

[SS 33] robot

Results in PATENW **302.061**

[SS 34] gas 1w detection

Results in PATENW **22.039**

[SS 35] gas 1w sensor

Results in PATENW **60.908**

[SS 36] 33 and 34

Results in PATENW **311**

[SS 37] sensor and 36

Results in PATENW **251**

[SS 38] processor or CPU or computer

Results in PATENW **5.870.969**

[SS 39] 37 and 38

Results in PATENW **193**

[SS 40] batter+ and 39

Results in PATENW **135**

[SS 41] comunication and 40

Results in PATENW **0**

[SS 42] transmitter and 40

Results in PATENW **25**

[SS 43] ..li



PN - [US2017083018](#) A1 20170323

PR - US201615365896
 20161130; US201514823859
 20150811; US201414191244
 20140226; US201313892292
 20130512; US201361848437P
 20130104; US201261702856P
 20120919

AP - US201615365896 20161130

DT - *; Rep

CCI - [A01K5/0114](#) ; [A01K5/02](#) ;
[A01K15/02](#) ; [A01K15/021](#) ;
[A01K15/025](#) ; [A01K27/009](#) ;
[A01K29/00](#) ; [E01H1/006](#) ;
[G05D1/0278](#) ; [G06K9/00335](#) ;
[G06Q30/04](#)

CUI - [G05D1/0011](#) ; [G05D1/0088](#) ;
[G05D1/0246](#) ; [G05D1/0274](#)

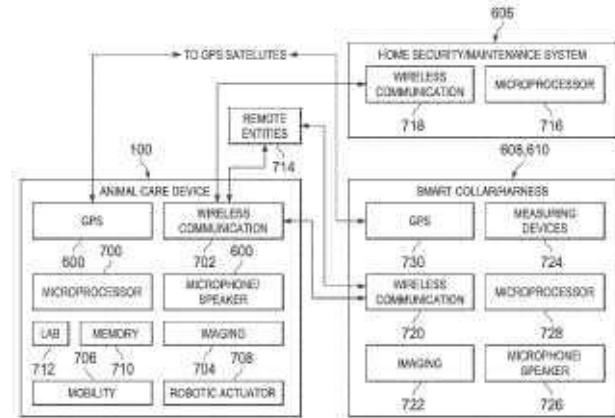
CQI - [A01K1/01](#) ; [A01K27/001](#) ;
[A01K27/002](#) ; [A01K29/005](#) ;
[G06K9/00711](#)

CUA - [G05D2201/0201](#)

PA - WOMBLE KRYSTALKA R [US];
 PICCIONI ROBERT L [US]

TI - Method and System for Remote
 Monitoring, Care and
 Maintenance of Animals

AB - A system for remote care of an
 animal includes a robotic
 animal caregiver that includes a
 housing, a wireless data
 communication system disposed
 within the housing and
 wirelessly communicatively
 coupled with an external data
 communications system, and a
 microprocessor in
 communication with the wireless
 data communication system
 disposed within the housing. The
 system further includes a smart
 collar to be worn by the animal
 operable to determine a geo-
 location and behavior
 information of the animal and
 communicate with the
 microprocessor.



PN - [US2017079247](#) A1 20170323

PR - US201615365895
20161130; US201514823859
20150811; US201414191244
20140226; US201313892292
20130512; US201361848437P
20130104; US201261702856P
20120919

AP - US201615365895 20161130

DT - *; Rep

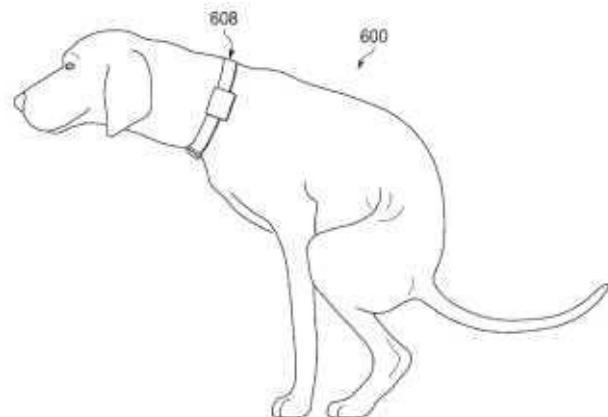
CCI - [A01K5/0114](#) ; [A01K5/02](#) ;
[A01K15/02](#) ; [A01K15/021](#) ;
[A01K15/022](#) ; [A01K15/023](#) ;
[A01K15/025](#) ; [A01K27/001](#) ;
[A01K27/002](#) ; [A01K27/009](#) ;
[A01K29/00](#) ; [A01K29/005](#) ;
[G05D1/0278](#) ; [A01K15/029](#)

CUI - [H04N5/772](#)

PA - WOMBLE KRYSTALKA R [US];
PICCIONI ROBERT L [US]

TI - Method and System for Remote
Monitoring, Care and
Maintenance of Animals

AB - A system for remote care of an
animal includes a robotic
animal caregiver that includes a
housing, a wireless data
communication system disposed
within the housing and
wirelessly communicatively
coupled with an external data
communications system, and a
microprocessor in
communication with the wireless
data communication system
disposed within the housing. The
system further includes a smart
collar to be worn by the animal
operable to determine a geo-
location information of the
animal and communicate with
the microprocessor.



PN - [US2017079236](#) A1 20170323

PR - US201615365901
20161130; US201514823859
20150811; US201414191244
20140226; US201313892292
20130512; US201361848437P
20130104; US201261702856P
20120919

AP - US201615365901 20161130

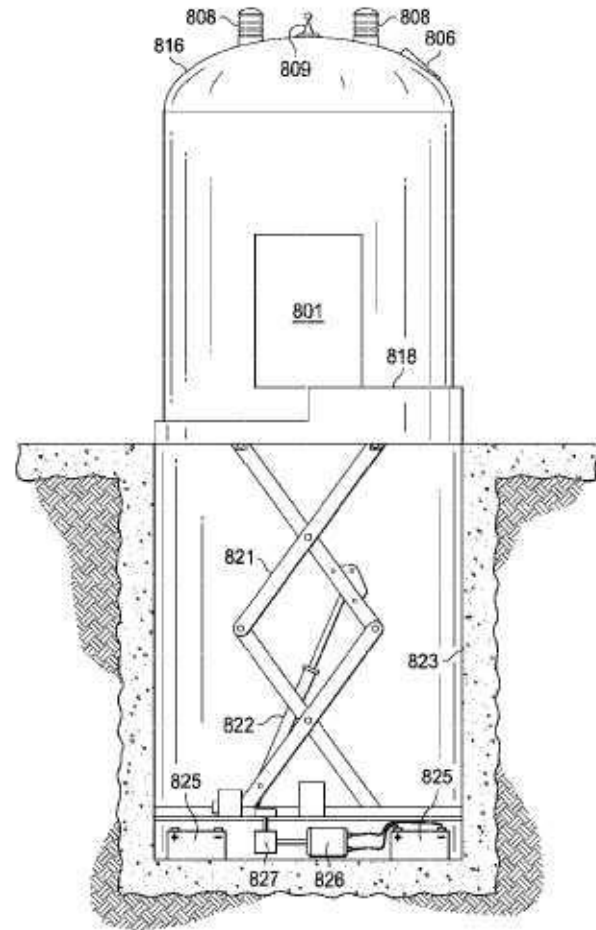
DT - *; Rep

CT - || R141 (A1)
[US3630174](#) A 19711228 [
] (RUNKLE ROBERT S, et al);
[US4526133](#) A 19850702 [
] (LOMAGLIO F LEO [US]);
[US5081955](#) A 19920121 [
] (YONEDA RYOZO [JP], et al);
[US5349924](#) A 19940927 [
] (HOPPER JR EUGENE J [US]);
[US5467734](#) A 19951121 [] (HO
YING-KUON [TW]);
[US6425347](#) B1 20020730 [
] (BOGNER DANIEL G [US], et al);
[US2005284405](#) A1 20051229 [
] (POMAKOY-POOLE SARA [US], et
al);
[US7036458](#) B1 20060502 [
] (STORNANT KRISTINE [US]);
[USD566907S](#) S 20080415 [
] (BARCA ROSANNE [US]);
[US2009223463](#) A1 20090910 [
] (CHERN SHIUAN KUEN [US]);
[US7997234](#) B1 20110816 [
] (HUGHEY WANDA [US]);
[US2012199080](#) A1 20120809 [
] (SIDONS TROY B [US]);
[US2016057968](#) A1 20160303 [
] (CHANDLER KAREN [US])

CCI - [A01K1/033](#) ; [A01K1/0356](#) ;
[A01K5/0114](#) ; [A01K5/02](#) ;
[A01K15/02](#) ; [A01K15/021](#) ;
[A01K15/025](#) ; [A01K27/001](#) ;
[A01K27/002](#) ; [A01K27/009](#) ;
[A01K29/00](#) ; [A01K29/005](#) ;
[G05D1/0278](#)

CUI - [G06K9/00362](#) ; [G06K9/00711](#)

CCA - [A01K1/0236](#) ; [A01K1/0245](#)



- PA - WOMBLE KRYSTALKA R [US];
PICCIONI ROBERT L [US]
- TI - Method and System for Remote
Monitoring, Care and
Maintenance of Animals
- AB - A system for remote care of an
animal includes a water-tight
housing with a hardened
structural shell defining a
chamber for accommodating the
animal, a door disposed in the
housing providing entry into and
exit from the chamber by the
animal, a wireless data
communication system disposed
within the housing and
wirelessly communicatively
coupled with a global **computer**
network, a mobility portion
coupled to the housing and
operable to move the housing,
and a microprocessor disposed
within the housing and in
communication with the wireless
data communication system and
operable to control the mobility
portion and the door.

4/25 © PATENW / EPO

- PN - [US2016312262](#) A1 20161027
- PR - US201415105547 20141222; US201361919663P 20131220; WO2014US71963
20141222
- AP - US201415105547 20141222
- DT - **
- CCI - [C12Q1/6825](#) ; [G01N33/227](#)
- CUI - [C12Q1/02](#) ; [C12N7/00](#) ; [G01N21/78](#) ; [G01N21/783](#) ; [G01N21/81](#)
- CUA - [G01N2333/01](#) ; [C12N2795/14131](#)
- PA - UNIV CALIFORNIA [US]
- TI - BIOMIMETIC VIRUS-BASED COLORIMETRIC SENSORS
- AB - The present invention provides, inter alia, a device comprising a colorimetric detection
layer configured to undergo a color change upon interaction with a first analyte of
interest. The detection layer comprises a first plurality of self-assembled fiber bundles.
At least a fraction of the fiber bundles undergo a change from a first conformation to a
second conformation upon interaction with the first analyte of interest, thereby
undergoing a color change. The invention also provides a method for using the system
to detect an analyte of interest.

5/25 © PATENW / EPO

- PN - [WO2016145300](#) A1 20160915
- PR - US201562131586P 20150311; US201562175640P 20150615
- AP - WO2016US21988 20160311
- DT - *; Rep
- CT - |US| ISR (A1)
[US2004204915](#) A1 20041014 [XY] (STEINTHAL GREGORY [US], et al)
[X] 1-3, 5, 6, 19-34, 47-57
* entire document *
[Y] 4;
[US2010175821](#) A1 20100715 [Y] (CHO HYOUNG JIN [US], et al)
[Y] 4
* entire document *;
[US8588887](#) B2 20131119 [A] (ARNESON MICHAEL R [US], et al)
[A] 1-6, 19-34, 47-57
* entire document *;
[US2006055531](#) A1 20060316 [A] (COOK JAMES D [US], et al)
[A] 1-6, 19-34, 47-57
* entire document *;
[US6182497](#) B1 20010206 [A] (KRAJCI JURAJ [CA])
[A] 1-6, 19-34, 47-57
* entire document *;
[US2013154823](#) A1 20130620 [A] (OSTRER AHARON [US], et al)
[A] 1-6, 19-34, 47-57
* entire document *;
[US2003064422](#) A1 20030403 [A] (MCDEVITT JOHN T [US], et al)
[A] 1-6, 19-34, 47-57
* entire document *;
[US7478108](#) B2 20090113 [A] (TOWNSEND CHRISTOPHER P [US], et al)
[A] 1-6, 19-34, 47-57
* entire document *
- CCI - [G01N33/0004](#) ; [G08B21/12](#)
- CCA - [G01N27/4146](#) ; [G01N33/0034](#) ; [G01N33/0075](#) ; [G08B31/00](#) ; [A61B2562/12](#)
- PA - NANO ENG APPLICATIONS INC [US]
- TI - CHEMICAL **SENSOR**
- AB - The invention provides a chemical **sensor** system comprising a nanomaterial based chemical **sensor** chip for detection of chemicals in gas, vapor, liquid and aerosol phase utilizing pattern recognition algorithms. Additionally the invention provides methods of fabricating the chemical **sensor** chip and sensing with the chip. Additionally the invention provides methods for collecting, storing, sharing and distributing data utilizing automated and predictive algorithms.

6/25 © PATENW / EPO

- PN - [US2016124498](#) A1 20160505
- PR - KR20140152025 20141104

AP - US201514924004 20151027

DT - *; Rep

CT - || R141 (A1)
[US2009113354](#) A1 20090430 [] (YUN YOUNG-HWA [KR], et al);
[US2013204449](#) A1 20130808 [] (AHN JUNHO [KR], et al);
[US2015015477](#) A1 20150115 [] (HUGHES CHARLES J [US], et al);
[US2015029880](#) A1 20150129 [] (BURNS GREGORY [US], et al);
[US2003040813](#) A1 20030227 [] (GONZALES GREG [US], et al);
[US2013262298](#) A1 20131003 [] (MORLEY STEWART [GB]);
[US2013339864](#) A1 20131219 [] (UUSITALO MIKKO ALEKSI [FI], et al);
[US2014204021](#) A1 20140724 [] (SUGIHARA RYOHEI [JP], et al)

CCI - [G01C25/00](#)

PA - SAMSUNG ELECTRONICS CO LTD [KR]

TI - METHOD FOR PERFORMING FUNCTION USING **SENSOR** DATA AND ELECTRONIC DEVICE FOR PROVIDING SAME

AB - An electronic device and method utilizes an external **sensor** group to facilitate miniaturization the device and repair/replacement of external sensors. An interface connected to an external **sensor** package including at least one **sensor**. A **processor** that when the external **sensor** package is connected through the interface, determines from which group the external **sensor** package is included in among pre-configured groups and controls the performance of a function corresponding to the determined group.

7/25 © PATENW / EPO

PN - [US2016005229](#) A1 20160107

PR - US201514755811 20150630; KR20150083532 20150612; US201462019558P 20140701

AP - US201514755811 20150630

DT - *; Rep

CT - || R141 (A1)
[US2015138190](#) A1 20150521 [] (HOLZER STEFAN JOHANNES JOSEF [DE], et al);
[US2013254666](#) A1 20130926 [] (SNAVELY KEITH NOAH [US], et al);
[US2012099804](#) A1 20120426 [] (AGUILERA JAIME [ES], et al);
[US2012050525](#) A1 20120301 [] (RINNER BERNHARD [AT], et al);
[US8369610](#) B1 20130205 [] (KOROBKIN CARL PHILLIP [US]);
[US7777648](#) B2 20100817 [] (SMITH LEONARD [US], et al);
[US7830962](#) B1 20101109 [] (FERNANDEZ DENNIS S [US], et al);
[US9122927](#) B2 20150901 [] (GALLUP DAVID ROBERT [US], et al);
[US6912293](#) B1 20050628 [] (KOROBKIN CARL P [US])

CCI - [G06F3/0488](#) ; [G06F3/04815](#) ; [G06F3/04845](#) ; [G06T19/003](#)

CUI - [G06T11/60](#)

PA - SAMSUNG ELECTRONICS CO LTD [KR]

TI - ELECTRONIC DEVICE FOR PROVIDING MAP INFORMATION

AB - An electronic device for providing map information associated with a space of interest is provided. The electronic device includes a display and a **processor** configured to display, on the display, at least a portion of a map including at least one node associated with at least one image photographed at a corresponding position of the

space of interest and additional information on the at least one image, change, in response to an input or an event, a first image associated with a first node among the at least one node or first additional information on the first image, and display, on the map through the display, at least a portion of the changed first image or at least a portion of the changed first additional information.

8/25 © PATENW / EPO

PN - [US2015342150](#) A1 20151203

PR - US201514823859 20150811; US201414191244 20140226; US201313892292 20130512; US201361848437P 20130104; US201261702856P 20120919

AP - US201514823859 20150811

DT - *; Rep

CT - || R141 (A1)
[US3630174](#) A 19711228 [] (RUNKLE ROBERT S, et al);
[US4526133](#) A 19850702 [] (LOMAGLIO F LEO [US]);
[US5081955](#) A 19920121 [] (YONEDA RYOZO [JP], et al);
[US5349924](#) A 19940927 [] (HOPPER JR EUGENE J [US]);
[US5467734](#) A 19951121 [] (HO YING-KUON [TW]);
[US6425347](#) B1 20020730 [] (BOGNER DANIEL G [US], et al);
[US2005284405](#) A1 20051229 [] (POMAKOY-POOLE SARA [US], et al);
[US7036458](#) B1 20060502 [] (STORNANT KRISTINE [US]);
[USD566907S](#) S 20080415 [] (BARCA ROSANNE [US]);
[US2009223463](#) A1 20090910 [] (CHERN SHIUAN KUEN [US]);
[US7997234](#) B1 20110816 [] (HUGHEY WANDA [US]);
[US2012199080](#) A1 20120809 [] (SIDONS TROY B [US]);
[US2016057968](#) A1 20160303 [] (CHANDLER KAREN [US])

- || STSE (B2)
[US3630174](#) A 19711228 [] (RUNKLE ROBERT S, et al);
[US4526133](#) A 19850702 [] (LOMAGLIO F LEO [US]);
[US5081955](#) A 19920121 [] (YONEDA RYOZO [JP], et al);
[US5349924](#) A 19940927 [] (HOPPER JR EUGENE J [US]);
[US5467734](#) A 19951121 [] (HO YING-KUON [TW]);
[US6425347](#) B1 20020730 [] (BOGNER DANIEL G [US], et al);
[US7036458](#) B1 20060502 [] (STORNANT KRISTINE [US]);
[USD566907S](#) S 20080415 [] (BARCA ROSANNE [US]);
[US7997234](#) B1 20110816 [] (HUGHEY WANDA [US]);
[US2005284405](#) A1 20051229 [] (POMAKOY-POOLE SARA [US], et al);
[US2009223463](#) A1 20090910 [] (CHERN SHIUAN KUEN [US]);
[US2012199080](#) A1 20120809 [] (SIDONS TROY B [US]);
[US2016057968](#) A1 20160303 [] (CHANDLER KAREN [US])

CCI - [A01K5/0114](#) ; [A01K5/02](#) ; [A01K15/02](#) ; [A01K15/021](#) ; [A01K15/025](#) ; [A01K27/009](#) ;
[A01K29/00](#) ; [G05D1/0278](#)

CUI - [G06K9/00362](#) ; [G06K9/00711](#)

PA - (A1 B2)
WOMBLE KRYSTALKA R [US]; PICCIONI ROBERT L [US]

TI - (A1)
Method and System for Remote Monitoring, Care and Maintenance of Animals

- (B2)
Method and system for remote monitoring, care and maintenance of animals
- AB - (A1 B2)
A system for remote care of an animal comprises a housing, a mobility portion coupled to the housing and operable to move the housing, a wireless data communications system disposed within the housing and wirelessly communicatively coupled with an external data communications system, and a microprocessor disposed within the housing and controlling the mobility portion. The system further includes a smart collar worn by the animal for effecting a variety of functions.

9/25 © PATENW / EPO

- PN - [WO2015095882](#) A1 20150625
- PR - US201361919663P 20131220
- AP - WO2014US71963 20141222
- DT - *; Rep
- CT - |US| ISR (A1)
[US7527981](#) B2 20090505 [X] (FARWELL DENNIS [US], et al);
[US7794657](#) B2 20100914 [Y] (STEWART RAY F [US]);
[US7332321](#) B2 20080219 [Y] (BELCHER ANGELA M [US], et al)
- CCI - [C12Q1/6825](#) ; [G01N33/227](#)
- CUI - [C12Q1/02](#) ; [C12N7/00](#) ; [G01N21/78](#) ; [G01N21/783](#) ; [G01N21/81](#)
- CUA - [G01N2333/01](#) ; [C12N2795/14131](#)
- PA - UNIV CALIFORNIA [US]; LEE SEUNG-WUK [US]; CHUNG WOO-JAE [US]
- TI - BIOMIMETIC VIRUS-BASED COLORIMETRIC SENSORS
- AB - The present invention provides, inter alia, a device comprising a colorimetric detection layer configured to undergo a color change upon interaction with a first analyte of interest. The detection layer comprises a first plurality of self-assembled fiber bundles. At least a fraction of the fiber bundles undergo a change from a first conformation to a second conformation upon interaction with the first analyte of interest, thereby undergoing a color change. The invention also provides a method for using the system to detect an analyte of interest.

10/25 © PATENW / EPO

PN - [EP2799393](#) A2 20141105

PR - US20050729321P
20051021; US20050729405P
20051021; US20060757360P
20060109; US20060841111P
20060829; EP20060826424
20061021

AP - EP20140176195 20061021

DT - **

CT - || STSE (A3)
[US2744662](#) A 19560508
[XI] (PAWSON SMITH ANTHONY,
et al)
[X] 1
* column 1, line 66 - column 2,
line 66; figures 1, 2 *
[I] 2,3;
[US1473979](#) A 19231113 [X] (LEO
SIMMONS)
[X] 1
* page 1, lines 83-93 *
* page 2, lines 47-81; figure . *;
[US5462207](#) A 19951031
[A] (DARAKTCHIEV IVAN S [BE])
[A] 1
* column 3, lines 7-55; figure . *;
[EP0812801](#) A1 19971217
[A] (TOTAL RAFFINAGE
DISTRIBUTION [FR])
[A] 1
* column 3, lines 11-25; figure .
*;
[DE19644980](#) A1 19980430
[A] (STOECKLIN LOGISTIK AG [CH])
[A] 1
* column 3, lines 11-53; figures
1-4 *

CCI - [B67D7/0233](#)

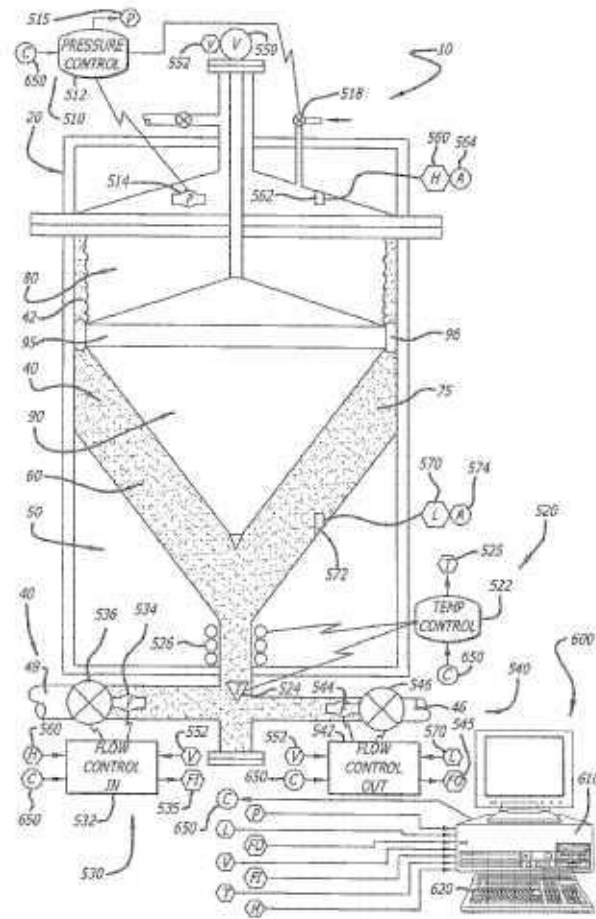
CUI - [B65D83/0005](#)

CCA - [B67D2210/0006](#) ;
[B67D2210/0016](#)

PA - (A2 A3)
C H & I TECH INC [US]

TI - (A2 A3)
Integrated material transfer and
dispensing system

AB - (A2)



An integrated material transfer and dispensing system for storing, transferring and dispensing materials, such as fluids and liquids, for example, liquid applied sound deadener (LASD). The system includes at least one vessel having a force transfer device. Each vessel may be removably enclosed in cabinet to form an automated station. Each vessel may be configured with a data logger, cleanout port, a sample valve at least one sight window and an access port for introducing a compound such as a biocide. Each vessel may be configured with instruments including sensors for measuring process variables, such as material volume, level, temperature, pressure and flow. The system may further include a metering device system and a robotic material dispenser system without a pump interface. The robotic system may further include a **computer** control system connected to flow and pressure sensors. The system may directly feed an applicator without an intervening pump.

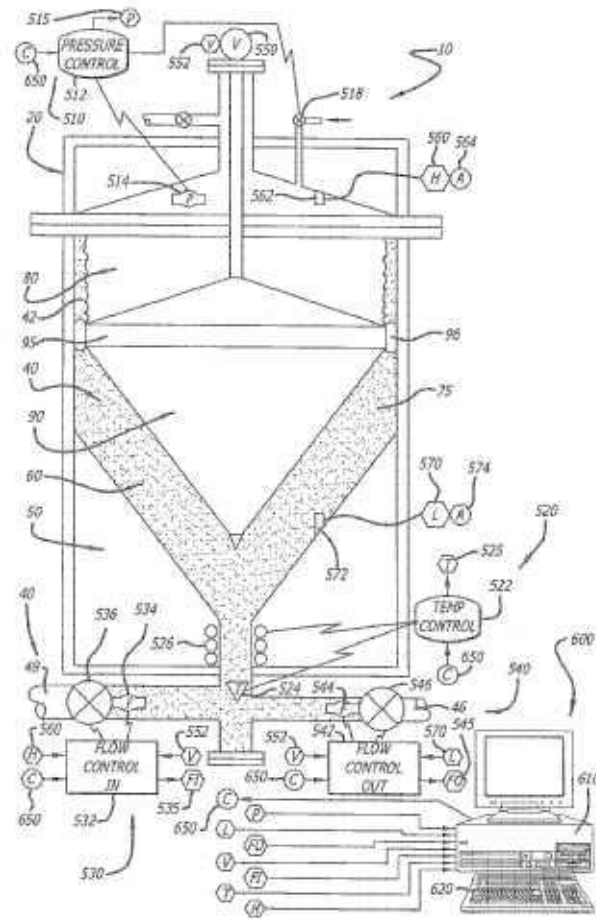
PN - [US2014166693](#) A1 20140619

PR - US201314020177
20130906; US20060584932
20061021; US20050729321P
20051021; US20050729405P
20051021; US20060757360P
20060109; US20060841111P
20060829; US20040558691P
20040331

AP - US201314020177 20130906

DT - **

CT - || R141 (A1)
[US195126](#) A 18770911 [];
[US1504423](#) A 19240812 []
(BONEBERG HAROLD J);
[US1836937](#) A 19311215 []
(EFRAIM RABINOWITSCH);
[US2744662](#) A 19560508 []
(PAWSON SMITH ANTHONY, et al);
[US3312083](#) A 19670404 []
(SCOGGINS CECIL W, et al);
[US3403818](#) A 19681001 []
(EUGEN ENSSLE BRUNO);
[US4405061](#) A 19830920 []
(BERGANDY WIESLAW [US]);
[US4592495](#) A 19860603 []
(TODA MASAOKI [JP], et al);
[US4893262](#) A 19900109 []
(KALATA PAUL R [US]);
[US5385275](#) A 19950131 []
(BILLET ROBERT L [US]);
[US5462207](#) A 19951031 []
(DARAKTCHIEV IVAN S [BE]);
[US5893490](#) A 19990413 []
(GNYP STEVEN M [US]);
[US6378740](#) B1 20020430 []
(MARTIN GARY D [US]);
[US2002148858](#) A1 20021017 []
(BERTONE CLAUDIO [CA]);
[US2003024955](#) A1 20030206 []
(MAGUIRE STEPHEN B [US]);
[US6526339](#) B1 20030225 []
(HERZOG STANLEY M [US], et al);
[US2003080142](#) A1 20030501 []
(MEHEEN DAVID [US]);
[US2005121462](#) A1 20050609 []
(ALLEN LEIGH B IV [US]);



[US6901971](#) B2 20050607 [] (SPEASL JERRY A [US], et al);
[US2006175352](#) A1 20060810 [] (EMMENDORFER JORG [DE], et al);
[US7311224](#) B2 20071225 [] (EMMENDOERFER JOERG [DE], et al);
[US2008280380](#) A1 20081113 [] (DIETZ JAMES [US], et al)
- || STSE (B2)
[US195126](#) A 18770911 [];
[US1504423](#) A 19240812 [] (BONEBERG HAROLD J);
[US1836937](#) A 19311215 [] (EFRAIM RABINOWITSCH);
[US2744662](#) A 19560508 [] (PAWSON SMITH ANTHONY, et al);
[US3312083](#) A 19670404 [] (SCOGGINS CECIL W, et al);
[US3403818](#) A 19681001 [] (EUGEN ENSSLE BRUNO);
[US4405061](#) A 19830920 [] (BERGANDY WIESLAW [US]);
[US4592495](#) A 19860603 [] (TODA MASAOKI [JP], et al);
[US4893262](#) A 19900109 [] (KALATA PAUL R [US]);
[US5385275](#) A 19950131 [] (BILLET ROBERT L [US]);
[US5462207](#) A 19951031 [] (DARAKTCHIEV IVAN S [BE]);
[US5893490](#) A 19990413 [] (GNYP STEVEN M [US]);
[US6378740](#) B1 20020430 [] (MARTIN GARY D [US]);
[US6526339](#) B1 20030225 [] (HERZOG STANLEY M [US], et al);
[US6901971](#) B2 20050607 [] (SPEASL JERRY A [US], et al);
[US7311224](#) B2 20071225 [] (EMMENDORFER JOERG [DE], et al);
[US2002148858](#) A1 20021017 [] (BERTONE CLAUDIO [CA]);
[US2003024955](#) A1 20030206 [] (MAGUIRE STEPHEN B [US]);
[US2003080142](#) A1 20030501 [

] (MEHEEN DAVID [US]);
[US2005121462](#) A1 20050609 [
] (ALLEN LEIGH B IV [US]);
[US2006175352](#) A1 20060810 [
] (EMMENDORFER JORG [DE], et
 al);
[US2008280380](#) A1 20081113 [
] (DIETZ JAMES [US], et al)

CCI - [B67D7/0233](#)
 CUI - [B65D83/0005](#)
 CCA - [B67D2210/0006](#) ;
[B67D2210/0016](#)
 PA - (A1)
 CH & I TECHNOLOGIES INC [US]
 - (B2)
 CH&I TECH INC [US]
 TI - (A1)
 INTEGRATED MATERIAL TRANSFER
 AND DISPENSING SYSTEM
 - (B2)
 Integrated material transfer and
 dispensing system
 AB - (A1 B2)
 An integrated material transfer
 and dispensing system for
 storing, transferring and
 dispensing materials, such as
 fluids and liquids, for example,
 liquid applied sound deadener
 (LASD). The system includes at
 least one vessel having a force
 transfer device. Each vessel may
 be removably enclosed in
 cabinet to form an automated
 station. Each vessel may be
 configured with a data logger,
 cleanout port, a sample valve at
 least one sight window and an
 access port for introducing a
 compound such as a biocide.
 Each vessel may be configured
 with instruments including
 sensors for measuring process
 variables, such as material
 volume, level, temperature,
 pressure and flow. The system
 may further include a metering

device system and a robotic material dispenser system without a pump interface. The robotic system may further include a **computer** control system connected to flow and pressure sensors. The system may directly feed an applicator without an intervening pump.

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PN - [US2011220545](#) A1 20110915

PR - KR20100022928
20100315; KR20100115102
20101118

AP - US201113048153 20110315

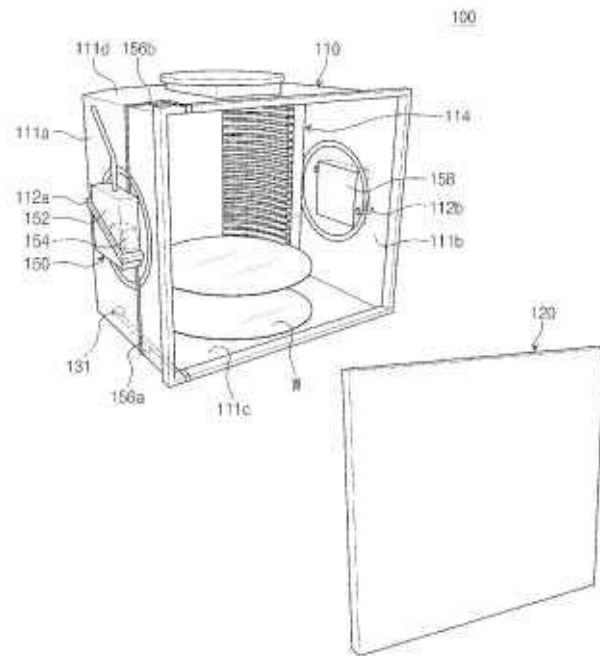
DT - *; Rep

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[US5988233](#) A 19991123 [
] (FOSNIGHT WILLIAM J [US], et
al)
[US6414389](#) B1 20020702 [
] (HUME JEFF [US], et al)
[US2007185687](#) A1 20070809 [
] (SPEASL JERRY A [US], et al)
- || R141 (A1)
[US5988233](#) A [];
[US2007185687](#) A1 [];
[US6414389](#) B1 [];
[US7790479](#) B2 [];
[US2006292037](#) A1 []

CCI - [H01L21/67376](#) ; [H01L21/67389](#)

PA - (A1)
SAMSUNG ELECTRONICS CO LTD
[KR]
- (B2)
RA BYUNG-KOOG [KR]; YUN TAE-
SIK [KR]; LEE KUNHYUNG [KR]; KIM
HYUNJOON [KR]; KIM HYEOKI
[KR]; KIM KIDOO [KR]; SAMSUNG
ELECTRONICS CO LTD [KR]

TI - (A1 B2)
SUBSTRATE TRANSFER
CONTAINER, GAS PURGE
MONITORING TOOL, AND
SEMICONDUCTOR
MANUFACTURING EQUIPMENT



WITH THE SAME

AB

- (A1 B2)
A substrate transfer container comprises a housing including a plurality of substrate slots positioned within a gas chamber having an interior environment. Each substrate slot accommodates a substrate undergoing a substrate manufacturing process, the interior environment of the gas chamber being selectively sealed from an exterior environment. A detection unit at the housing is constructed and arranged to detect an environmental property of the interior environment of the gas chamber, and to generate a detection signal in response. A signal transmission module at the housing is configured to wirelessly transmit a detection signal received from the detection unit.

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- PN - [WO2011049537](#) A2 20110428
- PR - TR20090007930 20091021
- AP - WO2010TR00206 20101021
- DT - *; Rep
- CT - |EP| ISR (A3)
[JP2006300734](#) A 20061102 [X] (BROTHER IND LTD)
[X] 1
* abstract *
* paragraphs [0004] , [0005] , [0031] , [0032] *;
[JP2005086405](#) A 20050331 [I] (NGK INSULATORS LTD)
[I] 1
* abstract *;
[US7385515](#) B1 20080610 [A] (OWEN WILLIAM K [US], et al)
[A] 1
* the whole document *;
[US2005184870](#) A1 20050825 [A] (GALPERIN NATAN [IL], et al)
[A] 1
* the whole document *
- CCI - [G08B21/22](#)

- PA - (A2 A3)
ALI SECKIN [TR]
- TI - (A2)
CEPMATIK
- (A3)
COMMUNICATION TOOLS
- AB - (A2 A3)
The invention is a communication tool having more than one function. It provides advantages in terms of users to have information about other users to the extent that the user let them or in terms of the capability of following information and documents which have to be under the government's control.

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PN - [US2010058833](#) A1 20100311

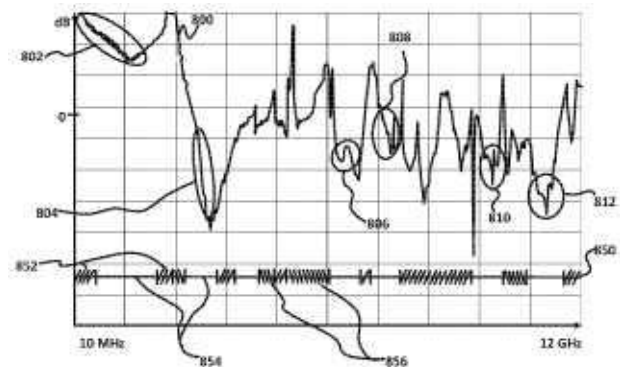
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20091118; US20070821481
20070621; US20080115767P
20081118; US20080116417P
20081120; US20080117056P
20081121; US20080116959P
20081121

AP - US20090621467 20091118

DT - *; Rep

CT - || STSE (B2)
[US4801209](#) A 19890131 [
] (WADLOW DAVID [US])
[US6043881](#) A 20000328 [
] (WEGRZYN JOSEPH [US], et al)
[US6107627](#) A 20000822 [
] (NAKAGAWA KAZUO [JP], et al)
[US6780378](#) B2 20040824 [
] (ABBASI HAMID A [US], et al)
[US7705988](#) B2 20100427 [
] (RICHTMAN LEE P [GB])
[US7781736](#) B2 20100824 [
] (LOGAN JR RONALD T [US], et al)

- || R141 (A1)
[US6107627](#) A [
[US6780378](#) B2 [
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[US7705988](#) B2 [
[US6043881](#) A [
[US7781736](#) B2 [
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[US6995558](#) B2 [
[US7347365](#) B2 [
[US2005090726](#) A1 [
];



[US2006080551](#) A1 [];
[US2003128867](#) A1 [];
[US2003133596](#) A1 [];
[US7081747](#) B2 [];
[US6309884](#) B1 [];
[US4975581](#) A [];
[US2008319293](#) A1 [];
[US2007237365](#) A1 [];
[US2008057526](#) A1 [];
[US7349556](#) B2 [];
[US7685433](#) B2 []

- CCI - [A61B5/05](#) ; [A61B5/0507](#) ;
[A61B5/14532](#) ; [A61B5/411](#)
- PA - (A1)
PINDI PRODUCTS INC [US]
- (B2)
HARRA DAVID JAMES [US];
SANNER RICHE EUGENE [US];
IVERSON MARK NORMAN [US]; RF
SCIENCE & TECHNOLOGY INC [US]
- TI - (A1 B2)
Gas Scanning and Analysis
- AB - (A1 B2)
Systems and methods for scanning and analyzing characteristics of a gas sample utilizing electromagnetic radiation are disclosed. More particularly, the systems and methods utilize an electromagnetic radiation source connected to a **transmitter** and an analyzer connected to a receiver. A sample gas volume to be analyzed is placed between the **transmitter** and receiver and a frequency sweep of electromagnetic radiation is transmitted through the sample to create a series of spectral data sets, which are developed into a composite spectrogram by the analyzer and processed to determine the one or more characteristics of the sample. A magnetic field can alternatively be applied around

the **transmitter**, receiver and sample to enhance some characteristic analysis applications and to make other characteristic analysis applications possible.

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PN - [WO2007048011](#) A2 20070426

PR - US20050729321P
20051021; US20050729405P
20051021; US20060757360P
20060109; US20060841111P
20060829

AP - WO2006US41193 20061021

DT - **

CT - [EP] ISR (A3)
[US2004069813](#) A1 20040415
[Y] (BRISSON GENE [US])
[Y] 1-11,27-31
* paragraphs [0010], [0015], [0016]; figures 1,4-6 *;
[WO2005097666](#) A1 20051020
[Y] (CH & I TECHNOLOGIES INC [US])
[Y] 1-11,27-31
* page 7, lines 15-25; figure 1 *;
[US2003071082](#) A1 20030417
[A] (JOHNSON TODD L [US], et al);
[FR2789059](#) A1 20000804
[A] (HUWER INTERNATIONAL SA [FR])

CCI - [B67D7/0233](#)

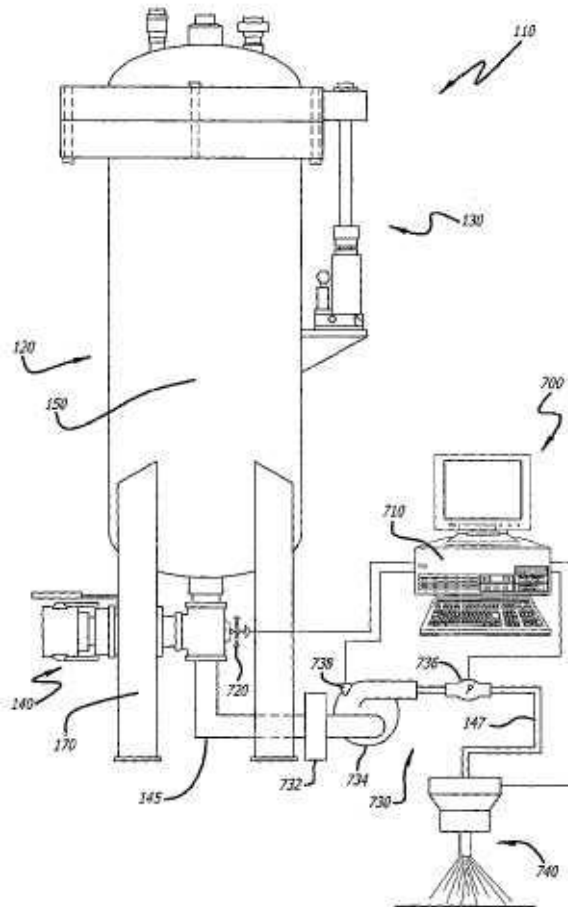
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CCA - [B67D2210/0006](#) ;
[B67D2210/0016](#)

PA - (A2 A3)
CH & I TECHNOLOGIES INC [US]

TI - (A2 A3)
INTEGRATED MATERIAL TRANSFER
AND DISPENSING SYSTEM

AB - (A2 A3)
An integrated material transfer and dispensing system for storing, transferring and dispensing materials, such as



fluids and liquids, for example, liquid applied sound deadener (LASD). The system includes at least one vessel having a force transfer device. Each vessel may be removably enclosed in cabinet to form an automated station. Each vessel may be configured with a data logger, cleanout port, a sample valve at least one sight window and an access port for introducing a compound such as a biocide. Each vessel may be configured with instruments including sensors for measuring process variables, such as material volume, level, temperature, pressure and flow. The system may further include a metering device system and a robotic material dispenser system without a pump interface. The robotic system may further include a **computer** control system connected to flow and pressure sensors. The system may directly feed an applicator without an intervening pump.

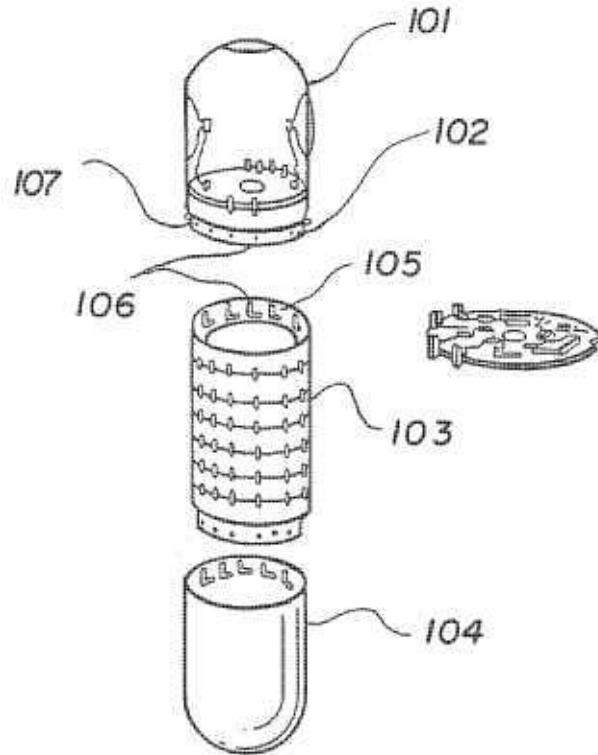
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PR - US20070701904
20070202; US20040837166
20040430; US20020165951
20020610; US19970997188
19971216

AP - US20070701904 20070202

DT - **

CT - || R141 (A1)
[US5289340](#) A 19940222 [
] (YOSHIFUJI YUUKI [JP]);
[US6029072](#) A 20000222 [
] (BARBER CLIFTON J [US]);
[US2003031321](#) A1 20030213 [
] (MAGES KEN [US]);
[US2004031219](#) A1 20040219 [
] (BANISTER MARK P [US]);
[US5880677](#) A 19990309 [
] (LESTICIAN GUY J [US]);
[US2006049977](#) A1 20060309 [
] (VACANTI DAVID C [US]);
[US5509304](#) A 19960423 [
] (PETERMAN K RUSSELL [US], et
al);
[US5894422](#) A 19990413 [
] (CHASEK NORMAN E [US]);
[US5898904](#) A 19990427 [
] (WANG WEIJIA [US]);
[US6227931](#) B1 20010508 [
] (SHACKELFORD JUDITH ANN
[US]);
[US2006097855](#) A1 20060511 [
] (TURNBULL ROBERT R [US], et al);
[US2006104038](#) A1 20060518 [
] (JONES JOHN E P E [US]);
[US6402032](#) B1 20020611 [
] (HUANG STEVEN [TW], et al);
[US2003114206](#) A1 20030619 [
] (TIMOTHY EARLE [US], et al);
[US4599620](#) A 19860708 [
] (EVANS ALAN G [US]);
[US4758767](#) A 19880719 [
] (BLAKE FREDERICK H [US]);
[US5036307](#) A 19910730 [
] (REAVELL JAMES [CA], et al);
[US5536177](#) A 19960716 [
] (CASEY DANIEL T [US]);
[US2003134048](#) A1 20030717 [
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	] (SHIOTSUKA HIDENORI [JP], et al); US6590525 B2 20030708 [] (YULE ANDREW T [GB], et al); US5544525 A 19960813 [] (PETERMAN K RUSSELL [US], et al); US5942731 A 19990824 [] (ROGERSON L KEITH [US]); US5812928 A 19980922 [] (WATSON JR JOHN C [US], et al); US2002153419 A1 20021024 [] (HALL DONALD R [US]); US5469335 A 19951121 [] (KLUTH MICHAEL R [US], et al); US2003222747 A1 20031204 [] (PERKINSON JOSEPH C [US], et al); US2003224784 A1 20031204 [] (HUNT PHILIP G [US], et al); US2007285227 A1 20071213 [] (TIMOTHY EARLE [US], et al)
	- STSE (B2) US6029072 A 20000222 [] (BARBER CLIFTON J [US]); US6590525 B2 20030708 [] (YULE ANDREW T [GB], et al); US2003031321 A1 20030213 [] (MAGES KEN [US]); US2003114206 A1 20030619 [] (TIMOTHY EARLE [US], et al); US2007285227 A1 20071213 [] (TIMOTHY EARLE [US], et al)
CCI	- G05B19/00 ; G06F1/1613 ; G06F1/1616 ; G06F1/1626 ; G06F1/1632 ; G06F1/1635 ; G06F1/1656 ; G06F1/1684 ; G06F3/0317 ; G06F3/0421 ; H05K1/144
TI	- (A1 B2) Modular architecture sensing and computing platform
AB	- (A1 B2) A weather resistant modular sensor and computing platform reduces costs and enhances versatility of sensor systems. Rapidly evolving

electronic technology results in hyper-obsolescence wherein **sensor** systems that are state of the art technology when designed, fall behind the art quickly as new transducers, **batteries** and components are developed. A cylindrical shaped modular system provides an architecture for up-grading sensors, **batteries**, special modules, communications, and control. A modular architecture extends the life cycle of a system and avoids hyper-obsolescence and the requirement to design a complete new system to incorporate new technology. Modularity and low cost manufacturing methods enable the practical definition of a cylindrical **computer**. The cylinder shaped enclosures have on their ends a common connection interface to which modules may be added. This provides a long system life cycle and wide ranging versatility. The size of the platform is not restricted. Larger systems are capable of supporting more sophisticated processing. A scaled up version of the modular platform provides an outdoor weather resistant community computing server.

TXT - transfer via uc class 235/375

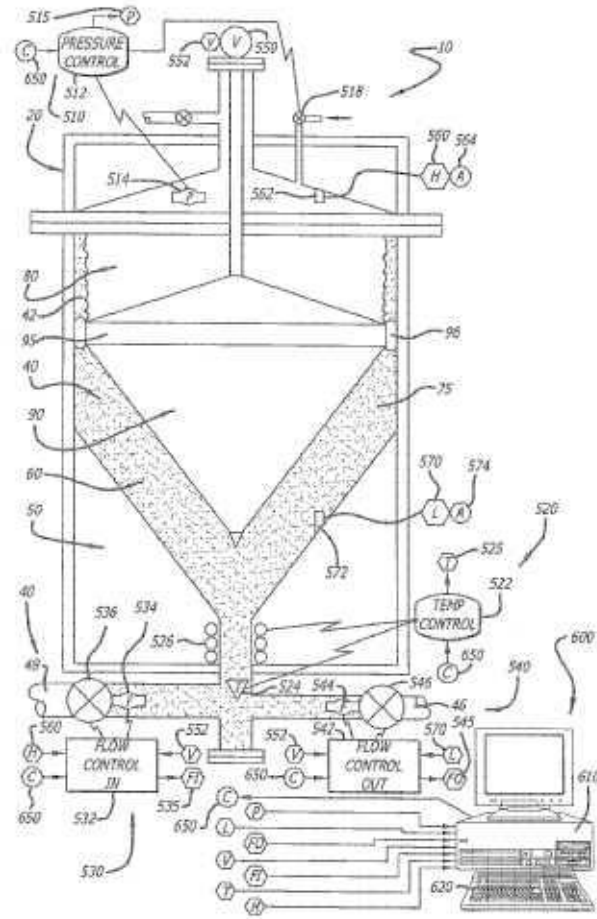
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PR - US20060584932
20061021; US20050729321P
20051021; US20050729405P
20051021; US20060757360P
20060109; US20060841111P
20060829

AP - US20060584932 20061021

DT - *; Rep

CT - || R141 (A1)
[US6325244](#) B2 20011204 [
] (VINCENT MICHAEL JAMES [US],
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[US6490922](#) B1 20021210 [
] (SPREA DINO [IT], et al);
[US4417473](#) A 19831129 [
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[US5799972](#) A 19980901 [
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[US3194434](#) A 19650713 [
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] (TRAUTMANN HERBERT L);
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] (BENDER DIETER [DE]);
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] (SCHULTZ CARL L [US], et al);
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] (MITTER MATHIAS [DE]);
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] (BRISSON GENE [US]);
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] (YANAGITA AKIHIRO [US], et al);
[US2745575](#) A 19560515 [
] (SPENCER ALVIN C);
[US3253592](#) A 19660531 [] (VON
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] (BOCCAGNO GEORGE E [US], et
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[US4935261](#) A 19900619 [
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] (SCHULTZ SR CARL L [US]);
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DUONG [US], et al);
[US3042268](#) A 19620703 [
] (PYLES GEORGE S);
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] (MOREL ANDRE [FR], et al);
[US5031805](#) A 19910716 [
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] (COLLINS MALCOLM G [GB]);
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] (WATSON M BURNELL [US]);
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] (IWASAKI KEIJI [JP], et al);
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[US4771920](#) A 19880920 [
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] (VOGT OLIVER [US]);
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] (SCHUMACKER HENRI J J, et al);
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] (FABEL DAVID A [US], et al);
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] (FISHER GLEN W [US]);
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] (MINISSIAN KEVIN G [US]);
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] (THIBODEAU ROBERT D [US], et
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] (KOLACEK IVO [US]);
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] (PINEAULT MARCEL [CA]);
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] (MCGEE H DEAN [US], et al);
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] (MORRIS DAVID PAUL [US], et
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] (PETERS JANET K [US]);
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 - [US4666066](#) A 19870519 [
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] (SRIVASTAVA NILENDU [US], et
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] (MINISSIAN KEVIN G [US]);
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 - [US6325244](#) B2 20011204 [
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] (REIFENBERGER MARK G [US], et
al);

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CCI - [B67D7/0233](#)

CUI - [B65D83/0005](#)

CCA - [B67D2210/0006](#) ;
[B67D2210/0016](#)

PA - (B2)
WILLIAMS ERIC A [US];
LEVENSTEIN LAWRENCE M [US];
THIBODEAU ROBERT D [US]; CH &
I TECHNOLOGIES INC [US]

TI - (A1 B2)
Integrated material transfer and
dispensing system

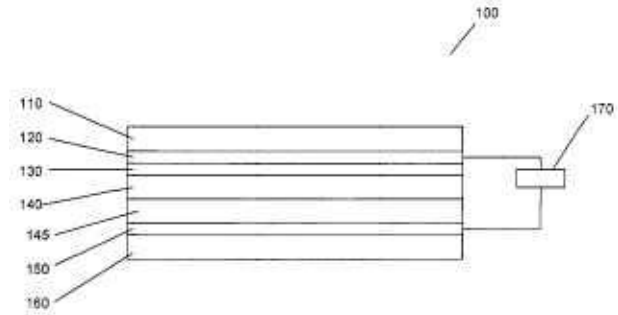
AB - (A1 B2)
An integrated material transfer
and dispensing system for
storing, transferring and
dispensing materials, such as
fluids, and liquids, for example,
liquid applied sound deadener
(LASD). The system includes at
least one vessel having a force
transfer device. Each vessel may
be removably enclosed in
cabinet to form an automated
station. Each vessel may be
configured with a data logger,
cleanout port, a sample valve at
least one sight window and an
access port for introducing a
compound such as a biocide.
Each vessel may be configured
with instruments including
sensors for measuring process
variables, such as material
volume, level, temperature,
pressure and flow. The system
may further include a metering
device system and a robotic
material dispenser system
without a pump interface. The
robotic system may further
include a **computer** control
system connected to flow and
pressure sensors. The system
may directly feed an applicator
without an intervening pump.

- PN - [US2007012349](#) A1 20070118
- PR - US20050167763 20050627; AT20000000734 20000427; AT20000000735 20000427; AT20000000733 20000427; AT20010001231 20010807; SE20010003740 20011108; DE2001161303 20011213; DE2002105579 20020211; AT20020000775 20020522; DE2002126669 20020614; DE2002136464 20020808; US20030258708 20030522; WO2001AT00129 20010427; US20030258709 20030227; WO2001AT00128 20010427; US20020258713 20021025; WO2001AT00130 20010427; US20030351607 20030124; US20020057394 20020125; US20030350913 20030124; US20030350912 20030124; US20030350812 20030124; US20030350800 20030124; US20030351298 20030124; US20030351260 20030124; US20030351249 20030124; US20030350919 20030124; US20030351264 20030124; US20030351265 20030124; US20030351251 20030124; US20030351250 20030124; US20040486116 20040713; WO2002AT00166 20020531; US20040494560 20041117; WO2002SE02049 20021108; US20040498484 20040614; WO2002DE04563 20021212; US20040504091 20040811; WO2003DE00385 20030210; WO2003AT00131 20030506; US20050515159 20050621; WO2003DE01867 20030605; US20030723554 20031126; US20030395823 20030324; US20040897268 20040722; US20040000276 20041130; US20050033217 20050110; WO2003DE02463 20030722; US20020351691P 20020125; US20020353138P 20020201; US20020368832P 20020329; US20020400289P 20020731; US20020390071P 20020620; US20020396173P 20020716; US20020427642P 20021119; US20030495302P 20030815; US20030526373P 20031201; US20040546818P 20040219; US20040589423P 20040720; US20040590312P 20040722; US20040590313P 20040722; US20040637844P 20041220; US20040638070P 20041221; US20050664298P 20050322; US20050663985P 20050321; US20050664114P 20050321; US20050664336P 20050323
- AP - US20050167763 20050627
- DT - *; Rep
- CT - || R141 (A1)
[DE10127292](#) A1 20021212 [] (SEEFLUTH CHRISTIAN U [DE]);
[US4636578](#) A 19870113 [] (FEINBERG STEWART C [US]);
[US4636579](#) A 19870113 [] (HANAK JOSEPH J [US], et al);
[US2004009729](#) A1 20040115 [] (HILL IAN GREGORY [US], et al);
[US6675580](#) B2 20040113 [] (ANSLEY JEFFREY H [US], et al);
[US4434510](#) A 19840228 [] (LEMELSON JEROME H [US]);
[US4574160](#) A 19860304 [] (CULL RONALD C [US], et al);
[US5198657](#) A 19930330 [] (TROST PETER K [US], et al);
[US5010317](#) A 19910423 [] (SCHWENDEMAN ROBERT J [US], et al);
[US5201961](#) A 19930413 [] (YOSHIKAWA MASAO [US], et al);
[US2002046764](#) A1 20020425 [] (ANSLEY JEFFREY H [US], et al);
[US2003070705](#) A1 20030417 [] (HAYDEN HERBERT T [US], et al);
[US2004069341](#) A1 20040415 [] (HEIDRICH FRANK [DE]);
[US4158775](#) A 19790619 [] (FROSCH ROBERT A ADMINISTRATOR, et al);
[US5217296](#) A 19930608 [] (TANNER DAVID P [US], et al);
[US5768370](#) A 19980616 [] (MAATTA VELI-MATTI [FI], et al);

	US2002069980 A1 20020613 [] (FLOYD JAMES C [US]); US2004118444 A1 20040624 [] (DUGGAL ANIL RAJ [US], et al); US4281053 A 19810728 [] (TANG CHING W); US5436725 A 19950725 [] (LEDGER ANTHONY M [US]); US6586906 B1 20030701 [] (BESSA JERRY [US], et al); US6441298 B1 20020827 [] (THIO TINEKE [US]); US2005178428 A1 20050818 [] (LAALY HESHMAT O [US], et al); US2005178429 A1 20050818 [] (MCCASKILL JOHN R [US], et al); US2005178430 A1 20050818 [] (MCCASKILL JOHN R [US], et al); US7576282 B2 20090818 [] (HEIDENREICH DAVID C [US]); US4114307 A 19780919 [] (LIEBESKIND ARTHUR S); US6291763 B1 20010918 [] (NAKAMURA SHIGERU [JP]); US6295818 B1 20011002 [] (ANSLEY JEFFREY H [US], et al); US2003188777 A1 20031009 [] (GAUDIANA RUSSELL [US], et al); US4555585 A 19851126 [] (BEHRENS GUENTER [DE], et al); US2002171391 A1 20021121 [] (BATTS-GOWINS CAROLYN [US]); US2004216777 A1 20041104 [] (PAN JIN-HUANG [TW]); US6812397 B2 20041102 [] (LAMBIEY JACQUES [FR]); US3778312 A 19731211 [] (KARIUS S)
	- STSE (B2) US3817477 A 19740618 [] (LUTHER E, et al); US4114307 A 19780919 [] (LIEBESKIND ARTHUR S); US4434510 A 19840228 [] (LEMELSON JEROME H [US]); US5010317 A 19910423 [] (SCHWENDEMAN ROBERT J [US], et al); US2002171391 A1 20021121 [] (BATTS-GOWINS CAROLYN [US]); US2004069341 A1 20040415 [] (HEIDRICH FRANK [DE]); DE10127292 A1 20021212 [] (SEEFLOTH CHRISTIAN U [DE])
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CCI	- G06Q30/00
PA	- (A1) KONARKA TECHNOLOGIES INC - (B2) GAUDIANA RUSSELL [US]; MCGAHN DANIEL PATRICK [US]; CELLA CHARLES H [US]; MERCK PATENT GMBH [DE]
TI	- (A1 B2) Photovoltaic sensor facilities in a home environment
AB	- (A1 B2) Photovoltaic cells, facilities, systems and methods, as well as related compositions, are disclosed. Embodiments involve providing a sensor in association with a photovoltaic facility to form a sensor-pv facility; and providing the sensor-pv facility in a kit adapted for purchase by a consumer to be deployed in a home environment.

PN - [US2005257827](#) A1 20051124

PR - US20050145333
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20000427; AT20000000733
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20020329; US20020390071P
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AP - US20050145333 20050603

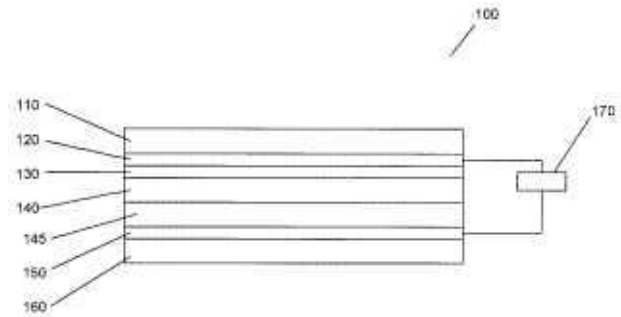
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[US5857207](#) A [];
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[US2004216777](#) A1 [];
[US2006277153](#) A1 []
- CCI - [H01G9/2068](#) ; [H01L27/301](#) ;
[H01L27/304](#) ; [H02S30/20](#)
- CCA - [Y02E10/542](#) ; [H01G9/2031](#) ;
[H01G9/2059](#) ; [H01L51/4226](#) ;
[H01L51/4253](#)
- TI - Rotational photovoltaic cells,
 systems and methods
- AB - Photovoltaic cells, systems and
 methods, as well as related
 compositions, are disclosed.
 Embodiments involve providing
 a first photovoltaic facility;
 providing a second photovoltaic
 facility; and electrically and
 mechanically associating the
 first and second photovoltaic
 facilities; wherein the
 association provides relative
 rotational freedom of the first
 and second photovoltaic
 facilities, forming a flexible
 photovoltaic facility.

PN - [US2005268962](#) A1 20051208

PR - US20050145128
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20000427; AT20010001231
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20010427; WO2001AT00130
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AP - US20050145128 20050603

DT - *; Rep

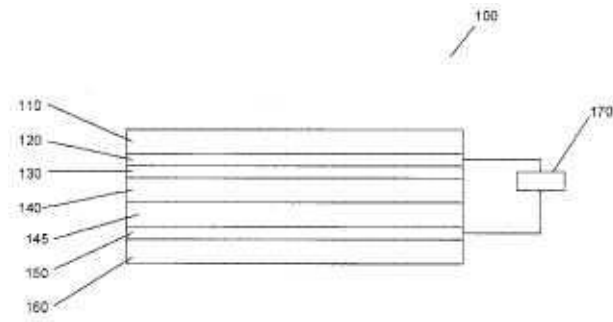
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CCI - [H01L25/047](#) ; [H02S30/20](#)
 CLC - [H01L2924/0002](#) , [H01L2924/00](#) ,
 ADD
 CCA - [H01G9/2095](#) ; [H01L2924/0002](#)
 TI - Flexible Photovoltaic cells,
 systems and methods
 AB - Photovoltaic cells, facilities,
 systems and methods, as well as
 related compositions, are
 disclosed. Embodiments involve
 providing a first photovoltaic
 cell; providing a second
 photovoltaic cell; and
 electrically and mechanically
 associating the first and second
 photovoltaic cells; wherein the
 association provides a
 mechanically flexible
 photovoltaic facility, forming a
 flexible photovoltaic facility.

21/25 © PATENW / EPO

PN - [US2006076048](#) A1 20060413

PR - US20050144272
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 20000427; AT20000000735
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- AP - US20050144272 20050603
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[US2004216777](#) A1 []

- CCI - [H01G9/2031](#) ; [H01L27/308](#)
- CCA - [Y02E10/542](#)
- TI - Photo-sensing photovoltaic with positioning facility
- AB - Photovoltaic cells, systems and methods, as well as related compositions, are disclosed. Embodiments involve providing a photovoltaic facility; associating a photon sensing facility with the photovoltaic facility; associating a positioning facility with the photovoltaic facility; measuring a photon intensity with the photon sensing facility; and automatically repositioning the photovoltaic facility based on the photon intensity.

PN - [CA2626674](#) A1 20070426

PR - US20050729321P
20051021; US20050729405P
20051021; US20060757360P
20060109; US20060841111P
20060829; WO2006US41193
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AP - CA20062626674 20061021

DT - I

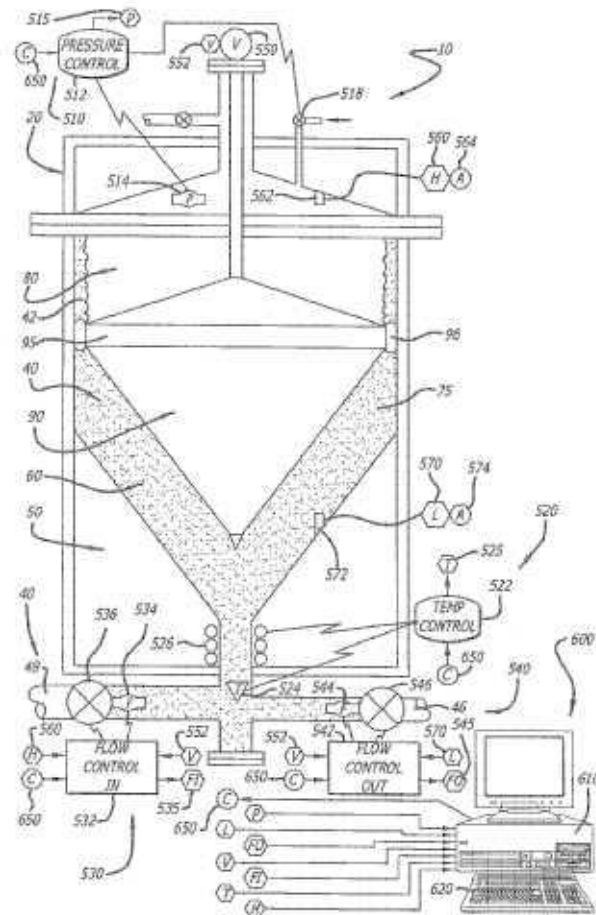
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CUI - [B65D83/0005](#)

CCA - [B67D2210/0006](#) ;
[B67D2210/0016](#)

PA - CH & I TECHNOLOGIES INC [US]

TI - INTEGRATED MATERIAL TRANSFER
AND DISPENSING SYSTEM



23/25 © PATENW / EPO

PN - [CA2072157](#) A1 19930111

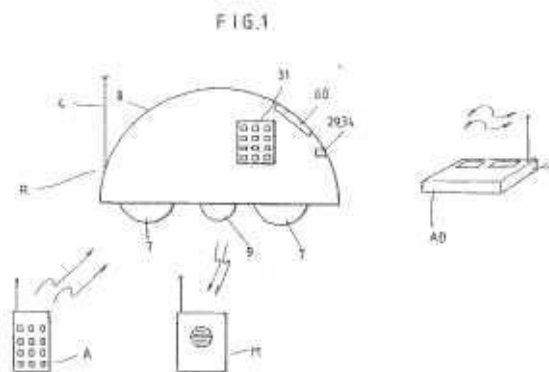
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19911105

AP - CA19912072157 19911129

DT - I

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[G05D1/0242](#) ; [G05D1/0255](#) ;
[G08B17/10](#) ; [G08B25/10](#) ;
[H04M11/04](#)

CCA - [Y02T10/7005](#) ; [Y02T90/16](#) ;
[Y02T90/162](#) ; [Y02T10/645](#) ;
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[B60L2200/40](#) ; [B60L2240/12](#) ;
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[B60L2240/662](#) ; [B60L2240/70](#) ;
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[G05D2201/0209](#) ; [Y02T10/72](#) ;



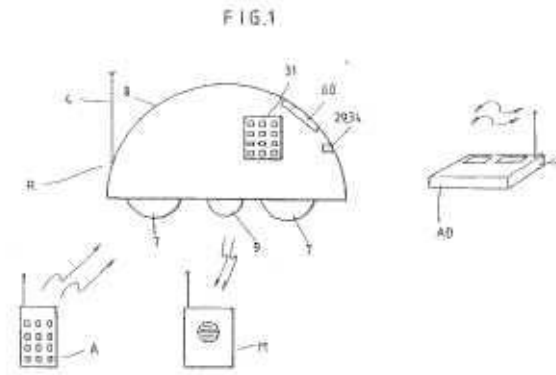
Y02P90/60

- PA - (A1 C)
ELF LIMITED PARTNERSHIP [US];
SAMSUNG ELECTRONICS CO LTD
[KR]
- TI - (A1 C)
MOBILE MONITORING DEVICE
- AB - (C)
A mobile monitoring device for detecting a fire, gas leak, intruder, of other abnormal condition in a house or office, and for alerting a central monitor, fire station, police station, or an occupant who is away from the house or office. The mobile monitoring device comprises a self-propelled movable **robot** having sensors located thereon; a monitor for receiving signals from the **robot** and alerting an authorized user accordingly; an automatic communication control unit including a telephone transmitting unit for automatically calling an appropriate party in response to a signal from the **robot** and for transmitting commands to the **robot** from an authorized calling party; and an RF remote controller for remotely controlling the **robot**. The **robot** is specifically capable of navigating throughout a house or office while using its sensors to detect abnormal conditions. In the event that an abnormal condition is detected, the **robot** initiates communications with the monitoring means and the automatic communication control unit to thereby alert an appropriate party of the existing abnormal condition. Commands can be provided to the **robot** either directly through a

keyboard on the **robot** itself, or remotely by way of the RF remote control means or the automatic communication control means.

24/25 © PATENW / EPO

- PN - [AU8821691](#) A 19930114
- PR - US19910727630
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- AP - AU19910088216 19911128
- DT - I
- CT - || STSE (B2)
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] (PERDUE TERRY A [US]);
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] (CAUGHMAN DONALD O [US], et
al);
[US4482960](#) A 19841113 [
] (PRYOR TIMOTHY R [CA])
- CCI - [B60L11/1803](#) ; [B60L15/20](#) ;
[G05D1/0242](#) ; [G05D1/0255](#) ;
[G08B17/10](#) ; [G08B25/10](#) ;
[H04M11/04](#)
- CCA - [Y02T10/7005](#) ; [Y02T90/16](#) ;
[Y02T90/162](#) ; [Y02T10/645](#) ;
[Y02T10/7275](#) ; [Y02T10/7291](#) ;
[B60L2200/40](#) ; [B60L2240/12](#) ;
[B60L2240/423](#) ; [B60L2240/622](#) ;
[B60L2240/662](#) ; [B60L2240/70](#) ;
[B60L2250/10](#) ; [B60L2250/12](#) ;
[B60L2250/16](#) ; [B60L2260/32](#) ;
[G05D2201/0209](#) ; [Y02T10/72](#) ;
[Y02P90/60](#)
- TI - (A B2)
MOBILE MONITORING DEVICE



25/25 © PATENW / EPO

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19910710; US19910789187
19911105

AP - EP19910120176 19911126

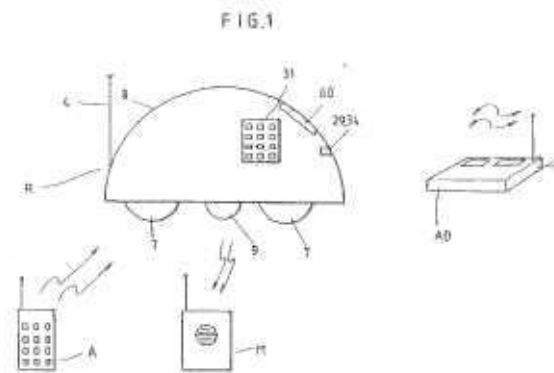
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[WO8800747](#) A2 19880128
[Y] (DENNING MOBILE ROBOTICS
INC [US]);
[FR2551240](#) A1 19850301
[Y] (ARPHI JAMES [FR]);
[GB2182634](#) A 19870520
[A] (SIRIUS SPA);
[US4748654](#) A 19880531
[A] (GRAY WILLIAM [US]);
[US4857912](#) A 19890815
[A] (EVERETT JR HOBART R [US], et
al);
[US4932831](#) A 19900612
[A] (WHITE JOHN R [US], et al);
[US4636137](#) A 19870113
[A] (LEMELSON JEROME H [US])

CCI - [B60L11/1803](#) ; [B60L15/20](#) ;
[G05D1/0242](#) ; [G05D1/0255](#) ;
[G08B17/10](#) ; [G08B25/10](#) ;
[H04M11/04](#)

CCA - [Y02T10/7005](#) ; [Y02T90/16](#) ;
[Y02T90/162](#) ; [Y02T10/645](#) ;
[Y02T10/7275](#) ; [Y02T10/7291](#) ;
[B60L2200/40](#) ; [B60L2240/12](#) ;
[B60L2240/423](#) ; [B60L2240/622](#) ;
[B60L2240/662](#) ; [B60L2240/70](#) ;
[B60L2250/10](#) ; [B60L2250/12](#) ;
[B60L2250/16](#) ; [B60L2260/32](#) ;
[G05D2201/0209](#) ; [Y02T10/72](#) ;
[Y02P90/60](#)

PA - (A2 B1)
SAMSUNG ELECTRONICS CO LTD
[KR]; ELF LP [US]
- (A3)
SAMSUNG ELECTRONICS CO LTD
[DK]; ELF LP [DK]; SAMSUNG
ELECTRONICS CO LTD [KR]; ELF LP
[KR]



TI	- (A2) Mobile monitoring device. - (A3) MOBILE MONITORING DEVICE - (B1) Mobile monitoring device
AB	- (A2) A mobile monitoring device for detecting a fire, gas leak, intruder, of other abnormal condition in a house or office, and for alerting a central monitor, fire station, police station, or an occupant who is away from the house or office. The mobile monitoring device comprises a self-propelled movable robot having sensors located thereon; a monitor for receiving signals from the robot and alerting an authorized user accordingly; an automatic communication control unit including a telephone transmitting unit for automatically calling an appropriate party in response to a signal from the robot and for transmitting commands to the robot from an authorized calling party; and an RF remote controller for remotely controlling the robot. The robot is specifically capable of navigating throughout a house or office while using its sensors to detect abnormal conditions. In the event that an abnormal condition is detected, the robot initiates communications with the monitoring means and the automatic communication control unit to thereby alert an appropriate party of the existing abnormal condition. Commands can be provided to the robot either directly through a keyboard on the robot itself, or remotely by way of the RF remote

control means or the automatic communication control means.
<IMAGE>

[SS 43] ..v

[PATENW: SS 43] caterpillar and 37

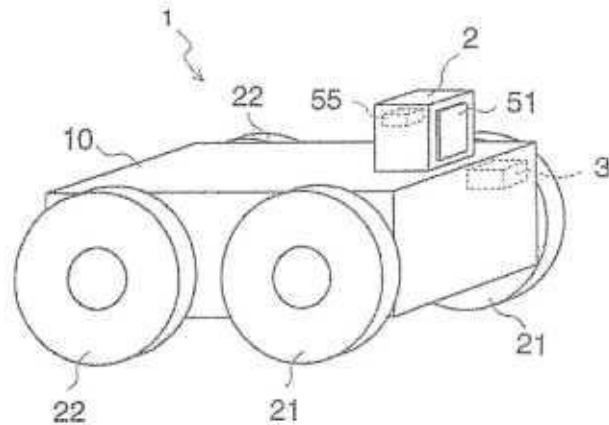
Results in PATENW 1

[SS 44] ..li



1/1 © PATENW / EPO

PN - [US2016375862](#) A1 20161229
PR - JP20150129923 20150629
AP - US201615072700 20160317
DT - *; Rep
CCI - [B60R25/1004](#) ; [B60R25/305](#) ;
[G05D1/024](#) ; [G05D1/0246](#) ;
[G05D1/0255](#) ; [B60R25/30](#)
CUI - [B60R1/00](#)
CCA - [G08B13/19647](#) ; [G08B15/00](#) ;
[G05D2201/0209](#)
PA - SHARP KK [JP]
TI - AUTONOMOUS TRAVELING APPARATUS
AB - This invention is an autonomous traveling apparatus having a traveling control part for controlling a driving member; an imaging part for photographing an image data of a predetermined external space; an image recognition part for extracting a human body included in the image data photographed by the imaging part, and recognizing an image data of the extracted human body; a **sensor** for preventing theft; and a controller for executing operation in emergency corresponding to a recognition result by the image recognition part, and a detection



result by the **sensor** for preventing theft.

[SS 44] ..v

[PATENW: SS 44] 33 and 35

Results in PATENW 751

[SS 45] caterpillar and 44

Results in PATENW 10

[SS 46] ..li



1/10 © PATENW / EPO

PN - [US2017205897](#) A1 20170720

PR - KR20160006772 20160120

AP - US201615359799 20161123

DT - *; Rep

CUI - [G06F3/03](#) ; [G06K9/0057](#) ; [G06K9/00664](#)

PA - SAMSUNG ELECTRONICS CO LTD [KR]

TI - METHOD FOR UTILIZING SENSOR AND ELECTRONIC DEVICE IMPLEMENTING SAME

AB - A method and apparatus for an electronic device and sensor includes: a housing; at least one sensor disposed on a part of the housing to detect an external image of the electronic device or sound. A communication circuit is arranged in the housing, and at least one processor is electrically connected to the at least one sensor and the communication circuit. A memory stores instructions that, when executed, cause the at least one processor to control operation of the at least one sensor to operate as a user interface of the electronic device, and/or to operate as a sensing device for detecting a movement and/or sound of an object within a selected range or space, and to provide data based at least partly on the detected movement and/or sound.

2/10 © PATENW / EPO

PN - [US2016334800](#) A1 20161117

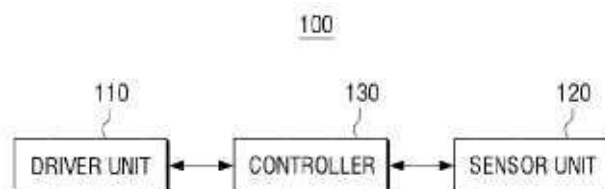
PR - US201615097358
20160413; KR20150141739
20151008; US201562160112P
20150512

AP - US201615097358 20160413

DT - **

CCI - [G05D1/0274](#)

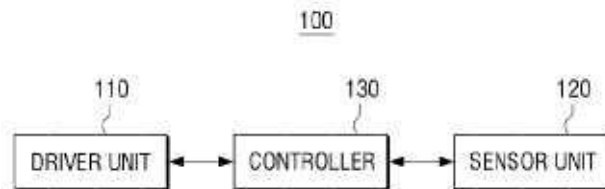
CUI - [A47L11/4011](#)



CCA - [A47L2201/06](#) ; [G05D2201/0203](#)
 PA - SAMSUNG ELECTRONICS CO LTD [KR]
 TI - **ROBOT** AND CONTROLLING METHOD THEREOF
 AB - A **robot** and a controlling method thereof are provided. The **robot** includes a driver unit configured to move a location of the **robot**, a sensor unit configured to sense an environment around the **robot**, and a controller configured to, in response to the location of the **robot** being changed by a user, check a current location of the **robot** by using the environment of the changed location sensed by the sensor unit and pre-stored map information, determine a task to be performed, based on the checked location and the environment of the changed location, and control the driver unit according to the determined task.

3/10 © PATENW / EPO

PN - [WO2016182187](#) A1 20161117
 PR - US201562160112P
 20150512; KR20150141739
 20151008
 AP - WO2016KR02698 20160317
 DT - *; Rep
 CT - |KR| ISR (A1)
[KR20130000278](#) A 20130102
 [XY] (LG ELECTRONICS INC [KR])
 [X] 1-2, 4, 12-13, 15
 * See abstract, paragraphs [0021]
 -[0026], [0035]-[0040], [0050]
 and figures 4-5. *
 [Y] 3, 5-11, 14;
[KR20060072597](#) A 20060628
 [Y] (KOREA ELECTRONICS
 TELECOMM [KR], et al)
 [Y] 3, 14



* See abstract, claims 1-6 and figures 1-2. *;

[US2012259481](#) A1 20121011

[Y] (KIM YIEBIN [KR])

[Y] 5-9

* See paragraphs [0033]-[0035], [0042] and figures 3-5. *;

[US2014230179](#) A1 20140821

[Y] (MATSUBARA TAKASHI [JP], et al)

[Y] 9

* See paragraphs [0061]-[0062], [0072]-[0078] and figure 6. *;

[KR100834761B](#) B1 20080605

[Y] (SAMSUNG ELECTRONICS CO., LTD.)

[Y] 10-11

* See abstract, paragraphs [0041]-[0043] and figure 4. *

CCI - [G05D1/0274](#)

CUI - [A47L11/4011](#)

CCA - [A47L2201/06](#) ; [G05D2201/0203](#)

PA - SAMSUNG ELECTRONICS CO LTD [KR]

TI - **ROBOT** AND CONTROLLING METHOD THEREOF

AB - A **robot** and a controlling method thereof are provided. The **robot** includes a driver unit configured to move a location of the **robot**, a sensor unit configured to sense an environment around the **robot**, and a controller configured to, in response to the location of the **robot** being changed by a user, check a current location of the **robot** by using the environment of the changed location sensed by the sensor unit and pre-stored map information, determine a task to be performed, based on the checked location and the environment of the changed location, and control the driver unit according to the determined task.

4/10 © PATENW / EPO

PN - [US2014039825](#) A1 20140206

PR - WO2011EP56669 20110427

AP - US201114112169 20110427

DT - **

CTNP - || R141 (A1)

[] - Anthony LaMarca in Making Sensor Networks Practical with Robots describes, printed on 2002, pages 16,
[] - Mohd Fauzi Othman in Wireless Sensor Network Applications: A Study in Environment Monitoring System, 2012, 7 pages,

- || STSE (B2)

[] - Anthony LaMarca in Making Sensor Networks Practical with Robots describes, printed on 2002, pp. 16.,
[] - Mohd Fauzi Othman in Wireless Sensor Network Applications: A Study in Environment Monitoring System, 2012, 7 pages.,

CCI - [G08B21/12](#)

CUI - [G01N35/0099](#)

PA - (A1 B2)
ANTONINI ROBERTO [IT]; FICI GIAN PIERO [IT]; GASPARDONE MARCO [IT]; TELECOM ITALIA SPA [IT]

TI - (A1)
AREA MONITORING SYSTEM AND CORRESPONDING METHOD FOR OPERATING THE SAME

- (B2)
Area monitoring system and corresponding method for operating the same

AB - (A1 B2)
A monitoring system monitoring an environmental condition of an area by measuring an environmental quantity,

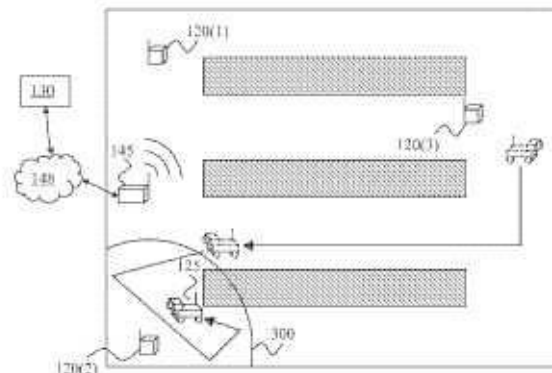


FIG.3B

including: a static monitoring section including plural static sensor units each configured to collect first measure data relating to the environmental quantity in respective portions of the area; a mobile monitoring section including at least one **robot** configured to move within the area to collect second measure data relating to the environmental quantity in a portion of the area surrounding the **robot**; and a central unit communicating with the static sensor units and **robot** to perform: conditioned to assessing an anomalous environmental condition from first measure data collected by at least one static sensor unit, commanding the **robot** to operate according to anomaly routines, and conditioned to assessing an anomalous environmental condition from second measure data collected by the **robot**, commanding at least one static sensor unit to operate according to anomaly routines.

5/10 © PATENW / EPO

PN - [WO2012146279](#) A1 20121101
 PR - WO2011EP56669 20110427
 AP - WO2011EP56669 20110427
 DT - *; Rep
 CT - |EP| ISR (A1)
[US2004012491](#) A1 20040122
 [XY] (KULESZ JAMES J [US], et al)
 [X] 1-9,11-15
 * the whole document *
 * pages 38,44,45; figure 1 *
 [Y] 10;
[US2009273479](#) A1 20091105
 [Y] (WAUGH MICHAEL JAY [US])
 [Y] 10
 * paragraphs [0052] , [0059] ,

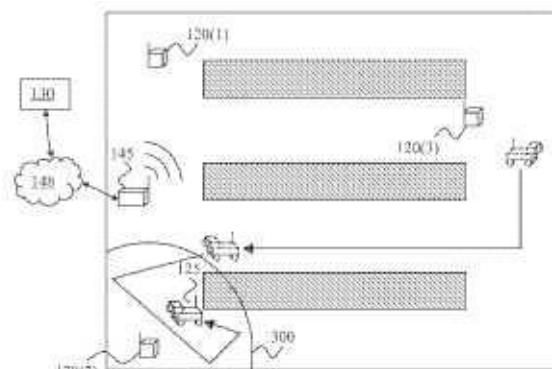


FIG.3B

[0060] , [0061] , [0063] , [0064] ,
[0065] , [0066]; figures 1-5 *;
[DE4228539](#) A1 19940303
[X] (DEUTSCHE AEROSPACE [DE])
[X] 1,11
* the whole document *
* column 2, line 33 - column 2,
line 63 *

- CCI - [G08B21/12](#)
- CUI - [G01N35/0099](#)
- PA - TELECOM ITALIA SPA [IT];
ANTONINI ROBERTO [IT]; FICI
GIAN PIERO [IT]; GASPARDONE
MARCO [IT]
- TI - AREA MONITORING SYSTEM AND
METHOD
- AB - A monitoring system (100) for
monitoring an environmental
condition of an area (105)
through the measurement of a
corresponding environmental
quantity is disclosed. The system
comprises a static monitoring
section (110) comprising a
plurality of static sensor units
(120); each static sensor unit is
configured to collect first
measure data relating to the
environmental quantity in a
respective portion of the area
according to first predetermined
scheduled routines. The system
further comprises a mobile
monitoring section (115)
comprising at least one **robot**
(125); each one of said at least
one **robot** is configured to move
itself within the area and is
configured to collect second
measure data relating to the
environmental quantity in a
portion of the area surrounding
the at least one **robot** itself
according to second
predetermined scheduled
routines. The system further
includes a central unit (130) in
communication relationships

with the static sensor units and the at least one **robot** for receiving the first measure data and the second measure data and assessing the environmental condition of the area based on at least one between the received first and second measure data. The central unit is configured to perform at least one between: - conditioned to the assessing of an anomalous environmental condition from first measure data collected by at least one static sensor unit, commanding at least one **robot** to operate according to anomaly routines under the control of the central unit, and - conditioned to the assessing of an anomalous environmental condition from second measure data collected by at least one **robot**, commanding at least one static sensor unit to operate according to anomaly routines under the control of the central unit.

6/10 © PATENW / EPO

PN - [CN101614624](#) A 20091230

PR - CN2009143729 20090619

AP - CN2009143729 20090619

DT - I

PA - (A B)
XUEJUN LEI

TI - (A B)
Quantitative sampling **robot** suitable for multiple environments

AB - (A)
The invention relates to a quantitative sampling **robot** suitable for multiple environments, comprising a car body on which a walking **caterpillar** is installed, wherein an optical camera, a lamp, an infrared thermal imager camera, a temperature sensor, a humidity sensor, a sound sensor, a vibration sensor, an inflammable, explosive and noxious **gas sensor** and an air pressure sensor are installed in a rotatable observing cover on the top face of the car body; and both sides of the front part of the car body on which a ground dust quantitative sampling device is installed are respectively provided with one obstacle crossing arm with a **caterpillar**, and the front part of the car body is provided with a combination hub for mechanical arms.

The **robot** also comprises a soil sampler, a sludge sampler, an air dust and microorganism sampler, an air speed sampler, a suction insect sampler, a dust counter, a liquid sampler and a gas sampler. The **robot** has the functions of horizontal movement, obstacle crossing, climbing, vertical creeping, float swimming, and the like; and the **robot** can observe and record images, sound, temperature, humidity, vibration and the concentration of inflammable, explosive and noxious gas by a computer in the process of driving of the **robot**, and can sense the signs of life bodies without being affected by light.

- (B)

The invention relates to a quantitative sampling **robot** suitable for multiple environments, comprising a car body on which a walking **caterpillar** is installed, wherein an optical camera, a lamp, an infrared thermal imager camera, a temperature sensor, a humidity sensor, a sound sensor, a vibration sensor, an inflammable, explosive and noxious **gas sensor** and an air pressure sensor are installed in a rotatable observing cover on the top face of the car body; and both sides of the front part of the car body on which a ground dust quantitative sampling device is installed are respectively provided with one obstacle crossing arm with a **caterpillar**, and the front part of the car body is provided with a combination hub for mechanical arms.

The **robot** also comprises a soil sampler, a sludge sampler, an air dust and microorganism sampler, an air speed sampler, a suction insect sampler, a dust counter, a liquid sampler and a gas sampler. The **robot** has the functions of horizontal movement, obstacle crossing, climbing, vertical creeping, float swimming, and the like; and the **robot** can observe and record images, sound, temperature, humidity, vibration and the concentration of inflammable, explosive and noxious gas by a computer in the process of driving of the **robot**, and can sense the signs of life bodies without being affected by light.

7/10 © PATENW / EPO

PN - [CN101468664](#) A 20090701

PR - CN20071172860 20071224

AP - CN20071172860 20071224

DT - I

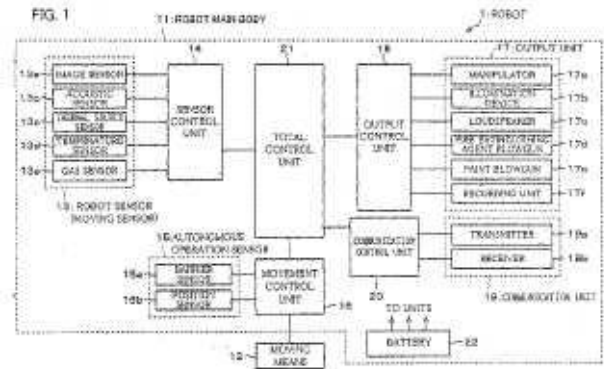
PA - ELECTRIC CABLE TRANSMISSION AN [CN]

TI - Small-sized **caterpillar** belt inspect **robot** system for cable tunnel hazardous environment

AB - The invention relates to small-sized **caterpillar** type inspection **robot** system for dangerous cable tunnel environment, which comprises a movable platform, an upper cover, a **gas sensor** box, a data transmission antenna, an image transmission antenna, a thermal camera tripod head, an ultrasonic sensor, a wireless monitoring device, a control box, a control unit and an operation panel, wherein the movable platform comprises a front guide belt wheel, a locking bolt, a swinging arm, a first tension bolt, a front load-bearing wheel, a second tension screw, a middle guide wheel, a **caterpillar**, a rear load-bearing wheel, a worm speed reducer, a swinging arm motor and a driving motor. Compared with the prior art, the system overcomes the drawbacks of the prior cable tunnel inspection technology, avoids dangerous factors caused by manual inspection, simplifies the **robot** mechanism and provides a simple, high-efficiency and reliable mechanism for cable tunnel inspection.

8/10 © PATENW / EPO

- PN - [US2004236466](#) A1 20041125
- PR - JP20010239904
20010807; WO2002JP07938
20020802
- AP - US20040485511 20040202
- DT - **
- CT - || R141 (A1)
[US7030757](#) B2 20060418 [
] (MATSUHIRA NOBUTO [JP], et
al);
[US5446445](#) A 19950829 [
] (BLOOMFIELD JOHN W [US], et
al);
[US5935179](#) A 19990810 [
] (KLEINER MENDEL [SE], et al);
[US6785619](#) B1 20040831 [
] (HOMANN KLAUS [DE], et al)
- || STSE (B2)
[US5935179](#) A 19990810 [
] (KLEINER MENDEL [SE], et al);
[US6785619](#) B1 20040831 [
] (HOMANN KLAUS [DE], et al);
[US7030757](#) B2 20060418 [
] (MATSUHIRA NOBUTO [JP], et al)
- CTNP - || STSE (B2)
[] - Funabiki et al., Binocular-
vision-based position sensor
with PSDs and its application to
mobile robot following, IEEE,
2002, p. 79-84.
- CCI - [G05D1/0278](#) ; [G08B17/10](#) ;
[G08B25/10](#) ; [G08B25/14](#)
- CCA - [G05D2201/0209](#)
- PA - (B2)
OMRON TATEISI ELECTRONICS CO
[JP]
- TI - (A1)
Information collection
apparatus, information
collection method, information
collection program, recording
medium containing information
collection program, and
information collection system



- (B2)

Information collection apparatus, information collection method, information collection program, recording medium containing information collection program, and information collection system

AB

- (A1)

A **robot** includes a **robot** sensor for sensing abnormality around the **robot**, moving means for moving the **robot** main body, and a movement control unit for controlling the moving means so that the **robot** main body is moved to a destination determined according to the information sensed by a fixed-position sensor fixed to a predetermined position outside the **robot**. The moving destination may be determined by the total control unit of the **robot** main body according to the information from the fixed-position sensors or by a center communicating with the **robot** according to the information from the fixed-position sensors. Since abnormality is sensed by the fixed-position sensors together with the **robot** sensor, the fixed-position sensors may have low accuracy obtained at a low cost. That is, by reducing the cost required for means for collecting external information such as the fixed-position sensor, it is possible to provide a monitoring system capable of collecting ambient information (such as abnormality information) without lowering the accuracy.

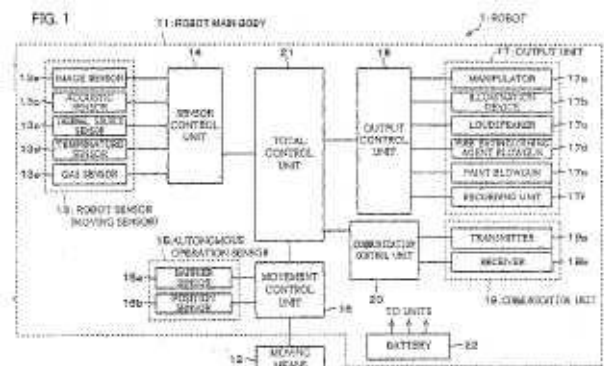
- (B2)

A **robot** includes a **robot** sensor for sensing abnormality around the **robot**, a moving portion for

moving the **robot** main body, and a movement control unit for controlling the moving portion so that the **robot** main body is moved to a destination determined according to the information sensed by a fixed-position sensor fixed to a predetermined position outside the **robot**. The moving destination may be determined by the total control unit of the **robot** main body according to the information from the fixed-position sensors or by a center communicating with the **robot** according to the information from the fixed-position sensors. Since abnormality is sensed by the fixed-position sensors together with the **robot** sensor, the fixed-position sensors may have low accuracy obtained at a low cost. That is, by reducing the cost required for collecting external information, such as by the fixed-position sensor, it is possible to provide a monitoring system capable of collecting ambient information (such as abnormality information) without lowering the accuracy.

9/10 © PATENW / EPO

PN - [CA2456623](#) A1 20030220
PR - JP20010239904
20010807; WO2002JP07938
20020802
AP - CA20022456623 20020802
DT - |
CCI - [G05D1/0278](#) ; [G08B17/10](#) ;
[G08B25/10](#) ; [G08B25/14](#)
CCA - [G05D2201/0209](#)
PA - OMRON TATEISI ELECTRONICS CO
[JP]
TI - INFORMATION COLLECTION
APPARATUS, INFORMATION



COLLECTION METHOD,
INFORMATION COLLECTION
PROGRAM, RECORDING MEDIUM
CONTAINING
INFORMATIONCOLLECTION
PROGRAM, AND INFORMATION
COLLECTION SYSTEM

AB

- A **robot** includes a **robot** sensor for sensing abnormality around the **robot**, moving means for moving the **robot** main body, and a movement control unit for controlling the moving means so that the **robot** main body is moved to a destination determined according to the information sensed by a fixed-position sensor fixed to a predetermined position outside the **robot**. The moving destination may be determined by the total control unit of the **robot** main body according to the information from the fixed-position sensors or by a center communicating with the **robot** according to the information from the fixed-position sensors. Since abnormality is sensed by the fixed-position sensors together with the **robot** sensor, the fixed-position sensors may have low accuracy obtained at a low cost. That is, by reducing the cost required for means for collecting external information such as the fixed-position sensor, it is possible to provide a monitoring system capable of collecting ambient information (such as abnormality information) without lowering the accuracy.

PN - [EP1441319](#) A1 20040728

PR - WO2002JP07938
20020802; JP20010239904
20010807

AP - EP20020755803 20020802

DT - *; Rep

CT - || STSE (A4)
[US5446445](#) A 19950829
[X] (BLOOMFIELD JOHN W [US],
et al)
[X] 1-19
* column 4, line 31 - column 5,
line 38 *
* column 6, line 55 - column 7,
line 22 *
* figures 1,2a,2b *;
[WO9967067](#) A1 19991229
[X] (SONY CORP [JP], et al)
[X] 1-19
* abstract *;
[EP1122038](#) A1 20010808
[X] (SONY CORP [JP])
[X] 1-19
* paragraph [0047] -
paragraph [0054] *
* figures 1,2 *

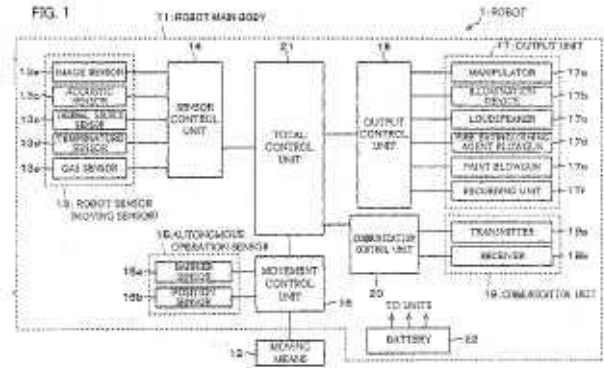
CCI - [G05D1/0278](#) ; [G08B17/10](#) ;
[G08B25/10](#) ; [G08B25/14](#)

CCA - [G05D2201/0209](#)

PA - (A1 A4 B1)
OMRON TATEISI ELECTRONICS CO
[JP]

TI - (A1 A4 B1)
INFORMATION COLLECTION
APPARATUS, INFORMATION
COLLECTION METHOD,
INFORMATION COLLECTION
PROGRAM, RECORDING MEDIUM
CONTAINING INFORMATION
COLLECTION PROGRAM, AND
INFORMATION COLLECTION
SYSTEM

AB - (A1)
A **robot** includes a **robot** sensor
for sensing abnormality around
the **robot**, moving means for
moving the **robot** main body, and



a movement control unit for controlling the moving means so that the **robot** main body is moved to a destination determined according to the information sensed by a fixed-position sensor fixed to a predetermined position outside the **robot**. The moving destination may be determined by the total control unit of the **robot** main body according to the information from the fixed-position sensors or by a center communicating with the **robot** according to the information from the fixed-position sensors. Since abnormality is sensed by the fixed-position sensors together with the **robot** sensor, the fixed-position sensors may have low accuracy obtained at a low cost. That is, by reducing the cost required for means for collecting external information such as the fixed-position sensor, it is possible to provide a monitoring system capable of collecting ambient information (such as abnormality information) without lowering the accuracy. <IMAGE>

[SS 46] ..v

[PATENW: SS 46]