

Nicolas Vargas

Search history

Search 1: TA=(WORKER) and PD<20180529 (Results 98340)
Search 2: 1 and gps (Results 638)
Search 3: 2 and identif* (Results 341)
Search 4: 3 and cloth* (Results 54)
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Search 6: 5 and stor* (Results 43)

1) Family number: 68006004 (US2017368381A)

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Title: INDICATING HAZARDOUS EXPOSURE IN A SUPPLIED AIR RESPIRATOR SYSTEM

Abstract: An exposure-indicating supplied air respirator system comprises a head top, a clean air supply source and a portable personal communication hub. The head top comprises a visor that is sized to fit over at least a user's nose and mouth, a position sensor secured to the head top, and a head top communication module. The clean air supply source is connected to the head top that supplies clean air to the interior of the head top. The position sensor detects whether the visor is in a closed position or in an open position and the head top communication module communicates the visor position to the personal communication hub. If the personal communication hub receives a signal indicating the presence of a hazard, and if the visor is in an open position, an alert is generated.

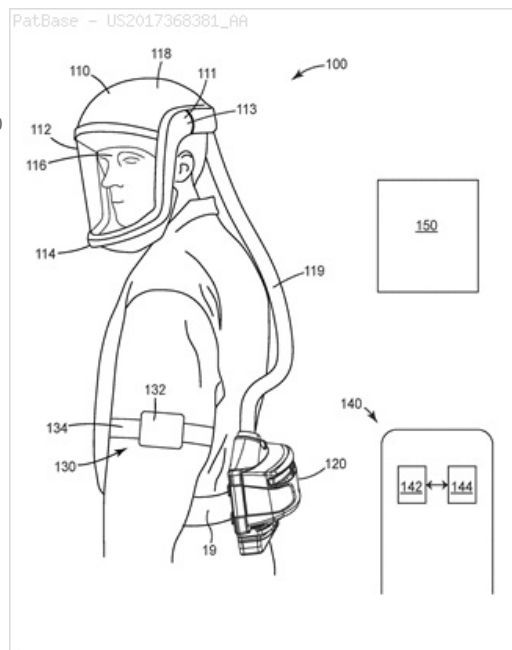
Classifications:

International (IPC 8-9): A41D13/11 A41D13/12 A42B3/04 A42B3/16 A42B3/20 A42B3/22 A42B3/30 A61F11/06 A61F11/14 A61F9/06 A62B A62B18/00 A62B18/04 A62B18/08 A62B27/00 A62B35/00 A62B7/00 A62B9/00 A62B99/00 A62C33/00 F16P1/06 G01H3/14 G02F1/133 G06F16/00 G06F16/2455 G06F17/30 G06N3/08 G06N7/00 G06N99/00 G06Q G06Q10/06 G08B21/02 G08B25/04 G08B31/00 H04Q9/00 (Advanced/Invention);
A42B3/16 A61F9/06 (Advanced/Non-invention);
A62B G06Q (Subclass/Invention)

International (IPC 1-7): A42B3/16 A61F11/06 A61F9/06 A62B18/00 A62B27/00 A62B9/00

CPC: G06N7/005 A62B7/00 A41D13/12 A61F11/14 A62B18/006 G06N20/00 G06F16/24568 A61F9/067 G02F1/13318 A62B18/04 G06N3/08 G06Q10/063 G06Q10/0635 A61F9/068 A61F11/06 A61F2011/145 G01H3/14 A61F9/065 F16P1/06 G08B21/02 G06Q10/06 G06Q10/0639 A62B9/006 A42B3/225 A42B3/0453 A42B3/046 A42B3/0466 A42B3/30 A62B18/045 A62B18/00 A62B27/00 A62B9/00 A61F9/06 A62B99/00 H04Q9/00 G06N7/00

US: 1/1 128/201.24 340/870.07 706/11



Family:

Publication number	Publication date	Application number	Application date
AU2017281368 AA	20190117	AU20170281368	20170622
AU2017281368 BB	20200130	AU20170281368	20170622
AU2017281368 BI	20200611	AU20170281368	20170622
AU2017281699 AA	20190117	AU20170281699	20170623
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AU2017281894 AA	20190117	AU20170281894	20170623
AU2017281902 AA	20190117	AU20170281902	20170623
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WO17223438 A1	20171228	WO2017US38983	20170623
WO17223451 A1	20171228	WO2017US39003	20170623
WO17223459 A1	20171228	WO2017US39015	20170623
WO17223469 A1	20171228	WO2017US39030	20170623
WO17223476 A1	20171228	WO2017US39041	20170623

Priority:

US20160190564	20160623	US20160408564P	20161014	US20160408634P	20161014
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US20180987971	20180524	US20190714885	20191216	AU20200201047	20200213

Probable Assignee: 3M CO

Assignee(s): (std): 3M CO ; 3M CO MINNESOTA MINING AND MFG COMPANY ; 3M INNOVATIVE PROPERTIES CO

Assignee(s): ANDERSON NATHAN J ; AWISZUS STEVEN T ; BILLINGSLEY BRITTON G ; BLACKFORD MATTHEW J ; FILLOUX MADELEINE E ; HU JIA ; JESME RONALD D ; JOHNSON MICAYLA A ; KANUKURTHY KIRAN S ; LOBNER ERIC C ; MARTINSON PAUL A ; MATTSOON KEITH G ; QUINTERO ROBERT J ; WURM MICHAEL G ; YLITALO CAROLINE M

Inventor(s): (std): ANDERSON NATHAN J ; AWISZUS STEVEN T ; BILLINGSLEY BRITTON G ; BILLINGSLI BRITTON DZH ; BLACKFORD MATTHEW J ; BRITTON G BILLINGSLEY ; BRITTON G LINGSLEY ; CAROLINE M YLITALO ; ERIC C LOBNER ; FILLOUX MADELEINE ; FILLOUX MADELEINE E ; HU JIA ; JESME RONALD D ; JIA HU ; JOHNSON MICAYLA A ; KANUKURTHY KIRAN S ; KEITH G MATTSOON ; KIRAN S KANUKURTHY ; LOBER ERIC C ; LOBNER ERIC C ; MADELEINE E FILLOUX ; MARTINSON PAUL A ; MATTHEW J BLACKFORD ; MATTSOON KEITH G ; MICAYLA A JOHNSON ; MICHAEL G WURM ; NATHAN J ANDERSON ; OIEN ROCHAT MILO G ; PAUL A MARTINSON ; QUINTERO ROBERT J ; ROBERT J QUINTERO ; RONALD D JESME ; SHARMA NEERAJ ; STEVEN T AWISZUS ; WURM MICHAEL G ; YLITALO CAROLIN M ; YLITALO CAROLINE M

Agent(s): FPA PATENT ATTORNEYS PTY LTD; SMART AND BIGGAR; ALESSANDRI AND COMPANIA LIMITADA; HERZOG FIESSER AND PARTNER PATENTANWAELTE PARTG MBB; REZA ADHIYANTO SAPARDAN; REINHOLD COHN AND PARTNERS; CHRISTOPHER D; KARLEN CHRISTOPHER D; KARLEN CHRISTOPHER D ET AL

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

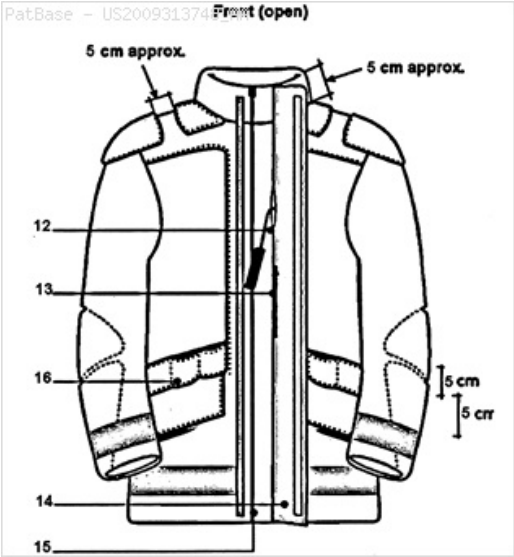
2) Family number: 44148020 (US2009313748A) © PatBase

Title: INTEGRATED SYSTEM FOR MULTICHANNEL MONITORING AND COMMUNICATION IN THE MANAGEMENT OF RESCUE TEAMS

Abstract: The present invention consists of an integrated monitoring and multichannel communication system for the management of rescue teams, especially those fighting forest fires, comprising a suit (1), worn by all operational suited units in the terrain; and electronic system (2); a telecommunication system (4) and an information system (3). The suit integrates fireproof, waterproof, heatproof and impact resistant materials, which as a unit integrate, protect and ease access to the electronic system. The electronic system (2) collects biometric and location data from the operational suited units in the terrain, transmitting said data to a panel located in the back of the suit. The telecommunications system (4) sends the biometric, orientation and location data, in real-time through an Ultra High Frequency network, to a computer integrated into a support vehicle, which in its turn sends the data, via terrestrial or satellite communications, to a server. The information system (3) collects and manages the data transmitted from the support vehicle, allowing the rescue units to monitor the biometric, orientation and location data, to receive critical alerts and through maps to define deployment strategies for the operational suited units.

Classifications:

International (IPC 8-9): A41D1/00 A41D13/00 A41D3/04 A61B5/00 A62B17/00 G06F17/00 G06Q10/00 G08B1/08 G08B21/00 G08B23/00 (Advanced/Invention)
CPC: G08B25/016 A41D1/002 A62C99/009 G06F1/163 G06Q10/06 G08B21/0453 G08B25/009
European: G06F1/16P5 G06Q10/06 G08B21/04S2 G08B25/00S G08B25/01D K41D1/00B K62C99/00F
US: 2/102 2/102S 2/458 2/458P 2/81 2/81S 2/87 2/87S 2/93 2/93S 340/539.1 340/539.100S 340/539.12 340/539.13 340/540 340/540S 340/573.1 340/584 600/301 600/301S



Family:

Publication number	Publication date	Application number	Application date
AU2008202868 AA	20100114	AU20080202868	20080630
EP2138965 A1	20091230	EP20080398008	20080623
US2009313748 AA	20091224	US20080164933	20080630
US8698634 BB	20140415	US20080164933	20080630

Priority:

EP20080398008 20080623 EP20080398008 20080723

Probable Assignee: INSTITUTO DE TELECOMUNICACOES

Assignee(s): (std): MIGUEL RIOS DESIGN ; YDREAMS INFORMATICA S A ; YDREAMS INFORMATICA SA ; SANTOS SERRAS BRUNO MIGUEL ; RUI SANTOS MARIO ; RODRIGUES REMEDIO JOSE MIGUEL ; MATOS PALMA DAVID JOSE ; HENRIQUES MATOS PEDRO MIGUEL ; GUEDES LOPES DA FONSECA TIAGO BENARD ; GONCALVES BORGES CARVALHO NUNO MIGUEL ; FERREIRA CLARO PEDRO MIGUEL ; DE ALMEIDA SOARES FRANCO IVAN ; DA SILVA LEAL RIOS MIGUEL NUNO ; BASTOS CARRICO VAZ DE ALMADA ANT O ; INST DE TELECOMUNICACOES

Assignee(s): INSTITUTO DE TELECOMUNICACOES ; BASTOS CARRICO VAZ DE ALMADA ANT AO

Inventor(s): (std): ALMADA ANT AO BASTOS VARRICO VAZ DE ; BASTOS CARRICO VAZ DE ALMADA A ; CARVALHO NUNO MIGUEL GONCALVES BORGES ; CLARO PEDRO MIGUEL FERREIRA ; DA SILVA LEAL RIOS MIGUEL NUNO ; DE ALMEIDA SOARES FRANCO IVAN ; FERREIRA CLARO PEDRO MIGUEL ; FONSECA TIAGO BENARD GUEDES LOPES DA ; FRANCO IVAN DE ALMEIDA SOARES ; GONCALVES BORGES CARVALHO NUNO ; GONCALVES BORGES CARVALHO NUNO MIGUEL ; GUEDES LOPES DA FONSECA TIAGO ; GUEDES LOPES DA FONSECA TIAGO BENARD ; HENRIQUES MATOS PEDRO MIGUEL ; MATOS PALMA DAVID JOSE ; MATOS PEDRO MIGUEL HENRIQUES ; BASTOS VARRICO VAZ DE ALMADA A ; PALMA DAVID JOSE MATOS ; REMEDIO JOSE MIGUEL RODRIGUES ; RIOS MIGUEL NUNO DA SILVA LEAL ; RODRIGUES REMEDIO JOSE MIGUEL ; RUI SANTOS MARIO ; SANTOS MARIO ; SANTOS MARIO RUI ; SANTOS SERRAS BRUNO MIGUEL ; SERRAS BRUNO MIGUEL SANTOS ; BASTOS CARRICO VAZ DE ALMADA ANT O

Inventor(s): TIAGO BENARD GUEDES LOPES DA FONSECA ; DE ALMADA ANT AO BASTOS VARRICO VAZ ; DA FONSECA TIAGO BENARD GUEDES LOPES ; PEDRO MIGUEL FERREIRA CLARO ; PEDRO MIGUEL HENRIQUES MATOS ; BASTOS VARRICO VAZ DE ALMADA ANT AO ; BRUNO MIGUEL SANTOS SERRAS ; MIGUEL NUNO DA SILVA LEAL RIOS ; NUNO MIGUEL GONCALVES BORGES CARVALHO ; IVAN DE ALMEIDA SOARES FRANCO ; JOSE MIGUEL RODRIGUES REMEDIO ; MARIO SANTOS ; DAVID JOSE MATOS PALMA ; BASTOS CARRICO VAZ DE ALMADA ANT AO ; ANT AO BASTOS VARRICO VAZ DE ALMADA

Agent(s): HALFORDS IP; ALVES MOREIRA PEDRO; SUGHRUE MION PLLC; KING AND SPALDING 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 MK MT NL NO PL PT RO RS SE SI SK TR

3) Family number: 34971024 (US2007185748A)

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Title: METHOD FOR TRACKING HAND-HARVESTED FIELD CROPS

Abstract: A method for tracking hand-harvested field crops includes outfitting each **worker** that is working in the field with a corresponding first wireless communication device; associating with each produce crate that is actively used in the field a corresponding second wireless communication device; generating localization data to define each field region contributing to a filling of a particular produce crate with produce; and generating tracking information for tracking a crop flow from a particular **worker** to the particular produce crate using information provided by the corresponding first wireless communication device, the corresponding second wireless communication device, and the localization data.

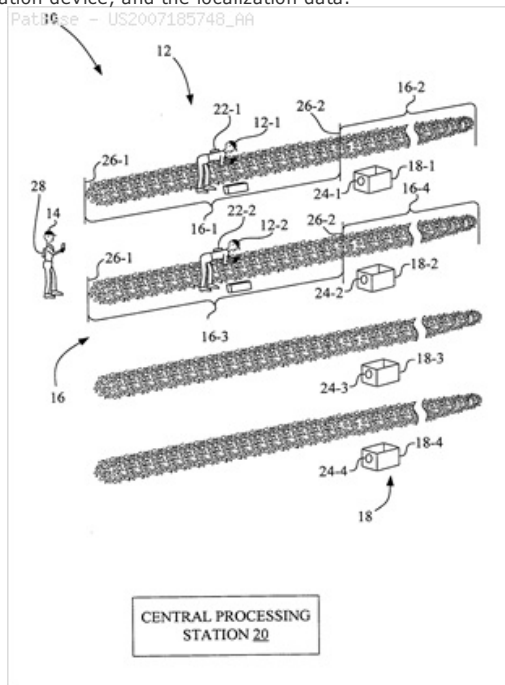
Classifications:

International (IPC 8-9): G06F7/00 G06F9/44 G06Q50/00 G07F19/00 G07F7/00 G08B13/14 G08B23/00 (Advanced/Invention); G06F7/00 G06F9/44 G06Q50/00 G07F19/00 G07F7/00 G08B13/14 G08B23/00 (Core/Invention)

CPC: G06Q40/12 G06Q10/08 G06Q10/06 G06Q50/02

European: G06Q10/06 G06Q10/08 G06Q40/10 G06Q50/02

US: 235/376 235/376S 340/5.61 340/5.610P 340/572.1 340/572.100S 340/573.1 340/573.100S 705/30 705/30S 705/7 705/7P



Family:

Publication number	Publication date	Application number	Application date
CL2007000307 A1	20070525	CL20070000307	20070207
EP1984886 A2	20081029	EP20070763116	20070207
US2007185748 AA	20070809	US20060348910	20060207
WO07092520 A2	20070816	WO2007US03300	20070207
WO07092520 A3	20080306	WO2007US03300	20070207

Priority:

US20060348910 20060207 WO2007US03300 20070207

Probable Assignee: DEERE AND CO

Assignee(s): (std): ANDERSON NOEL W ; ANDERSON NOEL WAYNE ; DEERE AND CO ; DICKMAN DOUGLAS J ; DICKMAN DOUGLAS JEFFREY ; FAIVRE STEPHEN M ; FAIVRE STEPHEN MICHAEL ; WILCOX TIMOTHY A ; WILCOX TIMOTHY AMOS

Assignee(s): DEERE AND COMPANY

Inventor(s): (std): ANDERSON NOEL W ; DICKMAN DOUGLAS J ; FAIVRE STEPHEN M ; WILCOX TIMOTHY A ; WILCOX TIMOTHY AMOS ; FAIVRE STEPHEN MICHAEL ; DICKMAN DOUGLAS JEFFREY ; ANDERSON NOEL WAYNE

Inventor(s): ANDERSON NOEL ; DICKMAN DOUGLAS ; FAIVRE STEPHEN ; DOUGLAS JEFFREY DICKMAN ; WILCOX TIMOTHY ; TIMOTHY AMOS WILCOX ; STEPHEN MICHAEL FAIVRE ; NOEL WAYNE ANDERSON

Agent(s): BARROS; HOLST SOENKE; DEERE AND COMPANY; DEERE AND CO

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

4) Family number: 34971025 (US2007185749A)

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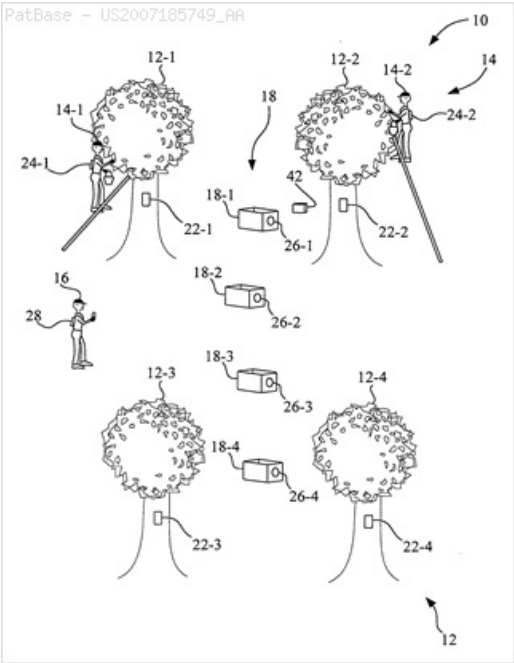
Title: METHOD FOR TRACKING HAND-HARVESTED ORCHARD CROPS

Abstract: A method for tracking hand-harvested orchard crops includes associating with each tree of interest in an orchard a corresponding first wireless communication device; outfitting each **worker** that is working in the orchard with a corresponding second wireless communication device; associating with each produce bin that is actively used in the orchard a corresponding third wireless communication device; and generating tracking information for tracking a crop flow from a particular tree via a particular **worker** to a particular produce bin using information provided by the corresponding first wireless communication device, the corresponding second wireless communication device, and the corresponding third wireless communication device.

Classifications:

International (IPC 8-9): G06F7/00 G06F9/44 G06Q10/00 G06Q50/00

G07F19/00 G08B13/14 G08B23/00 (Advanced/Invention);
G06F7/00 G06F9/44 G06Q10/00 G06Q50/00 G07F19/00 G08B13/14
G08B23/00 (Core/Invention)
CPC: G06Q40/12 G06Q10/08 G06Q10/06 G06Q50/02
European: G06Q10/06 G06Q10/08 G06Q40/10 G06Q50/02
US: 235/376 235/376S 340/5.61 340/5.610P 340/572.1
340/572.100S 340/573.1 340/573.100S 705/30 705/30S 705/7
705/7P



Family:

Publication number	Publication date	Application number	Application date
EP1984815 A2	20081029	EP20070763678	20070207
US2007185749 AA	20070809	US20060348912	20060207
WO07092540 A2	20070816	WO2007US03338	20070207
WO07092540 A3	20071213	WO2007US03338	20070207

Priority:

US20060348912 20060207 WO2007US03338 20070207

Probable Assignee: DEERE AND CO

Assignee(s): (std): ANDERSON NOEL W ; ANDERSON NOEL WAYNE ; DEERE AND CO ; WILCOX TIMOTHY AMOS ; FAIVRE STEPHEN MICHAEL ; DICKMAN DOUGLAS JEFFREY ; WILCOX TIMOTHY A ; FAIVRE STEPHEN M ; DICKMAN DOUGLAS J

Assignee(s): DEERE AND COMAPNY ; DEERE AND COMPANY

Inventor(s): (std): ANDERSON NOEL WAYNE ; WILCOX TIMOTHY AMOS ; FAIVRE STEPHEN MICHAEL ; DICKMAN DOUGLAS JEFFREY ; ANDERSON NOEL W ; WILCOX TIMOTHY A ; FAIVRE STEPHEN M ; DICKMAN DOUGLAS J

Inventor(s): WILCOX TIMOTHY ; FAIVRE STEPHEN ; ANDERSON NOEL ; DICKMAN DOUGLAS

Agent(s): HOLST SOENKE; DEERE AND COMPANY; DEERE AND CO

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

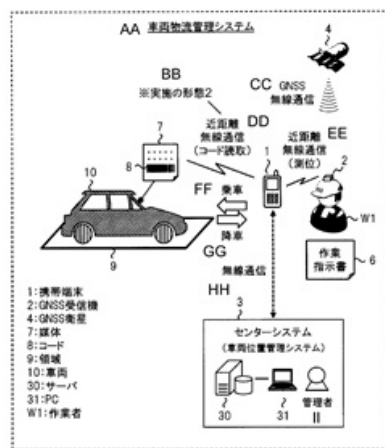
5) Family number: 66215041 (WO17109845A1) © PatBase

Title: VEHICLE LOGISTICS MANAGEMENT SYSTEM

Abstract: The present invention can reduce the labor and cost involved in registering a position at which a vehicle is **stored**, and enhances the efficiency of a vehicle logistics operation. This vehicle logistics management system is provided with: a mobile terminal (1) which is possessed by a **worker** (W1) who moves a vehicle (10) within a site; a server device (30) which registers, in a database, information including the position of the vehicle (10); a vehicle boarding/disembarking determining means (103) for determining that the **worker** (W1) has boarded the vehicle (10) and has disembarked from the vehicle (10) during work. The mobile terminal (1) acquires first position information by GNSS positioning, transmits boarding information including the first position information and a terminal ID to the server device (30) when the vehicle boarding/disembarking determining means (103) determines that the **worker** (W1) has boarded the vehicle, and transmits disembarking information including the first position information and the terminal ID to the server device (30) when the vehicle boarding/disembarking determining means (103) determines that the **worker** (W1) has disembarked from the vehicle. The server device (30) uses the boarding information and the disembarking information to ascertain that the operation has been performed, and to register, in the DB, information including the position of the vehicle (10) after movement of the vehicle (10).

Classifications:

International (IPC 8-9): B65G1/137 B65G61/00 B65G63/00
G06Q10/08 G06Q50/28 G08G1/00 G08G1/13 (Advanced/Invention)
CPC: B65G1/137 B65G61/00 B65G63/00 G08G1/13 G08G1/20
G06Q10/08 G06Q50/28



- 1: Mobile terminal
 2: GNSS receiver
 3: Center system (vehicle position management system)
 4: GNSS satellite
 6: Operation instructions
 7: Medium
 8: Code
 9: Area
 10: Vehicle
 30: Server
 W1: Worker
 AA: Vehicle logistics management system
 BB: Embodiment 2
 CC: GNSS wireless communication
 DD: Short-range wireless communication (code reading)
 EE: Short-range wireless communication (positioning)
 FF: Board vehicle
 GG: Disembark from vehicle
 HH: Wireless communication
 II: Manager

Family:

Publication number	Publication date	Application number	Application date
EP3395725 A1	20181031	EP20150911283	20151222
EP3395725 A4	20190619	EP20150911283	20151222
IN201847025155 A	20180713	IN201847025155	20180705
JP2017109845 A1	20180830	JP20170557545T	20151222
JP6514360 B1	20190515	JP20170557545T	20151222
WO17109845 A1	20170629	WO2015JP85756	20151222

Priority:

WO2015JP85756 20151222

Probable Assignee: NIPPON YUSEN KK

Assignee(s): (std): NIPPON YUSEN KK

Inventor(s): (std): AWAMOTO SHIGERU ; NAKAMURA YOSHIO

Inventor(s): SHIGERU AWAMOTO ; YOSHIO NAKAMURA

Agent(s): WILSON GUNN; TSUTSUI 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 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

6) Family number: 15678055 (US2003047870A)

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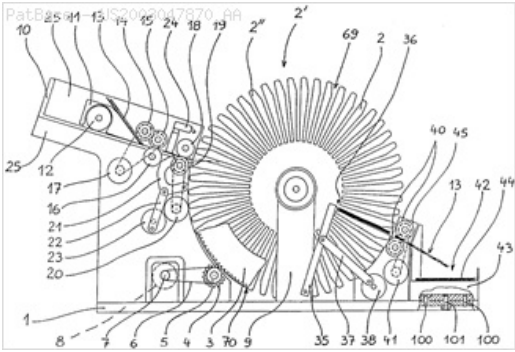
Title: CARD SHUFFLING DEVICE

Abstract: A card shuffler with a drivable card shuffling means (2 ') with compartments (69) for receiving cards (13), which shuffling means is associated with an input apparatus for the individual insertion of cards into the compartments (69) and an output device distanced from the same for the shuffled cards, with the drive of the shuffling storage means (2 ') being controlled by a randomizer, and the same being held on a basic body (1) which also carries the output device comprising a card storage means (42, 42 ') for the shuffled cards. In order to enable the versatile use of such a shuffler it is provided that different card storage means (42, 42 ') are provided for the removal of the shuffled cards (13) either one-by-one or in stacks, which storage means can be fastened alternately to a receiving means of the basic body (1).

Classifications:

International (IPC 8-9): A63B71/00 A63F A63F1/00 A63F1/06 A63F1/10 A63F1/12 A63F1/14 A63F1/18 A63F13/00 A63F13/12 A63F17/00 A63F5/00 A63F5/02 A63F9/00 A63F9/24 G01F19/00 G06F17/00 G06F17/40 G06F19/00 G06K9/00 G06K9/62 G06K9/68 G06Q30/00 G06Q30/00J0 G07B15/00 G07C15/00 G07F G07F17/32 H04N5/374 (Advanced/Invention); A63F1/00 A63F1/12 A63F1/14 A63F1/18 A63F3/00 A63F9/24 G06Q50/00G0 (Advanced/Non-invention); A63F1/00 A63F1/06 A63F13/00 A63F5/00 A63F9/00 A63F9/24 G01F19/00 G06F17/00 G06F19/00 G06K9/00 G06Q30/00

G07F17/32 (Core/Invention);
A63F1/00 A63F1/14 A63F1/18 A63F13/12 A63F3/00
G07B15/00 (Core/Non-invention);
A61F A63F G07F (Subclass/Invention)
International (IPC 1-7): A63F A63F 1/06 A63F1/12 A63F5/04
G06F17/00
CPC: H04N5/374 G06K9/68 G07F17/3272 G08C2201/50
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G07F17/3225 G07F17/3227 G07F17/3293 A63F1/06 A63F1/10
A63F1/12 A63F1/14
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G07F17/32C2F G07F17/32C4D G07F17/32C6 G07F17/32E6
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273/148A 273/148R 273/149 273/149.00P 273/149.00PP 273/149.00R 273/149.00RP 273/149.00RS 273/149BR 273/149P
273/149R 273/274 273/292 273/292P 273/309 273/309S 29/525.01 29/525.010S 382/100 382/141 382/181 382/181S
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463/47P 463/47S D21/392 D21/393



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US20180125888	20180910				

Probable Assignee: SHUFFLE MASTER GMBH AND CO KG

Assignee(s): (std): CARD CASINOS AUSTRIA RESEARCH AND DEVELOPMENT CASI ; BACIGALUPI MICHAEL ; BALLY GAMING INC ; BLAHA ERNST ; CARD CASINOS AUSTRIA RES AND D ; CARD CASINOS AUSTRIA RES AND DEV ; GRAUZER ATILLA ; GRAUZER ATTILA ; JACKSON JAMES P ; KELLY JAMES V ; KRENN PETER ; KULAKKUNNATH KAPILKUMAR N ; LOPEZ DAVID B ; MARZ JOSHUA D ; MARZ JOSHUA DAVID ; NELSON TROY D ; ROBERTS JAMES R ; SCHEPER PAUL K ; SCHUBERT OLIVER M ; SHAFFL MASTER INK ; SHFL ENTERTAINMENT INC ; SHFL ENTERTAINMENT INC ; SHFL ENTERTAINMENT INC ; CARD CASINOS AUSTRIA RESEARCH AND DEVELOPMENT CA ; CARD CASINOS AUSTRIA RESEARCH AND DEVELOPMENT CAS ; DOWNS III JUSTIN G ; SHUFFLE MASTER INC ; SNOW ROGER M ; STASSON JAMES B ; SWANSON RONALD R ; WADDS NATHAN J ; WALSH SION D ; SHUFFLE MASTER GMBH AND CO KG ; YOSELOFF MARK L ; ZVERCOV VLADISLAV

Assignee(s): SHUFFLE MASTER GMBH AND CO KGDR. KARL LUEGER-RING 141015VIENNAAT ; WELLS FARGO BANK NA ADMINISTRATIVE AGENT AS ; WMS GAMING INC ; SHUFFLE MASTER INC LAS VEGAS ; SHUFFLE MASTER INC ; SIERRA DESIGN GROUP ; DOWNS JUSTIN G III ; SHFL ENTERTAINMENT INC WAS KNOWN AS SHUFFLE MASTER INC.. ; SHFL ENTERTAINMENT INC WAS KNOWN SHUFFLE MASTER INC AS ; SHUFFLE MASTER INC ; SHUFFLE MASTER ; SHUFFLE MASTER GMBH ; SCIENTIFIC GAMES INT INC ; SG GAMING INC ; LOVGREN DOUGLAS K ; CARD CASINOS AUSTRIA RESEARCH AND DEVELOPMENT ; BALLY GAMING INT INC ; BALLY TECHNOLOGIES INC ; BANK OF AMERICA NA ADMINISTRATIVE AGENT AS ; BANK OF AMERICA NA COLLATERAL AGENT AS ; CARD CASINOS AUSTRIA RESEARCH AND DEVELOPMENT CASINOS AUSTRIA F ; CARD CASINOS AUSTRIA RESEARCH AND DEVELOPMENT CASINOS AUSTRIA FORSCHUNGS ; CARD CASINOS AUSTRIA RESEARCH AND DEVELOPMENT CASINOS AUSTRIA FORSCHUNGS U ENTWICKLUNGSGES MBH ; CARD CASINOS AUSTRIA RESEARCH AND DEVELOPMENT CASINOS AUSTRIA FORSCHUNGS U ENTWICKLUNGSGESMBH ; CARD CASINOS AUSTRIA RESEARCH AND DEVELOPMENT CASINOS AUSTRIA FORSCHUNGS U ENTWICKLUNGSGESMBHDR. KARL-LUEGER-RING 14, A-1015WIENAT ; CARD CASINOS AUSTRIA RESEARCH AND DEVELOPMENT CASINOS AUSTRIA FORSCHUNGS UND ENTWICKLUNGS GMBH ; CARD CASINOS AUSTRIA RESEARCH AND DEVELOPMENT CASINOS AUSTRIA FORSCHUNGS UND ENTWICKLUNGSGES M B H ; CARD CASINOS AUSTRIA RESEARCH AND DEVELOPMENT CASINOS AUSTRIA FORSCHUNGS UND ENTWICKLUNGSGES M B H WIEN ; CARD CASINOS AUSTRIA RESEARCH AND DEVELOPMENT CASINOS AUSTRIA FORSCHUNGS UND ENTWICKLUNGSGES MBH ; CARD CASINOS AUSTRIA RESEARCH AND DEVELOPMENT GMBH AND CO KG ; CARD CASINOS AUSTRIA RESEARCH AND DEVELOPMENT GMBH AND CO KGDR. KARL LUEGER-RING 141015VIENNAAT ; COSTELLO CHRISTOPHER ; DEUTSCHE BANK TRUST CO ; DEUTSCHE BANK TRUST CO AMERICAS COLLATERAL AGENT A ; DEUTSCHE BANK TRUST CO AMERICAS COLLATERAL AGENT AS ; ARCADE PLANET INC

Inventor(s): (std): CHOO WENG NENG ; CHRISTOPHER COSTELLO ; COSTELLO CHRISTOPHER ; CZYZEWSKI ZBIGBIEW ; DAVID B LOPEZ ; DAVID MARZ JOSHUA ; ATTILIA GRAUZER ; BACGALUPI MICHAEL ; BACIGALUPI MICHAEL ; DOWNS JUSTIN G ; DOWNS JUSTIN G III ; GLENCROSS BRADBURY C T ; GRAUZER ATILA ; GRAUZER ATTILA ; GRAUZER ATTILIA ; DOWNS III JUSTIN G ; JACKSON JAMES P ; JACKSON JAMES P P ; JAMES B STASSON ; JAMES P JACKSON ; JAMES V KELLY ; JUSTIN G DOWNS III ; KELLY JAMES V ; KULAKKUNNATH KAPILKUMAR N ; LOPEZH DEHVID ; LOVGREN DOUGLAS K ; MARK L YOSELOFF ; MARZ JOSHUA D ; MARZ JOSHUA DAVID ; MICHAEL BACGALUPI ; NATHAN J WADDS ; NELSON TROY D ;

NICOL MURRAY ; OLIVER M SCHUBERT ; PAUL K SCHEPER ; PAUL SCHEPER ; LOPEZ DAVID B ; RADCLIFFE RICHARD A ; RICHARD A RADCLIFFE ; ROBERTS JAMES D ; ROBERTS JAMES R ; SARWANA CHET S ; SCHEPER PAUL K ; SCHEPER PAUL K KELLY JAMES V ; SCHUBERT OLIVER M ; SNOW ROGER M ; SWANSON RONALD R ; WADDS NATHAN J ; WADDS NATHAN J J ; STASSON JAMES B ; WALSH SION D ; YOSELOFF MARK L ; YOSELOFF MARK L L ; PETER KRENN ; GRAUZE ATTILA ; ERNST BLAHA ; ERNST BLAHA ; BLAHA ERNST ING ; BLAHA ERNST ; ATTILA GRAUZE ; BLAHA ERNST ; ZBIGBIEW CZYZEWSKI ; ZVERCOV VLADISLAV ; KRENN PETER ING ; KRENN PETER

Inventor(s): WALSH SION D LAS VEGAS ; SWANSON RONALD ; WALSH SION ; STASSON JAMES ; SION D WALSH ; SCHUBERT OLIVER ; SCHEPER PAUL ; ROBERTS JAMES R NORTH LAS VEGAS ; ROGER M SNOW ; ROBERTS JAMES ; LOVGREN DOUGLAS ; RADCLIFFE RICHARD ; NATHAN JWADDS ; NELSON TROY ; MARK LYOSELOFF ; MARZ JOSHUA ; LOPEZ DAVID ; KRENN PETERAT ; KULAKKUNNATH KAPILKUMAR ; JUSTIN G III DOWNS ; KELLY JAMES ; JOSHUA DAVID MARZ ; JAMES PJACKSON ; JAMES R ROBERTS ; DOWNS JUSTIN ; III JUSTIN G ; DOWNS JUSTIN G III HENDERSON ; DOWNS JUSTIN GAYLORD ; DOWNS JUSTIN GIII ; BLAHA ERNSTAT ; DOUGLAS K LOVGREN ; DOWNS

Agent(s): FB RICE PTY LTD; FB RICE; WATERMARK INTELLECTUAL PROPERTY PTY LTD; GRIFFITH HACK; WATERMARK PATENT AND TRADE MARKS ATTORNEYS; FRANKE HYLAND; SPRUSON AND FERGUSON; OGILVY RENAULT LLP SENCRL SRL; TORYS LLP; BOEHMERT AND BOEHMERT ANWALTSPARTNERSCHAFT MBB PATENTANWALTE RECHTSANWALTE; HOARTON LLOYD DOUGLAS CHARLES; HITCHCOCK ESMOND ANTONY; ARIAS JUAN; IP IMPETUS CONSULTANTS LTD; CHAN TANG AND KWOK; EMETERIO V SOLIVEN AND ASSOCIATES; MARK A LITMAN AND ASSOCIATES PA SUITE 205; MARK A LITMAN AND ASSOCIATES PA YORK BUSINESS CENTER; MARK A LITMAN AND ASSOCIATES PA; MARK A LITMAN AND ASSOCIATES P A YORK BUSINESS CENTER; DICKSTEIN SHAPIRO LLP; MARK A AND GT LITMAN AND ASSOCIATES PA YORK BUSINESS CENTER; MACK A LITMAN AND ASSOCIATES PA; MARK A LITTMAN AND ASSOCIATES PA; MARK A LITMAN AND ASSOC PA; TRASKBRITT; FARRAR JENNIFER K; HARDING ANDY

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

7) Family number: 67654098 (US2017344919A)

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Title: SYSTEM AND METHOD FOR ERGONOMIC MONITORING IN AN INDUSTRIAL ENVIRONMENT

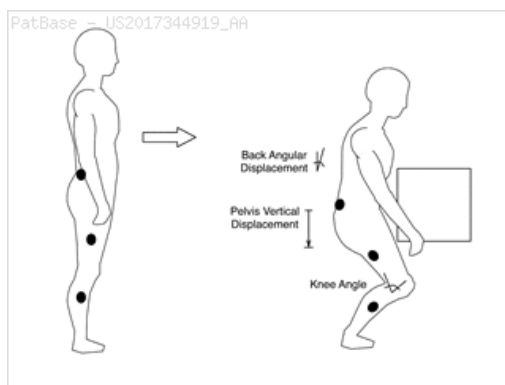
Abstract: A system and method for ergonomic monitoring in an industrial environment that includes tracking task properties of tasks performed by a **worker**; for a set of tasks, tracking kinematic activity of a **worker** during each task instance, which includes collecting kinematic data, processing the kinematic data and generating at least one biomechanical measurement of a task associated kinematic activity; and generating an ergonomic model that associates task properties and kinematic activity.

Classifications:

International (IPC 8-9): A61B5/00 A61B5/11 G01P15/18 G06Q10/06 G09B19/00 G09B5/02 G09B5/04 (Advanced/Invention)

CPC: G06Q10/0633 G09B19/003 G09B5/04 G09B5/02 A61B5/1116 A61B5/112 A61B2562/0219 A61B5/1118 A61B2503/20 G06Q10/06398

US: 1/1 705/7.27



Family:

Publication number	Publication date	Application number	Application date
US2017344919 AA	20171130	US20170603906	20170524

Priority:

US20160340939P 20160524 US20170603906 20170524

Probable Assignee: LUMO BODYTECH INC

Assignee(s): (std): LUMO BODYTECH INC

Assignee(s): LUMO LLC

Inventor(s): (std): WANG CHUNG CHE CHARLES ; CHANG ANDREW ROBERT

8) Family number: 67234162 (US2017303187A)

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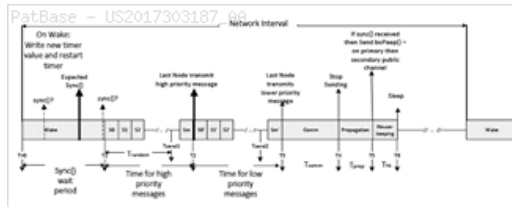
Title: **WORKER** SAFETY SYSTEM

Abstract: A network for connecting a plurality of network nodes includes a leader node and a plurality of follower nodes. The leader node transmits a sync message to the plurality of follower nodes indicating a beginning of a network interval, wherein the leader node and the plurality of follower nodes transmit information during a transmission period and do not transmit information during a sleep period of the network interval, and wherein during a predetermined time of the transmission period of the network interval each of the follower nodes that received the sync message transmit a message advertising one or more properties of the leader node. The network nodes are environmental sensing devices that are part of a **worker** safety system.

Classifications:

International (IPC 8-9): G01N27/14 G01N27/16 G01N27/40 G01N27/407 G01N33/22 G06K7/10 G06Q10/06 G08B21/02 G08B21/12 G08B25/04 G08B25/10 H04B1/713 H04L29/08 H04M11/00 H04M11/04 H04Q9/00 H04W4/00 H04W4/38 H04W4/80 H04W48/10 H04W48/16 H04W52/02 H04W56/00 H04W72/04

H04W84/10 H04W84/20 (Advanced/Invention);
G08B21/16 H04W48/10 H04W84/18 (Advanced/Non-invention)
CPC: G06K7/10297 G01N27/16 G01N33/0014 G01N33/0063
Y02D70/20 H04B1/713 H04W4/80 H04W48/10 H04W52/0235
H04W56/0015 H04W84/18 Y02D70/142 Y02D70/144 Y02D70/162
Y02D70/164 Y02D70/166 Y02D70/22 Y02D70/26 Y02D70/40
G01N27/4075 G08B21/16
US: 1/1 204/431 370/350



Family:

Publication number	Publication date	Application number	Application date
AU2017252615 AA	20181025	AU20170252615	20170419
CA3018763 AA	20180921	CA20173018763	20170419
CA3034811 AA	20190222	CA20173034811	20170731
CN109565516 A	20190402	CN201780038089	20170419
EP3446468 A1	20190227	EP20170786534	20170419
EP3446468 A4	20191106	EP20170786534	20170419
EP3510386 A1	20190717	EP20170849250	20170731
EP3510386 A4	20200422	EP20170849250	20170731
JP2019522391 T2	20190808	JP20180555126T	20170419
US2017303187 AA	20171019	US20170491311	20170419
US2018024091 AA	20180125	US20170665034	20170731
US2020145906 AA	20200507	US20200739003	20200109
US2020145907 AA	20200507	US20200739010	20200109
US2020150077 AA	20200514	US20190710643	20191211
US2020150078 AA	20200514	US20190710677	20191211
US2020154342 AA	20200514	US20200739014	20200109
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US2020169945 AA	20200528	US20200774734	20200128
US10533965 BB	20200114	US20170665034	20170731
US10568019 BB	20200218	US20170491311	20170419
US10690622 BB	20200623	US20190710643	20191211
US10690623 BB	20200623	US20190710677	20191211
WO17184702 A1	20171026	WO2017US28320	20170419
WO18048517 A1	20180315	WO2017US44735	20170731

Priority:

US20160324573P 20160419	US20160364935P 20160721	US20160384798P 20160908
US20160384803P 20160908	US20160385688P 20160909	US20160397587P 20160921
US20160409706P 20161018	US20170463230P 20170224	US20170491311 20170419
WO2017US28320 20170419	US20170665034 20170731	WO2017US44735 20170731
US20190710643 20191211	US20190710677 20191211	US20200739003 20200109
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US20200739028 20200109	US20200774734 20200128	

Probable Assignee: INDUSTRIAL SCIENTIFIC CORP

Assignee(s): (std): IND SCIENT CORP ; INDUSTRIAL SCIENT CORP

Assignee(s): INDUSTRIAL SCIENTIFIC CORP ; JUBECK SCOTT ; MCCLAIN LISA ; MCCracken LISA ; MOZZOCCHI LISA ; PAVLISKO BRYAN JAMES ; SALVETTI KATHRYN ; TIMCO DANIEL JAMES ; WANG CHUAN BAO ; WANG YONG ; XIN HENRY ; AN LING ; ARUNACHALAM RAGHU ; BELSKI TIMOTHY JAMES ; CORNELIUS RICHARD E ; CROUTHAMEL L ROBERT ; HAAS BENJAMIN ; HUGHES CHARLES DENNIS

Inventor(s): (std): CROUTHAMEL L ROBERT ; HAAS BENJAMIN ; HUGHES CHARLES DENNIS ; JUBECK SCOTT ; MCCLAIN LISA ; MCCracken LISA ; MOZZOCCHI LISA ; PAVLISKO BRYAN JAMES ; SALVETTI KATHRYN ; TIMCO DANIEL J ; TIMCO DANIEL JAMES ; WANG CHUAN BAO ; WANG YONG ; XIN HENRY ; AN LING ; ARUNACHALAM RAGHU ; BELSKI TIMOTHY JAMES ; CORNELIUS RICHARD E

Inventor(s): CROUTHAMEL L

Agent(s): AJ PARK; BORDEN LADNER GERVAIS LLP; FINDLAY ALICE ROSEMARY; DESHIMARU TAKESHI; OHTSUKA FUMIAKI; NISHIJIMA TAKAKI; SUDA HIROYUKI; UESUGI HIROSHI; KONDO NAOKI; GTC LAW GROUP PC AND AFFILIATES; IRIZARRY STACEY ET AL

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

9) Family number: 63470168 (US2016260046A)

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Title: TRACKING **WORKER** ACTIVITY

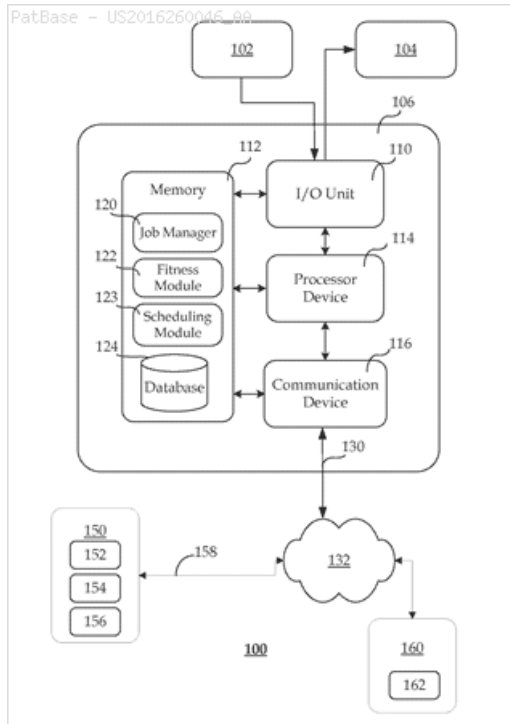
Abstract: Disclosed herein are technologies for facilitating activity tracking In accordance with one aspect, sensor data is received from a wearable device. An activity type associated with a **worker** is recognized based on the sensor data. A fitness analysis may be performed, based on the sensor data and recognized activity type, to determine a stress level of the **worker**. One or more suggestions for improving the well-being of the **worker** may then be generated based on the stress level.

Classifications:

International (IPC 8-9): A61B5/00 A61B5/01 A61B5/024 A61B5/11 G01K13/02 G06Q10/06 (Advanced/Invention)

CPC: G06Q10/063114 A61B5/681 A61B5/02438 A61B5/01 A61B5/7278 A61B5/1118 A61B5/486 G01K13/002 A61B5/02055 A61B5/1112 A61B2503/20 A61B2560/0242 G16H20/30

US: 1/1 705/7.15

**Family:**

Publication number	Publication date	Application number	Application date
US2016260046 AA	20160908	US20150634897	20150302

Priority:

US20150634897 20150302

Probable Assignee:

SAP SE

Assignee(s): (std):

CAI DANQING

Assignee(s):

SAP SE

Inventor(s): (std):

CAI DANQING

10) Family number: 44403169 (US2011133927A)

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Title: ENVIRONMENTAL RISK MANAGEMENT SYSTEM AND METHOD

Abstract: A system and method for directing and monitoring the whereabouts of persons within an environmentally hazardous area includes equipping each person with devices for monitoring personal physiological conditions (56), **equipment** conditions (64), topographical locations (34), environmental conditions (57) and other pertinent data. The data are individually encoded and uploaded to a processing center (36) where they are analyzed (58,60,61) in order to ensure compliance with health or environmental norms and safety regulations, generate hot-spot mapping (53) and to issue real-time risk avoidance behavior directives (62), **worker**, mechanism and material traffic directions, warnings (59), permissions or interdictions.

Classifications:

International (IPC 8-9): A61B5/00 A62B9/00 G08B1/08 G08B21/04 G08B23/00 (Advanced/Invention);

A62B9/00 G08B21/00 (Core/Invention)

CPC: A62B9/006 A62B99/00 G08B21/04 G08B25/14

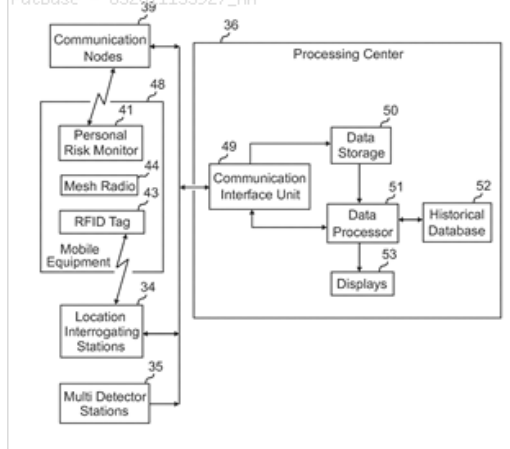
European: A62B9/00C A62B99/00 G08B21/04 G08B25/14

US: 128/903 340/539.1 340/539.11 340/539.110P 340/539.12

340/539.13 340/539.22 340/539.26 340/540 340/573.1

340/573.100S 340/601 455/404.1 600/300 600/300S 600/301

702/187

**Family:**

Publication number	Publication date	Application number	Application date
CA2734152 AA	20110214	CA20092734152	20090814
CA2734152 C	20171128	CA20092734152	20090814
CN102246215 A	20111116	CN200980140743	20090814
CN102246215 B	20140910	CN200980140743	20090814
EP2324466 A1	20110525	EP20090791534	20090814
US2011133927 AA	20110609	US20090058854	20090814

US8446273 BB	20130521	US20090058854	20090814
WO10019871 A1	20100218	WO2009US53873	20090814

Priority:

US20080088860P 20080814 US20090058854 20090814 WO2009US53873 20090814

Probable Assignee: HONEYWELL INT INC

Assignee(s): (std): HUMPHREY CHRISTOPHER A ; ROSATI RAMON W ; SPERIAN PROT INSTRUMENTATION L ; SPERIAN PROT INSTRUMENTATION LLC ; HONEYWELL INT INC

Assignee(s): HONEYWELL INTERNATIONAL INC ; SPERIAN PROTECTION INSTRUMENTATION LLC ; SPERIAN PROTECTION INSTRUMENTATION LLC A DELAWARE LIABILITY CO LTD

Inventor(s): (std): HUMPHREY CHRISTOPHER A ; ROSATI RAMON W

Agent(s): GOWLING LAFLEUR HENDERSON LLP; GOWLING WLG CANADA LLP; BUCKLEY GUY JULIAN; WOOD PHILLIPS KATZ CLARK AND MORTIMER; BUCHACA JOHN D 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 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 ZA ZM ZW

11) Family number: 67497191 (WO17197409A1)

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Title: PERSONAL SAFETY AND TOOL LOSS PREVENTION SYSTEM

Abstract: Systems and methods for a wearable device that provides **worker** safety and tool-loss prevention for **workers** in the field and away from offices. The device worn by **workers** provides managers with **GPS** locations of their **workers** in the field, and safety features, such as an SOS button and automatic Man-Down and No-Movement alerts, to provide a continual link to management and emergency services which allows for rapid response in emergencies, and when **workers** themselves are unable to call for help. The wearable safety device also provides a communication link to a **worker's** tools and **equipment**, both with the **worker** and in their vehicle, simultaneously, which automatically alerts the **worker** when a tool or **equipment** has been lost or forgotten before the **worker** leaves the job site.

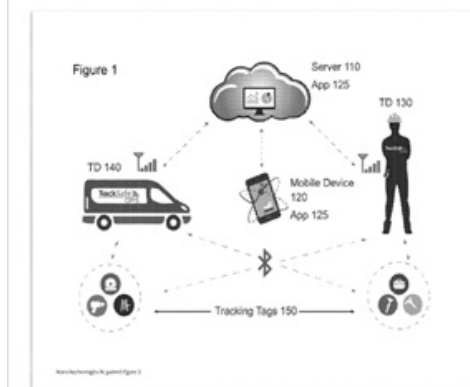
Classifications:

International (IPC 8-9): G08B21/00 G08B21/18 G08B21/24

H04L29/06 (Advanced/Invention)

CPC: H04L29/06 H04W4/029 H04W4/80 G08B21/24 G08B25/08

PatBase - WO17197409_A1



Family:

Publication number	Publication date	Application number	Application date
WO17197409 A1	20171116	WO2017US32752	20170515

Priority:

US20160336354P 20160513 US20160376018P 20160817 US20160376045P 20160817

Probable Assignee: NANA TECH LLC

Assignee(s): (std): NANA TECH LLC

Assignee(s): NANA TECHNOLOGIES LLC

Inventor(s): (std): SMITH JAMES SIPPLE

Agent(s): CONE JOHN M

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

12) Family number: 59008241 (US2016106173A)

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Title: CONDITION RESPONSIVE INDICATION ASSEMBLY AND METHOD

Abstract: A communications assembly includes a central processing unit and a plurality of portable communication assemblies. The central processing unit transmits central signals and for receiving remote communications from the portable communications assemblies. The portable communications assemblies are operatively connected to the central processing unit transmit the remote communications and receive the central communications. A communications hub is operatively connected between the central processing unit and each of the portable communications assemblies to control independent communication between the central processing unit and the portable communications assemblies. The central processing unit includes an incident **identification** module for receiving the remote communications and for **identifying** a portion of the remote communications from a portion of the portable communications assemblies as indicating a situation requiring a communication to be sent to the portion of the portable communications assemblies. The portion may include one or more than one portable communications assembly.

Classifications:

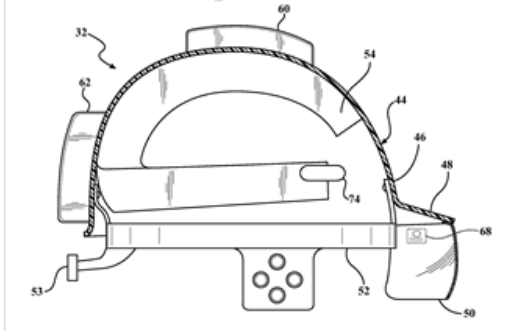
International (IPC 8-9): A42B A42B1/24 A42B3/00 A42B3/04 A42B3/06 A42B3/08 A42B3/14 A42B3/18 A42B3/30 A42B3/32 A42B7/00 A61B5/00 A61B5/02 A61B5/0205 A61B5/024 A61B5/0245 G05B G05B23/02 G06F3/01 G08B1/08 G08B21/02 G08B21/04 G08B21/18 G08B23/00 G08B25/00 G08B25/01 G08B25/04 G08B25/10 G08B27/00 G08C17/02 G5B23/02 H04Q9/00 H04R1/00 (Advanced/Invention); G08B21/04 G08B21/12 G08B25/01 G08B7/06 (Advanced/Non-invention); A42B (Subclass/Invention)

International (IPC 1-7): A42B1/24

CPC: A61B5/6803 A61B5/486 A61B5/7455 A61B2503/20 G08B7/06 G08B21/043 G08B21/12 G05B23/02 G05B23/0202 A42B3/04 A42B3/14 A42B3/0406 A42B3/042 A42B3/0433 A42B3/0446 A42B3/0453 A42B3/147 A42B3/324 A61B5/02 A61B5/02055 A61B5/024 A61B5/0245 G08B21/0446 G08B21/0453 G08B25/009 G08B25/014 G08B25/016 G08B21/02 G08B25/10 A42B3/30 G06F3/011 G06F3/016 G06F2203/011 A42B3/046 H04Q9/00

US: 1/1 2/421 2/422 340/539.1 340/539.11 340/539.13 340/539.17 340/573.1 600/300

PatBase - US2016106173_AA

**Family:**

Publication number	Publication date	Application number	Application date
AU2015334100 AA	20170427	AU20150334100	20150316
AU2016340788 AA	20180426	AU20160340788	20161010
AU2020200113 AA	20200130	AU20200200113	20200107
AU2020200416 AA	20200213	AU20200200416	20200121
BR112017007887 A2	20180123	BR20171107887	20150316
BR112018007587 A2	20181023	BR20181107587	20161010
CA2963635 AA	20170404	CA20152963635	20150316
CA3002016 AA	20180413	CA20163002016	20161010
CN107407932 A	20171128	CN201580056450	20150316
CN107407932 B	20200529	CN201580056450	20150316
CN108348025 A	20180731	CN201680059217	20161010
EP3207434 A1	20170823	EP20150851191	20150316
EP3207434 A4	20181107	EP20150851191	20150316
EP3361896 A1	20180822	EP20160857998	20161010
EP3361896 A4	20190626	EP20160857998	20161010
IL251693 A0	20170629	IL20150251693	20150316
IL258676 A0	20180628	IL20160258676	20161010
IN201737013569 A	20170825	IN201737013569	20170417
IN201817014317 A	20180907	IN201817014317	20180414
JP2017533794 T2	20171116	JP20170540542T	20150316
JP2018538449 T2	20181227	JP20180518998T	20161010
JP6488394 B2	20190320	JP20170540542T	20150316
KR20170069237 A	20170620	KR20177011544	20150316
KR20180063202 A	20180611	KR20187012146	20161010
MX2017004968 A1	20180223	MX20170004968	20150316
MX2018004477 A1	20180801	MX20180004477	20161010
RU2671765 C1	20181106	RU20170115881	20150316
SG11201703099R A1	20170530	SG20171103099	20150316
SG11201802996V A1	20180530	SG20181102996	20161010
US2016106173 AA	20160421	US20150803571	20150720
US2016110992 AA	20160421	US20150883157	20151014
US2016213088 AA	20160728	US20160087972	20160331
US2016249700 AA	20160901	US20160150384	20160509
US2017000417 AA	20170105	US20160259406	20160908
US2018168265 AA	20180621	US20180898577	20180217
US2019037954 AA	20190207	US20180155652	20181009
US2019380417 AA	20191219	US20190502127	20190703
US9013297 BA	20150421	US20140517385	20141017
US9177458 BA	20151103	US20150590596	20150106
US9486027 BB	20161108	US20160087972	20160331
US9538800 BB	20170110	US20150803571	20150720
US9538801 BB	20170110	US20150883157	20151014
US9642574 BB	20170509	US20160259406	20160908
US10383384 BB	20190820	US20160150384	20160509
US10667571 BB	20200602	US20180898577	20180217
WO16060708 A1	20160421	WO2015US20743	20150316
WO17069961 A1	20170427	WO2016US56264	20161010
WO20076893 A1	20200416	WO2019US55311	20191009
ZA201702768 A	20180926	ZA20170002768	20150316
ZA201802603 A	20181219	ZA20180002603	20180419

Priority:

US20140517385	20141017	US20150590596	20150106	AU20150334100	20150316
WO2015US20743	20150316	US20150803571	20150720	US20150883157	20151014
US20160087972	20160331	US20160150384	20160509	US20160259406	20160908
WO2016US56264	20161010	US20180898577	20180217	US20180155652	20181009
US20190502127	20190703	AU20200200113	20200107	AU20200200416	20200121

Probable Assignee: GUARDHAT INC

Assignee(s): (std): DEY SAIKAT ; FRIEDMAN STEVEN ; GUARDHAT INC ; OCKHAM RAZOR VENTURES LLC ; PERUMAL SENNI ; REEPMAYER GERRIT ; SENGUPTA ANUPAM ; ZHAROVONKOV MIKHAIL ; ZHAVORONKOV MIKHAIL

Assignee(s): SENGUPTA ANUPAN ; GUARDHAT TECHNOLOGIES LLC

Inventor(s): (std): ANUPAM SENGUPTA ; ANUPAN SENGUPTA ; DEY SAIKAT ; FRIEDMAN STEVEN ; GERRIT REEPMAYER ;

Agent(s): MIKHAIL ZHAVORONKOV ; PERUMAL SENNI ; REEPMAYER GERRIT ; SAIKAT DEY ; SENGUPTA ANUPAM ; SENGUPTA ANUPAN ; SENNI PERUMAL ; STEVEN FRIEDMAN ; ZHAROVONKOV MIKHAIL ; ZHAVORONKOV MIKHAIL
WRAYS PTY LTD; BALDWIN INTELLECTUAL PROPERTY; PIASETZKI NENNIGER KVAS LLP; RIDOUT AND MAYBEE LLP; KAUFMANN URSULA JOSEFINE; STOLMAR AND PARTNER PATENTANWALTE PARTG MBB; YURIDICHESKAYA GORODISSKI I PARTNER YOO FA; REISING ETHINGTON PC; SIMONELLI IP PLLC; SIMONELLI DAVID 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 JO JP KE KG KH KM KN KP KR KW KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

13) Family number: 53197248 (US2013067319A)

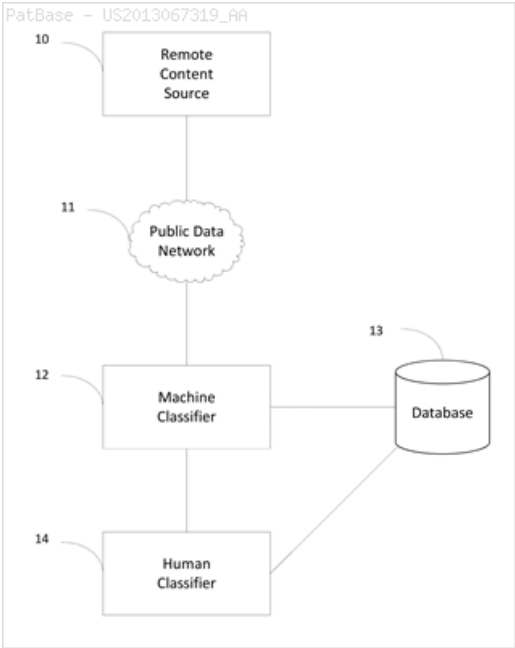
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Title: METHOD AND APPARATUS FOR FORMING A STRUCTURED DOCUMENT FROM UNSTRUCTURED INFORMATION

Abstract: Illustrative embodiments improve upon prior machine learning techniques by introducing an additional classification layer that mimics human visual pattern recognition. Building upon classification passes that extract contextual information, illustrative embodiments look for hints of high-level semantic categorization that manifest as visual artifacts in the document, such as font family, font weight, text color, text justification, white space, or CSS class name. An improved lightweight markup language enables display of machine-categorized tokens on a screen for human correction, thereby providing ground truths for further machine classification.

Classifications:

International (IPC 8-9): G06F17/00 G06F17/21 G06F17/22 G06F17/24 G06F17/30 G06F3/0481 G06F3/0482 G06F7/00 G06N99/00 G06Q10/06 G06Q20/20 G06Q30/02 G06Q30/06 G06Q40/00 H04L29/08 (Advanced/Invention); G06F17/27 G06F17/30 (Advanced/Non-invention)
CPC: G06Q20/202 G06Q40/12 G06Q30/0256 G06Q30/0633 G06Q30/0637 G06Q10/06398 G06Q30/0641 G06F3/0481 G06Q30/0244 G06F3/0482 G06Q20/20 G06Q20/203 G06Q20/209 H04L67/1095 H04L67/20 G06Q30/06 G06Q30/0623 G06Q30/0631 G06Q30/0635 G06Q30/0643 G06F16/958 G06F16/972 G06F16/35 G06F40/117 G06F40/106 G06F40/14 G06F40/284 G06F16/285 G06N20/00 H04L67/02
US: 1/1 705/14.43 705/14.54 705/21 705/26.8 705/26.82 705/27.1 705/7.42 707/728 707/736 707/756 707/758 709/219 715/234 715/235 715/243 715/753



Family:

Publication number	Publication date	Application number	Application date
US2013067319 AA	20130314	US20120605051	20120906
US2014149240 AA	20140529	US20130081966	20131115
US2014149845 AA	20140529	US20130081954	20131115
US2014149846 AA	20140529	US20130081961	20131115
US2014195312 AA	20140710	US20140209306	20140313
US2014330638 AA	20141106	US20140261164	20140424
US2014330646 AA	20141106	US20140261220	20140424
US2014330671 AA	20141106	US20140267686	20140501
US2014330672 AA	20141106	US20140267694	20140501
US2014330681 AA	20141106	US20140296331	20140604
US2014331124 AA	20141106	US20130108044	20131216
US2015006333 AA	20150101	US20140488102	20140916
US2015007022 AA	20150101	US20140488115	20140916
US2015026201 AA	20150122	US20130944789	20130717
US2015026304 AA	20150122	US20130944790	20130717
US2016117295 AA	20160428	US20150980998	20151228
US2017316490 AA	20171102	US20170653265	20170718
US9280525 BB	20160308	US20120605051	20120906
US9483740 BA	20161101	US20130108119	20131216
US9516089 BA	20161206	US20130108139	20131216
US9576065 BB	20170221	US20130944789	20130717
US9747630 BB	20170829	US20140296331	20140604
US10055391 BB	20180821	US20150980998	20151228

Priority:

US20110531498P	20110906	US20120605051	20120906	US20130818736P	20130502
US20130818713P	20130502	US20130944789	20130717	US20130944790	20130717
US20130081966	20131115	US20130081954	20131115	US20130081961	20131115
US20130108044	20131216	US20130108119	20131216	US20130108139	20131216
US20140209306	20140313	US20140261164	20140424	US20140261220	20140424
US20140267686	20140501	US20140267694	20140501	US20140296331	20140604

Probable Assignee: LOCUS INC

Assignee(s): (std): GO DADDY OPERATING CO LLC ; LOCUS INC ; OLSZEWSKI MAREK ; PIETTE MARC ; REINSBERG RENE ; SIDIROGLOU STYLIANOS ; ANSEL JASON

Assignee(s): BARCLAYS BANK PLC COLLATERAL AGENT AS

Inventor(s): (std): ANSEL JASON ; CHEN ROBERT ; GOKHALE MANDAR ; GROVER SANDEEP ; MARCUS ADAM ; MIERLE KEIR ; MUKHERJEE RAJATISH ; NIJJER RAJINDER ; OLSZEWSKI MAREK ; PHILLIPS EMILY ; PIETTE MARC ; REINSBERG RENE ; SIDIROGLOU STYLIANOS ; WANG LU ; TSAI JUSTIN ; NIJJER RAJ ; KAMALOV KAINAR ; HAAS DANIEL ; GREENSTEIN MATTHEW ; DOWNS PETER ; SILVEIRA ANTONIO CARLOS PEREIRA DA

Agent(s): QUARLES AND BRADY LLP

14) Family number: 43520273 (US2010289662A)

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Title: PERSONNEL SAFETY UTILIZING TIME VARIABLE FREQUENCIES

Abstract: A system to improve safety of **workers** who are in proximity to mobile machines includes a machine mountable radio-frequency **identification** reader that wirelessly monitors radio-frequency **identification** tags worn by **workers** moving relative to and in proximity to a mobile machine when the reader is mounted on the machine. The reader includes a processor and an antenna front-end which is switchable between an omni-directional antenna or at least one directional antenna. The omni-directional antenna is mountable so as to monitor a machine circumference completely around the mobile machine. Each directional antenna is mountable so as to monitor only either a front or a back of the mobile machine relative to the machines direction of motion.

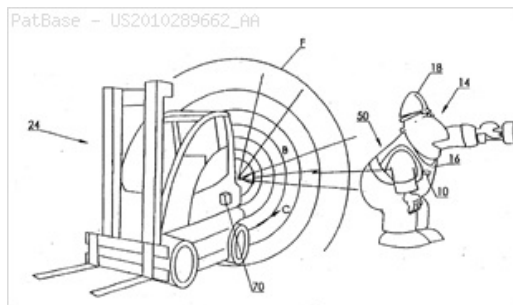
Classifications:

International (IPC 8-9): B23Q11/00 B60K28/10 B60W30/08 B60W30/09 G01V15/00 G01V3/12 G08B21/00 G08B21/02 H01Q21/06 H01Q9/04 (Advanced/Invention); H01Q21/06 H01Q9/04 (Core/Invention)

CPC: G07C9/20 G07C9/28 B66F17/003 F16P3/147 G01V15/00 G07C2009/0092

European: F16P3/14E G01V15/00 G07C9/00B G07C9/00B10 S07C9/00E20D

US: 340/539.1 340/539.11 340/539.13 340/572.1 340/686.1 340/686.6 340/686.600P 340/8.1



Family:

Publication number	Publication date	Application number	Application date
AU2009203876 AA	20090716	AU20090203876	20090109
AU2009203876 BB	20140612	AU20090203876	20090109
CA2617976 AA	20090711	CA20082617976	20080111
CA2688945 AA	20100619	CA20092688945	20091221
CA2712047 AA	20090716	CA20092712047	20090109
EP2238476 A1	20101013	EP20090701096	20090109
EP2238476 A4	20150805	EP20090701096	20090109
MX2010007634 A1	20101221	MX20100007634	20090109
NZ586803 A	20130830	NZ20090586803	20090109
US2010289662 AA	20101118	US20090735388	20090109
US8248263 BB	20120821	US20090735388	20090109
WO09086636 A1	20090716	WO2009CA00022	20090109

Priority:

CA20082617976 20080111 US20080006505 20080117 US20080006505P 20080117
US20080193730 20081219 US20080193730P 20081219 CA20092712047 20090109
WO2009CA00022 20090109 US20090735388 20090109

Probable Assignee: PSST MOBILE EQUIPMENT

Assignee(s): (std): CHAMSEDDINE AHMAD ; HAUBRICH PETER ; PSST MOBILE EQUIPMENT ; PSST MOBILE EQUIPMENT LTD ; SHERVBY RICHARD CLAYTON ; SHERVEY RICHARD CLAYTON ; SHERVEY RICHARD C ; DASILVA JOHN

Assignee(s): SHERVEY RICHARD

Inventor(s): (std): CHAMSEDDINE AHMAD ; DASILVA JOHN ; HAUBRICH PETER ; SHERVEY RICHARD C ; SHERVBY RICHARD CLAYTON ; SHERVEY RICHARD CLAYTON

Inventor(s): AHMAD CHAMSEDDINE ; RICHARD CLAYTON SHERVBY ; PETER HAUBRICH ; JOHN DASILVA

Agent(s): A J PARK; AJ PARK; GUY ELIZABETH; ANTONY C EDWARDS; EDWARDS ANTONY C

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 ZA ZM ZW

15) Family number: 69334323 (US2018108236A)

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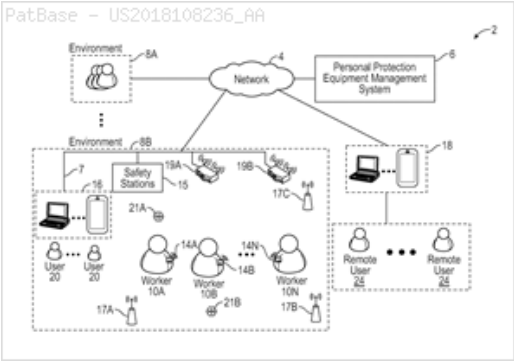
Title: CONTEXT-BASED PROGRAMMABLE SAFETY RULES FOR PERSONAL PROTECTIVE **EQUIPMENT**

Abstract: In some examples, a system includes: an article of personal protective **equipment** (PPE) that includes a communication component; a computing device communicatively coupled to the article of PPE, wherein the computing device: receives context data that is based on one or more of the article of PPE, a work environment for the article of PPE, or a **worker** assigned to the article of PPE; selects, based at least in part on the context data, a set of programmable safety rules that are contextually associated with the at least one article of PPE; sends the programmable safety rules to one or

more of the article of PPE or a data hub communicatively coupled to the article of PPE; and wherein the programmable safety rules are configured at the article of PPE or the data hub to perform one or more operations based at least in part on PPE data.

Classifications:

International (IPC 8-9): A41D13/00 A41D13/002 A41D13/02 A41D13/11 A41D19/015 A62B18/08 A62B9/00 G06Q10/06 G06Q50/26 G08B21/02 G08B21/12 G08B21/18 G08B7/06 G16Z99/00 H04W4/38 (Advanced/Invention)
International (IPC 1-7): A62B18/08 A62B9/00
CPC: A62B9/006 A62B18/08 G06Q10/0635 G06Q10/0639 G06Q50/265 G08B7/06 G08B21/02 G08B21/12 A41D13/0002 A41D13/002 A41D2600/20 G08B21/0275
US: 1/1 340/540



Family:

Publication number	Publication date	Application number	Application date
AU2017435125 AA	20190530	AU20170435125	20171012
AU2017435125 BB	20200611	AU20170435125	20171012
BR112019007647 A2	20190702	BR20191107647	20171012
CA3040135 AA	20190412	CA20173040135	20171012
CN109891458 A	20190614	CN201780063597	20171012
EP3526764 A1	20190821	EP20170922912	20171012
IN201947014760 A	20191018	IN201947014760	20190412
KR20190070935 A	20190621	KR20197013466	20171012
US2018108236 AA	20180419	US20170782676	20171012
US2020168069 AA	20200528	US20200739329	20200110
US10607467 BB	20200331	US20170782676	20171012
WO19088962 A1	20190509	WO2017US56392	20171012

Priority:

US20160408386P 20161014 US20170782676 20171012 WO2017US56392 20171012
US20200739329 20200110

Probable Assignee: 3M CO

Assignee(s): (std): 3M CO MINNESOTA MINING AND MFG COMPANY ; 3M INNOVATIVE PROPERTIES CO

Assignee(s): AWISZUS STEVEN T ; GAMBERINI KENNETH J ; KANUKURTHY KIRAN S ; LOBNER ERIC C ; WURM MICHAEL G ; 3M CO

Inventor(s): (std): AWISZUS STEVEN T ; ERIC C LOBNER ; GAMBERINI KENNETH J ; KANUKURTHY KIRAN S ; KENNETH J GAMBERINI ; KIRAN S KANUKURTHY ; LOBNER ERIC C ; MICHAEL G WURM ; STEVEN T AWISZUS ; WURM MICHAEL G

Agent(s): FPA PATENT ATTORNEYS PTY LTD; SMART AND BIGGAR; MATHYS AND SQUIRE; KARLEN CHRISTOPHER D ET AL

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

16) Family number: 63668371 (US2018007002A)

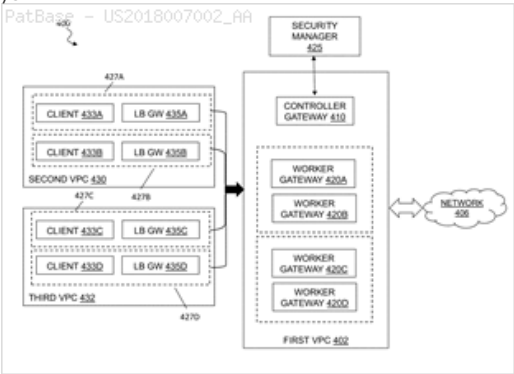
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Title: ELASTIC OUTBOUND GATEWAY

Abstract: In general, in an aspect, a method for providing an outbound gateway protection includes provisioning one or more **worker** gateways located in a first gateway virtual private cloud, the one or more **worker** gateways sharing configuration data with the controller gateway, provisioning one or more load balancer gateways in one or more virtual clouds, the one or more client virtual clouds each comprising one or more clients, the one or more load balancer gateways distributing client requests among the **worker** gateways, assigning groups of the one or more clients to one of the one or more load balancer gateways based on requests from a majority of the **worker** gateways, and communicating outbound network traffic from the clients via the assigned load balancer gateways.

Classifications:

International (IPC 8-9): H04L12/24 H04L12/66 H04L29/06 H04L29/08 (Advanced/Invention); H04L12/26 (Advanced/Non-invention)
CPC: H04L41/0806 H04L41/0893 H04L43/16 H04L63/0218 H04L63/145 H04L67/1036 H04L12/66 H04L63/0263 H04L63/0272 H04L29/06 H04L29/08 H04L67/1002 H04L67/1097
US: 1/1 726/12



Family:

Publication number	Publication date	Application number	Application date

GB201611403 A0	20160817	GB20160011403	20160630
GB2551792 A1	20180103	GB20160011403	20160630
GB2551792 B2	20190213	GB20160011403	20160630
US2018007002 AA	20180104	US20170636692	20170629
US10686758 BB	20200616	US20170636692	20170629

Priority:

GB20160011403 20160630

Probable Assignee: SOPHOS LTD

Assignee(s): (std): SOPHOS LTD

Assignee(s): GOLDMAN SACHS BANK USA COLLATERAL AGENT AS

Inventor(s): (std): LANDGRAF VINCENT MAURICE ; VINCENT MAURICE LANDGRAF

Agent(s): STRATEGIC PATENTS PC

17) Family number: 69565375 (US2018122205A)

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Title: TRANSIT **WORKER** WARNING SYSTEM

Abstract: The disclosed technology comprises a system to provide warning of a rail or vehicle approaching a work area for a transit **worker** or group of transit **workers**. In some implementations, the disclosed technology includes a sensor station that detects rail or vehicles approaching the work area, which transmits a warning signal to a safety vest worn by **workers**. In some implementations, the safety vest has a transceiver to receive the warning signal and activates an alarm mounted to the vest. The alarm may be a flashing light or a vibration that can be felt by the vest wearer.

Classifications:

International (IPC 8-9): A41D1/00 A41D1/04 A41D13/01 B61L23/06 G08B21/02 G08B5/00 H04W4/02 H04W4/021

H04W4/40 (Advanced/Invention);

G08B25/00 G08B5/36 G08B7/06 H04W4/04

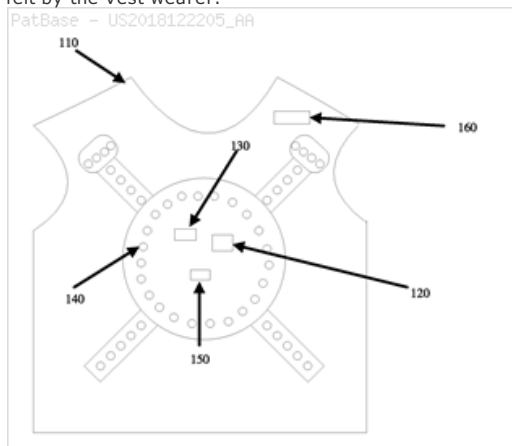
H04W4/80 (Advanced/Non-invention)

CPC: A41D13/01 A41D1/04 B61L23/06 A41D1/002 H04W4/80

G08B5/004 G08B7/06 G08B25/009 H04W4/021 H04W4/023

H04W4/027 H04W4/40 G08B5/006

US: 1/1 340/573.1



Family:

Publication number	Publication date	Application number	Application date
US2018122205 AA	20180503	US20170796499	20171027
US10304308 BB	20190528	US20170796499	20171027

Priority:

US20160415683P 20161101

US20170796499 20171027

Probable Assignee: MUJEEB NUMAN

Assignee(s): (std): MUJEEB NUMAN

Inventor(s): (std): MUJEEB NUMAN

18) Family number: 63987437 (US2016335116A)

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Title: TASK GENERATION METHOD, TASK GENERATION APPARATUS, AND NON-TRANSITORY COMPUTER-READABLE RECORDING MEDIUM **STORING** PROGRAM

Abstract: A task generation method includes: receiving **worker** information from **equipment** of a **worker** over a network, the **worker** information including attribute information regarding a personal attribute of the **worker**; calculating degrees of association between each of pieces of analysis information resulting from analysis of pieces of data **stored** in a **storage** device connected to a computer and the **worker** information; extracting a piece of data to be subjected to task processing the **worker** is requested to perform from the pieces of data as specific data, based on the degrees of association; and generating a request task that is a task for making, to the **equipment** of the **worker**, a request for performing task processing for giving label information to the extracted specific data by using the **equipment** of the **worker**.

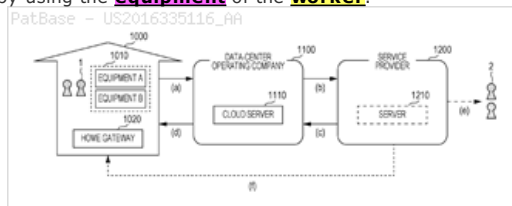
Classifications:

International (IPC 8-9): G06F16/9035 G06F17/30 G06F9/46

G06N99/00 (Advanced/Invention)

CPC: G06Q10/06 G06Q10/101 G06Q10/103

US: 1/1 718/102



Family:

Publication number	Publication date	Application number	Application date
JP2016212884 A2	20161215	JP20160095585	20160511
JP6612674 B2	20191127	JP20160095585	20160511

JP6612674 B2	20191108	JP20160095585	20160511
JP6612674 B2	20191127	JP20160095585	20160511
US2016335116 AA	20161117	US20160140538	20160428

Priority:

JP20150096910 20150511 JP20160095585 20160511

Probable Assignee: PANASONIC IP CORP AMERICA

Assignee(s): (std): PANASONIC IP CORP AMERICA

Assignee(s): PANASONIC INTELLECTUAL PROPERTY CORP OF AMERICA ; PANASONIC INTELLECTUAL PROPERTY OF AMERICA CORP

Inventor(s): (std): TSUKIZAWA SOTARO ; TAKAHASHI MASAKI ; ISHII YASUNORI ; HAGAWA REIKO

19) Family number: 28285448 (US2002190866A)

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Title: DETERMINING THE EFFICIENCY OF RESPIRATORS AND PROTECTIVE **CLOTHING**, AND OTHER IMPROVEMENTS

Abstract: A respirator system (10; 100) for a **worker** in an environment with hazardous airborne contaminants comprises a respirator (12, 112), a helmet (14, 114), a camera (40, 140), and a gas sample analyser (16, 116) capable of analysing samples of gas from within the respirator and in the immediate area near the user. An RF emitter (20, 120) sends a signal to a remote receiver (24, 124). The emitted signal is a real time view through the camera (40, 140) and overlaid on that is a graphical representation of the protection factor being achieved by the respirator. The system (100) may also have a data **storage** device (162, 170) to **store** data such as how protection factor varies with time and may have a position sensor (160). The provision of the position sensor (160) allows a map of contamination levels with position to be built up as a user moves around a site.

Classifications:

International (IPC 8-9): A62B17/00 A62B18/00 A62B7/00 A62B9/00 G08B21/00 G08B21/12 G08B23/00 (Advanced/Invention);

B63C11/02 (Advanced/Non-invention);

A62B17/00 A62B7/00 A62B9/00 G08B21/00

G08B23/00 (Core/Invention);

B63C11/02 (Core/Non-invention)

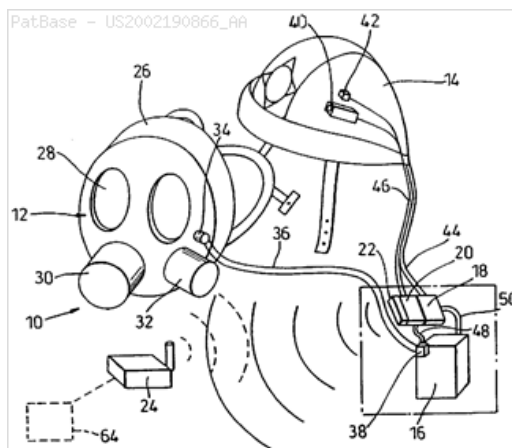
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G08B17/10 G08B21/12

CPC: A62B7/00 A62B9/006 B63C11/02

European: A62B7/00 A62B9/00C L63C11/02

US: 128/202.22 340/517 340/573.1 340/622 340/627 340/632 340/693.5



Family:

Publication number	Publication date	Application number	Application date
CA2394890 AA	20020613	CA20002394890	20001212
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GB9929745 A0	20000209	GB19990029745	19991217
JP2003516831 T2	20030520	JP20010544956T	20001212
US2002190866 AA	20021219	US20020168159	20020617
US2007018836 AA	20070125	US20060341122	20060127
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WO0143827 A1	20010621	WO2000GB04755	20001212

Priority:

GB19990029745 19991217 WO2000GB04755 20001212 US20020168159 20020617
US20060341122 20060127

Probable Assignee: SEC DEP FOR DEFENCE

Assignee(s): (std): SEC DEP FOR DEFENCE UNITED ; SECR DEFENCE ; SECRETARY OF STATE FOR DEFENCE THE ; THE SECRETARY OF STATE OF DEFENCE ; SEC DEP FOR DEFENCE THE UNITED ; RICHARDSON GRANT STUART

Assignee(s): SEC DEP FOR DEFENCE ; SEC DEP FOR DEFENCE IN HER BRITANNIC MAJESTY S GOVERNMENT OF UNETED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND ; THE SECRETARY OF STATE FOR DEFENCE IN HER BRITANNIC MAJESTY S GOVERNMENT OF THE UNETED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND ; SECRETARY OF STATE FOR DEFENCE THE UNITED KINGDOM ; THE SECRETARY OF STATE FOR DEFENCE ; SEC DEP FOR DEFENCE UNITED KINGDOM

Inventor(s): (std): RICHARDSON GRANT S ; RICHARDSON GRANT STUART

Inventor(s): RICHARDSON GRANT ; GRANT STUART RICHARDSON

Agent(s): FETHERSTONHAUGH AND CO; HITOSHIO AKIO; KAWAGUCHI YOSHIO; OSAKI KATSUMASA; JOHN S PRATT ESQ KILPATRICK STOCKTON LLP; DEAN W; KRISTIN M; KILPATRICK STOCKTON LLP

Designated states: AT BE CA CH CY DE DK ES FI FR GB GR IE IT JP LI LU MC NL PT SE TR US

20) Family number: 49957452 (US2012001765A)

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Title: SYSTEM FOR MONITORING THE UTILIZATION OF PERSONAL PROTECTIVE **EQUIPMENT** BY **WORKERS** IN THE WORKPLACE

Abstract: The present invention concerns a system for monitoring the utilization of personal protective **equipment** by **workers** in the workplace. Said system comprises a set of first slave electronic modules, each of which is paired to a corresponding piece of personal protective **equipment** to be used in said workplace and is configured to **store** information

that **identifies** said corresponding piece of personal protective **equipment**. In addition, said system further comprises a set of master electronic modules, each of which is paired to a corresponding **worker** working in said workplace and is configured to: **store** information that **identifies** said corresponding **worker**; form with corresponding first slave electronic modules that are paired to the personal protective **equipment** with which said corresponding **worker** is equipped a corresponding Body Area Network (BAN), through which said corresponding first slave electronic modules communicate exclusively with said master electronic module; acquire the information **stored** by the corresponding first slave electronic modules from said corresponding first slave electronic modules through the corresponding Body Area Network (BAN); and **store** the information acquired from said corresponding first slave electronic modules. In addition, said system further comprises a set of monitoring devices, each of which is arranged in a corresponding position in the workplace and is configured to acquire from the master electronic modules present in a corresponding acquisition area the information **stored** by said master electronic modules. Lastly, said system further comprises a central control and monitoring unit connected to the monitoring devices and configured to acquire from the monitoring devices the information that said monitoring devices acquire from the master electronic modules.

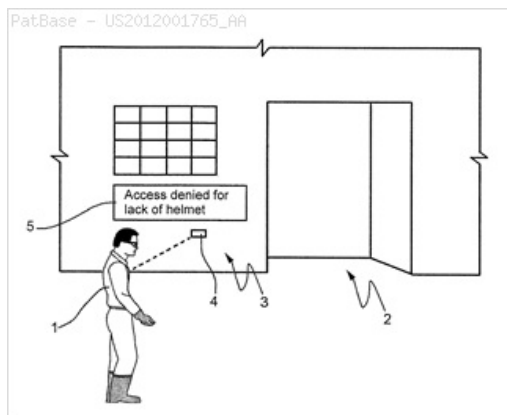
Classifications:

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CPC: G08B21/24

European: G08B21/24

US: 340/686.1 340/686.100P 702/150 702/150S



Family:

Publication number	Publication date	Application number	Application date
BRPI1102487 A2	20121106	BR2011PI02487	20110523
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PL2388755 T3	20130430	PL20110167188T	20110523
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Priority:

IT2010TO00426 20100521 EP20110167188 20110523

Probable Assignee: SELEX SISTEMI INTEGRATI SPA

Assignee(s): (std): BOCCOLA ENRICO ; SELEX SISTEMI INTEGRATI SPA ; SELEX SISTEMI INTEGRATI S P A

Inventor(s): (std): BOCCOLA ENRICO

Inventor(s): BOCCOLA ENRICO 80128 ; ENRICO BOCCOLA

Agent(s): WAGNER AND GEYER PARTNERSCHAFT PATENT U RECHTSANWALTE; JORIO PAOLO; MARSHALL GERSTEIN BORUN 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

21) Family number: 54292478 (US2013179204A)

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Title: METHOD, SYSTEM AND DEVICE FOR A GEOLOCATIONAL TRACKING AND MANAGEMENT OF AGRICULTURAL WORKFLOW

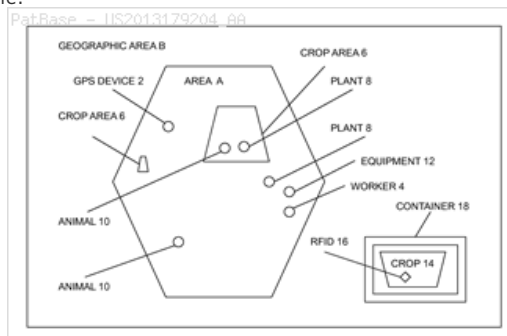
Abstract: Methods, systems and devices for enabling the geolocational monitoring, tracking and management of an agricultural workflow are provided. A first version of the method includes defining a unique area of plant cultivation or animal husbandry; recording inputs to the area with a **GPS** device; reporting the inputs and related **GPS** confirmations to a database in association with the area; recording outputs from the area with the **GPS** device 2; and reporting the outputs and related **GPS** confirmations to a database in association with the area, whereby a net yield of the area over time can be appraised in view of the inputs and outputs of the area. A marker may be assigned to an element of crop or animal output and the element may be monitored by references to the marker over distance and time.

Classifications:

International (IPC 8-9): G05B19/00 G06K5/00 G06Q10/00 G06Q10/06 G06Q10/08 G06Q10/10 G06Q30/00 G06Q30/02 (Advanced/Invention)

CPC: G06Q10/06 G06Q50/02 G06K5/00 G06Q10/087 G06Q30/018 G06Q10/0832 G06Q10/06398 G06Q10/0833 G06Q10/101 G06Q30/0185 G06Q30/0201 Y02P90/265

US: 235/375 705/28 705/333 705/7.11 705/7.42



Family:

Publication number	Publication date	Application number	Application date
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US2014252080 AA	20140911	US20130018089	20130904
US2014337186 AA	20141113	US20140338310	20140722
US2015012338 AA	20150108	US20130948594	20130723
US2015012457 AA	20150108	US20130933752	20130702
US9767326 BB	20170919	US20130018089	20130904
US9965736 BB	20180508	US20130948594	20130723

Priority:

US20120347702 20120111 US20130933752 20130702 US20130948594 20130723
US20130018089 20130904 US20140338310 20140722

Probable Assignee: HOUND DOG LLC

Assignee(s): (std): GONZALEZ ABEL ; GONZALEZ ALVARO ; HOUND DOG LLC ; SABAREZ II ANTONIO

Inventor(s): (std): SABAREZ II ANTONIO ; GONZALEZ ALVARO ; GONZALEZ ABEL

Agent(s): PATRICK

22) Family number: 28318587 (US2002180606A)

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Title: ELECTRONIC EXPOSURE DOSE METER AND RADIATION HANDLING OPERATION MANAGEMENT SYSTEM EMPLOYING THE SAME

Abstract: An electronic exposure dose meter and a radiation handling operation management system is capable of realizing real time exposure management. The radiation handling operation management system has monitoring unit receiving an exposure dose amount measured by an electronic exposure dose meter having a radiation detector, its counter circuit and a PHS transmission and reception antenna, from a plurality of transmission and reception base station installed in a radiation handling operation site through bidirectional communication with a central management section via an external management base station, and deriving position of user of the electronic exposure dose meter for collecting and displaying position and exposure dose amount of the user. The electronic exposure dose meter has a radiation detector, a counter circuit, a PHS antenna for bidirectional communication with a central management section. The electronic exposure dose meter generates an alarm in response to an instruction signal from the central management section.

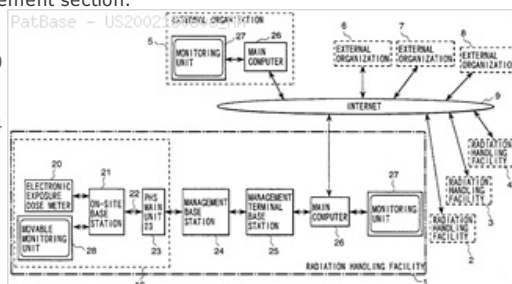
Classifications:

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H04B7/24 (Advanced/Invention)

International (IPC 1-7): G01T1/00 G01T1/02 G01T1/04 G01T1/17
G08B21/12 G08B23/00 G08B25/10 G08B27/00 G21C17/00 H04B7/24
CPC: G01T1/026 G01T7/00

European: G01T1/02D G01T7/00

US: 250/336.1 250/336.100S 250/472.1 250/472.100P 340/539.1
340/573.1 340/573.100P 340/600 340/612 340/632 340/693.6
378/97 378/97S 378/98 378/98S



Family:

Publication number	Publication date	Application number	Application date
JP2002365366 A2	20021218	JP20010168939	20010605
JP3885520 B2	20070221	JP20010168939	20010605
US2002180606 AA	20021205	US20020200491	20020723
US2002195572 AA	20021226	US20020097376	20020315
US6891476 BB	20050510	US20020097376	20020315

Priority:

JP20010168939 20010605 US20020097376 20020315 US20020200491 20020723

Probable Assignee: HITACHI LTD

Assignee(s): (std): HITACHI LTD

Assignee(s): KONO NAOYUKI ; USHIRODA KOUICHI ; KITAGUCHI HIROSHI ; MATSUI TETSUYA ; FUKUTSUKA NAOYA

Inventor(s): (std): FUKUTSUKA NAOYA ; FUKUZUKA NAOYA ; KITAGUCHI HIROSHI ; KONO NAOYUKI ; MATSUI TETSUYA ; USHIRODA KOUICHI ; NOCHIDA KOICHI

Inventor(s): TETSUYA MATSUI ; NAOYA FUKUTSUKA ; NAOYUKI KONO ; HIROSHI KITAGUCHI ; KOUICHI USHIRODA

Agent(s): MATTINGLY STANGER MALUR AND BRUNDIDGE PC

23) Family number: 67467602 (IN201631008225A)

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Title: METHOD AND APPARATUS FOR ENHANCING WORKPLACE SAFETY AND PRODUCTIVITY BY INCORPORATION OF WEARABLE SENSORS IN THE PERSONAL PROTECTIVE **EQUIPMENT**

Abstract: The invention described in the claims elaborates methods and apparatus used to implement a positive isolation system and wearable sensors which transmit critical data to a central command centre along with alerting the users. The sensors enable **GPS** location, Carbon Monoxide gas leakages and pulse data to be transmitted using existing cellular or WiFi network through a micro controller. This also incorporates the use of live video streaming and proximity based maintenance data to be transmitted to a **worker** while also tracking him underground or in confined spaces among other claims. Such an invention has not been conceived or implemented elsewhere at the time of writing the claims in this document.

Classifications:

International (IPC 8-9): G08B21/18 (Advanced/Invention)

Family:

Publication number	Publication date	Application number	Application date
IN201631008225 A	20171110	IN201631008225	20160309

Priority:

IN201631008225 20160309

Probable Assignee:

TATA STEEL LTD

Assignee(s):

TATA STEEL LTD

Inventor(s):

ABHISHEK KUMAR

24) Family number: 63468628 (US2016255969A)

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Title: SHOPPING FACILITY ASSISTANCE SYSTEMS, DEVICES AND METHODS PERTAINING TO MOVEMENT OF A MOBILE RETAIL PRODUCT DISPLAY

Abstract: A motorized transport unit is configured to temporarily attach to a mobile retail product display and a central computer system is configured to task that motorized transport unit to move such a mobile retail product display. This movement can be from a customer-inaccessible area to a customer-accessible area and/or vice versa. The mobile retail product displays can include refrigerated-product displays and heated-product displays. By one approach such tasking is based, at least in part, upon detecting one or more predetermined states such as a predetermined temporal state, a detected customer demographic, local weather conditions, and/or a societal observation.

Classifications:**International (IPC 8-9):** A47F10/00 A47F10/02 A47F10/04 A47F13/00

A47F3/08 A47L11/40 A61G5/04 B07C5/00 B07C5/28 B07C5/342 B25J5/00 B60K1/00 B60K1/02 B60L11/18 B60L15/40 B60L53/36 B60L53/63 B60P3/06 B61B5/00 B62B3/00 B62B3/04 B62B3/14 B62B5/00 B65F3/00 B65G1/00 B65G1/02 B65G1/04 B65G43/08 B65G47/00 B65G47/46 B65G67/04 B65G67/24 B66F9/06 E01H5/06 E01H5/12 E04H3/02 G01C21/20 G01C21/34 G01C22/00 G01S1/02 G01S1/68 G01S1/70 G01S1/72 G01S5/16 G05B15/02 G05B19/048 G05B19/12 G05B19/418 G05D1/00 G05D1/02 G05D1/04 G06F17/30 G06F21/60 G06F3/01 G06F7/00 G06K7/10 G06K7/14 G06K9/00 G06K9/18 G06K9/32 G06K9/62 G06K9/78 G06Q10/00 G06Q10/02 G06Q10/06 G06Q10/08 G06Q10/10 G06Q20/12 G06Q30/00 G06Q30/02 G06Q30/06 G06Q50/28 G06Q50/30 G06T7/00

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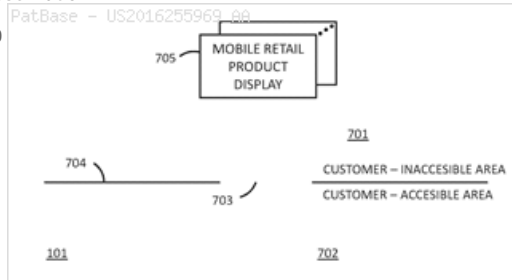
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CPC: H04N7/181 G06Q10/0833 G06T7/0004 G10L15/265 G06T7/0044 G06T7/0075 G05D1/0261 B66F9/00 B62B3/1492 B62B5/0033 G05D1/0094 H04W4/008 H04N13/0282 G06F17/30979 G06Q30/0283 B60L11/1833 B60L11/1844 B07C5/00 B62B5/0093 B62B2203/10 B65G47/00 H04L65/1069 G05D1/02 G05D1/0274 G01C21/34 H04W4/043 G06Q10/047 G06Q10/08 B65G1/0492 G06K9/00664 G06K9/6201 G06Q30/0607 G06Q10/00 G06Q10/06 G06T7/0002 A61G5/047 G05B19/41895 G05D2201/0212 G05D1/0287 B60L53/36 B60L53/63 G05D1/028 G06Q10/0631 G06Q10/06315 G06Q10/087 G06Q30/0601 G06Q30/0641 G06Q50/28 G06F16/90335 H04N7/183 H04W4/02 H04W4/021 H04W4/80 H04N13/282 Y02W30/82 Y02W30/827 Y02W90/20 Y10S901/01 A47F3/08 A47F10/04 A47F13/00 A47F2010/005 A47F2010/025 A47L11/4011 A47L2201/04 B07C5/28 B07C5/3422 B07C2501/0045 B07C2501/0054 B07C2501/0063 B60P3/06 B60Y2410/10 B62B5/0026 B62B5/0069 B62B5/0076 B65F3/00 B65F2210/168 B66F9/063 E01H5/061 E01H5/12 G01C21/206 G01S1/02 G01S1/70 G01S1/72 G05B19/048 G05B19/124 G05B2219/23363 G05B2219/39107 G05D1/0011 G05D1/0022 G05D1/0027 G05D1/0061 G05D1/0088 G05D1/021 G05D1/0214 G05D1/0219 G05D1/0246 G05D1/0255 G05D1/0276 G05D1/0289 G05D1/0291 G05D1/0293 G05D1/0297 G05D1/04 G05D2201/0203 G06F3/017 G06F21/606 G06K7/10297 G06K7/10821 G06K7/1413 G06K9/00208 G06K9/00624 G06K9/00671 G06K9/00771 G06K9/00791 G06K9/00805 G06K9/18 G06K9/3208 G06K9/6256 G06K9/78 G06K2009/00738 G06Q10/02 G06Q10/06311 G06Q10/083 G06Q10/1095 G06Q10/30 G06Q20/12 G06Q30/016 G06Q30/0281 G06Q30/0605 G06Q30/0613 G06Q30/0617 G06Q30/0619 G06Q30/0631 G06Q30/0633 G06Q30/0635 G06Q30/0639 G06Q50/30 G06T7/593 G06T7/74 G06T2207/10028 G08G1/20 G10L13/043 G10L15/22 G10L17/22 G10L2015/223 H02J7/00034 H04B1/38 H04B10/116 H04L63/06 H04L63/08 H04L63/0846 H04L67/12 H04L67/141 H04L67/143 H04N5/77 H04N7/18 H04N7/185 H04W4/029 H04W4/30 H04W4/33 H04W4/40 Y04S10/54 B62B3/1404 B62B5/005 G01S5/02 G01S5/16 G01S5/18 G05B15/02 G06Q30/06 H02J2007/0096 G08G1/123 G01S1/68 H02J7/0013 H02J7/0071 G01S1/7034 G01S1/7038 G01S2201/02 G01S2201/01 H02J7/0027 G05D2201/0216 G05D1/0016 G05D1/0234

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Publication number	Publication date	Application number	Application date
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Priority:

US20150129726P 20150306	US20150129727P 20150306	US20150138877P 20150326
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Probable Assignee: WALMART APOLLO LLC

Assignee(s): (std): WAL MART STORES INC ; WALMART APOLLO LLC

Assignee(s): WELCH ERIC ; WELCH ERIC E ; WINKLE DAVID ; WINKLE DAVID C ; MCHALE BRIAN G ; ATCHLEY MICHAEL D ; CHAKROBARTTY SHUVRO ; HIGH DONALD R ; KAY KARL ; TAYLOR ROBERT C ; THOMPSON JOHN P

Inventor(s): (std): ATCHLEY MICHAEL D ; BRIAN G MICHALE ; BRIAN MCHALE ; CHAKROBARTTY SHUVRO ; DAVID C WINKLE ; DAVID WINKLE ; DONALD HIGH ; DONALD R HIGH ; ERIC E WELCH ; ERIC WELCH ; HIGH DONALD R ; JOHN P THOMPSON ; KARL KAY ; KAY KARL ; MCHALE BRIAN G ; MICHAEL ATCHLEY ; MICHAEL D ATCHLEY ; MICHAEL DEAN ATCHLEY ; ROBERT C TAYLOR ; SHUVRO CHAK ROBERTTY ; TAYLOR ROBERT C ; THOMPSON JOHN P ; WELCH ERIC ; WELCH ERIC E ; WINKLE DAVID ; WINKLE DAVID C ; SHUVRO CHAKROBARTTY ; BRIAN GERARD MCHALE ; BRIAN G MCHALE ; ROBERT TAYLOR

Agent(s): DEETH WILLIAMS WALL LLP; FITCH EVEN TABIN AND FLANNERY LLP; FITCH EVEN TABIN AND FLANNERY; MENGHINI SCOTT J 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 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

25) Family number: 43356650 (US2010284384A)

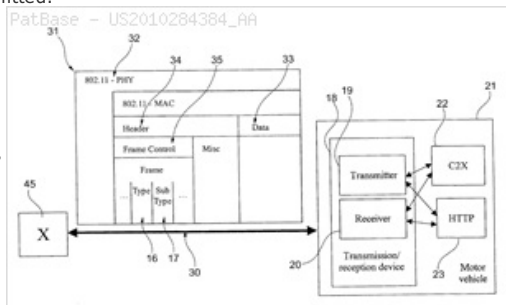
PatBase

Title: USE OF THE WLAN STANDARD FOR C2C COMMUNICATION BY ADDING NEW PACKET TYPES

Abstract: C2X communication is made possible efficiently via WLAN by apparatuses and a method for filtering data frames received by a vehicle from a receiver via a WLAN connection, wherein a frame type indicated in a received data frame is used to decide that device to which data in the data frame are transmitted.

Classifications:

International (IPC 8-9): B60R16/02 B60R25/10 B60R25/102 B60R25/33 G06F19/00 G06F7/00 G06F9/455 G06Q50/30 G08B21/02 G08B25/01 G08G1/00 G08G1/16 H04L12/28 H04L12/413 H04L12/56 H04L29/02 H04L29/06 H04L29/08 H04M1/00 H04M11/00 H04M3/00 H04W24/00 H04W4/00 H04W4/04 H04W84/02 H04W84/12 H04W88/04 (Advanced/Invention); B60R16/02 B60R25/10 G08B21/00 G08G1/16 H04L12/28 H04L12/407 H04L29/02 H04L29/06 H04W84/02 H04W88/00 (Core/Invention)
International (IPC 1-7): G08G1/16
CPC: B60R25/33 B60R25/102 B60R2325/101 B60R2325/205 G08B25/016 G08G1/205 H04L67/18 H04W84/12 H04W84/18 H04W76/40 G08G1/164 G08G1/161 H04L67/12
European: B60R25/102 B60R25/33 G08B25/01D G08G1/16A G08G1/16B G08G1/20B H04L29/08N11 H04L29/08N17 H04W76/00B H04W84/12 L60R325/10B L60R325/20D T04W84/18
US: 180/168 180/272 318/587 370/338 370/338P 370/342 370/343 370/389 455/404.2 455/404.200P 455/418 455/419 455/456.1 455/462 455/463 455/464 455/465 455/466 455/574 700/304 701/117 701/19 701/23 701/24 701/28 701/31.4 701/31.400P 701/33 701/36



Family:

Publication number	Publication date	Application number	Application date
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Priority:

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WO2009EP53926	20090402				

Probable Assignee: CONTINENTAL TEVES AND CO OHG AG

Assignee(s): (std): CONTINENTAL TEVES AND CO OHG AG ; ERDEM BETTINA ; GEE ROBERT ; GROTENDORST THOMAS ; KONTINENTAL TEVES U KO OKHG AG ; MENZEL MARC ; MERZBACHER RALF ; MOELLER ULRICH ; SCHAEFER MAIK ; SCHERPING RICHARD ; STAHLIN ULRICH ; WILLNECKER THOMAS ; AUNKOFER MAIK ; AUNKOFER MARKUS ; BAIER ROBERT ; BAUER OLEG ; BIRKE CARSTEN ; CONTINENTAL TEVES AG AND CO OHG

Assignee(s): CONTINENTAL TEVES AND CO AG ; CONTINENTAL TEVES AG AND CO

Inventor(s): (std): AUNKOFER MAIK ; AUNKOFER MAJK ; AUNKOFER MARKUS ; BAIER ROBERT ; BAJER ROBERT ; BAUER OLEG ; BETTINA ERDEM ; BIRKE CARSTEN ; DZHI ROBERT ; EHRDEM BETTINA ; ERDEM BETTINA ; GEE ROBERT ; GROTENDORST THOMAS ; MAIK AUNKOFER ; MAIK SCHAEFER ; MARC MENZEL ; MELLER ULRIKH ; MENTSEL MARK ; MENZEL MARC ; MERZBACHER RALF ; MOELLER ULRICH ; OLEG BAUER ; ROBERT BAIER ; ROBERT GEE ; SCHAEFER MAIK ; SHEFFER MAJK ; SHTHELIN ULRIKH ; STAHLIN ULRICH ; THOMAS GROTENDORST ; THOMAS WILLNECKER ; ULRICH MOELLER ; ULRICH STAHLIN ; VIL NEKER TOMAS ; WILLNECKER THOMAS ; SCHERPING RICHARD

Inventor(s): SCHFER MAIK ; STAHLIN ULRICH ; STHLIN ULRICH ; SCHAFER MAIK ; MLLER ULRICH ; GEE ROBERT ALLEN

Agent(s): BONN ROMAN KLEMENS; LOZANO JOSE; LEHMANN MARIA ISABEL; RATNERPRESTIA; CONTINENTAL TEVES AG AND CO OHG

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 ZA ZM ZW

26) Family number: 66946665 (US2019073618A)

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Title: INTELLIGENT SAFETY MONITORING AND ANALYTICS SYSTEM FOR PERSONAL PROTECTIVE **EQUIPMENT**

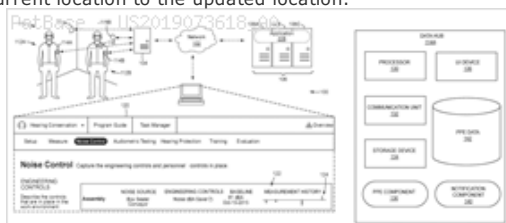
Abstract: In some examples, a system includes an article of hearing protection assigned to a **worker**, and a portable computing device assigned to the **worker**; a remote computing device communicatively coupled to the portable computing device, the remote computing device configured to receive sound level data that indicate different sound levels at different, respective locations of a work environment; determine, based on location data received from the portable computing device, an amount of sound received by the **worker** over a period of time; **identify** an updated location in the work environment having a sound level that is different from a current location, based at least in part on the article of hearing protection, the amount of sound, and the sound level data that indicates different sound levels at different, respective locations; and generate a notification that instructs the **worker** to move from the current location to the updated location.

Classifications:

International (IPC 8-9): A61F11/06 G01H3/14 G06F17/18 G06F9/54 G06Q10/06 G06Q50/22 G08B21/02 G08B21/04 G08B21/18 G16H80/00 (Advanced/Invention)

CPC: G06Q10/06 G06Q10/06315 G06Q10/0635 G08B21/02 G06F17/18 G06F9/542 A61F9/029 A61F11/06 G06Q10/063 G08B21/0453 G08B21/182 G16H40/67 G06Q50/22

US: 1/1



Family:

Publication number	Publication date	Application number	Application date
AU2017229342 AA	20180927	AU20170229342	20170307
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Priority:

US20160304644P 20160307 US20170077541 20170307 WO2017US21118 20170307

Probable Assignee: 3M CO

Assignee(s): (std): 3M CO ; 3M INNOVATIVE PROPERTIES CO ; 3M CO MINNESOTA MINING AND MFG COMPANY

Assignee(s): AWISZUS STEVEN T ; BERGER ELLIOTT H ; BLACKFORD MATTHEW J ; BROWN JAMES D ; DIGRE STEVEN R ; FACKLER CAMERON J ; HOLLOWAY DARCEY L ; KANUKURTHY KIRAN S ; LOBNER ERIC C ; MADISON TED K ; SAVOIE PHILIP J ; SMITH PAGEEN S ; WELLS LAURINE L ; WURM MICHAEL G ; 3M INNOVATIVE PROPERTIES COMPANY

Inventor(s): (std): AWISZUS STEVEN T ; BERGER ELLIOTT H ; BLACKFORD MATTHEW J ; BROWN JAMES D ; CAMERON J FACKLER ; DARCEY L HOLLOWAY ; DIGRE STEVEN R ; ELLIOTT H BERGER ; ERIC C LOBNER ; FACKLER CAMERON J ; HOLLOWAY DARCEY L ; JAMES D BROWN ; KANUKURTHY KIRAN S ; KIRAN S KANUKURTHY ; KUNUKURTHY KIRAN S ; LAURINE L WELLS ; LOBNER ERIC C ; MADISON TED K ; MATTHEW J BLACKFORD ; MICHAEL G WURM ; PAGEEN S SMITH ; PHILIP J SAVOIE ; SAVOIE PHILIP J ; SMITH PAGEEN S ; STEVEN R DIGRE ; STEVEN T AWISZUS ; TED K MADISON ; WELLS LAURINE L ; WURM MICHAEL G ; WURM MAJCL G ; WELLS LAURINE L ; SMITH PAGEEN S ; SAVOIE PHILIP DZH ; LOBNER ERIC K ; KHOLLOVEJ DARSI L ; KANUKURTHY KIRAN S ; FACKLER CAMERON DZH ; DIGRE STEVEN R ; BRAUN DZHEJMS D ; BLACKFORD MATTHEW J ; BERGER ELLIOTT H ; AWISZUS STEVEN T ; SMITH PAGEEN S ; KANUKURTHY KIRAN S

Agent(s): FPA PATENT ATTORNEYS PTY LTD; SMART AND BIGGAR; ALESSANDRI AND COMPANIA LIMITADA; HERZOG FIESSER AND PARTNER PATENTANWALTE PARTG MBB; IR Y T WIDJOJO; KARLEN CHRISTOPHER D 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 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

27) Family number: 41118670 (US2008018472A)

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Title: RADIO FREQUENCY IDENTIFICATION BASED PERSONNEL SAFETY SYSTEM

Abstract: Disclosed is a method and apparatus for selectively immobilizing equipment to ensure the safety of a proximate worker. The apparatus comprises an article of clothing wearable by the proximate worker, a sensor and a stopping means for stopping the movement of a portion of the equipment in response to the sensing. The article of clothing has a RFID tag having an antenna distributed about the article so as to substantially surround a worker wearing the article of clothing. The sensor senses the proximity of the RFID tag to a portion of the equipment. The method comprises sensing the proximity of the RFID tag to a portion of the equipment and stopping the movement of a portion of the equipment in response to the sensing.

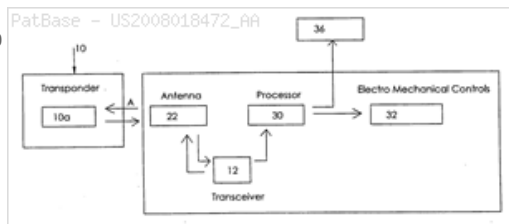
Classifications:

International (IPC 8-9): A41D13/00 A62B99/00 B60K28/00 B60L3/00 B60R21/34 B60T7/18 B60W30/08 B60W30/09 G01V3/12 G08B21/00 G08B21/22 (Advanced/Invention); B60W30/16 (Advanced/Non-invention); G08B21/00 (Core/Invention)

CPC: Y02T90/16 B66F17/003 F16P3/141 F16P3/147 G08B21/0213 G08B25/016

European: F16P3/14 G08B25/01D Y02T90/16

US: 340/539.1 340/539.11 340/572.1 340/572.4 340/572.400P 340/573.4 340/686.6



Family:

Publication number	Publication date	Application number	Application date
CA2592299 AA	20080111	CA20072592299	20070711
CA2592299 C	20141223	CA20072592299	20070711
US2008018472 AA	20080124	US20070822911	20070711
US8115650 BB	20120214	US20070822911	20070711

Priority:

US20060819641P 20060711 CA20072592299 20070711 US20070822911 20070711

Probable Assignee: PSST MOBILE EQUIPMENT LTD RICHARD SHERVEY

Assignee(s): (std): DASILVA JOHN ; PSST MOBILE EQUIPMENT LTD RICHARD SHERVEY ; SHERVEY RICHARD C ; SHERVEY RICHARD CLAYTON

Assignee(s): DASILVA JOHN4597 ZRAL ROADPRINCE GEORGE1V2K 5X9CA ; SHERVEY RICHARD CP.O. BOX 23002PRINCE GEORGE1V2N 6Z2CA

Inventor(s): (std): DASILVA JOHN ; SHERVEY RICHARD C ; SHERVEY RICHARD CLAYTON

Inventor(s): SHERVEY RICHARD CP.O. BOX 23002PRINCE GEORGE1V2N 6Z2CA ; DASILVA JOHN4597 ZRAL ROADPRINCE GEORGE1V2K 5X9CA ; SHERVEY RICHARD

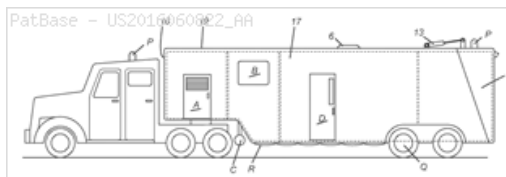
Agent(s): EDWARDS ANTONY C ; ANTONY C EDWARDS

Title: ROAD REPAIR VEHICLE

Abstract: A road repair vehicle has an engine for powering the vehicle, a plurality of wheels, and a shelter structure supported above a road by the wheels, the shelter structure forming an enclosure for providing shelter to one or more road repair **workers**, the shelter structure having an open bottom to enable the one or more road repair **workers** to access the road to be repaired. The vehicle may be used to repair potholes. The vehicle includes a sensor for detecting a **worker** in a work area of the shelter structure and for automatically disabling at least one vehicle system in response to detecting the **worker** in the work area.

Classifications:

International (IPC 8-9): E01C19/00 E01C19/08 E01C19/45
E01C23/06 E01F13/00 E01F13/12 E02F9/16 H04N5/33
H04N7/18 (Advanced/Invention)
CPC: E01F13/12 E01C19/45 E01C19/002 E01C19/08 E02F9/163
H04N7/181 H04N5/33 E01C2301/00 E01C23/06
US: 1/1 404/84.05



Family:

Publication number	Publication date	Application number	Application date
US2016060822 AA	20160303	US20150849997	20150910
US9157199 BA	20151013	US20140474662	20140902
US9464389 BB	20161011	US20150849997	20150910

Priority:

US20140474662 20140902 US20150849997 20150910

Probable Assignee: KANERVA RONALD

Assignee(s): (std): KANERVA RONALD

Inventor(s): (std): KANERVA RONALD

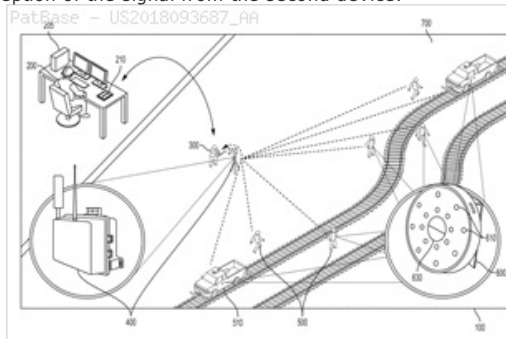
Agent(s): GARDNER LINN BURKHART AND FLORY LLP

Title: ENHANCED RAIL **WORKER** PROTECTION WARNING SYSTEM (PWS)

Abstract: A rail **worker** protection system having a first device configured to generate and send an **identification** code, a second device configured to transmit a request to the first device and to transmit a signal to one or more remote devices, and the remote device able to issue alarms to rail **workers** upon reception of the signal from the second device.

Classifications:

International (IPC 8-9): B61L23/06 G08B21/02 G08B3/10 G08B5/36
G08B6/00 (Advanced/Invention)
CPC: B61L23/06 G08B21/02 G08B6/00 G08B5/36 G08B3/10
US: 1/1 340/539.11



Family:

Publication number	Publication date	Application number	Application date
US2018093687 AA	20180405	US20170722673	20171002
US10207726 BB	20190219	US20170722673	20171002

Priority:

US20160402039P 20160930 US20170722673 20171002

Probable Assignee: HARSCO TECH LLC

Assignee(s): (std): HARSCO TECH LLC ; HARSCO TECHNOLOGIES LLC

Inventor(s): (std): DAVIS MICHAEL STEPHEN ; BARTEK PETER MICHAEL

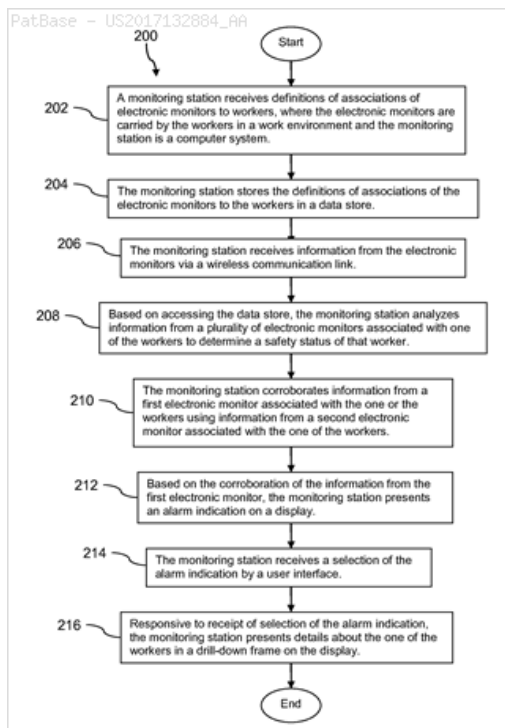
Agent(s): BAKER AND MCKENZIE LLP

Title: AGGREGATE MONITOR DATA IN REAL-TIME BY **WORKER**

Abstract: A **worker** monitoring system. The system comprises a processor, a display, a data **store**, a non-transitory memory, and an application **stored** in the non-transitory memory. The application **stores** definitions of associations of electronic monitors to **workers** in the data **store**, receives information from the electronic monitors via a wireless communication link, based on accessing the data **store**, analyzes information from a plurality of electronic monitors associated with one of the **workers**, corroborates information from a first electronic monitor associated with the one or the **workers** using information from a second electronic monitor associated with the one of the **workers**, and based on the corroboration of the information from the first electronic monitor, and presents an alarm indication on the display.

Classifications:

International (IPC 8-9): G08B21/04 G08B5/22
H04W4/02 (Advanced/Invention)
CPC: G08B5/22 H04W4/023 G08B21/0415 G08B21/0446
G08B21/0453
US: 1/1 340/635



Family:

Publication number	Publication date	Application number	Application date
EP3374977 A1	20180919	EP20160795473	20161027
US2017132884 AA	20170511	US20150936438	20151109
US2020175826 AA	20200604	US20200783452	20200206
US2020211335 AA	20200702	US20200815671	20200311
US2020211336 AA	20200702	US20200815786	20200311
US10593164 BB	20200317	US20150936438	20151109
WO17083111 A1	20170518	WO2016US59060	20161027

Priority:

US20150936438 20151109 WO2016US59060 20161027 US20200783452 20200206
US20200815671 20200311 US20200815786 20200311

Probable Assignee: HONEYWELL INT INC

Assignee(s): (std): HONEYWELL INT INC

Assignee(s): HONEYWELL INT INC A DELAWARE CORP

Inventor(s): (std): KUMAR TARUN ; SHARMA PRAVEEN

Agent(s): HOUGHTON MARK PHILLIP; WICK PHILLIPS GOULD AND MARTIN LLP; SZUCH COLLEEN 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 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

31) Family number: 63598731 (US2016271800A)

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Title: SYSTEMS AND METHODS TO FACILITATE HUMAN/ROBOT INTERACTION

Abstract: Short range transmissions are used to **identify** potential interactions between warehouse **workers** and warehouse robots in automated warehouses. The robot can be equipped with one or more short range transmission tags, such as radio frequency **identification** (RFID) tags, while the warehouse **worker** can be equipped with a short range transmission reader, such as an RFID reader. The robot can detect a warehouse **worker** that is within range when the RFID tags on the robot are written to by the RFID reader. The warehouse robots and warehouse **workers** can also be equipped with one or more cameras to **identify** fiducials in the automated warehouse and to report their positions. A central control or interaction server can ensure that warehouse robots and warehouse **workers** are routed appropriately to avoid incidents.

Classifications:

International (IPC 8-9): B25J5/00 B25J9/00 B25J9/16 G05B19/18
G05D1/00 G05D1/02 G06K19/077 G06K7/10

G06Q10/08 (Advanced/Invention)

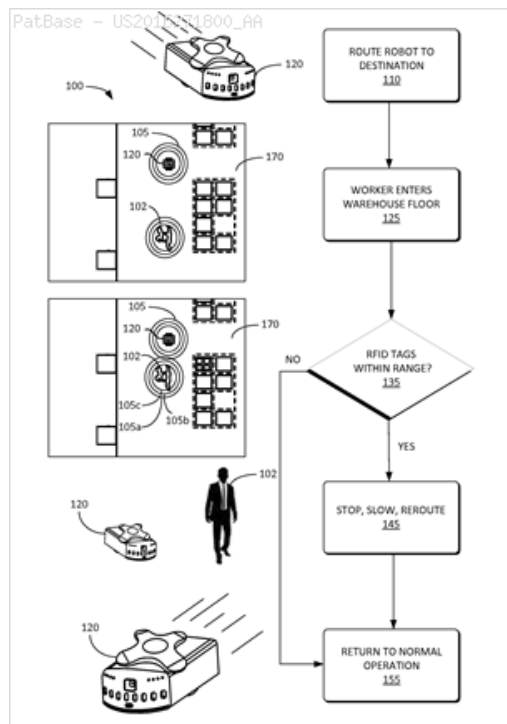
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G05B2219/40202 G05D1/0234 G05D1/0261 G05D2201/0216

G05D1/0214 Y10S901/47 Y10S901/46 G06K19/07762 G05D1/021

G06K7/10 G06K7/10376 B25J9/16 G06Q10/087

US: 1/1 700/255



Family:

Publication number	Publication date	Application number	Application date
CN107407936 A	20171128	CN201680015959	20160315
EP3271878 A1	20180124	EP20160713211	20160315
IN201717028524 A	20171027	IN201717028524	20170810
JP2018511125 T2	20180419	JP20170547417T	20160315
US2016271800 AA	20160922	US20150660161	20150317
US2016274586 AA	20160922	US20150660259	20150317
US9588519 BB	20170307	US20150660259	20150317
US9649766 BB	20170516	US20150660161	20150317
US9889563 BA	20180213	US20170483240	20170410
WO16149255 A1	20160922	WO2016US22443	20160315

Priority:

US20150660161 20150317 US20150660259 20150317 WO2016US22443 20160315
US20170483240 20170410

Probable Assignee: AMAZON TECHNOLOGIES INC

Assignee(s): (std): AMAZON TECH INC

Assignee(s): AMAZON TECHNOLOGIES INC

Inventor(s): (std): CALDARA STEPHEN ; CALDARA STEPHEN A ; MANSFIELD PETER K ; SHYDO JR ROBERT MICHAEL ; STUBBS ANDREW ; TIERNEY GREGORY EDWARD ; VERMINSKI MATTHEW DAVID

Inventor(s): SHYDO JR

Agent(s): BLAKE STEPHEN JAMES; TANI AND ABE PC; LEE AND HAYES PLLC; ELLIOTT JR ROBERT R 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

32) Family number: 55671768 (WO14030374A1)

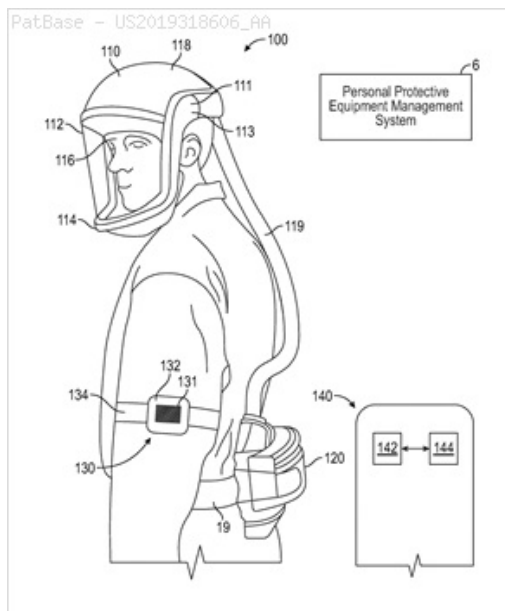
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Title: VEHICLE LOGISTICS MANAGEMENT SYSTEM

Abstract: Provided is a vehicle logistics operation technology such that the work for, e.g., registering and searching for the location of a vehicle **stored** in a terminal can be made more efficient, an inexpensive system with sufficient management accuracy can be implemented, and the lead time can be decreased. The present system includes a PC (3) used by an administrator, an HH terminal (1) carried by a **worker**, and a **GPS** receiver (2). The HH terminal (1) has the function to read first data including the ID of the vehicle from a medium in a vehicle, and the function to acquire positioning information (second data) through short-range communication with the **GPS** receiver (2). When registering vehicle position, the HH terminal (1), through **worker** operation, acquires the first and second data, transmits the data to the PC (3), and has information corresponding to the ID and position of the vehicle registered in a DB. The area of the lot where the vehicle is **stored** is managed according to location (block). The **stored** position of the vehicle is managed by associating the positioning information with a location ID.

Classifications:

International (IPC 8-9): B65G1/137 B65G61/00 B65G63/00
G06Q10/08 G06Q50/28 G08G1/00 G08G1/13 (Advanced/Invention);
B65G1/137 G06Q50/28 (Core/Invention)
CPC: G06Q10/087 G08G1/20



Family:

Publication number	Publication date	Application number	Application date
AU2017342276 AA	20190502	AU20170342276	20171011
BR112019007570 A2	20190702	BR20191107570	20171011
CA3040464 AA	20190412	CA20173040464	20171011
CN109844867 A	20190604	CN201780063239	20171011
EP3526702 A1	20190821	EP20170793756	20171011
IN201947014781 A	20190517	IN201947014781	20190412
KR20190062542 A	20190605	KR201907013443	20171011
US2019318606 AA	20191017	US20170340714	20171011
US2020118413 AA	20200416	US20190714870	20191216
US10515532 BB	20191224	US20170340714	20171011
WO18071568 A1	20180419	WO2017US56184	20171011

Priority:

US20160408353P 20161014 US20170340714 20171011 WO2017US56184 20171011
US20190340714 20190410 US20190714870 20191216

Probable Assignee: 3M CO

Assignee(s): (std): 3M CO MINNESOTA MINING AND MFG COMPANY ; 3M INNOVATIVE PROPERTIES CO

Assignee(s): AWISZUS STEVEN T ; KANUKURTHY KIRAN S ; LOBNER ERIC C ; WURM MICHAEL G ; 3M CO

Inventor(s): (std): AWISZUS STEVEN T ; ERIC C LOBNER ; KANUKURTHY KIRAN S ; KIRAN S KANUKURTHY ; LOBNER ERIC C ; MICHAEL G WURM ; STEVEN T AWISZUS ; WURM MICHAEL G

Agent(s): FPA PATENT ATTORNEYS PTY LTD; SMART AND BIGGAR; MATHYS AND SQUIRE; KARLEN CHRISTOPHER D; KARLEN CHRISTOPHER D ET AL

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

34) Family number: 29223775 (US5340968A)

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Title: INFORMATION **STORAGE** MEDIUM WITH ELECTRONIC AND VISUAL AREAS

Abstract: An electronic device intended for use as a tag to be attached to **identify** contents of the container to which it is attached. In particular, the present invention relates to an electronic tag which has a facility for **storing** delivery information and is equipped with a responding means for transmitting the delivery information **stored** therein in response to a query signal received from an interrogating apparatus. Codes, including items such as the names and addresses of the destination and the sender, and a sorting code are written into predetermined blanks of a delivery label, and into a memory. The memory responds to a query by transmitting the sorting information to allow automated sorting. The tag may be initiated only when torn, to extend battery shelf life.

Classifications:

International (IPC 8-9): B07C3/18 B23Q41/00 B42D15/10 B65G43/08 B65G47/49 B65G61/00 G01C21/00 G01S13/75 G01S13/76 G01S13/79 G05B19/418 G06F1/26 G06F13/00 G06F17/30 G06K1/12 G06K17/00 G06K19/00 G06K19/07 G06K19/077 G06K19/08 G06K7/00 G06K7/08 G06Q10/08 G06Q30/00 G06Q30/06 G06Q50/00 G06Q50/26 G06Q50/28 G07B17/00 G07C1/00 G07C9/00 G08G1/00 G08G1/09 G08G1/0969 G08G1/137 G09F3/00 H01M10/04 H01M2/10 H01M6/12 H01M6/40 H02J5/00 H04B1/59 H04B5/00 H04B7/15 H04B7/26 H04L7/10 H04W4/04 H04W4/35 H05K3/00 H05K3/20 (Advanced/Invention); B23Q41/00 G06F19/00 G06K17/00 (Advanced/Non-invention); B07C3/00 B23Q41/00 B42D15/10 B65G43/08 B65G47/48 B65G61/00 G01C21/00 G01S13/00 G05B19/418 G06F1/26 G06F13/00 G06F17/30 G06K17/00 G06K19/00 G06K19/07 G06K19/077 G06K7/00 G06K7/08 G06Q30/00 G06Q50/00 G07C1/00 G08G1/00 G08G1/09 G08G1/0969 G08G1/123 G09F3/00 H01M10/04 H01M2/10

H01M6/04 H01M6/40 H02J5/00 H04B1/59 H04B5/00 H04B7/26
H04L7/10 H05K3/00 H05K3/20 (Core/Invention);
B23Q41/00 G06F19/00 (Core/Non-invention)
International (IPC 1-7): B07C3/18 B23Q41/00 B42D15/10
B65G43/08 B65G47/49 G01C21/00 G01S13/75 G01S13/76
G01S13/79 G01S13/80 G06F1/26 G06F13/00 G06F15/21 G06F15/24
G06F15/40 G06F17/30 G06F17/60 G06F19/00 G06K1/12 G06K17/00
G06K19/00 G06K19/07 G06K19/077 G06K19/08 G06K5/00 G06K7/08
G06K7/10 G08G1/00 G08G1/0969 G08G1/137 G09F3/00 H01M10/04
H01M6/12 H01M6/40 H04B1/59 H04B5/00 H04B7/15 H04B7/26
H04L7/10 H04Q9/00 H05K3/00 H05K3/20
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S07B17/00F3E2 Y02E60/12
US: 235/375 235/380 235/384 235/385 235/492 340/10.1 340/4.2
340/825.2 340/825.54 342/51 364/478.01 375/359 700/213

FIG. 1

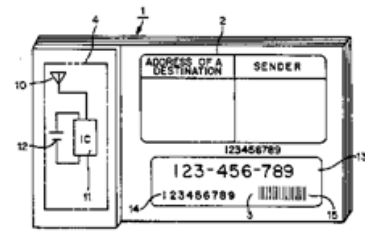
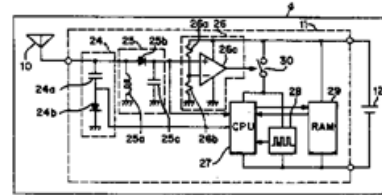


FIG. 2



Family:

Publication number	Publication date	Application number	Application date
AU199216028 A1	19921112	AU19920016028	19920505
AU199346183 A1	19940317	AU19930046183	19930907
AU662901 B2	19950921	AU19920016028	19920505
AU667944 B2	19960418	AU19930046183	19930907
DE69228144 D1	19990225	DE19926028144	19920507
DE69228144 D1	19990225	DE19926028144T	19920507
DE69228144 T2	19990923	DE19926028144T	19920507
DE69323460 D1	19990325	DE19936023460	19930907
DE69323460 D1	19990325	DE19936023460T	19930907
DE69323460 T2	19990708	DE19936023460T	19930907
EP0512543 A2	19921111	EP19920107710	19920507
EP0512543 A3	19930901	EP19920107710	19920507
EP0512543 B1	19990113	EP19920107710	19920507
EP0587115 A2	19940316	EP19930114337	19930907
EP0587115 A3	19951102	EP19930114337	19930907
EP0587115 B1	19990210	EP19930114337	19930907
JP2606183 B2	19970430	JP19910308921	19911125
JP2830501 B2	19981202	JP19910105945	19910510
JP2830885 B2	19981202	JP19920107607	19920427
JP2890886 B2	19990517	JP19910113149	19910517
JP2893995 B2	19990524	JP19910118718	19910523
JP2894002 B2	19990524	JP19910135004	19910606
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JP2973582 B2	19991108	JP19910126246	19910529
JP2998288 B2	20000111	JP19910135005	19910606
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JP3099413 B2	20001016	JP19910120374	19910524
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JP4333415 A2	19921120	JP19910105945	19910510
JP4341414 A2	19921127	JP19910113149	19910517
JP4345421 A2	19921201	JP19910116277	19910521
JP4345422 A2	19921201	JP19910118718	19910523
JP4345423 A2	19921201	JP19910118720	19910523
JP4345424 A2	19921201	JP19910120374	19910524
JP4350016 A2	19921204	JP19910126246	19910529
JP4354721 A2	19921209	JP19910127635	19910530
JP4354722 A2	19921209	JP19910127636	19910530
JP4359183 A2	19921211	JP19910135005	19910606
JP4361915 A2	19921215	JP19910135004	19910606
JP4367293 A2	19921218	JP19910143357	19910614
JP5139530 A2	19930608	JP19920107607	19920427
JP5142342 A2	19930608	JP19910308921	19911125
JP5170331 A2	19930709	JP19920107600	19920427
JP5217587 A2	19930827	JP19920288764	19921027
JP6080236 A2	19940322	JP19920238517	19920907
JP6111197 A2	19940422	JP19920258624	19920928

JP61156691 A2	19940603	JP19920315064	19921125
JP61156691 A2	19940603	JP19920315064	19921125
JP6326633 A2	19941125	JP19930189628	19930730
US5340968 A	19940823	US19920878787	19920505
US5532692 A	19960702	US19930116991	19930907
US5557096 A	19960917	US19940215711	19940322

Priority:

JP19910101532	19910507	JP19910105945	19910510	JP19910113149	19910517
JP19910116277	19910521	JP19910118718	19910523	JP19910118720	19910523
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JP19920261398	19920930	JP19920266124	19921005	JP19920266124	19921005
JP19920288764	19921027	JP19920297291	19921106	JP19920315064	19921125
JP19930189628	19930730	US19940215711	19940322		

Probable Assignee: NIPPONDENSO CO LTD

Assignee(s): (std): DENSO CORP ; NIPPON DENSO CO ; NIPPONDENSO CO LTD

Assignee(s): NIPPONDENSO COMPANY LTD ; NIPPONDENSO CO ; DENSO CORP KARIYA ; DENSO CORP KARIYA AICHI JP ; DENSO KK

Inventor(s): (std): NAKADA EIJI ; MIZUNO TOMOAKI ; MURASE TOKUTARO ; SANO MITSUHIRO ; MIZUNO KAZUO ; MATSUMOTO MANABU ; KOSAKA TOSHIYUKI ; SHIGEKUSA HISASHI ; WATANABE ATSUSHI ; WAKAHARA KAZUAKI ; TOMOAKI MIZUNO ; TOKUTARO MURASE ; NORIHIRO ISOBÉ ; SATOMI YOSHIOKA ; MITSUHIRO SANO ; KAZUO MIZUNO ; MANABU MATSUMOTO ; TOSHIHIKO ITO ; TOSHIYUKI KOSAKA ; TOSHIHIDE ANDO ; TOSHIYUKI KATO ; TATSUYA HIRATA ; KOSAKA TOSHUKI ; HIRATA TATSUYA ; ATSUSHI WATANABE ; EIJI NAKADA ; HIDENORI ISHII ; INUKAI YOSHIHIKO ; IGARASHI YOSHIYUKI ; HITOSHI KAMIYA ; HISASHI SHIGEKUSA ; KAMIYA HITOSHI ; KAGO YOSHIYUKI ; ISOBÉ NORIHIRO ; ITO TOSHIHIKO ; ISHII HIDENORI ; KATO TOSHIYUKI ; ISHII SHUSUKE ; KAZUAKI WAKAHARA ; YOSHIOKA SATOMI ; YOSHIYUKI KAGO ; YOSHIHIKO INUKAI ; YOSHIYUKI IGARASHI ; ANDO TOSHIHIDE

Inventor(s): ANDO TOSHIHIDE TOKONAME CITY AICHI PREF ; YOSHIOKA SATOMI KARIYA CITY AICHI PREF ; ISHII HIDENORI ICHINOMIYA CITY AICHI PREF ; ITO TOSHIHIKO CHIRYU CITY AICHI PREF ; KAGO YOSHIYUKI NISHIO CITY AICHI PREF ; ISOBÉ NORIHIRO TOKAI CITY AICHI PREF ; KATO TOSHIYUKI ANJO CITY AICHI PREF ; KAMIYA HITOSHI AICHI PREF ; INUKAI YOSHIHIKO NAGOYA CITY AICHI PREF ; KATO TOSHUKI ; IGARASHI YOSHUKI ; HIRATA TATSUYA ICHINOMIYA SHI AICHI KEN JP ; HIRATA TATSUYA ICHINOMIYA CITY AICHI PREF ; IGARASHI YOSHIYUKI NAGOYA CITY AICHI PREF ; WATANABE ATSUSHI TOYOKAWA CITY AICHI PREF ; NAKADA EIJI KARIYA CITY AICHI PREF ; SANO MITSUHIRO KARIYA CITY AICHI PREF ; MIZUNO KAZUO NAGOYA CITY AICHI PREF ; KOSAKA TOSHIYUKI OKAZAKI CITY AICHI PREF ; MURASE TOKUTARO OBU CITY AICHI PREF ; MATSUMOTO MANABU HANDA CITY AICHI PREF ; MIZUNO TOMOAKI TOYOAKE CITY AICHI PREF ; SHIGEKUSA HISASHI AICHI PREF

Agent(s): GRIFFITH HACK

Designated states: DE FR GB IT

35) Family number: 57351780 (GB2527778A)

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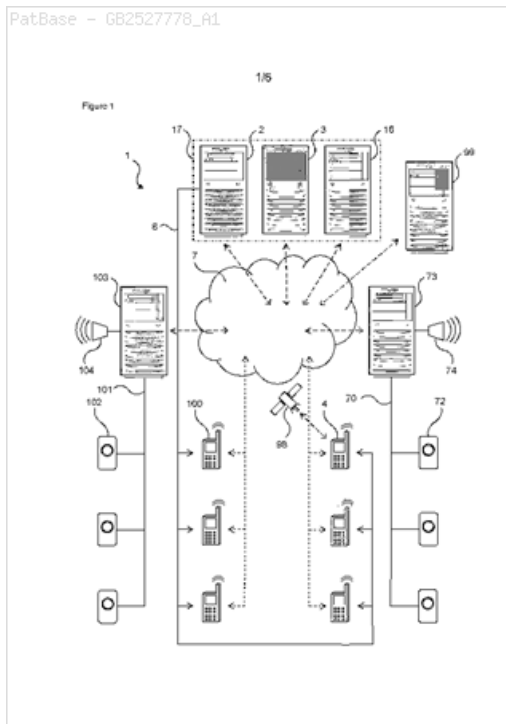
Title: COMBINED DATA EXCHANGE AND EMERGENCY ALARM APPARATUS AND METHOD OF USE

Abstract: A combined data exchange and emergency alarm apparatus comprising a data issuing computer 2, an emergency alarm issuing computer 3 and a plurality of mobile telephones 4, in which the data issuing computer issues queries to the mobile telephones and the mobile telephones allows answers from a user to be entered and in which said emergency alarm issuing computer issues emergency alarms to the mobile telephones via the internet 7 and/or a mobile telephone network 8. The telephones provide location data to a personnel monitoring computer 16. The apparatus may determine emergency alarm data based on hazard detection data, may enable presentation of a warning corresponding to a threat level and may provide different movement directions based on phone location data for evacuation. The system may further be used to determine **worker** present data, **worker** qualification certificates and certification renewal requirements, **worker** requirements and advertisements.

Classifications:

International (IPC 8-9): G06Q50/08 H04W4/22
H04W4/90 (Advanced/Invention)

CPC: G06Q90/205 G06Q50/08 H04W4/06 H04W4/90 G06Q30/02

**Family:**

Publication number	Publication date	Application number	Application date
GB201411705 A0	20140813	GB20140011705	20140701
GB2527778 A1	20160106	GB20140011705	20140701

Priority:

GB20140011705 20140701

Probable Assignee:

SAFE ANGEL LTD

Assignee(s): (std):

SAFE ANGEL LTD

Inventor(s): (std):

LAWS ROBERT JAMES

Inventor(s):

ROBERT JAMES LAWS

36) Family number: 67745790 (US2017352242A)

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Title: SAFETY DEVICE, SYSTEM AND METHOD OF USE

Abstract: A safety device that is worn by a **worker** in a manufacturing facility is presented. The safety device includes a microprocessor, memory, an antenna and transceiver and a plurality of sensors that sense environmental conditions surrounding the **worker** such as light levels, noise levels, temperature, humidity, air quality and CO levels. The safety device also tracks the position of the **worker** and includes an accelerometer that detects trips and falls. The safety device also includes an event trigger which can be activated by the **worker** when a notable event or near miss occurs. The environmental information recorded by the safety device is used to both track accidents and near misses and is aggregated in a database for datamining purposes so as to predict future accidents and near misses. This information is also used to create correlations and better understand the root cause of accidents and near misses.

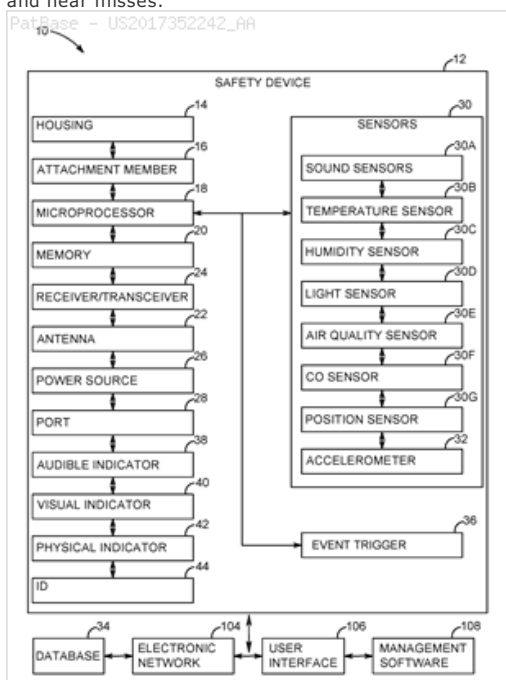
Classifications:

International (IPC 8-9): G08B21/04 G08B21/14 G08B23/00 G08B25/01 (Advanced/Invention)

CPC: G08B21/0446 G08B21/0469 G08B21/14 G08B25/016

US: 1/1 340/573.1

PatBase - US2017352242_AA



Family:

Publication number	Publication date	Application number	Application date
US2017352242 AA	20171207	US20170614835	20170606
US2019012896 AA	20190110	US20180124287	20180907
US2020105118 AA	20200402	US20190689303	20191120
US10096230 BB	20181009	US20170614835	20170606
US10522024 BB	20191231	US20180124287	20180907

Priority:

US20160346231P 20160606 US20170614835 20170606 US20180124287 20180907
US20190689303 20191120

Probable Assignee: MAKUSAFE CORP

Assignee(s): (std): MAKUSAFE CORP ; GLYNN GABRIEL

Inventor(s): (std): FREDERICK MARK ; GLYNN GABRIEL ; KRIER DAVE

Agent(s): PROSKY CHRISTOPHER A; BROWNNINICK LAW FIRM

37) Family number: 30237790 (US2005151669A)

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Title: LONE **WORKER** MONITOR

Abstract: A system has a monitor attached to and monitoring sound and vision around the user and using cellular telephone communications to convey monitored information. The monitor calls a primary server which alerts a secondary server of call receipt. The secondary server calls the monitor which drops the call to the primary server after a predetermined time, and remains in contact with the secondary server only if the monitor has successfully received the call from the secondary server, thereby preventing introduction of a false monitor. The monitor has options alterable only when on a battery charging cradle. The monitor has amber and red alert modes involving further servers, providing means to monitor and record the sounds and vision. The monitor has satellite position reporting. The system employs cell phone inter base station signal strength interpolation to find the monitor's position. A vibration motor silently alerts the user to calls.

Classifications:

International (IPC 8-9): G08B13/196 G08B25/08 G08B29/18

H04B1/38 (Advanced/Invention);

G08B13/194 G08B25/08 G08B29/00 (Core/Invention)

International (IPC 1-7): G06F15/173 G08B25/08 G08B29/18

H04M11/04

CPC: G08B13/19621 G08B13/19658 G08B13/1968 G08B13/19684

G08B25/005

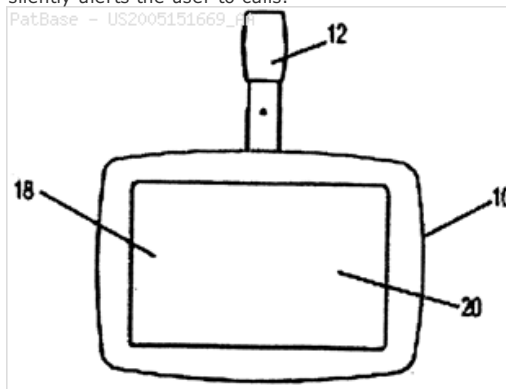
European: G08B13/196C2 G08B13/196N2 G08B13/196U1

G08B13/196U3 G08B25/00J

US: 340/539.12 340/901 340/901P 340/937 340/937S 348/14.1

455/423 455/427 455/466 455/566 455/567 455/575.6 701/300

701/300S

**Family:**

Publication number	Publication date	Application number	Application date
EP1536391 A1	20050601	EP20040257213	20041118
GB200327758 A0	20031231	GB20030027758	20031128
GB200407781 A0	20040512	GB20040007781	20040406
GB200425983 A0	20041229	GB20040025983	20041126
GB2409131 A1	20050615	GB20040025983	20041126
US2005151669 AA	20050714	US20040998186	20041126
US7412264 BB	20080812	US20040998186	20041126

Priority:

GB20030027758 20031128 GB20040007781 20040406

Probable Assignee: SOLOPROTECT LTD

Assignee(s): (std): SWALLOW CRAIG ; TRITEQ LTD ; CONNEXION 2 LTD ; CONNEXION2 LTD

Assignee(s): SOLOPROTECT LTD ; CONNEXION2 LIMITED ; CONNEXION 2 LIMITED

Inventor(s): (std): SWALLOW CRAIG

Inventor(s): CRAIG SWALLOW

Agent(s): ROBERT W J USHER PATENT AGENT; GOLDBERG RICHARD M; RICHARD M

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

38) Family number: 48149886 (US2011006912A)

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Title: TRACK **WORKER** SAFETY SYSTEM

Abstract: A safety system for providing early warning notifications to an authorized track **worker** performing official duties along a rail road network is disclosed herein. The safety system determines the position of the authorized **worker** and determines an estimated time to collision between the authorized track **worker** and an approaching rail vehicle. The result of the safety system is that the track **worker** has enough time and sufficiently accurate warning that will enable the track **worker** to move to a point of safety so as to remain unharmed by the approaching rail vehicle.

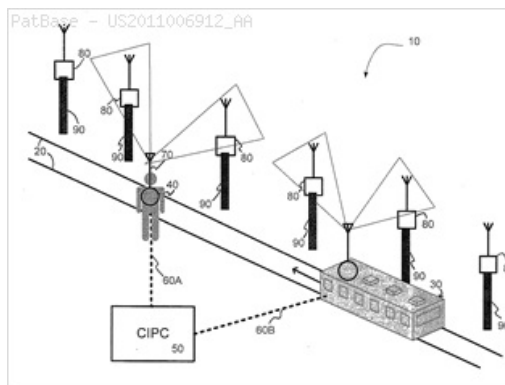
Classifications:

International (IPC 8-9): B61L23/06 G08B1/08 G08B21/00 G08B7/06

G08G1/00 G08G1/01 (Advanced/Invention);

B60Q1/00 (Advanced/Non-invention)

CPC: B61L23/06 B61L27/0005 G08B7/06 G08B21/02
European: B61L23/06 B61L27/00A G08B21/02 G08B7/06
US: 246/122R 246/124 246/477 340/425.5 340/425.500S 340/539.1
 340/539.100S 340/539.13 340/539.23 340/540 340/540S 340/572.1
 340/815.45 340/815.450S 340/901 340/901P 340/933 340/933S



Family:

Publication number	Publication date	Application number	Application date
CA2709171 AA	20110107	CA20102709171	20100707
CA2709171 C	20151201	CA20102709171	20100707
US2011006912 AA	20110113	US20090498881	20090707
US8344877 BB	20130101	US20090498881	20090707

Priority:

US20090498881 20090707 CA20102709171 20100707

Probable Assignee: BOMBARDIER TRANSPORTATION GMBH

Assignee(s): (std): FREEBERN JASON JOHN ; SHEARDOWN KEITH BURTON ; VENKATASUBRAMANIAN SATHYA VAGHEESWAR ; BOMBARDIER TRANSP GMBH

Assignee(s): VENKATASUBRAMANIAN SATHYA V ; SHEARDOWN KEITH B ; FREEBERN JASON J ; BOMBARDIER TRANSPORTATION GMBH

Inventor(s): (std): FREEBERN JASON J ; FREEBERN JASON JOHN ; SHEARDOWN KEITH B ; SHEARDOWN KEITH BURTON ; VENKATASUBRAMANIAN SATHYA V ; VENKATASUBRAMANIAN SATHYA VAGHEESWAR

Agent(s): DIMOCK STRATTON LLP; BENOIT AND COTE ASSOCIES INC; BENOIT AND COTE INC; WEBB LAW FIRM PC; WEBB LAW FIRM; THE WEBB LAW FIRM

39) Family number: 65976886 (US2018357886A)

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Title: SYSTEM, DEVICES AND METHODS FOR HEALTH CARE **WORKER** TRAINING, MONITORING AND PROVIDING REAL TIME CORRECTIVE GUIDANCE FOR PROCEDURES AND PRACTICE RELATED TO HOSPITAL INFECTION CONTROL

Abstract: A system, devices and methods for training of a health care **worker**, real time monitoring of a health care **worker** and providing real time corrective guidance for procedures related to hospital infection control. Furthermore, the devices, systems and methods of the present invention are configured to provide monitoring the performance and the quality of a hand hygiene procedure and providing real time, in accordance with the World Health Organization's "5 Moments Hand Hygiene" events protocol, corrective guidance to the health care **worker** procedures and practice related to hospital infection control.

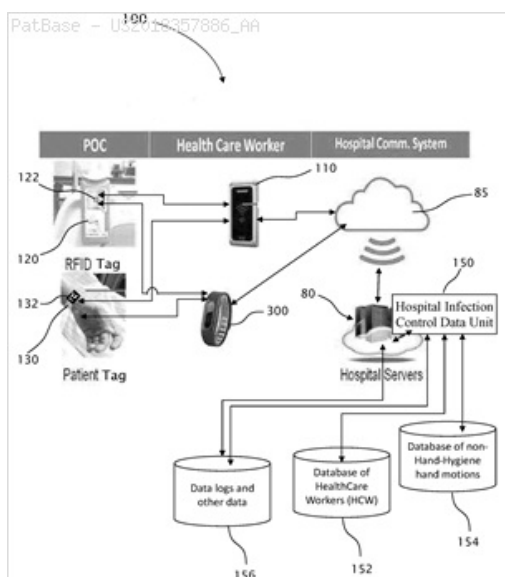
Classifications:

International (IPC 8-9): G06F1/16 G06K7/10 G06K9/00 G06Q50/22 G08B21/24 G16H40/20 (Advanced/Invention)

CPC: G06K9/00355 G16H40/20 G06F1/163 G06K7/10396

G08B21/245 G16H40/63

US: 1/1 340/523



Family:

Publication number	Publication date	Application number	Application date
US2018357886 AA	20181213	US20160780390	20161201
WO17094016 A1	20170608	WO2016IL51292	20161201

Priority:

US20150261322P 20151201 US20160780390 20161201 WO2016IL51292 20161201

Probable Assignee: FLEISCHER LIOR

Assignee(s): (std): FLEISCHER LIOR ; TAVORI ISAAC

Inventor(s): (std): FLEISCHER LIOR ; TAVORI ISAAC

Agent(s): KATZ ITZHAK

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 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

40) Family number: 69902889 (US2020064433A)

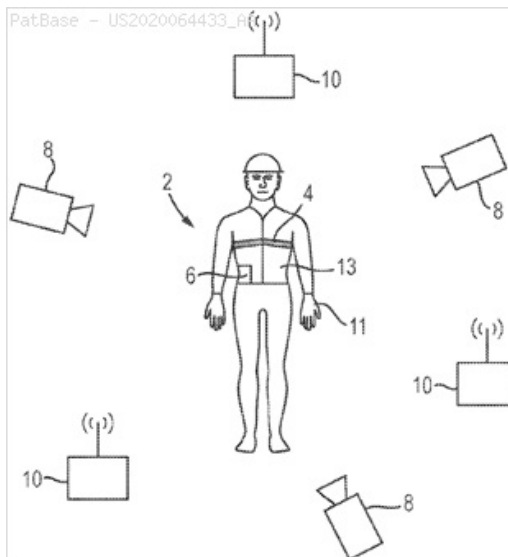
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Title: PERSONNEL SAFETY SENSING SYSTEM

Abstract: A location system for locating **workers** in including a plurality of light detectors mounted at known locations and configured to detect light from one or more **workers**, and a processing system configured to determine locations of the **workers** using the light detected by the light detectors. There is also disclosed a wearable device for locating a **worker** including a wireless transceiver, and a wearable device light source and/or one or more reflective elements. There is also disclosed a method for locating **workers** including detecting light from one or more **workers** using a plurality of light detectors mounted at known locations, and determining locations of the **workers** using the light detected by the light detectors.

Classifications:

International (IPC 8-9): G01S17/48 G01S17/88 G01S5/02
G08B21/02 H04B1/3827 (Advanced/Invention)
CPC: G01S5/0257 H04B1/385 G08B7/06 G08B21/02 G01S5/06
G01S5/10 G01S13/765 G01S13/876 G01S13/0209



Family:

Publication number	Publication date	Application number	Application date
GB201805323 A0	20180516	GB20180005323	20180329
GB201806281 A0	20180530	GB20180006281	20180417
GB201806697 A0	20180606	GB20180006697	20180424
GB201813975 A0	20181010	GB20180013975	20180828
GB201817474 A0	20181212	GB20180017474	20181026
GB201902010 A0	20190403	GB20190002010	20190214
GB201903656 A0	20190501	GB20190003656	20190318
GB201903818 A0	20190501	GB20190003818	20190320
GB201908632 A0	20190731	GB20190008632	20190617
US2020064433 AA	20200227	US20190659366	20191021
WO19186202 A1	20191003	WO2019GB50932	20190329
WO20044014 A1	20200305	WO2019GB52263	20190812

Priority:

GB20180005323 20180329	GB20180006281 20180417	GB20180006697 20180424
GB20180013975 20180828	GB20180017474 20181026	GB20190002010 20190214
GB20190003656 20190318	GB20190003818 20190320	WO2019GB50932 20190329
GB20190008632 20190617	US20190659366 20191021	

Probable Assignee: SALUNDA LTD

Assignee(s): (std): SALUNDA LTD

Inventor(s): (std): WILSON JOHN ; NICHOLLS GRANT ; LARKINS ANDREW HENRY JOHN ; FINLAY ALAN PATRICK JOHN

Agent(s): J A KEMP; J A KEMP LLP

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

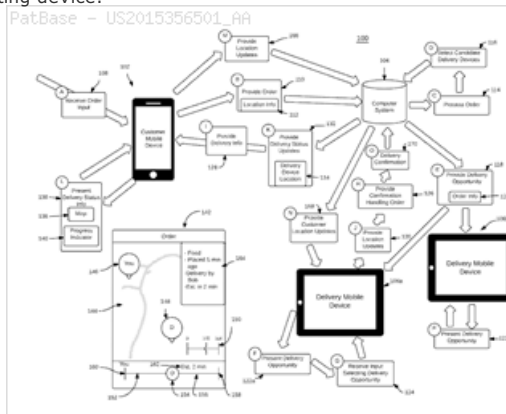
41) Family number: 61063932 (US2015356501A)

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Title: DELIVERY TO MOBILE DEVICES

Abstract: In one implementation, a computer-implemented method includes receiving, at a mobile computing device and after transmitting an order, information that **identifies** a delivery **worker** who is handling delivery of the order; continuously updating an interface presented by the mobile computing device until the order has been delivered, the interface **identifying** a current location of the delivery **worker** relative to a current location of the mobile computing device as both of the current locations change over time, the continuously updating including: determining, by the mobile computing

US: 705/333



Family:

Publication number	Publication date	Application number	Application date
US2015356501 AA	20151210	US20150726483	20150530

Priority:

US20140009576P 20140609 US20150726483 20150530

Probable Assignee: CLOUD LAB LLC

Assignee(s): (std): CLOUD LAB LLC

Inventor(s): (std): ARPIN EDMUND ; GORJESTANI ALEC ; MENON ARVIND

42) Family number: 63664945 (US2016280240A)

Title: WORKER PROTECTION SYSTEM

Abstract: Systems and methods are provided for **worker** protection. The **worker** protection systems comprise a plurality of alert devices, comprising one or more wearable personal alert devices, each worn by a person (e.g., **worker**), and one or more companion alert devices that broadcast alerts or signals triggering alerts. The companion alert devices comprise vehicle-mounted alert devices, configured for operation on vehicles (e.g., trains), and wayside detection units, configured for placement on or near paths of the vehicles. The wayside detection units may be operable to autonomously detect and track the vehicles.

Classifications:

International (IPC 8-9): A41D1/00 A41D1/04 A41D13/01 B61L15/00 B61L23/06 B61L25/02 B61L27/00 G01S19/13 G01S19/17 G01S19/50 G08B21/02 G08B25/01 H01Q1/27 (Advanced/Invention)

CPC: A41D2600/20 H01Q1/273 A41D1/04 G08B21/02 G08B7/06

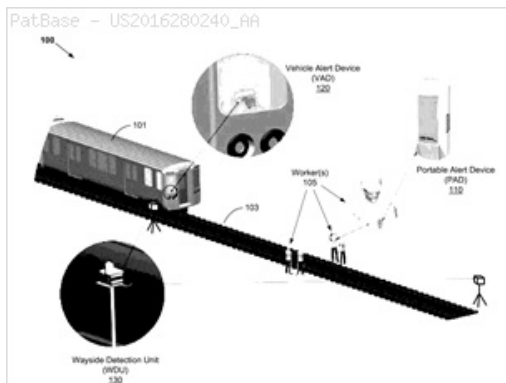
H01Q1/32 H01Q21/28 A41D1/002 A41D13/0002 A41D13/01

H04R2201/023 G06F1/163 B61L27/0005 G01S19/50 G08B25/016

B61L2205/02 B61L15/0027 B61L23/06 B61L25/021 B61L25/025

B61L2205/04 G01S19/17

US: 1/1 2/102 246/122R 246/124



Family:

Publication number	Publication date	Application number	Application date
US2016280240 AA	20160929	US20160078427	20160323
US2017282944 AA	20171005	US20170623996	20170615
US2018301012 AA	20181018	US20180013596	20180620
US2019283787 AA	20190919	US20190246940	20190114
US2020062286 AA	20200227	US20190460302	20190702
US10179595 BB	20190115	US20160078427	20160323
US10336353 BB	20190702	US20170623996	20170615
WO16154295 A1	20160929	WO2016US23754	20160323

Priority:

US20150177683P	20150323	US20160078427	20160323	US20160350520P	20160615
US20170623996	20170615	US20170605486P	20170815	US20180013596	20180620
US20190246940	20190114	US20190460302	20190702		

Probable Assignee: METROM RAIL LLC

Assignee(s): (std): CARLSON RICHARD C ; METROM RAIL LLC

Inventor(s): (std): CARLSON RICHARD ; CARLSON RICHARD C ; CYGNUS MARC WAYNE ; CYNGUS MARC WAYNE ; GUNTHER KURT ; PLUTT JOHN ALBERT JR ; PLUTT JR JOHN ALBERT ; STREZEV PETER ; WOITEL SARA
10

Inventor(s): PLUTT JR

Agent(s): MCANDREWS HELD AND MALLOY LTD; MOUSSA RAMI 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 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
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43) Family number: 32810967 (US2007247312A)

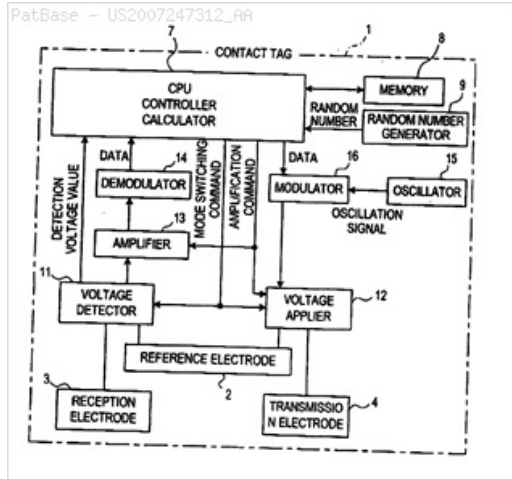
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Title: OPERATION STATE DETECTION DEVICE

Abstract: An operation state detection device comprises data communication devices and a detection device. The data communication devices are respectively attached to an operator, and a person or an object as an operation target. The data communication devices mutually perform data communication when the operator contacts the person or the object and thereby a path is formed through the operator, and the person or the object. The detection device detects the data communication performed between the data communication devices.

Classifications:

International (IPC 8-9): A61B19/02 A61G12/00 A61M5/00 G01V3/00
G01V5/00 G06K17/00 G06K19/00 G06K19/07 G06Q10/00
G06Q50/00 G06Q50/10 G06Q50/22 G07C9/00 G08B13/14
G08B21/24 H03K17/96 H04B1/59 H04B13/00
H04B5/02 (Advanced/Invention);
A61G12/00 G01V3/00 G01V5/00 G06K17/00 G06K19/00 G06K19/07
G07C9/00 G08B13/14 G08B21/00 H03K17/94 H04B1/59 H04B13/00
H04B5/02 (Core/Invention)
CPC: A61J2205/60 H04B5/0062 A61B5/0002 A61B5/02438 A61J1/00
A61M2205/6027 G07C9/00309 G07C9/00896 H03K17/962
H03K17/9645 H03K2217/96058 H04B13/005
European: G07C9/00E4 H03K17/96C H03K17/96R H04B13/00
H04B13/00B H04B5/00R2 H04B5/02 K61B5/00B K61B5/024F
K61B5/117 K61J1/00 K61M205/60E S07C9/00E20 T03K217/960S
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JP20090206307	20090907	JP20090277843	20091207	US20110042098	20110307

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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 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