

Search history

Search 1: SFT=(thickness and layer and (soil or ground)) and IC=(G01N29/00) (Results 233)
Search 2: 1 and speaker (Results 10)
Search 3: SFT=(properties and layer and (liquid or solid)) and IC=(G01N29/00) (Results 564)
Search 4: 3 and speaker (Results 20)

1) Family number: 31716046 (US2006098533A)

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Title: METHOD AND APPARATUS FOR ECHOLOCATION

Abstract: Method and apparatus for application of echolocation to robot guidance and assisting the blind. The method is based on the echolocation of bats. It combines a source of pulsed ultrasound (100) with a recently-developed acoustic vector probe (AVP) (200) into an echolocation instrument (1000), together with a data-acquisition system (300), a digital signal processor (400) and an output device (500). The source emits pulses of ultrasound of about 35 kHz over a beam angle of approximately 100 degrees and the AVP detects backscattered pulses from a discrete distribution of acoustic highlights on surrounding objects. The ultrasonic sound pressures of the backscattered pulses are heterodyned down to lower frequencies so that the signal processor can make an accurate determination of the sound-intensity vector for each pulse. The sound-intensity vector points in the direction of the highlight from which the backscattered pulse originates while the round-trip time of flight of the pulse determines the distance to the highlight. In this way the positions of the highlights on surrounding objects can be determined. The distribution of such highlights changes when the echolocation instrument moves relative to surrounding objects, generating a sequence of highlight distributions that can be stored in the memory of the processor and combined to provide a more complete representation of surrounding objects.

Classifications:

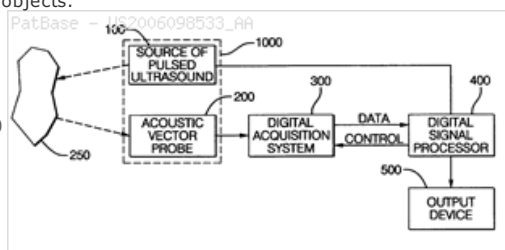
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G01H3/00 G01N29/00 G01N29/04 G01N29/34 G01N29/36 G01S15/00 G01S3/00 G01V1/00 G01V1/16 H04R1/02 H04R1/20 H04R29/00 H04R3/00 (Core/Invention)

International (IPC 1-7): G01N29/00 G01S3/80

CPC: H04R3/04 H04R19/016 H04R29/004 G01S15/42 G01S3/8006 G01S5/20 G01H3/14 G01S7/521 G01S15/93 G01H3/00 G01H3/125 G01N29/11 G01N29/341 G01N29/36 G01N2291/02491 G01N2291/02836 G01N2291/044 G01V1/003 G01V1/16

European: G01H3/00 G01H3/12B G01H3/14 G01N29/11 G01N29/34B G01N29/36 G01S13/00 G01S15/42 G01S15/89 G01S15/93 G01S3/80W G01S5/20 G01S7/521 G01V1/00B G01V1/16 H04R29/00M H04R3/04 S01N291/024N S01N291/028F S01N291/044 T04R19/01C

US: 367/124 367/124P 367/13 367/153 367/153S 367/87 367/87P 367/88 367/88S 367/99 367/99S 381/338 381/353 381/56 381/58 381/91 381/92 381/95 73/594 73/594S 73/646



Family:

Publication number	Publication date	Application number	Application date
US2006098533 AA	20060511	US20040842880	20040510
US2006098534 AA	20060511	US20030746763	20031226
US2007223730 AA	20070927	US20060415910	20060502
US6862252 BA	20050301	US20030658076	20030909
US7054226 BA	20060530	US20040842880	20040510
US7054228 BA	20060530	US20030746763	20031226
US7058184 BA	20060606	US20030396541	20030325
US7526094 BB	20090428	US20060415910	20060502
US7920709 BA	20110405	US20060607376	20061202
US8203909 BA	20120619	US20100800169	20100510
WO07130341 A2	20071115	WO2007US10419	20070430
WO07130341 A3	20081106	WO2007US10419	20070430

Priority:

US20030396541 20030325 US20030658076 20030909 US20030746763 20031226
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US20060607376 20061202 US20100800169 20100510

Probable Assignee: HICKLING ROBERT

Assignee(s): (std): HICKLING ROBERT

Inventor(s): (std): HICKLING ROBERT

Agent(s): REISING ETHINGTON BARNES KISSELLE PC; ROBERT HICKLING; REISING ETHINGTON PC

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

Title: BATTERY LIFE ASSESSMENT AND CAPACITY RESTORATION

Abstract: Described herein are embodiments of methods and apparatus for determining the SoC and SoH a lithium ion battery and for restoring capacity to a lithium ion battery. Some embodiments provide a method and apparatus including an ultrasound transducer designed to measure characteristics of a lithium ion battery in order to determine the SoC and SoH of the lithium ion battery, and to disrupt the SSEI **layer** inside the lithium ion battery. Several other methods for determination of SoC and SoH and disruption of the SSEI **layer** are also described. Use of such methods and apparatus may be advantageous in assessing a state of the lithium ion battery, as well as rejuvenating a lithium ion battery and increasing its life span.

Classifications:**International (IPC 8-9):** G01R31/36

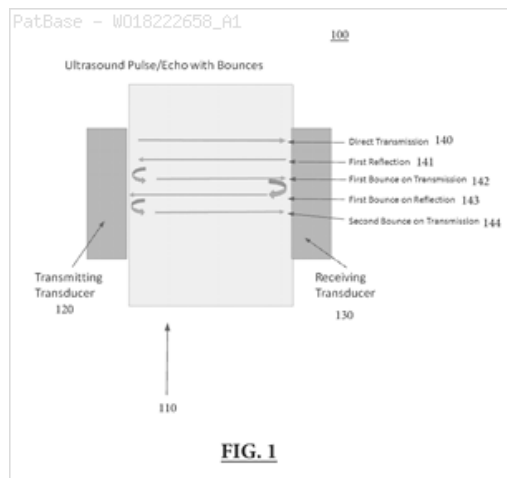
H01M10/052 (Advanced/Invention);

G01N19/00 G01N23/20 G01N29/00 (Advanced/Non-invention)

CPC: H01M10/0525 G01N19/00 H01M10/42 H01M10/48 G01N3/08

G01N29/07 G01N29/11 G01N29/12 G01N2291/011 G01N2291/014

G01N2291/015 G01N2291/048 G01N2291/2697 G01N23/04

**FIG. 1****Family:**

Publication number	Publication date	Application number	Application date
TW201905484 A	20190201	TW20180118839	20180530
WO18222658 A1	20181206	WO2018US35039	20180530

Priority:

US20170512616P 20170530 US20180634098P 20180222

Probable Assignee: TITAN ADVANCED ENERGY SOLUTIONS INC**Assignee(s):** (std): TITAN ADVANCED ENERGY SOLUTIONS INC**Inventor(s):** (std): MURPHY SHAWN ; SREEDHAR ASHISH ; LEE VINCENT YUAN HSIANG ; AFRICK STEVEN ; LEE VINCENT**Agent(s):** MORRIS JAMES H

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

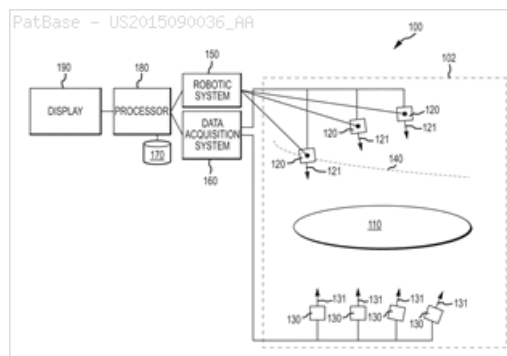
3) Family number: 58856111 (US2015090036A)

Title: METHODS AND APPARATUS FOR HIGH-RESOLUTION CONTINUOUS SCAN IMAGING USING VOLD-KALMAN FILTERING

Abstract: A method of imaging a test subject includes providing one or more moveable sensors to sense an attribute of the test subject (e.g., acoustic pressure), wherein the attribute has a tonal noise component and a broadband noise component. A rotational sensor is provided to sense a rotational velocity of a rotational element of the test subject. Each of the moveable sensors are moved along a path while continuously acquiring test data that is indicative of the rotational velocity of the rotational element, the sensed attribute, the position, and the orientation of each of the moveable sensors. A set of transfer functions corresponding to points in space that have been visited by the moveable sensors are constructed, each of the transfer functions relating the test data of the moveable sensors to the test data of the rotational sensor. A visual representation of the tonal noise component of the attribute in a region adjacent the test subject is produced using the set of transfer functions.

Classifications:**International (IPC 8-9):** G01N29/00 G01N29/06 G03H1/04

G03H3/00 (Advanced/Invention)

CPC: G01N29/0663 G03H1/0443 G03H3/00**US:** 73/603**Family:**

Publication number	Publication date	Application number	Application date
US2015090036 AA	20150402	US20140470797	20140827
US9482644 BB	20161101	US20140470797	20140827

Priority:

US20130879061P 20130917 US20140470797 20140827

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Inventor(s): (std): SHAH PARTHIV N ; VOLD HAVARD I
Agent(s): LORENZ AND KOPF LLP

4) Family number: 31779168 (US2005066735A) © PatBase

Title: SYSTEM AND METHOD FOR IMPROVED VOLUME MEASUREMENT

Abstract: An apparatus comprises a variable acoustic source and a microphone, both acoustically coupled to a volume having a fluid region and an air region. The apparatus also can include a processor to determine a volume of the air region based on signals received from the microphone and the variable acoustic source. A fluid valve is coupled to the processor, and is configured to allow an amount of fluid to exit the fluid region associated with the volume of the air region. An atomizer, coupled to the fluid region, is configured to aerosolize at least a portion of the fluid.

Classifications:

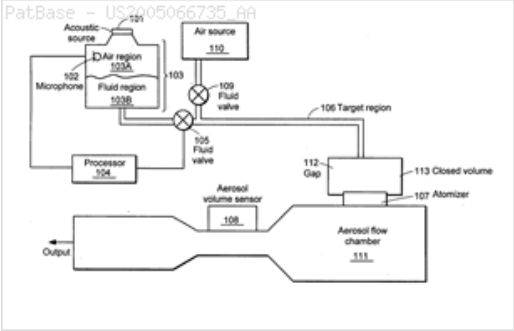
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International (IPC 1-7): A01G27/00 A61M11/00 A61M15/00 B05B1/30 G01H11/00

CPC: G01F1/007 G01F1/662 G05D7/0635 G05B15/02 G01F13/00 G05D7/0617 A61M2205/123 A61M2205/3331 A61M2202/064 A61M2207/00 A61M2205/3368 A61M2205/3379 A61M15/009 A61M2205/3306 A61M2205/50 A61M2205/52 G01H3/00 A61M15/0045 A61M15/0048 A61M15/0065 A61M15/008 A61M15/0085 A61M2016/0021 A61M2016/0039 A61M2202/03 A61M2205/3375 B05B12/006 B05B12/085 G01F17/00 G01F22/00 G01F23/14 G10K9/04 A61M15/0003 A61M15/002 A61M15/0066 A61M15/0068

European: A61M15/00C2 A61M15/00D A61M15/00F B05B12/08T G01F17/00 G01F22/00 G01F23/14 G10K9/04 K61M15/00C2B2 K61M15/00D4E K61M16/00A11 K61M16/00A14B4 K61M16/00A20 K61M16/00A8B2 K61M202/03 K61M205/33M2 K61M205/33U

US: 1/1 128/200.14 128/200.16 128/200.19 128/200.23 128/203.12 128/203.14 128/205.23 239/303 239/407 239/569 239/67 239/68 700/282 702/49 702/49P 702/55 702/55S 73/223 73/290R 73/649 73/861.18



Family:

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CA2850361 C	20170912	CA20042850361	20040927
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DE602004037843 D1	20120705	DE200460037843T	20040927
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DE602004052480 D1	20180405	DE200460052480T	20040927
EP1725284 A2	20061129	EP20040785145	20040927
EP1725284 B1	20120222	EP20040785145	20040927
EP2269743 A2	20110105	EP20100183339	20040927
EP2269743 A3	20110427	EP20100183339	20040927
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EP2345481 B1	20120509	EP20100183347	20040927
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EP2799151 B1	20180314	EP20140178987	20040927
EP3363545 A1	20180822	EP20180161517	20040927
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US9610414 BB	20170404	US20150812024	20150729
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WO05030306 A2	20050407	WO2004US31672	20040927
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Priority:

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Probable Assignee: DEKA PRODUCTS PARTNERSHIP LTD

Assignee(s): (std): ALTOBELLI DAVID E ; BEAVIS RUSSELL ; BEAVIS RUSSELL H ; DEKA PRODUCTS LP ; GRAY LARRY B ; HOWLETT DAVID J ; KANE DEREK G ; LANIGAN RICHARD J

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Inventor(s): (std): HOWLETT DAVID J ; KANE DEREK G ; ALTOBELLI DAVID E ; BEAVIS RUSSELL ; KANE DEREK ; LANIGAN RICHARD ; GRAY LARRY ; ALTOBELLI DAVID ; BEAVIS RUSSELL H ; LANIGAN RICHARD J ; GRAY LARRY B

Inventor(s): BEAVIS RUSSELL MERRIMACK ; LANIGAN RICHARD J CONCORD ; HOWLETT DAVID J KING S LYNN ; GRAY LARRY B MERRIMACK ; ALTOBELLI DAVID E HOLLIS ; KANE DEREK G MANCHESTER ; HOWLETT DAVID

Agent(s): GOWLING LAFLEUR HENDERSON LLP; GOWLING WLG CANADA LLP; FINNIE PETER JOHN; GILL JENNINGS AND EVERY LLP; BROMBERG AND SUNSTEIN LLP; MICHELLE SAQUET TEMPLE; SAMUEL J; MICHELLE SAQUET; MICHAEL GEORGE; TEMPLE MICHELLE SAQUET; NORRIS MICHAEL GEORGE

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

5) Family number: 40838174 (US2009184830A)

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Title: SMOKE SENSOR OF SOUND WAVE TYPE

Abstract: The present invention provides a smoke sensor of sound wave type that excels in responsiveness and has a low probability of false detection. The smoke sensor has a sound wave generating unit that provides an ultrasound wave to a monitoring space, a sound wave receiving unit that receives the ultrasound wave from the sound wave generating unit via the monitoring space, and a signal processing unit that detects an abnormality of the monitoring space by using an output of the sound wave receiving unit. The signal processing unit includes a smoke density estimation unit that estimates a smoke density in the monitoring space on the basis of a difference between the output of the sound wave receiving unit and a standard value, and a smoke density determination unit that determines the abnormality of the monitoring space by comparing the smoke density estimated by the smoke density estimation unit with a predetermined threshold.

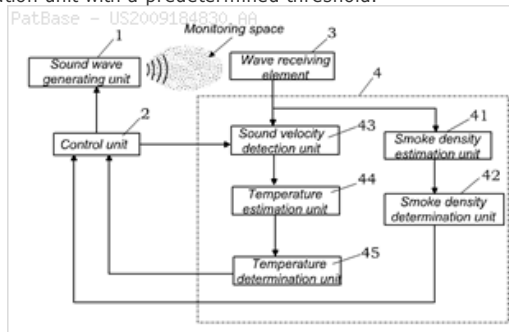
Classifications:

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CPC: G01N2291/02809 G01N2291/0421 G01N2291/02872 G08B17/00 G08B17/113 G01N29/032 G01N29/348 G01N2291/045 G08B13/1968 G08B29/24 G08B17/10 G01N29/024 G01N29/4427 G01N2291/0217 G01N2291/02818 G01N2291/02881 G01N2291/048 G08B17/103

European: G01N29/024 G01N29/032 G01N29/34F G01N29/44B2 G08B13/196U1 G08B17/10 G08B17/103 G08B29/24 S01N291/021E S01N291/028C S01N291/028D S01N291/028P S01N291/028T S01N291/042B S01N291/045 S01N291/048

US: 340/577 340/577P 340/628 340/628P 73/865.5



Family:

Publication number	Publication date	Application number	Application date
CN101449304 A	20090603	CN200780017260	20070501
CN101449304 B	20110511	CN200780017260	20070501
CN101836244 A	20100915	CN200880113407	20081021
CN101836244 B	20120523	CN200880113407	20081021
DE602008016576 D1	20120816	DE200860016576T	20081021
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EP2034462 A4	20110518	EP20070742748	20070501
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Priority:

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Assignee(s): (std): HAYASHI MASANORI ; HONDA YOSHIKI ; MATSUSHITA ELECTRIC INDUSTRIAL CO LTD ; MATSUSHITA ELECTRIC WORKS LTD ; NISHIKAWA TAKAYUKI ; PANASONIC ELEC WORKS CO LTD ; PANASONIC CORP ; PANASONIC ELECTRIC IND CO LTD ; TERASAWA TOMIZO ; TAKADA YUJI ; WATABE YOSHIFUMI

Assignee(s): PANASONIC ELECTRIC WORKS CO LTD ; PANASONIC ELECTRIC WORKS CO ; PANASONIC ELECTRIC WORKS CO LTD JP ; PANASONIC KADOMA SHI CORP ; PANASONIC ELECTRIC INDUSTRIAL CO LTD ; PANASONIC ELECTRIC INDUSTRIAL CO ; PANASONIC ELEC WORKS CO

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

6) Family number: 41806224 (US2010268479A)

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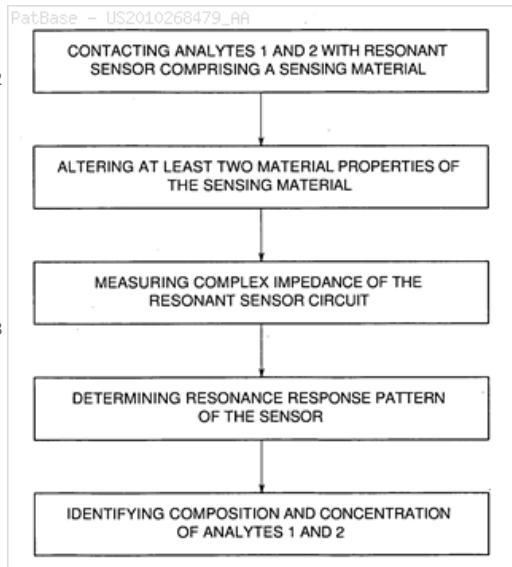
Title: SENSOR SYSTEM AND METHODS FOR ANALYTE DETECTION

Abstract: A system for selectively determining at least two analytes, comprising at least one resonant sensor circuit comprising a sensing material that predictably affects the resonant complex impedance response of a sensor electrode, wherein the sensing material having at least two material **properties** that change upon exposure to two or more analytes; and a processor that generates a multivariate sensor response pattern that is based at least in part on a change in the two material **properties** of the sensing material and a sensing device and methods adapted to detect an analyte using the same sensor system.

Classifications:

International (IPC 8-9): G01N27/22 G01N27/26 G01N33/18 G21C17/022 B01D17/12 B60R21/00 B61C17/08 B61L3/00 C12M1/34 E21B47/10 F01M11/10 F01M11/12 F16N29/04 G01C21/20 G01D21/02 G01F G01F23/00 G01F23/22 G01F23/24 G01F23/26 G01F23/284 G01N G01N1/10 G01N21/39 G01N27/00 G01N27/02 G01N27/06 G01N27/08 G01N27/12 G01N27/327 G01N29/00 G01N29/02 G01N29/24 G01N30/26 G01N30/96 G01N31/00 G01N33/00 G01N33/22 G01N33/28 G01N33/483 G01N33/487 G01R27/00 G01R27/02 G01R27/22 G01R27/26 G01R27/28 G01R33/385 G01S17/89 G01V3/00 G06F15/00 G06F16/29 G06F16/58 G06K19/07 G06K19/077 G06K7/10 G06Q50/26 G07C5/00 G07C5/08 G08B13/14 G21C17/00 G21C17/02 H03K17/955 H04B5/00 H04Q5/22 H04Q9/00 H04W84/18 H04W88/16 H05K1/16 H05K3/30 (Advanced/Invention); G01N33/487 G01R31/28 H04Q9/00 (Advanced/Non-invention); G01N1/10 G01N27/06 G01N27/22 G01N27/26 G01N30/00 G01N33/18 G01R27/22 G21C17/02 (Core/Invention)

CPC: G01N27/08 G01N27/22 G01N27/26 G01N33/2847 G01F23/24 G01F23/244 G01F23/26 G21C17/022 G01N33/18 G01N33/483 G01N33/0031 H05K1/16 H05K2201/0338 H05K2201/09263 H05K2201/10151 G01F23/261 G01F22/00 G01F23/241 E21B47/10 H04B5/0043 G01N33/48792 Y10T29/4913 G01D21/02 G01N27/3278 G01N27/025 G07C5/0816 G07C5/006 B60W2400/00 F16N29/04 G07C5/0841 G01F23/284 F01M11/10 F01M2011/1406 F16N2200/00 F16N2200/08 F16N2210/04 F16N2260/18 F16N2270/54 G07C5/0808 G01N27/126 G01N33/1893 G01N27/028 G06K19/0717 G06K19/0723 G06K19/07749 G01R27/28 G01R31/2824 B61C17/08 G01N21/39 G06F16/5866 G06F16/29 G01N2201/06113 G01S17/89 G01C21/20 B61L3/002 G01N33/28 G01N27/221 G01M15/09 G01N33/0036 H04Q2209/823 H04Q2209/845 H04Q2209/883 H04Q2209/886 G01W1/00 F01M1/18 F01M2011/14 F01M2011/146 F01M2011/1473 F16N2200/20 F16N2250/08 F16N2250/32 G01H1/00



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European: G01N27/02 G01N27/02E G01N27/08 G01N27/22 G01N27/26 G01N27/333 G01N33/18 G21C17/022 S21Y2/202
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US: 1/1 29/832 324/602 324/603 324/605 324/652 324/655 324/675 324/675S 324/693 324/698 340/10.1 340/856.3
376/247 376/247P 376/259 376/259S 422/82.01 422/82.010S 702/127 702/23 702/23P 702/24 73/290R 73/61.43 73/61.44
73/61.61 73/64.53 977/742 977/742S 977/953 977/953S

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Publication number	Publication date	Application number	Application date
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Priority:

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SURMAN CHERYL MARGARET ; GO STEVEN ; TOKAREV IGOR ; NICHOLAS JOSEPH ELLSON ; CHERYL
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JEAN K; FLETCHER YODER PC; JOHN P; DOMBROWSKI JOANNA M ET AL; WINTER CATHERINE J ET AL;
GE HEALTHCARE BIO SCIENCES AB ET AL; PUNDSACK SCOTT R ET AL

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7) Family number: 29906229 (US2003101819A)

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Title: ACOUSTIC ASSESSMENT OF FLUIDS IN A PLURALITY OF RESERVOIRS

Abstract: The invention provides devices and methods for acoustically assessing the contents in a plurality of reservoirs. Each reservoir has a portion adapted to contain a fluid, and an acoustic radiation generator is positioned in acoustic coupling relationship to each of the reservoirs. Acoustic radiation generated by the acoustic radiation generator is transmitted through at least the portion of each reservoir to an analyzer. The analyzer is capable of analyzing a characteristic of the transmitted acoustic radiation and optionally correlating the characteristic to a **property** of the reservoirs' contents. The invention is particularly suited for assessing the contents of a plurality of reservoirs to allow for accuracy and control over the dispensing of fluids therefrom.

Classifications:

International (ipc 8-9): B01J19/00 B01L3/02 B05B12/00 B41J2/02
B41J2/04 B41J2/045 B41J2/135 B41J2/14 B41J29/38 B65D90/48
G01F23/296 G01H5/00 G01K11/22 G01N29/00 G01N29/02
G01N29/024 G01N29/07 G01N29/22 G01N29/28 G01N29/36
G01N35/10 G01N37/00 G01N9/00 G06F19/00 (Advanced/Invention);
B01L3/00 B41J2/045 C40B40/06 C40B40/10 C40B60/14 G01N35/00
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B01L3/02 B41J2/04 B41J2/045 B41J2/135 B41J2/14 B41J29/38
B65D90/00 G01F23/296 G01N29/00 G01N29/02 G01N29/22
G01N29/28 G01N35/10 G01N37/00 (Core/Invention);
B01L3/00 C40B40/04 C40B60/14 G01N35/00 G01N35/10 (Core/Non-
invention)

International (ipc 1-7): B01J19/00 B01L3/02 B41J2/02 B41J2/14
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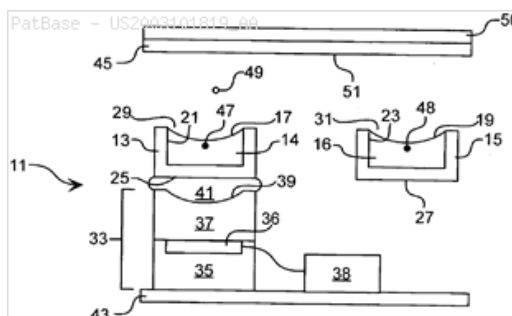
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Family:

Publication number	Publication date	Application number	Application date
AT517751 E	20110815	AT20030760479T	20030618
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Priority:

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US20150944874	20151118				

Probable Assignee: LABCYTE INC

Assignee(s): (std): ELLSON RICHARD N ; FOOTE JAMES K ; LABCYTE INC ; MUTZ MITCHELL W ; PICOLITER INC ; QURESHI SHEHRZAD A ; QURESHI SHEHRZAD AHMED ; STEARNS RICHARD ; STEARNS RICHARD G

Assignee(s): PICOLITER INC SUNNYVALE

Inventor(s): (std): FOOTE JAMES K ; STEARNS RICHARD ; ELLSON RICHARD N MUTZ MITCHELL ; QURESHI SHEHRZAD AHMED ; FOOTE JAMES ; MUTZ MITCHELL ; ELLSON RICHARD ; QURESHI SHEHRZAD A ; MUTZ MITCHELL W ; ELLSON RICHARD N ; STEARNS RICHARD G ; AHMED QURESHI SHEHRZAD

Inventor(s): QURESHI SHEHRZAD ; FOOTE JAMES K CUPERTINO ; ELLSON RICHARD N PALO ALTO ; MUTZ MITCHELL W PALO ALTO ; MITCHELL W MUTZ ; RICHARD N ELLSON ; JAMES K FOOTE

Agent(s): KRAMER BARSKE SCHMIDTCHEN PATENTANWALTE PARTG MBB; HASELTINE LAKE KEMPNER LLP; CRUMP JULIAN RICHARD JOHN; REED INTELLECTUAL PROPERTY LAW GROUP; MINTZ LEVIN COHN FERRIS GLOVSKY AND POPEO PC; REED DIANNE E; DIANNE E; ROSE FLAVIO M; FLAVIO M; JONES DAY

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

8) Family number: 65330280 (US2017232300A)

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Title: SMART DEVICE

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

Classifications:

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

A61B5/0404 A61B5/11 A63B24/00 A63B43/00 A63B60/46
A63B69/36 A63B69/38 A63B71/00 A63B71/06 A63B71/14 A63F11/00
A63F13/00 A63F13/211 A63F13/212 B33Y10/00 B33Y80/00
B60Q1/00 G01L5/00 G01L5/10 G01L5/22 G01M17/02 G01M17/06
G01N29/00 G01N29/14 G01N29/44 G01P15/08 G01P15/18 G06F1/16
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G06K9/00 G06K9/78 G06N5/04 G06N99/00 G06Q20/36 G06Q20/40
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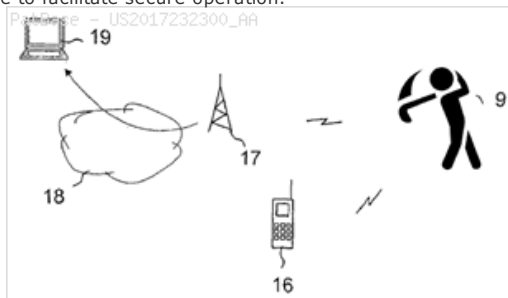
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H04W4/38 H04W88/02 A61B5/6804 B33Y10/00 G06F3/00
US: 1/1 340/870.07 340/870.3 434/247 700/91

Family:

Publication number	Publication date	Application number	Application date
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US2019191284 AA	20190620	US20180207154	20181202
US2019200184 AA	20190627	US20180034239	20180712
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US9713756 BA	20170725	US20170407253	20170117
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US9717958 BA	20170801	US20170407257	20170117
US9849364 BB	20171226	US20170586199	20170503
US9975033 BB	20180522	US20170407255	20170117
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Priority:

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Probable Assignee: TRAN BAO
Assignee(s): (std): TRAN BAO ; TRAN HA
Inventor(s): (std): TRAN BAO ; TRAN HA
Agent(s): TRAN AND ASSOCIATES

9) Family number: 57372401 (US2014260624A)

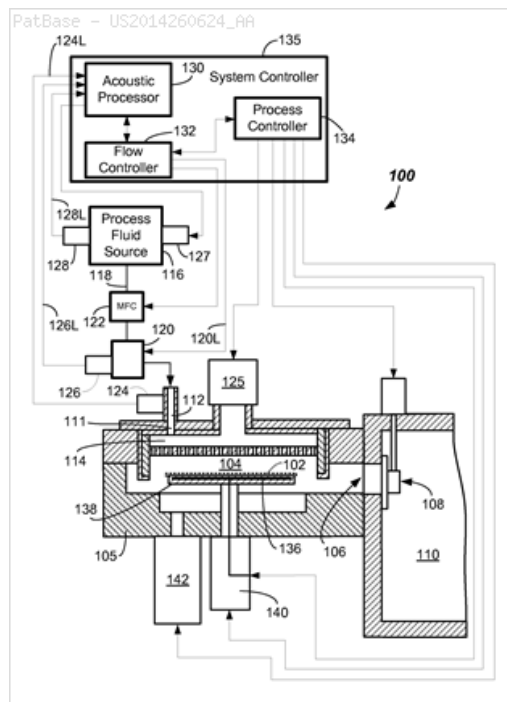
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Title: ACOUSTICALLY-MONITORED SEMICONDUCTOR SUBSTRATE PROCESSING SYSTEMS AND METHODS

Abstract: A semiconductor substrate processing system having acoustic monitoring is disclosed. The system includes a process chamber adapted to perform a process on a substrate, a process fluid source, a fluid conduit coupling the fluid source to the process chamber, and a flow control valve located along the fluid conduit and adapted to be operable to control a flow of a process fluid between the process fluid source and the process chamber. The system includes one or more acoustic sensors operable to sense acoustic noise coupled to at least one of the process fluid source, the fluid conduit, and the flow control valve, and an acoustic processor adapted to receive at least one signal from the one or more acoustic sensors. Acoustic monitoring methods are provided, as are other aspects.

Classifications:

International (IPC 8-9): F16K37/00 G01N29/00 G05D7/00
H01L21/205 H01L21/3065 H01L21/67 (Advanced/Invention)
CPC: F16K37/0083 H01L21/67253 Y10T137/8158
US: 1/1 137/551 73/587



Family:

Publication number	Publication date	Application number	Application date
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TWI593038 B	20170721	TW20140104949	20140214
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Priority:

US20130779229P 20130313 US20140180012 20140213

Probable Assignee: APPLIED MATERIALS INC

Assignee(s): (std): APPLIED MAT INC ; APPLIED MATERIALS INC

Assignee(s): APPLIED MATERIALS CO LTD

Inventor(s): (std): YUDOVSKY JOSEPH ; SUBRAHMANYAM KOMMISSETTI ; EGAN TODD J ; JOHNSON MICHAEL

Agent(s): DUGAN AND DUGAN PC ; DUGAN BRIAN M 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

10) Family number: 4453467 (US4991439A)

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Title: Apparatus for detecting insect-induced vibrations in particulate matter

Abstract: Grain-destroying insects, and those which may infect other types of particulate matter, when feeding and moving about, induce vibrations in the grain or particulate material affected which is modified and amplified to an audible level. The detection is performed using a crystal with piezoelectric properties directly and physically connected to a vibratory receiving structure such as an elongated probe, a thin, flat diaphragm or the like which mechanically amplifies the vibrations to the crystal. The vibratory sounds are then analyzed, such as by comparison with other records of known destructive insects to determine the probable species of insect and its location.

Classifications:

International (IPC 8-9): G01H11/08 G01N29/14 G01V1/00

G10K11/24 (Advanced/Invention);

G01H11/00 G01N29/14 G01V1/00 G10K11/00 (Core/Invention)

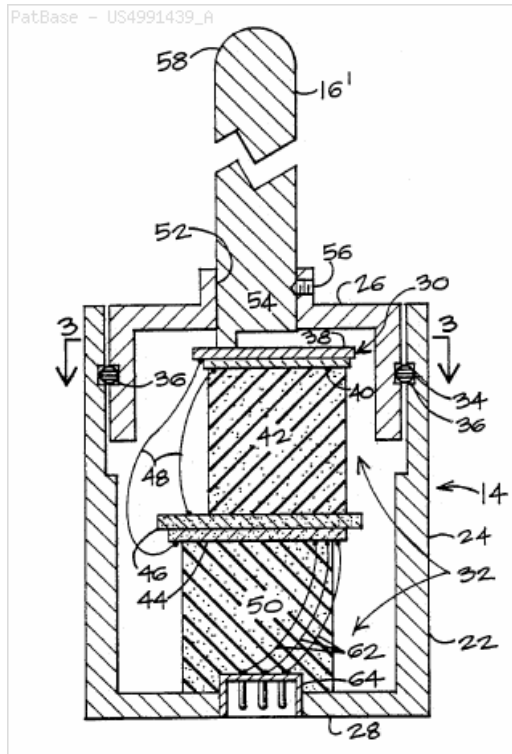
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CPC: A01M1/026 G01H11/08 G01N29/14 G01V1/001 G10K11/24

European: A01M1/02E G01H11/08 G01N29/14 G01V1/00A

G10K11/24

US: 73/587 73/661

**Family:**

Publication number	Publication date	Application number	Application date
US4991439 A	19910212	US19880272857	19881118

Priority:

US19880272857 19881118

Probable Assignee: B AND B IND**Assignee(s):** (std): B AND B IND**Assignee(s):** B AND B INDUSTRIES ; SOUND TECHNOLOGIES INC**Inventor(s):** (std): BETTS WILLIAM B