3	20080110	WO2006US06065	20060221
■ WO08033898 A2	20080320	WO2007US78240	20070912

Priority:

US20040622137	20041026	US20040622137P	20041026	US20040633971	20041207
US20040633971P	20041207	US20050654384P	20050218	US20050259185	20051026
US20050259578	20051026	WO2005US38538	20051026	US20050296081	20051207
US20050296082	20051207	US20050295867	20051207	WO2005US44264	20051207
US20050296547	20051207	WO2006US06065	20060221	US20060358352	20060221
US20060803224P	20060525	US20060532073	20060914	US20070753606	20070525

Probable Assignee: RPC IP HOLDINGS LLC

Assignee(s): (std): KESTREL WIRELESS INC ; KRUEST JAMES R ; KUMAR RAKESH ; REYZER KENDALL C ; ATKINSON PAUL ; CONERO RONALD S

Assignee(s): KESTREL WIRELESS ; NXP BV ; RPC IP HOLDINGS LLC ; LEGACY CAPITAL PARTNERS LLC

Inventor(s): (std): ATKINSON PAUL ; CONERO RONALD S ; KRUEST JAMES R ; KUMAR RAKESH ; PAUL ATKINSON ; REYZER KENDALL C

Inventor(s): REYZER KENDALL ; KRUEST JAMES ; CONERO RONALD

Agent(s): WILLIAM J KOLEGRAFF; WILLIAM J KOLEGRAFF KESTREL WIRELESS INC; KOLEGRAFF WILLIAM J

Designated states: AE AG AL AM 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 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 YU ZA ZM ZW

Title: APPARATUS, METHODS AND PROCESSES FOR SORTING PARTICLES AND FOR PROVIDING SEX-SORTED ANIMAL SPERM.

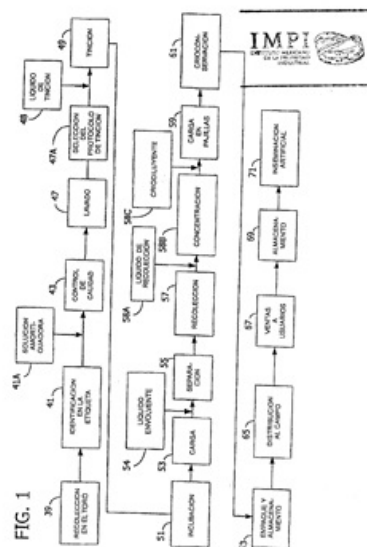
Abstract: Apparatus and methods for analyzing particles, including apparatus and methods for a sperm sorting process including: collecting sperm from an animal (30); selecting staining conditions (47A); staining the sperm with DNA selective fluorescent dye (48); sorting the sperm cells according to sex chromosome content (55); and cryopreserving a population of sorted sperm (61) until used for artificial insemination. One embodiment includes apparatus (1001) and methods for using a plurality of flow cytometry units (9) sharing an integrated platform to sort sperm cells. In one embodiment, flow cytometric sorting includes use of the following apparatus and methods: an orienting nozzle having a baffle (101); an epi-illumination optics system (109); slit scanning of localized DNA regions within cell nuclei (225); digital signal processing, including synchronous sampling of analog output signals (701), pulse waveform (497) feature extraction of an approximation of a first order derivative of a pulse waveform (497) at a point of the pulse, any of various sort strategies; and an automated sort calibration system (4201). In one embodiment, digital signal processing includes sampling analog output signals (701) at times relative to emission of pulses from an illumination laser. Other embodiments are substantially different from the foregoing, including embodiments directed to individual steps or systems that can be used for any of various applications involving particle analysis.

Classifications:

International (IPC 8-9): A01N1/02 C12M1/34 C12N5/071 C12Q1/02 C12Q1/04 G01N1/30 G01N15/00 G01N15/14 G01N33/48 G01N33/487 G01N33/50 (Advanced/Invention); G01N15/00 (Core/Invention)

CPC: C12N5/0612 A01N1/0284 C12N5/06 C12N5/061 C12Q1/02 C12Q3/00 G01N15/1468 G01N15/147 G01N21/63 G01N21/6428 G01N33/48 G01N33/5005 G01N2015/0065 G01N2015/1006 G01N2015/149 G01N2021/6439 Y10T436/10 Y10T436/115831 Y10T436/12 Y10T436/25 Y10T436/2525 Y10T436/25375 Y10T436/255 Y10T436/2575

PatBase - MX350776_B



Family:

Publication number	Publication date	Application number	Application date
MX347048 B	20170407	MX20120005671	20040329
MX350776 B	20170915	MX20120005673	20040329

Priority:

US20030458607P 20030328 US20030458731P 20030328 WO2004US09646 20040329

Probable Assignee: INGURAN LLC

Assignee(s): (std): INGURAN LLC

Inventor(s): (std): ANZAR MUHAMMAD ; CROWLEY KATHLEEN S ; DIDION BRADLEY ; DURACK GARY ; GRAHAM JEFFREY A ; HATCHER JEREMY T ; HELBLING DAVID R ; LUDWIG CINDY L ; NAYAK NIRAJ V ; VANDRE GARY P ; WALLACE JEFFREY D ; WESTFALL LON A

Title: TELEMETRY DIAGNOSTICS

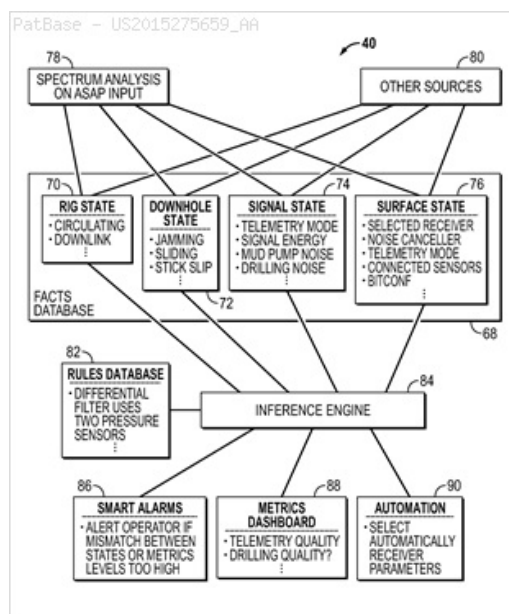
Abstract: A technique facilitates diagnosis of a telemetry system, such as a mud pulse telemetry system or an electro-magnetic telemetry system. The technique comprises operating a telemetry system in a wellbore and collecting a variety of data. The data may relate to a rig state, a downhole state, a signal state, a surface state, and/or other suitable types of data. The data is processed to determine whether states of operation indicated by the data match states indicating a problem with operation of the telemetry system. If a problem is detected, appropriate information regarding the problem is transmitted for use in correcting the problem.

Classifications:

International (IPC 8-9): E21B47/12 E21B47/18 G01V11/00 G06F15/16 G06F15/18 G06F17/30 G06F3/048 G06F3/0481 G06F3/0482 G06F3/0484 G06F3/0485 G06F3/0488 G06F3/14 G06F3/16 G06F9/44 G06N5/02 G06Q10/10 G06Q30/08 G06Q50/00 G06Q50/30 G09B7/00 H04L12/18 H04L12/58 H04L29/06 H04L29/08 H04N21/258 (Advanced/Invention)

CPC: G06F3/04842 H04L65/403 H04L65/4038 G06F17/30654 H04L51/046 G06F17/30876 H04L67/1044 H04L67/2885 H04L67/42 H04N21/258 G06F3/04845 G06F3/1454 H04L67/104 H04L67/10 G06F2203/04806 G06Q30/08 G06F3/165 H04N21/4725 H04N21/4756 H04N21/4788 H04N21/4882 G06F3/04817 G06N5/02 H04L67/22 H04L67/125 H04L67/141 H04L67/04 H04L69/24 H04L29/08 H04L67/18 G06Q10/10 G06Q50/30 H04L12/1827 H04L67/325 G06F9/4446 H04L65/1066 G06F15/18 G06F9/453 E21B47/122 E21B47/18 G06F3/04812 G06F3/04883 G06Q10/101 H04L67/14 G09B7/00 G06F3/0484 G06Q50/01 H04L67/12 G06F3/0482 G06F3/011 G06F3/04847 E21B44/00 E21B47/00 E21B47/12 E21B49/00 E21B49/003 G01V13/00 G06F3/0481

US: 340/854.6 367/81 705/26.3 715/753

**Family:**

Publication number	Publication date	Application number	Application date
AU2015236010 AA	20151001	AU20150236010	20150325
EP3123442 A1	20170201	EP20150767909	20150325
EP3123442 A4	20171004	EP20150767909	20150325
EP3155584 A1	20170419	EP20150808982	20150612
EP3155584 A4	20171227	EP20150808982	20150612
EP3210386 A1	20170830	EP20150852495	20151020
EP3210386 A4	20180418	EP20150852495	20151020
GB201805236 A0	20180516	GB20180005236	20160701
IN201747000968 A	20170421	IN201747000968	20170110
US2015275659 AA	20151001	US20150663401	20150319
US2015277730 AA	20151001	US20150668970	20150325
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US2016057182 AA	20160225	US20150859035	20150918
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WO15148283 A1	20151001	WO2015US21631	20150320
WO15148738 A1	20151001	WO2015US22594	20150325
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WO15195492 A1	20151223	WO2015US35694	20150612
WO16064827 A1	20160428	WO2015US56394	20151020
WO17004475 A1	20170105	WO2016US40600	20160701
WO18006065 A1	20180104	WO2017US40480	20170630
WO18094105 A2	20180524	WO2017US62095	20171116

Priority:

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US20140991505P	20140510	US20140012403P	20140615	US20140066718P	20141021
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US20170640145	20170630	WO2017US40480	20170630	US20170815579	20171116

Probable Assignee: UNANIMOUS AI INC

Assignee(s): (std): SCHLUMBERGER CA LTD ; SCHLUMBERGER HOLDINGS ; SCHLUMBERGER TECHNOLOGY CORP ; PRAD RES AND DEV LTD ; SCHLUMBERGER TECHNOLOGY BV ; UNANIMOUS A I LLC ; SCHLUMBERGER SERVICES PETROL ; UNANIMOUS A I INC ; UNANIMOUS A L LLC

Assignee(s): UNANIMOUS AI ; LINANIMOUS AI LLC ; UNANIMOUS A I ; UNANIMOUS AI LLC ; UNANIMOUS AI INC ; UNANIMOUS AL LLC ; SERVICES PETROLIERS SCHLUMBERGER ; SCHLUMBERGER CANADA LTD ; PRAD RESEARCH AND DEVELOPMENT LTD ; SCHLUMBERGER HOLDINGS LTD

Inventor(s): (std): ROSENBERG LOUIS B ; PESCE TELLI NICCOLO ; BALTAXE DAVID ; REYES SANDRA ; JARROT ARNAUD ; HUTIN REMI

Agent(s): GRIFFITH HACK; RUEGER BARTHELT AND ABEL; FITCH EVEN TABIN AND FLANNERY LLP; SULLIVAN CHADWICK A ET AL; LEBENS THOMAS F ET AL

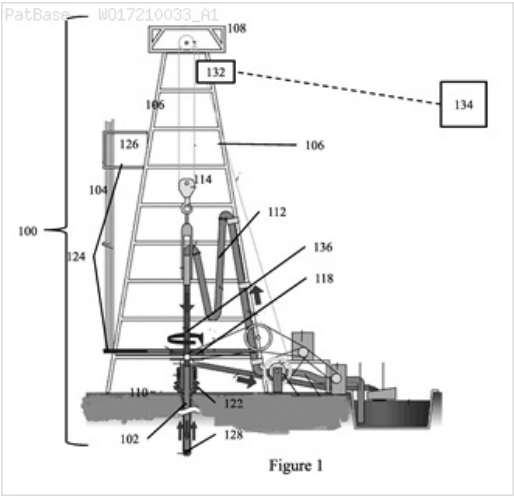
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Title: IMAGE BASED SYSTEM FOR DRILLING OPERATIONS

Abstract: A drilling rig site may include at least one tubular configured to be inserted into a wellbore at the drilling rig, at least one imaging device configured to detect a location of an end of the at least one tubular or a feature of the at least one tubular, and a processor receiving an input from the at least one imaging device and configured to calculate a distance between the end of the at least one tubular and another element, a diameter of the at least one tubular, or movement of the at least one tubular. A method for completing a drilling operation at a rig site, may include capturing an image of a tubular at a rig site, the tubular configured to be inserted into a wellbore at the rig site, detecting a location of an end of the tubular or a feature of the tubular from the image, and determining a diameter of the tubular, a distance between the detected end of the tubular and another element, or movement of the tubular.

Classifications:

International (IPC 8-9): E21B44/00 E21B7/20 G01C11/00
G01C3/02 (Advanced/Invention)
CPC: E21B7/20 G01B11/02 E21B17/006 E21B47/04 G01B11/2433



Family:

Publication number	Publication date	Application number	Application date
WO17132297 A2	20170803	WO2017US15003	20170126
WO17132297 A3	20170831	WO2017US15003	20170126
WO17210033 A1	20171207	WO2017US34098	20170524

Priority:

US20160287097P 20160126 US20160341522P 20160525

Probable Assignee: SERVICES PETROLIERS SCHLUMBERGER

Assignee(s): (std): SCHLUMBERGER TECH CORP ; SCHLUMBERGER TECHNOLOGY BV ; SCHLUMBERGER TECHNOLOGY CORP ; SERVICES PETROLIERS SCHLUMBERGER ; SCHLUMBERGER CA LTD

Assignee(s): SCHLUMBERGER CANADA LTD

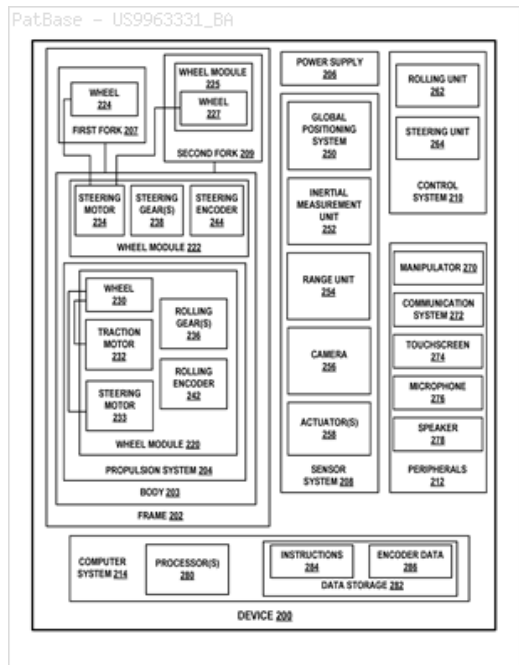
Inventor(s): (std): CHAMBON SYLVAIN ; JOHNSEN JOERGEN KRINGEN ; MEEHAN RICHARD JOHN ; ROWATT JOHN DAVID ; ZHENG SHUNFENG ; PARMESHWAR VISHWANATHAN ; ORBAN JACQUES

Agent(s): GREENE RACHEL 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 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

Abstract: The present disclosure provides an example device including a frame. The frame includes a body, a first fork extending from the body, and a second fork extending from the body. The device also includes a first wheel coupled to the first fork of the frame, a second wheel coupled to the second fork of the frame, and a third wheel coupled to the body of the frame. The device also includes at least one steering motor to rotate the first wheel about a first steering axis and the second wheel about a second steering axis. The device also includes a second steering motor to rotate the third wheel about a third steering axis, and a traction motor to rotate the third wheel about a rolling axis. The device also includes a controller configured to operate the at least one steering motor, the second steering motor, and the traction motor to cause the device to navigate within an environment.

International (IPC 8-9): B62D5/04 B66F9/06 B66F9/075 G05D1/00
G05D1/02 (Advanced/Invention)



Publication number	Publication date	Application number	Application date
US9963331 BA	20180508	US20150849648	20150910

US20150849648 20150910

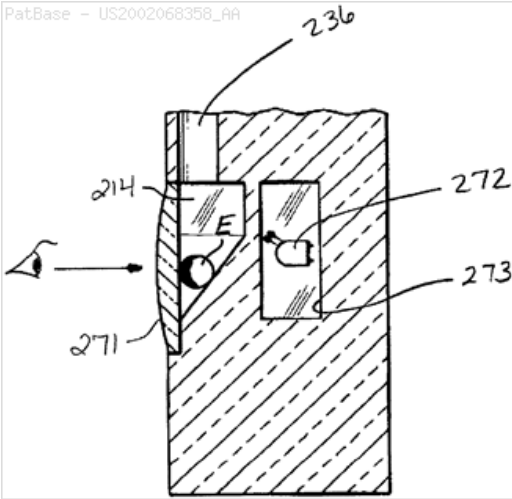
Probable Assignee:	X DEV LLC
Assignee(s): (std):	X DEV LLC
Assignee(s):	X DEVELOPMENT LLC
Inventor(s): (std):	HOLMBERG ROBERT ANDRE
Agent(s):	MCDONNELL BOEHNEN HULBERT AND BERGHOFF LLP

Title: IN VITRO EMBRYO CULTURE DEVICE

Abstract: An embryo support assembly, embryo support system, a method for maintaining the viability of a growing embryo, and a method for shipping a metabolically active embryo are provided.

Classifications:

International (ipc 8-9): A01K45/00 A01K67/00
A61B17/43 (Advanced/Invention);
A01K45/00 A01K67/00 (Core/Invention)
International (ipc 1-7): A61B17/43 C12M1/00 C12M3/00 C12N
CPC: C12M45/22 C12M21/06 C12M41/14 C12M41/26 C12M41/34
C12M41/36 C12M41/40 C12M41/46 A01K67/00 A01K45/007
European: A01K45/00C A01K67/00
US: 435/289.1 435/289.100P 435/290.4 600/33 600/34 600/35



Family:

Publication number	Publication date	Application number	Application date
AU200112246 A1	20010612	AU20010012246	20001020
AU200112246 A5	20010612	AU20010012246D	20001020
AU2002231184 AA	20020429	AU20020231184	20011019
US2002068358 AA	20020606	US20010827301	20010405
US6673008 BA	20040106	US19990450963	19991130
WO0140437 A2	20010607	WO2000US29180	20001020
WO0140437 A3	20020510	WO2000US29180	20001020
WO0233047 A2	20020425	WO2001US49662	20011019
WO0233047 A3	20021010	WO2001US49662	20011019

Priority:

US19980067715 19980428US19990450963 19991130US20000242238P 20001020

WO2000US29180 20001020US20010098273 20010405US20010827301 20010405

WO2001US49662 20011019

Probable Assignee: ORIGIO INC

Assignee(s): (std): CAMPBELL MICHAEL J ; FADEM K C ; NEXGENICS BIOSCIENCE CORP ; THOMPSON RONALD J

Assignee(s): ORIGIO INC ; FADEM KC ; INCEPT BIOSYSTEMS INC ; FADEM K

Inventor(s): (std): CAMPBELL MICHAEL J ; FADEM K C ; THOMPSON RONALD J

Inventor(s): RONALD J THOMPSON ; MICHAEL J CAMPBELL ; K C FADEM ; FADEM K ; FADEM KC

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

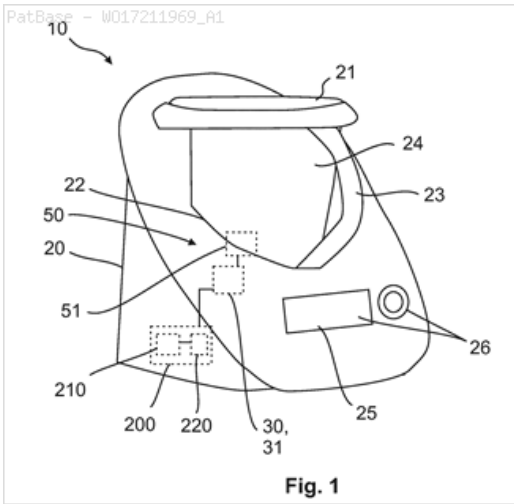
Title: METHOD FOR OPERATING A FOOD PROCESSOR

Abstract: The invention relates to a method (100) for operating a food processor (10), in which, in a preparation mode, at least one processor device (50) of said food processor (10) is actuated so as to prepare food at least partly automatically, wherein a monitoring device (200) determines detection values (106) by detecting (105), at said food processor (10), at least two detection variables (102) specific to a state of preparation.

Classifications:

International (IPC 8-9): A47J27/00 A47J43/046 A47J43/07 A47J44/00 G05B19/04 (Advanced/Invention)

CPC: A47J43/0716 A47J27/004 A47J43/046 A47J2043/0733



Family:

Publication number	Publication date	Application number	Application date
DE102016110710 A1	20171214	DE201610110710	20160610
TW201804943 A	20180216	TW20170118329	20170602
WO17211969 A1	20171214	WO2017EP63990	20170608

Priority:

DE201610110710 20160610

Probable Assignee: VORWERK CO INTERHOLDING

Assignee(s): (std): VORWERK CO INTERHOLDING

Assignee(s): VORWERK AND CO INTERHOLDING GMBH

Inventor(s): (std): KOENNINGS MAXIMILIAN ; KONNINGS MAXIMILIAN ; RESENDE MARIA ; YAN WENJIE

Agent(s): BALS RUEDIGER 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 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

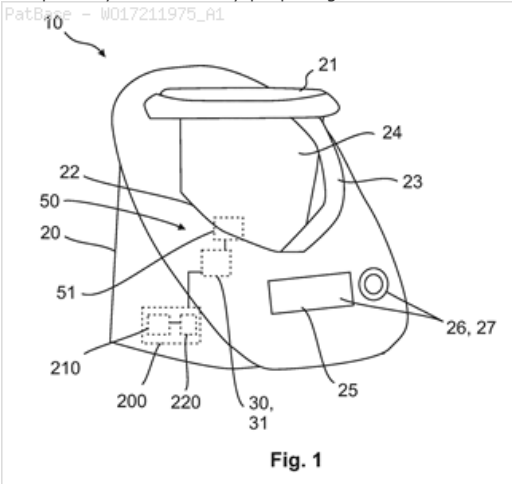
Title: METHOD FOR OPERATING A FOOD PROCESSOR

Abstract: The invention relates to a method (100) for operating a food processor (10), wherein in a preparation mode at least one processing device (50) of the food processor (10) is controlled for at least partially automatically preparing at least one food.

Classifications:

International (IPC 8-9): A47J27/00 A47J27/62 A47J43/07 A47J44/00 (Advanced/Invention)

CPC: A47J27/004 A47J27/62 A47J43/0716



Family:

Publication number	Publication date	Application number	Application date
DE102016110715 A1	20171214	DE201610110715	20160610
TW201801661 A	20180116	TW20170118331	20170602
WO17211975 A1	20171214	WO2017EP64000	20170608

Priority:

DE201610110715 20160610

Probable Assignee: VORWERK CO INTERHOLDING

Assignee(s): (std): VORWERK AND CO INTERHOLDING GMBH ; VORWERK CO INTERHOLDING

Inventor(s): (std): RESENDE MARIA ; YAN WENJIE

Agent(s): BALS RUEDIGER 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 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: METHOD AND APPARATUS FOR MANUFACTURING AND CONSTRUCTING A DENTAL ALIGNER

Abstract: A method produces a physical dental aligner. The method includes producing a digital dental aligner model suitable for CNC based manufacturing based on the digital dental arch model and segmenting the digital dental aligner model into a plurality of manufacturable digital components. Aligner components are produced using Computer Numerical Control (CNC) based manufacturing in accordance with the digital aligner components and subsequently assembled to form the physical dental aligner.

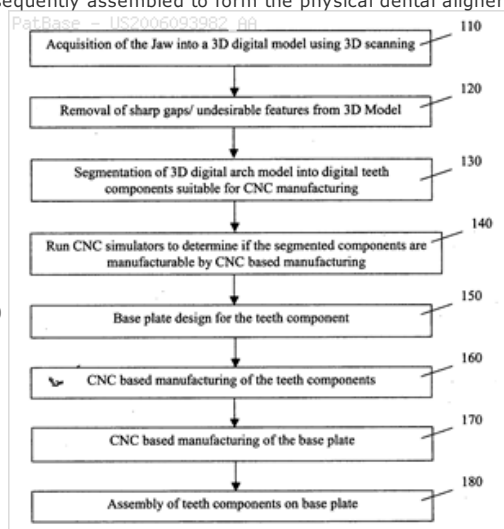
Classifications:

International (IPC 8-9): A47F7/00 A61C11/00 A61C13/20 A61C13/34 A61C19/00 A61C3/00 A61C3/04 A61C5/00 A61C7/00 A61C7/04 A61C7/08 A61C8/00 A61C9/00 G06F15/00 G06F15/16 G06F17/30 G06F17/50 G06F19/00 G06F3/048 G06F3/0484 G06K9/00 G06T15/00 G07F11/16 G07F11/72 H04B1/40 H04M3/56 H04N7/14 H04N7/15 (Advanced/Invention); A61C13/00 A61C7/00 A61C9/00 B33Y80/00 (Advanced/Non-invention); A47F7/00 A61C11/00 A61C13/20 A61C19/00 A61C3/00 A61C5/00 A61C7/00 A61C9/00 G06F15/00 G06F15/16 G06F17/30 G06F19/00 G06F3/048 G06K9/00 G06T15/00 G07F11/00 G07F11/16 H04B1/40 H04M3/56 H04N7/14 H04N7/15 (Core/Invention)

CPC: A61C13/14 A61C19/02 A61C2202/00 G06Q10/08 A61C9/0046 A61C9/008 A61C9/00 A61C9/05 A61C9/0053 A61C13/0018 A61C13/34 A61C9/004 A61C2007/004 A61C7/04 A61C7/146 A61C8/0089 B33Y50/00 A61C13/16 H04N7/147 H04N7/152 H04N21/4786 H04N21/4788 G06F17/50 A61C5/77 A61C3/00 B33Y80/00 A61C7/00 A61C9/0093 G06F3/0484 A61C7/08 A61C7/002 A61C19/063 A61C19/04 A61C13/04 A61C9/002 A61C13/0027 A61C13/0004 G06F19/00

European: A61C13/00C1 A61C13/00F A61C13/04 A61C13/14 A61C13/16 A61C19/02 A61C19/04 A61C19/05 A61C7/00 A61C7/04 A61C7/08 A61C7/14P A61C8/00T A61C9/00 A61C9/00B G06Q10/08 H04N21/4786 H04N21/4788 H04N7/14A3 H04N7/15M K61C13/00C1 K61C13/00C3L K61C19/06B K61C202/00 K61C7/00C K61C9/00B K61C9/00E

US: 206/63.5 211/70.6 221/26 221/270 221/271 221/274 221/276 221/30 348/E7.081 348/E7.084 348/E70.81S 348/E70.84S 433/173 433/173S 433/18 433/18P 433/213 433/213P 433/215 433/24 433/24P 433/24S 433/34 433/49 433/54 433/6 433/6P 433/74 433/74P 433/74S 700/95 703/1 707/200 707/999.2 707/999.200S 707/E17.009 707/E17.009S 715/758 715/758P 715/771

**Family:**

Publication number	Publication date	Application number	Application date
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US20150641926	20150309	US20160369145	20161205	US20170638141	20170629

Probable Assignee: ORTHOCLEAR HOLDINGS INC

Assignee(s): (std): LIANG WENJIA ; WEN HUAFENG ; ORTHOCLEAR HOLDINGS INC ; LIU FRANK ZHENHUAN ; LIU GANG ; LIU FRANK Z ; SAWTELLE MARI ; WOLF KEITH R ; LIU RANK ; RIZVI SYED WASI MOHSIN RAZA ; MOHAMMAD KASHIF ; WAQAS WAHAB ; ALIGN TECH INC ; ALIGN TECHNOLOGY INC ; BASHIR YASSER ; CHISHTI MUHAMMAD ZIAULLAH KHAN ; SAMSUNG ELECTRONICS CO LTD ; ZHENHUAN LIU FRANK

Assignee(s): KOOKIE INC ; ALIGN TECHNOLOGY INC A DELAWARE CORP ; LIU FRANK ; SAMSUNG ELECTRONICS CO

Inventor(s): (std): HUAFENG WEN ; LIANG WENJIA ; LIU FRANK ; LIU FRANK Z ; LIU FRANK ZHENHUAN ; LIU GANG ; LIU RANK ; MOHAMMAD KASHIF ; RANK LIU ; BASHIR YASSER ; CHISHTI MUHAMMAD Z K ; CHISHTI MUHAMMAD ZIAULLAH KHAN ; SAWTELLE MARI ; WAQAS WAHAB ; WEN HUAFENG ; WOLF KEITH R ; YUN DONG SUNG ; ZHENHUAN LIU FRANK ; RIZVI SYED W M ; RIZVI SYED WASI MOHSIN RAZA

Inventor(s): RIZVI SYED WM ; CHISHTI MUHAMMAD ZK ; CHISHTI MUHAMMAD ; RIZVI SYED

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; BLANEY MCMURTRY LLP; BROOKES BATCHELLOR LLP; MILLER JOHN OWEN; LANG JOHANNES; GRUENECKER PATENT U RECHTSANWAELTE PARTG MBB; MORRISON AND FOERSTER LLP; FRANK Z LIU; HC PARK AND ASSOCIATES PLC; PAUL HASTINGS JANOFISKY AND WALKER LLP; ALIGN TECHNOLOGY C/O WAGNER BLECHER LLP; ALIGN TECHNOLOGY C O WAGNER BLECHER LLP; TOWNSEND AND TOWNSEND AND CREW LLP; KILPATRICK TOWNSEND AND STOCKTON LLP; WILSON SONSINI GOODRICH AND ROSATI

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

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PL PT RO RS RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA
ZM ZW

Title: DEVICE TO DETECT, ASSESS AND TREAT SNORING, SLEEP APNEAS AND HYPOPNEAS

Abstract: The present Invention (the "Invention") relates to an apparatus to detect, assess and end occurrences of snoring, sleep apnea events and hypopnea episodes, in a manner that will decrease or eliminate hypoxia, hypercapnia and the disturbance of cardiac and pulmonary hemodynamics, and give users of the apparatus a report of their critical sleep data each morning

Classifications:

International (IPC 8-9): A61B5/00 A61B5/0205 A61B5/08 A61B5/11

A61B5/113 A61B5/1455 A61B5/1495 A61B7/00 A61B7/04

A61F5/56 (Advanced/Invention)

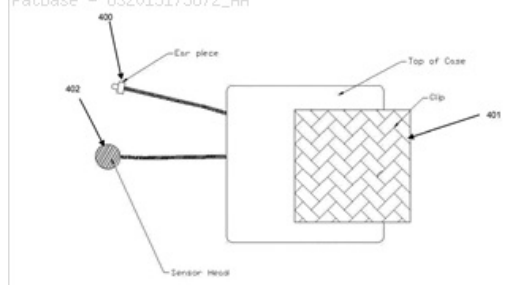
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A61B5/1495 A61B5/486 A61B2560/0223

US: 600/301

PatBase - US2015173672_AA



Family:

Publication number	Publication date	Application number	Application date
CA3004536 AA	20180507	CA20153004536	20151107
CN107205693 A	20170926	CN201580072604	20151107
EP3215010 A1	20170913	EP20150856295	20151107
EP3215010 A4	20180620	EP20150856295	20151107
US2015173672 AA	20150625	US20140535561	20141107
WO16073965 A1	20160512	WO2015US59632	20151107

Priority:

US20130901668P 20131108 US20140535561 20141107 WO2015US59632 20151107

Probable Assignee: WHISPERSOM CORP

Assignee(s): (std): GOLDSTEIN DAVID BRIAN ; WHISPERSOME CORP

Assignee(s): GOLDSTEIN DAVID ; WHISPERSOM CORP

Inventor(s): (std): GOLDSTEIN DAVID ; GOLDSTEIN DAVID BRIAN

Agent(s): DLA PIPER CANADA LLP; LEMAN CONSULTING SA; KLICPERA MICHAEL

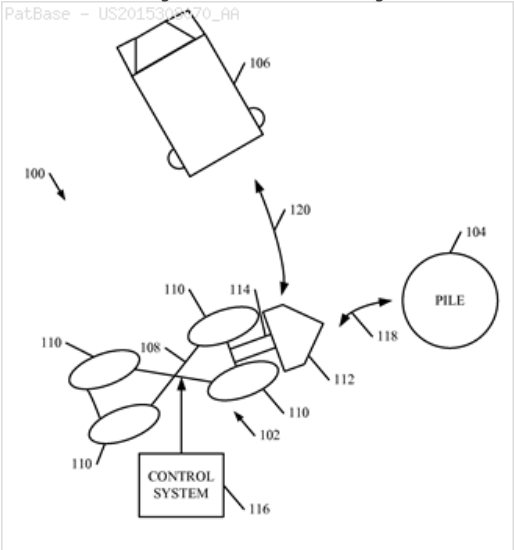
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Title: SEMI-AUTOMATIC MATERIAL LOADING

Abstract: A position of a loading device on a conveying vehicle, relative to a receiving area, is calculated. The loading device is automatically positioned based on the relative position. The relative position of the loading device relative to the receiving area is output. An operator input is received and material is automatically unloaded from the loading device to the receiving area.

Classifications:

International (IPC 8-9): B65G67/04 E02F3/34 E02F3/43 E02F9/24 E02F9/26 G05D1/02 (Advanced/Invention); A01D41/127 G01S19/14 G01S19/51 (Advanced/Non-invention)
CPC: E02F3/434 A01D41/127 E02F9/24 E02F9/262 E02F9/265 G01S19/14 G01S19/51
US: 701/50



Family:

Publication number	Publication date	Application number	Application date
BR102015009387 A2	20160105	BR20151009387	20150427
US2015308070 AA	20151029	US20140263602	20140428
US9523180 BB	20161220	US20140263602	20140428

Priority:

US20140263602 20140428

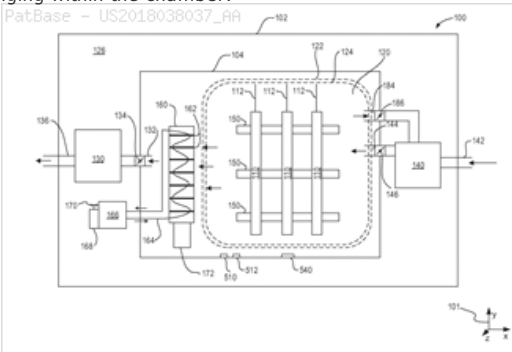
Probable Assignee: DEERE AND CO
Assignee(s): (std): DEERE AND CO
Inventor(s): (std): DEINES STEVEN D
Inventor(s): STEVEN D DEINES
Agent(s): KELLY HOLT AND CHRISTENSON PLLC; JOSEPH R

Title: SYSTEMS AND METHODS FOR WASHING AND DRYING USING AN ALTERED PRESSURE ENVIRONMENT

Abstract: Systems and methods are provided for treating clothing with a clothing treatment device under a pressure environment altered from an ambient pressure. In one example, the clothing treatment device may comprise a chamber which may be evacuated to a low internal air pressure by a vacuum pump and/or a cold plate, wherein fabric articles placed inside the chamber may be washed and dried, and wherein the drying occurs under low pressure conditions within the chamber via one or more heat sources. In at least one example, the fabric articles may be hanging within the chamber.

Classifications:

International (IPC 8-9): D06F25/00 D06F33/02 D06F39/00
D06F58/20 (Advanced/Invention)
CPC: D06F39/002 D06F33/02



Family:

Publication number	Publication date	Application number	Application date
US2018038037 AA	20180208	US20170669757	20170804
WO18031492 A1	20180215	WO2017US45794	20170807

Priority:

US20160372265P 20160808 US20170669757 20170804

Probable Assignee: HUI LAP SHUN

Assignee(s): (std): HUI LAP SHUN

Inventor(s): (std): HUI LAP SHUN

Agent(s): MCCOY ANNA B

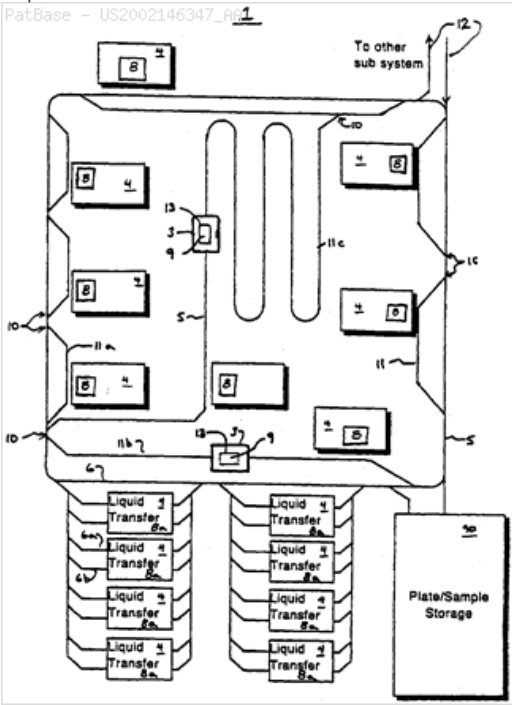
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Title: SYSTEM AND METHOD FOR SAMPLE POSITIONING IN A ROBOTIC SYSTEM

Abstract: A system and method for positioning a sample, or cargo, with respect to a device in a robotic system is provided. The system includes a macro positioning system for "gross" movement of the sample between stations and a micro positioning system for precisely locating the sample in a predetermined location at a station with respect to a device that will interact with the sample. The macro positioning system provides a positioning mechanism for the general movement of a sample along a pathway between various destinations or stations wherein the sample is "grossly" positioned with respect to the station. Once at the station, the micro positioning subsystem disposed between a sample carrier and the station provides a positioning mechanism for "precisely" positioning the sample in a predetermined location at the station with respect to a device that will interact with, or perform some function on, the sample. The system and method provide for multiple sample carrying robots having autonomous navigation thereby providing flexibility and stacker-like queuing for near 100 percent device utilization.

Classifications:

International (ipc 8-9): G01N35/00 G01N35/04 (Advanced/Invention);
G01N35/04 (Advanced/Non-invention);
G01N35/00 (Core/Invention);
G01N35/04 (Core/Non-invention)
International (ipc 1-7): G01N35/00 G01N35/02 G01N35/04
CPC: Y10T436/11 Y10T436/113332 Y10T436/114165 Y10T436/114998
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European: G01N35/00R S01N35/00G3C1V S01N35/04D7 S01N35/04D9
S01N35/04D9C
US: 414/222.02 422/63 422/65 422/67 436/164 436/43 436/47 436/48
436/49 436/50 701/200 701/205 701/24 701/25 701/26 701/300 701/301
701/400



Family:

Publication number	Publication date	Application number	Application date
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■ AU200076228 A5	20010510	AU20000076228	20000929
■ US2002146347 AA	20021010	US20020153327	20020522
■ US6429016 BA	20020806	US19990411748	19991001
■ WO0125796 A1	20010412	WO2000US26829	20000929
■ WO0125796 C1	20010913	WO2000US26829	20000929

Priority:

US19990411748 19991001 WO2000US26829 20000929 US20020153327 20020522

Probable Assignee: IBIS BIOSCIENCES INC

Assignee(s): (std): ISIS PHARMACEUTICALS INC ; MCNEIL JOHN

Assignee(s): IBIS BIOSCIENCES INC

Inventor(s): (std): MCNEIL JOHN

Inventor(s): JOHN MCNEIL

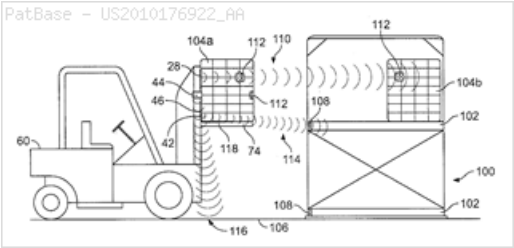
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Title: MOBILE RADIO FREQUENCY IDENTIFICATION (RFID) READER SYSTEM

Abstract: A mobile radio frequency identification (RFID) reader system is provided. The RFID reader system includes an RFID reader. The RFID reader system further includes a primary antenna for transmitting RFID signals to acquire RFID information from RFID item tags and a secondary antenna for transmitting RFID signals to acquire RFID information from one of RFID shelf tags and RFID floor tags.

Classifications:

International (IPC 8-9): H04Q5/22 (Advanced/Invention);
H04Q5/00 (Core/Invention)
CPC: H04Q2209/47 H04Q2209/75 H04Q9/00 G06K7/10356
European: G06K7/10A8G H04Q9/00
US: 340/10.1 340/10.100P



Family:

Publication number	Publication date	Application number	Application date
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Priority:

US20090352258 20090112

Probable Assignee: MICRONETICS INC

Assignee(s): (std): LANNON MATTHEW ; SCHILLING ROBERT ; SCHWAB PAUL JOHN

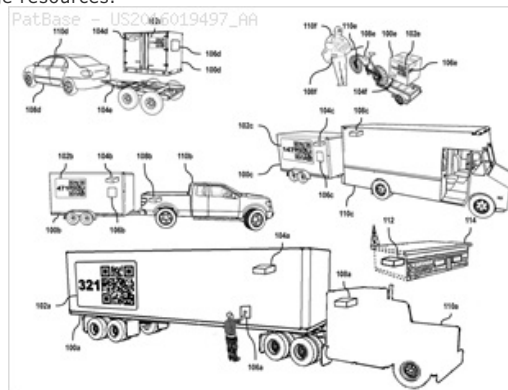
Assignee(s): MICRONETICS INC ; COBHAM DEFENSE ELECTRONICS SYSTEMS CORP

Inventor(s): (std): LANNON MATTHEW ; SCHILLING ROBERT ; SCHWAB PAUL JOHN

Agent(s): VERN MAINE AND ASSOCIATES

Abstract: Some embodiments include a transportation system implementing a network for transporting, distributing, and/or storing one or more physical items in one or more cargo containers (herein may be referred to as the “transportation network” for short). The cargo containers and relay terminals may be identified via node addresses in a network address space. The no addresses enables the transportation system to track, route, and monitor the physical items as they propagate through the transportation network. The transportation network can mimic routing protocols of telecommunication systems can facilitate different private transportation, storage and distribution companies and fleets. The transportation network can enable dynamic routing to fulfill logistic requests without wasting transportation and storage resources.

International (IPC 8-9): G01C21/00 G01C21/34 G01S19/42 G01S5/02
G06Q10/08 G06Q30/00 G06Q50/30 H04L29/08 H04W4/02 H04W4/04
H04W64/00 (Advanced/Invention);
H04W88/04 (Advanced/Non-invention)
CPC: G06Q10/0833 H04L67/104 H04W4/027 H04W64/006 H04W4/046
H04L67/12 G01C21/34 G01S19/42 G01S5/0294 H04W88/04 G06Q10/08
G06Q50/30
US: 701/519 705/333



Publication number	Publication date	Application number	Application date
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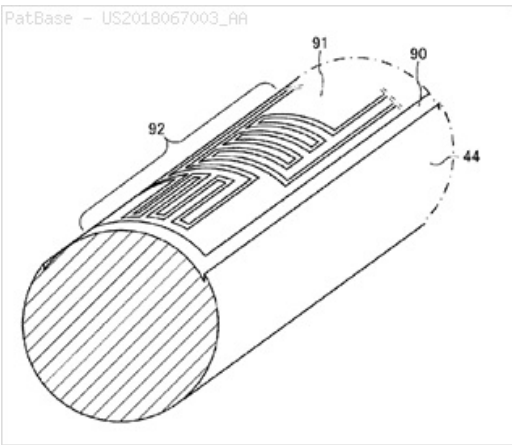
Agent(s): PERKINS COIE LLP; CHENG SHIH YO SHAWN ET AL

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Title: CONDUCTION-PATH-EQUIPPED MEMBER, METHOD FOR PATTERNING CONDUCTION PATH, AND METHOD FOR MEASURING CHANGES IN MEMBER

Abstract: The present invention directly forms, on part of a member to be measured, a conduction path for measuring changes in said member. The present invention thus detects changes such as stress and displacement acting on a conduction-path-equipped member **30** intended for use in a structural member or the like. Consequently, circumstances generating stress in the member can be objectively monitored.

Classifications:
International (IPC 8-9): G01L1/22 G01L5/00 (Advanced/Invention)
CPC: G01L1/2287 G01L1/225 G01L1/22



Family:

Publication number	Publication date	Application number	Application date
■ CN107532953 A	20180102	CN201680019943	20160331
■ EP3279628 A1	20180207	EP20160773125	20160331
■ JP2016159245 A1	20180201	JP20170510194T	20160331
■ KR20170132757 A	20171204	KR20177027261	20160331
■ US2018067003 AA	20180308	US20160563309	20160331
■ WO16159245 A1	20161006	WO2016JP60681	20160331

Priority:

JP20150072342 20150331 JP20150211656 20151028 WO2016JP60681 20160331

Probable Assignee: NEJILAW INC

Assignee(s): (std): NEJILAW INC

Inventor(s): (std): MICHIWAKI HIROSHI

Agent(s): PULIERI GIANLUCA ANTONIO

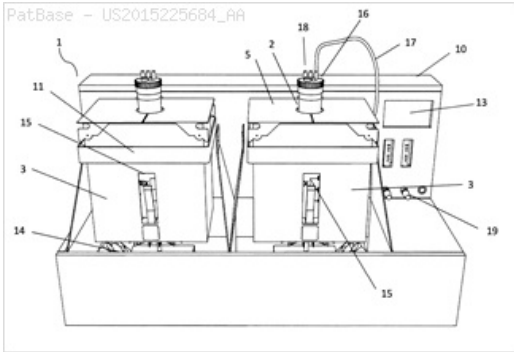
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Title: PHOTOBIOREACTOR

Abstract: A method for non-invasive growth measurement of organisms in an apparatus for growing and harvesting organisms or substances derived from such organisms. The organisms are comprised in an aqueous medium in a vessel, the method comprising the steps of: a) Providing means for measuring the opacity of the aqueous medium in order to estimate a growth rate of the organisms; b) The means for measuring the opacity are arranged in the apparatus such that they are located at predetermined locations relative to the vessel; c) The means for measuring the opacity are calibrated to account for refraction, absorbance and reflection caused by the vessel at the predetermined location. Finally the method also allows for measuring the opacity of the aqueous medium at the predetermined location.

Classifications:

International (IPC 8-9): B01F15/00 C12M1/00 C12M1/02 C12M1/26 C12M1/34 C12M1/36 C12M1/40 C12M3/00 C12M3/04 C12M3/06 C12Q1/02 (Advanced/Invention)
CPC: C12M21/14 C12M21/18 C12M23/22 C12M23/44 C12M23/48 C12M27/16 C12M31/02 C12M33/00 C12M41/06 C12M41/12 C12M41/18 C12M41/32 B01F11/0025 C12M1/00 B01F15/00 C12M1/02 C12M1/26 C12M1/34 C12M1/36 C12M1/40 C12M3/00 C12M3/04 C12M3/06 C12M41/14 C12M29/20 C12M29/22 C12M29/06 C12M23/38 C12Q1/02 C12M21/02 C12M27/10 C12M41/48
US: 435/29 435/292.1 435/303.3



Family:

Publication number	Publication date	Application number	Application date
EP2898054 A1	20150729	EP20130777227	20130918
GB201216661 A0	20121031	GB20120016661	20120918
GB201506603 A0	20150603	GB20150006603	20130918
GB2520911 A1	20150603	GB20150006603	20130918
US2015225684 AA	20150813	US20130425608	20130918
WO14044389 A1	20140327	WO2013EP02814	20130918

Priority:

GB20120016661 20120918 WO2013EP02814 20130918

Probable Assignee: SPICER CONSULTING LTD

Assignee(s): (std): SPICER CONSULTING LTD

Assignee(s): SPICER CONSULTING LIMITED

Inventor(s): (std): HUTTON DANIEL ; SACKETT JOHN ; SPICER ANDREW ; SPICER DENIS ; ZAREMBA MARK ; SACKET JOHN

Inventor(s): JOHN SACKETT ; MARK ZAREMBA ; ANDREW SPICER ; DANIEL HUTTON ; DENIS SPICER

Agent(s): NORRIS TIMOTHY SWEYN

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 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: INKJET RECORDING METHOD

Abstract: An inkjet recording method is provided that includes (a) a step of applying an undercoat liquid onto a recording medium, (b) a step of carrying out image formation by discharging a colored liquid onto the undercoat liquid, and (c) a step of curing the colored liquid, the colored liquid being a multiple color ink set comprising a plurality of ink compositions, and the colored liquid comprising an ink composition of at least one color selected from the group consisting of violet, blue, green, orange, and red.

Classifications:

International (IPC 8-9): B41J2/01 B41J2/21 B41M5/00 B41M5/50

B41M7/00 C09D11/00 C09D11/322 C09D11/40

G03G15/08 (Advanced/Invention);

B41M5/52 (Advanced/Non-invention);

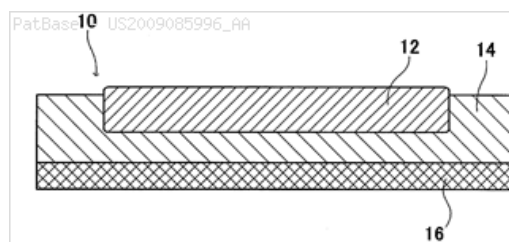
B41J2/01 B41J2/21 B41M5/00 B41M5/50 B41M7/00

C09D11/00 (Core/Invention)

CPC: B41M7/0081 B41M5/0011 B41M2205/12

European: B41M5/00D B41M7/00R L41M205/12

US: 347/100 347/100P 347/101 347/102 347/103



Family:

Publication number	Publication date	Application number	Application date
DE602008029057 D1	20140130	DE200860029057T	20080925
EP2042335 A2	20090401	EP20080016854	20080925
EP2042335 A3	20091125	EP20080016854	20080925
EP2042335 B1	20131204	EP20080016854	20080925
JP2009083267 A2	20090423	JP20070255513	20070928
JP4898618 B2	20120321	JP20070255513	20070928
US2009085996 AA	20090402	US20080236758	20080924
US7815303 BB	20101019	US20080236758	20080924

Priority:

JP20070255513 20070928 EP20080016854 20080925

Probable Assignee: FUJIFILM HOLDINGS CORP

Assignee(s): (std): FUJIFILM CORP ; FUJIFILM HOLDINGS CORP

Assignee(s): FUJIFILM TOKIO TOKYO CORP

Inventor(s): (std): KASAI KIYOSUKE ; KASAI SEISHI

Agent(s): HOFFMANN EITLE PATENT U RECHTSANWAELTE PARTMBB; HOFFMANN EITLE; NOGUCHI YASUHIRO; SUGHRUE MION PLLC

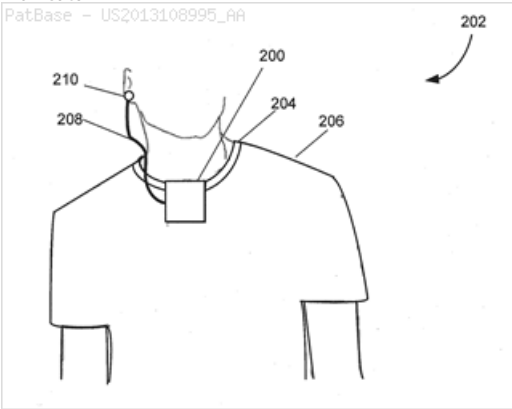
Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK TR

Title: SYSTEM AND METHOD FOR MONITORING AND INFLUENCING BODY POSITION

Abstract: Systems and methods are provided to monitor a user body position and/or influence a user to change and improve body position, without causing the user to wake up. A personal audio output communicator is adapted to be positioned in close proximity to an ear of the user. A motion detector is adapted to attach to the user for generating a motion signal. A stimulus provider is adapted to receive the motion signal from the motion detector and to compare a motion signal value representative of the motion signal to a preset motion value. In response to the comparison, the stimulus provider transmits a user-selected stimulus and/or voice command stimulus to the personal audio output communicator.

Classifications:

International (IPC 8-9): A61F5/56 G08B21/02 G08B23/00
G09B19/00 (Advanced/Invention)
CPC: G09B19/00 G09B23/28
US: 434/236



Family:

Publication number	Publication date	Application number	Application date
US2013108995 AA	20130502	US20110286037	20111031
WO13066826 A1	20130510	WO2012US62473	20121029
WO13066826 A8	20140327	WO2012US62473	20121029

Priority:

US20110286037 20111031

Probable Assignee: C AND D RESEARCH GROUP LLC

Assignee(s): (std): CRAIG MELANEY ; CRAIG RICHARD A ; DEPASQUA LOUIS ; CRAIG SCOTT D ; C AND D RES GROUP LLC

Assignee(s): C AND D RESEARCH GROUP LLC

Inventor(s): (std): CRAIG MELANEY ; CRAIG RICHARD A ; CRAIG SCOTT D ; DEPASQUA LOUIS

Agent(s): MURAFF JAMES P ET AL

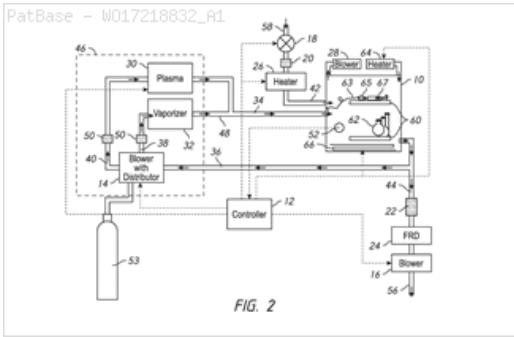
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Title: STERILIZATION, DISINFECTION, SANITIZATION, DECONTAMINATION, AND THERAPEUTIC DEVICES, SYSTEMS, AND METHODS

Abstract: A sterilization, disinfection, sanitization, or decontamination system having a chamber defining a region, and a generator for creating a free radical effluent with reactive oxygen, nitrogen, and other species and/or a vaporizer. A closed loop circulating system without a free-radical destroyer is provided for supplying the mixture of free radicals from the generator mixed with the hydrogen peroxide solution in the form of the effluent to the chamber. The system is used in sterilizing, disinfecting, sanitizing, or decontaminating items in the chamber or room and, with a wound chamber, in treating wounds on a body. The wound chamber may be designed to maintain separation from wounds being treated. Various embodiments can control moisture to reduce or avoid unwanted condensation. Some embodiments can be incorporated into an appliance having a closed space, such as a washing machine. Some embodiments may include a residual coating device that deposits a bactericidal coating on sterilized items.

Classifications:

International (IPC 8-9): A61L2/00 A61L2/14 A61L2/20 A61L2/24 A61L2/26 A61M35/00 H05H1/00 (Advanced/Invention)
CPC: A61L2/14 A61L2/007 A61L2/0094 A61L2/208 A61L2/24 A61L2/26 A61L2202/11 A61L2202/122 A61L2202/13 A61L2202/14 A61L2202/24 A61M35/00



Family:

Publication number	Publication date	Application number	Application date
WO17218832 A1	20171221	WO2017US37762	20170615

Priority:

US20160351872P 20160617 US20160351873P 20160617 US20160424319P 20161118

Probable Assignee: STERIFRE MEDICAL INC

Assignee(s): (std): STERIFRE MEDICAL INC

Inventor(s): (std): GOLKOWSKI ANYA ; GOLKOWSKI CZESLAW ; GOLKOWSKI MARK ; GREENE JON ; SHEA RICK ; STEFFIE TOM

Agent(s): DELANEY KAROLINE A

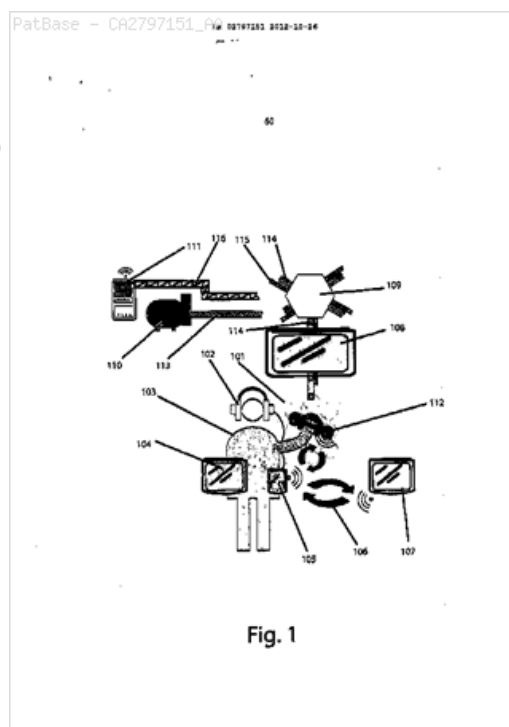
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Title: INTERACTIVE MODULAR AEROBIC TRAINING SYSTEM

Abstract: Source: CA2797151A [FR] L'invention est un système modulaire de conditionnement physique intégrant différents capteurs qui communiquent les informations de force, de vitesse et de temps, via un programme informatique à un smartphone, propriété de l'utilisateur. Toutes les informations des capteurs sont traduites en information utile à l'application interactive spécialement conçue et installée sur le smartphone de l'utilisateur. Cette application donne à l'utilisateur des fonctions diverses telles que des jeux, des routines préprogrammées, des logiciels de création musicale ou tout simplement des rapports d'entraînements. Cette invention a pour but de stimuler les utilisateurs dans leurs entraînements en les divertissant et leur offrant des modules d'entraînements efficaces, accessibles, sécuritaires, innovateurs et extrêmement divertissants. Elle est un ensemble de modules interactifs, complémentaires et numériquement assistés. Ces modules sont conçus afin de donner un grand nombre de routines et d'objectifs d'entraînement. Pour cette raison, l'invention est une série d'objet et de procédés destinés aux équipements multi-fonctionnels interactifs d'activité physique. **Machine translation:** Invention is a modular system fitness integrating various sensors that communicate information of strength, speed and time, via a computer program has a smartphone, property of the user. All sensor information is translated into useful information to the interactive application specially designed and installed on the user's smartphone. This application gives the user various functions such as games, preprogrammed routines, software or music establishment simply reports trainings. This invention is designed to stimulate users in their workouts in entertaining and providing safe, innovative and extremely entertaining accessible effective trainings modules for. It is a set of interactive modules, complementary and numerically assistance. These modules are designed to provide a large number of routines and training objectives. For this reason, the invention is a series of processes intended purpose and interactive multi-functional equipment for physical activity.

Classifications:

International (IPC 8-9): A63B22/00 A63B24/00 A63B26/00 A63B69/00 A63B69/20 A63B69/34 G01S1/70 H04N5/30 (Advanced/Invention)
CPC: A63B24/00 A63B69/34 A63B5/11 A63B43/00 A63B63/083 A63B69/20 A63B71/022 A63B71/0619 A63B71/145 A63B2069/0044 A63B2207/02 A63B2220/20 A63B2220/40 A63B2220/54 A63B2220/56 A63B2220/64 A63B2220/806 A63B2220/808 A63B2225/105 A63B2225/20 A63B2225/50 A63B2225/54 A63B2230/00 G01S1/70 A61H2003/043 A61H2003/046 A61H2201/501 A61H2201/5012 A61H2201/5061 A61H2201/5071 A61H2201/5084 A61H2201/5092 A61H2201/5097 A63B6/00 A63B21/00061 A63B21/00185 A63B21/025 A63B21/0421 A63B21/0552 A63B21/0557 A63B21/06 A63B21/0726 A63B23/16 A63B71/0697 A63B2024/0096 A63B2071/0081 A63B2071/0625 A63B2209/10 A63B2225/305 G08C2201/93 H04Q9/00 H04Q2209/40 H04Q2209/50 A63F13/65 G09B19/0038 H04M1/7253 A63B21/4007 A63B21/4009 A63B21/4015 A63B21/4019 A63B21/4025 A63B21/4035 A63B21/4047 A63B67/18 A63B49/00 A63B49/08

**Family:**

Publication number	Publication date	Application number	Application date
CA2797151 AA	20140426	CA20122797151	20121026

Priority:

CA20122797151 20121026

Probable Assignee:

LAVALLEE ERIC

Assignee(s): (std):

LAVALLEE ERIC

Inventor(s): (std):

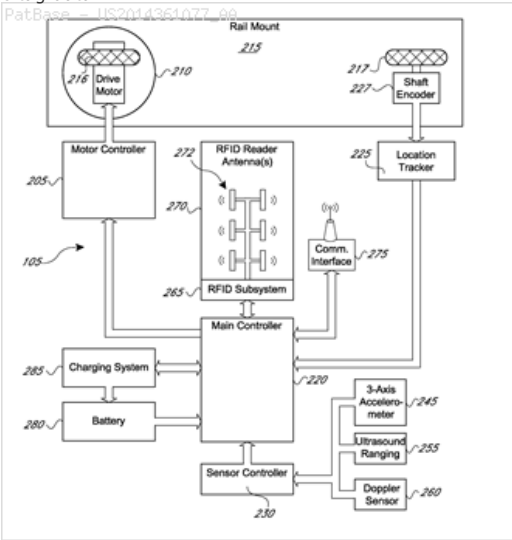
LAVALLEE ERIC

Title: RAIL-MOUNTED ROBOTIC INVENTORY SYSTEM

Abstract: Examples of a rail-mounted robotic inventory system are provided. The system includes a rail-mounted robot having an electronic tag reader configured to receive electronic tag data from electronic tags associated with inventory items. The system can include a navigation module configured to direct the rail-mounted robot along a rail through an inventory area, detect obstacles, and determine a position of the rail-mounted robot within the inventory area. The system can include an inventory identification module configured to receive the electronic tag data from the rail-mounted robot and identify and/or locate the inventory items in the inventory area based at least partly on the electronic tag data.

Classifications:

International (IPC 8-9): G05B11/01 G06F19/00 G06K7/10 G06Q10/08
G06Q30/00 G06Q50/28 G06Q90/00 (Advanced/Invention)
CPC: G06Q10/087 G06K7/10366 G06Q10/08 G06Q50/28
US: 1/1 235/385



Family:

Publication number	Publication date	Application number	Application date
US2014361077 AA	20141211	US20140466272	20140822
US9129251 BB	20150908	US20140466272	20140822
WO13138193 A2	20130919	WO2013US29958	20130308
WO13138193 A3	20150618	WO2013US29958	20130308

Priority:

US20120609808P 20120312 WO2013US29958 20130308 US20140466272 20140822

Probable Assignee: RFID RESOLUTION TEAM INC

Assignee(s): (std): BAR CODE SPECIALTIES INC DBA BCS SOLUTIONS ; RFID RESOLUTION TEAM INC

Inventor(s): (std): DAVIDSON WILLIAM EDWARD

Agent(s): COATS AND BENNETT PLLC; KIMMEL ANDREW I

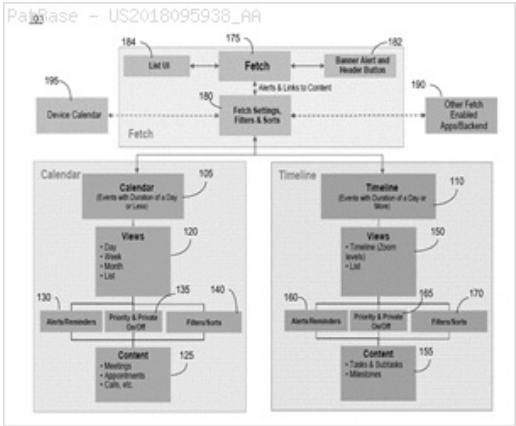
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Title: SYNCHRONIZED CALENDAR AND TIMELINE ADAPTIVE USER INTERFACE

Abstract: A system, computer-readable medium, and computer-implemented method, including receiving first temporal information relating to one or more calendar events, the calendar events each having a duration equal to a day or less; receiving second temporal information relating to one or more timeline events, the timeline events each having a duration equal to or greater than a day; generating a user interface including user interface representations of an integrated calendar and timeline visualization to, in response to user input, navigate and control aspects of both the calendar events and the timeline events; and presenting, in response to user input via the user interface, a synchronized navigation and control of both the calendar events and the timeline events.

Classifications:

International (IPC 8-9): G06F17/21 G06F17/22 G06F3/0482 G06F3/0485 G06F3/0488 (Advanced/Invention)
CPC: G06F3/0484 G06Q10/109 G06F3/0488



Family:

Publication number	Publication date	Application number	Application date
US2018095938 AA	20180405	US20160282381	20160930

Priority:

US20160282381 20160930

Probable Assignee:

SAP SE

Assignee(s): (std):

SAP SE

Inventor(s): (std):

MONTE CHARLES

Title: METHOD, SYSTEM, AND APPARATUS FOR OPTIMISING THE AUGMENTATION OF RADIO EMISSIONS

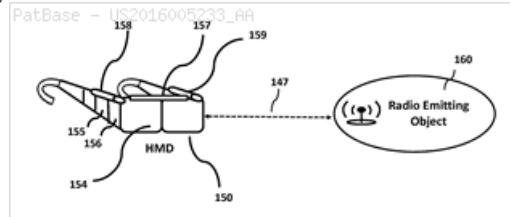
Abstract: In accordance with one example embodiment of the present invention, a plurality of antennas that are arranged according to a predetermined geometrical pattern receive radio emission signals from nearby radio emitting objects. Said radio emission signals are used, at least in part, to exhibit augmented reality indicia on a display, wherein the position of said augmented reality indicia on said display approximately indicates the direction of arrival of said radio emission signals and is organized or corrected according to predetermined criteria. One or more databases, either positioned on the cloud, or on the headset, or at an intermediate apparatus, may store the data, settings, and authorizations associated with said radio emitting object to permit and regulate the representation of said augmented reality indicia.

Classifications:

International (IPC 8-9): G02B27/01 G06F3/01 G06T19/00
G09G5/00 (Advanced/Invention)

CPC: G02B27/017 G09G5/00 G02B2027/0178 G09G2370/16
G09G2370/20 G09G3/003 G09G2370/022 G02B2027/014 G02B27/0172
G06F1/163 G06F1/1698 G06F3/0487 G09G5/003

US: 1/1 345/633



Family:

Publication number	Publication date	Application number	Application date
■ US2016005233 AA	20160107	US20150809221	20150726
■ US9092898 BA	20150728	US20140323983	20140703

Priority:

US20140323983 20140703 US20150809221 20150726

Probable Assignee: BOCHICCO BRIAN JOSEPH

Assignee(s): (std): BOCHICCO BRIAN JOSEPH ; FRACCAROLI FEDERICO

Inventor(s): (std): BOCHICCO BRIAN JOSEPH ; FRACCAROLI FEDERICO

Title: INTELLIGENT RFID TAG FOR MAGNETIC FIELD MAPPING

Abstract: System(s) and method(s) to increase the accuracy and efficiency of an RFID system is provided. A system includes an RFID component that receives a signal from an RFID reader, and an identifier component that interfaces with the RFID component and identifies the source of the signal. The system further includes a signal strength component that interfaces with the identifier component and measures the strength of the signal. The system can include an environment component that analyzes an operating environment.

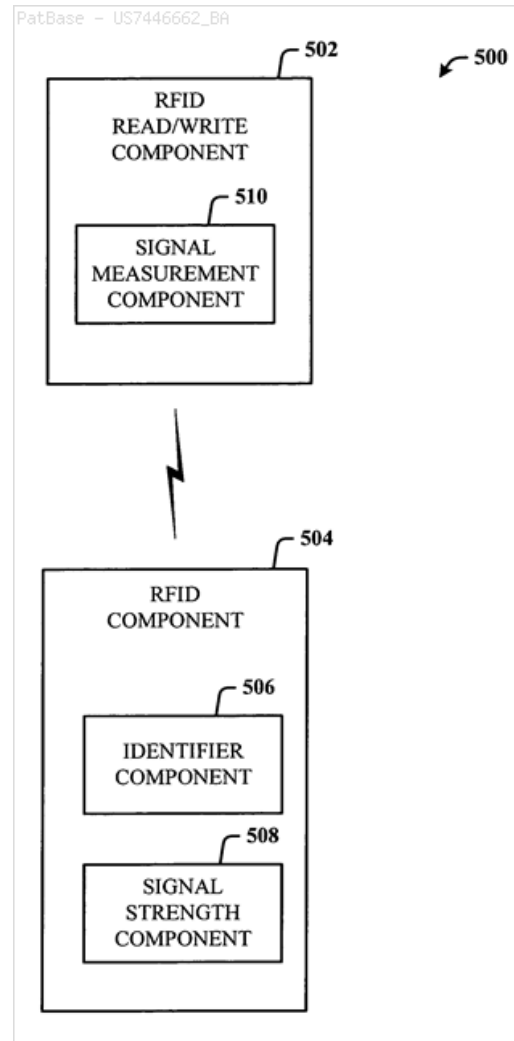
Classifications:

International (IPC 8-9): G08B13/14 (Advanced/Invention)

CPC: G06K7/0095 G06K19/0723

European: G06K19/07T G06K7/00M

US: 340/10.41 340/10.51 340/539.21 340/539.22 340/539.26 340/572.4



Family:

Publication number	Publication date	Application number	Application date
US7446662 BA	20081104	US20050235730	20050926
US7772978 BA	20100810	US20080263750	20081103

Priority:

US20050235730 20050926 US20080263750 20081103

Probable Assignee: ROCKWELL AUTOMATION TECHNOLOGIES INC

Assignee(s): (std): ROCKWELL AUTOMATION TECH INC

Assignee(s): ROCKWELL AUTOMATION TECHNOLOGIES INC

Inventor(s): (std): TINNELL KENNETH A ; SOMOGYI ANDREAS ; PIETRZYK ARTHUR P ; OWEN JR JOSEPH P ; MORSE RICHARD A ; HALL KENWOOD H ; CHAND SUJEET ; BAPAT VIVEK R

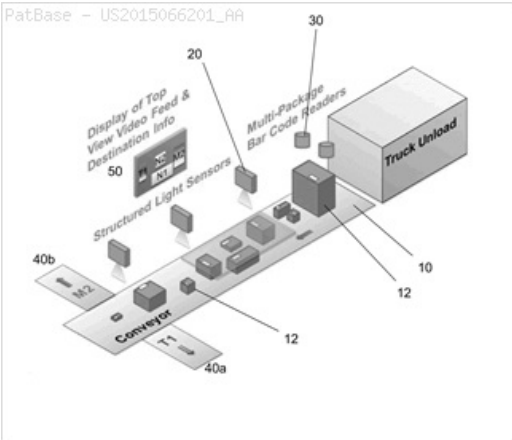
Agent(s): AMIN TUROCY AND CALVIN LLP; SPEROFF R SCOTT; R SCOTT; TUROCY AND WATSON LLP; WILLIAM R; JOHN M

Title: REAL-TIME 3-D IDENTIFICATION OF SEEMINGLY IDENTICAL OBJECTS

Abstract: A system for conducting real-time multi-dimension inspection of multiple objects, particularly for use with a conveyor belt carrying multiple boxes and packages, many of which are seemingly identical to each other. A plurality of real-time vision sensors and other sensors are positioned above the conveyor belt to observe and record data in real-time of packages and boxes as they move on the belt. The vision sensors include, but are not limited to, 3D sensors, cameras, structured light sensors, time of flight sensors, laser sensors, infrared sensors, and the like. Other sensors include, but are not limited to, multi-package bar code readers and other forms of specialized sensors.

Classifications:

International (IPC 8-9): B65G43/08 (Advanced/Invention)
CPC: G05B2219/23363 G05B2219/32121 G05B2219/37563 G05B19/4183 Y02P90/10
US: 700/226



Family:

Publication number	Publication date	Application number	Application date
US2015066201 AA	20150305	US20140320162	20140630

Priority:

US20130840568P 20130628 US20140320162 20140630

Probable Assignee: WANG DI

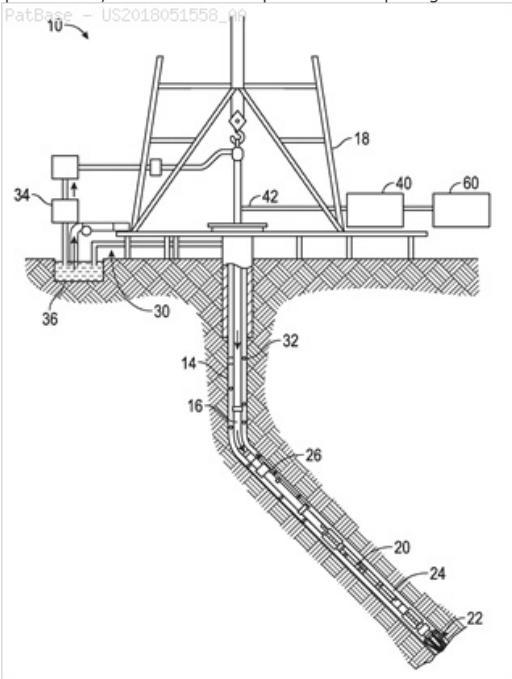
Assignee(s): (std): WANG DI ; WUBBENA WILLIAM HOBSON

Inventor(s): (std): WANG DI ; WUBBENA WILLIAM HOBSON

Title: METHOD FOR CONSTRUCTING A CONTINUOUS PVT PHASE ENVELOPE LOG

Abstract: A method for generating a phase envelope log to characterize a subsurface formation includes drilling the borehole with a drill string, circulating a drilling fluid in the borehole, drawing a fluid sample representing a fluid contained in the subsurface formation, estimating a PVT parameter indicative of an in-situ condition of the subsurface formation from the drawn fluid sample, determining at least two phase envelopes at different depths using the estimated PVT parameter, and creating a phase envelope log formed of a continuous series of phase envelopes using the phase envelopes. A related system includes a drill string, a fluid sampling system, and a processor that estimates a PVT parameter indicative of an in-situ condition of the subsurface formation, determines at least two phase envelopes at different depths using the PVT parameter, and creates the phase envelope log.

Classifications:
International (IPC 8-9): E21B47/00 E21B49/00
E21B49/08 (Advanced/Invention)
CPC: E21B49/005 E21B49/086 E21B49/081



Family:

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US2018051558 AA	20180222	US20160238424	20160816
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Priority:
US20160238424 20160816

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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