

1) Family number: 69821002 (JP2018081048A)

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Title: THREE-DIMENSIONAL SHAPE MEASUREMENT DEVICE

Abstract: PROBLEM TO BE SOLVED: To provide a three-dimensional shape measurement device which can suppress generation of a shadow region without increasing the number of projection means when measuring the three-dimensional shape of an object by pattern projection.SOLUTION: The three-dimensional shape measurement device includes: projection means 10 for projecting a pattern to a measurement target O; imaging means 11 for imaging the measurement target to which the pattern is projected; measurement means for measuring the three-dimensional shape of the inspection target by processing the image acquired by the imaging means; and moving means for moving the projection means.SELECTED DRAWING: Figure 3

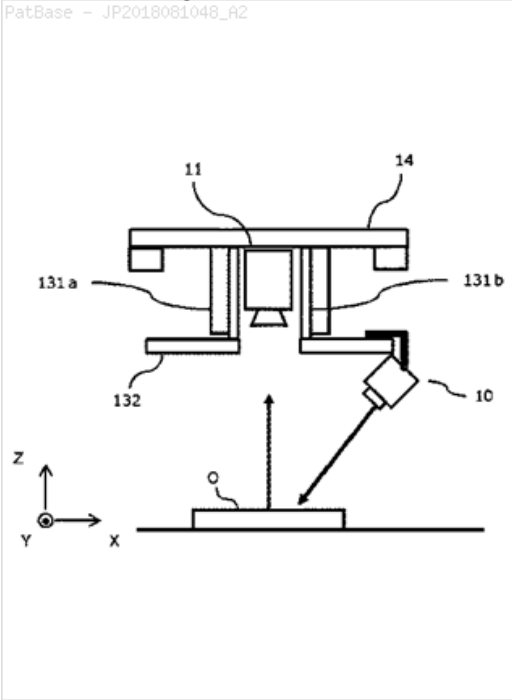
Classifications:

International (IPC 8-9): G01B11/25 (Advanced/Invention)

CPC: G01B11/2513 G01B11/25

JP F-Term: 2F065/AA53 2F065/BB05 2F065/DD02 2F065/FF04
2F065/HH07 2F065/HH14 2F065/JJ09 2F065/JJ19 2F065/JJ26 2F065/MM13
2F065/MM15 2F065/QQ24 2F065/QQ31

JP F-Index: G01B11/25/H



Family:

Publication number	Publication date	Application number	Application date
CN108072335 A	20180525	CN201710860489	20170921
DE102017216552 A1	20180524	DE201710216552	20170919
DE102017216552 B4	20190529	DE201710216552	20170919
JP2018081048 A2	20180524	JP20160225090	20161118

Priority:

JP20160225090 20161118

Probable Assignee: OMRON CORP

Assignee(s): (std): OMRON TATEISI ELECTRONICS CO

Assignee(s): OMRON CORP

Inventor(s): (std): TSUJIMURA YUKIHIRO ; YOSHIDA MASAOMI ; TSUJIMURA SACHIHIRO

Agent(s): SERA KAZUNOBU; KAWAGUCHI YOSHIYUKI

2) Family number: 49104009 (CN102095384A)

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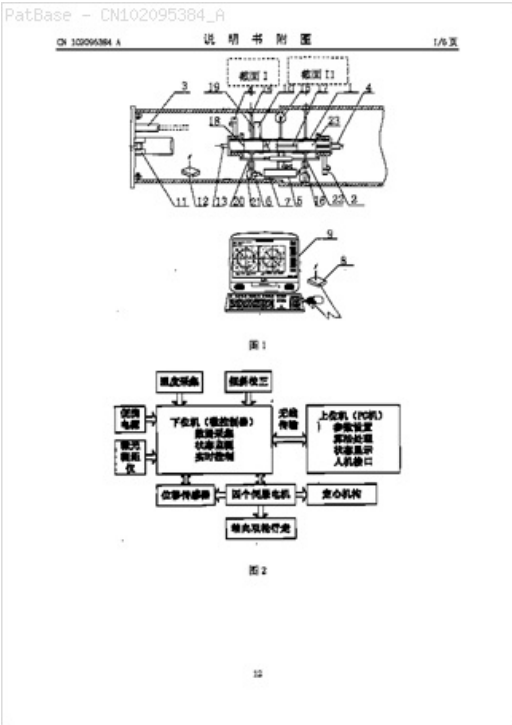
Title: MULTIPARAMETER INTERNAL-DIAMETER MEASUREMENT SYSTEM AND METHOD BASED ON HIGH-PRECISION COAXIAL POSITIONING

Abstract: The invention relates to a multiparameter internal-diameter measurement system and method based on high-precision coaxial positioning. The multiparameter internal-diameter measurement system comprises a walking positioning mechanism, a laser displacement sensor, a laser distance meter, a motor driving device, a micro-control module, a wireless transmission network, upper computer software, a portable power supply, an optical inclined angle measuring device and a multipoint temperature-measuring compensation system. In the system, two-surface six-point axis positioning can be realized by a bipyramidal link gear connected by a flexible piece. The laser displacement sensor is used for measuring the relative displacement. The laser distance meter is used for measuring the axial advancing distance. Four servo motors are respectively

used for driving a positioning mechanism, driving double wheels to walk and driving a measuring arm to rotate. The micro-control module collects data, detects states and controls the motor and the like. The wireless transmission network transmits all messages of an upper computer and a lower computer. The upper computer software is used for processing the data and controlling the measurement. The portable power supply provides energy for the whole system. The measurement system can be used for automatically measuring comprehensive parameters, such as the diameters, roundness, cylindricity, conicity and the like of a round hole and a taper hole, and has the advantages of high measurement efficiency, large measuring range and wide usable range.

Classifications:

International (IPC 8-9): G01B11/12 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN102095384 A	20110615	CN201010560382	20101125
CN102095384 B	20121128	CN201010560382	20101125

Priority:

CN201010560382 20101125

Probable Assignee: UNIV TIANJIN

Assignee(s): (std): TIANJIN UNIV ; UNIV TIANJIN

Assignee(s): TIANJIN UNIVERSITY

Inventor(s): (std): SHILEI ZHAO ; SHUJIAN XING ; FUMIN ZHANG ; YANG ZHAO ; XINGHUA QU

Inventor(s): ZHANG FUMIN ; ZHAO SHILEI ; QU XINGHUA ; ZHAO YANG ; XING SHUJIAN

3) Family number: 33451010 (US2009056479A)

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Title: MOTOR-OPERATED VALVE DIAGNOSING DEVICE

Abstract: To provide a motor-operated valve diagnosing device capable of making a highly accurate diagnosis at a low cost. In a motor-operated valve diagnosing device for diagnosing a motor-operated valve having a valve element driving part for opening and closing a valve element, and a spring cartridge which expands and contracts in proportion to a reaction force exerted thereon from the valve element driving part, a spring compression mechanism or a worm displacement measuring means is configured to be attached to the valve element driving part via an adapter. With this configuration, the spring compression mechanism and so on can be easily attached to and removed from the valve element driving part. In addition, since the spring compression mechanism and so on can be attached to the valve element driving part without any alternation of the valve element driving part, the spring compression mechanism can be shared by two or more motor-operated valves, and reduction of expense for a diagnosis of a motor-operated valve and improvement in accuracy of diagnosis can be achieved.

Classifications:

International (IPC 8-9): F16K31/04 F16K31/54 F16K37/00 F16K51/00

G01M13/00 G01N19/00 (Advanced/Invention);

F16K31/04 F16K37/00 G01M13/00 G01N19/00 (Core/Invention)

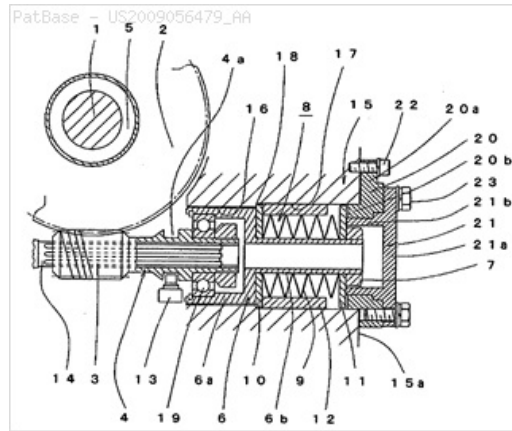
CPC: F16K37/0083 F16K31/53

European: F16K31/53 F16K37/00G

US: 73/865.9 73/865.900P

JP F-Term: 2G024 2G024/AA15 2G024/BA18 2G024/CA04 2G024/CA11 2G024/DA01 2G024/FA02 3H062 3H062/BB33 3H062/CC01 3H062/DD01 3H062/FF33 3H063 3H063/BB42 3H063/BB43 3H063/BB50 3H063/DB32 3H065 3H065/AA01 3H065/BA01 3H065/BA05 3H065/BB02 3H065/BB11 3H065/BB21 3H066 3H066/BA38

JP F-Index: F16K31/04/B F16K31/54 F16K37/00/F F16K51/00/F G01M13/003



Family:

Publication number	Publication date	Application number	Application date
JP2006103925 A1	20080904	JP20070510373T	20060308
JP4395185 B1	20100106	JP20070510373T	20060308
JP4395185 B2	20100106	JP20070510373T	20060308
US2009056479 AA	20090305	US20060887184	20060803
US7836784 BB	20101123	US20060887184	20060803
WO06103925 A1	20061005	WO2006JP305075	20060308

Priority:

JP20050093372 20050329 WO2006JP305075 20060308 WO2006JP305075 20060803

Probable Assignee: SHIKOKU RESEARCH INST INC

Assignee(s): (std): NOGAMI TAKEKI ; SHIKOKU RES INST ; SHIKOKU RESEARCH INST INC ; YAMAGUCHI SHIGEYA

Assignee(s): SHIKOKU RESEARCH INST

Inventor(s): (std): NOGAMI TAKEKI ; YAMAGUCHI SHIGEYA

Agent(s): BIRCH STEWART KOLASCH AND BIRCH; BIRCH STEWART KOLASCH AND BIRCH LLP

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

4) Family number: 76267011 (US2019323823A)

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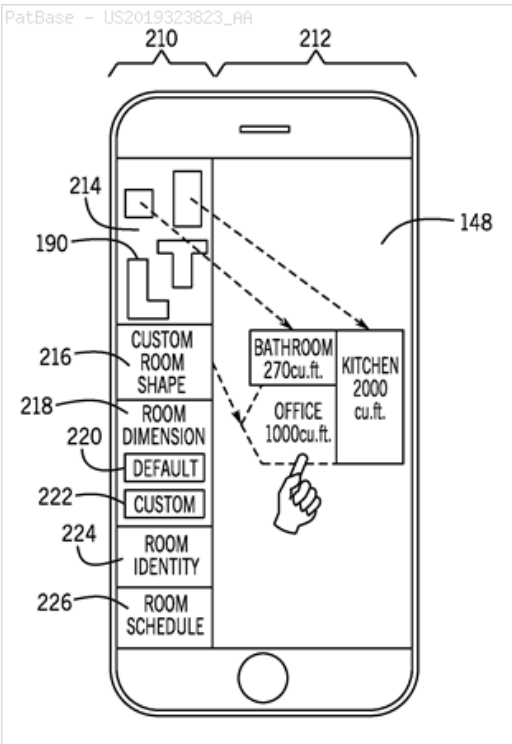
Title: MOBILE DEVICE BUILDING LAYOUT DETERMINATION SYSTEMS AND METHODS

Abstract: The present disclosure includes systems and methods for determining dimensions, shapes, and locations of rooms of a building using a mobile device for controlling heating, ventilation, and air conditioning (HVAC) provided to the rooms and building. A measuring device receives a shape of a room in the building and determines a dimension set of the room based on the shape of the room. The measuring device transmits the shape of the room and the dimension set to a mobile device that determines a layout of the building based on the shapes and the dimension sets corresponding to the rooms of the building. In this manner, the systems and methods provide the layout of the building more efficiently, resulting in an improved HVAC system installation and operation process.

Classifications:

International (IPC 8-9): F24F11/52 G01B11/00 G01C15/00 G06F3/0488 G06T7/521 H04W4/33 (Advanced/Invention)

CPC: G01B11/005 G06T7/521 F24F11/52 G06T2207/10028 G06F3/0488 H04W4/33 G01C15/002



Family:

Publication number	Publication date	Application number	Application date
US2019323823 AA	20191024	US20180966820	20180430

Priority:

US20180660107P 20180419 US20180966820 20180430

Probable Assignee: JOHNSON CONTROLS TECHNOLOGY CO

Assignee(s): (std): JOHNSON CONTROLS TECH CO

Assignee(s): JOHNSON CONTROLS TECHNOLOGY CO

Inventor(s): (std): ATCHISON SHAUN B ; BENTZ JEDIDIAH O ; UERKVITZ JOHN W ; NOOR ANEEK M ; CARLTON DREW H ; BOYD ANDREW M ; RIGG BRIAN D ; HERN SHAWN A ; GRAJEDA TREVIZO NOEL A ; KAISER CODY J ; TASKER TOM R

5) Family number: 65607011 (US2017131091A)

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Title: MEASURING SURFACE GEOMETRY USING ILLUMINATION DIRECTION CODING

Abstract: Measuring a surface geometry of an object involves capturing one or more images of the object illuminated by a light field produced by one or more luminaires having multiple pixel-layers with overlapping fields of illumination. Each pixel-layer simultaneously and in synchronization with each other displays multiple coded patterns such that combinations of the multiple coded patterns uniquely identify directions of light rays originating from the multiple pixel-layers. A unique incident light ray direction for each pixel of the captured one or more images is determined by decoding the combinations of the multiple coded patterns. The surface geometry of the object is recovered using the determined unique incident light ray direction for each pixel of the one or more captured images.

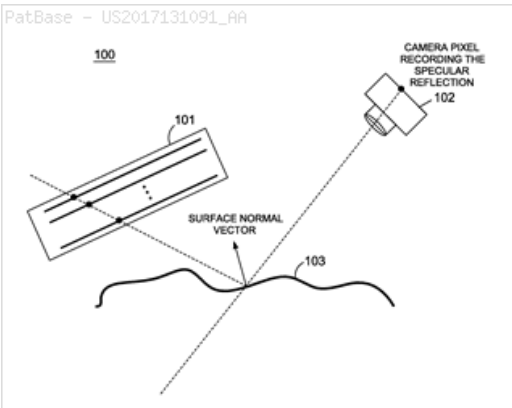
Classifications:

International (IPC 8-9): G01B11/22 G01B11/25

G06T7/40 (Advanced/Invention)

CPC: G01B11/2513 G06T7/521 G06T7/40

US: 1/1 382/108



Family:

Publication number	Publication date	Application number	Application date
US2017131091 AA	20170511	US20150937648	20151110

Priority:

US20150937648 20151110

Probable Assignee:

CANON INC

Assignee(s): (std):

CANON INC ; CANON KK

Inventor(s): (std):

TIN SIU KEI ; YE JINWEI

6) Family number: 31168014 (US2004211573A)

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Title: SAFETY MECHANISM FOR A ROTARY HAMMER

Abstract: An improved method is provided for controlling a power tool having a rotary shaft. The method includes: disposing an inertial mass in a housing of the power tool, such that the inertial mass is freely rotatable about an axis of rotation which is axially aligned with the rotary shaft; monitoring rotational motion of the power tool in relation to the inertial mass during operation of the power tool; and activating a protective operation based on the rotational motion of the power tool in relation to the inertial mass.

Classifications:

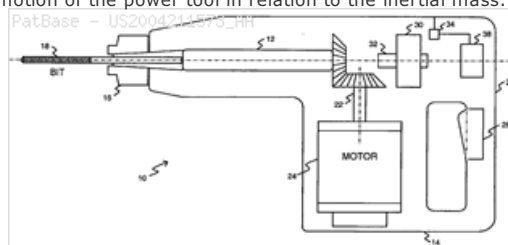
International (IPC 8-9): B23B1/00 B23B45/02 B23Q5/00 B23Q5/10 B25F5/00 E21B15/04 (Advanced/Invention)

International (IPC 1-7): B25F5/00 E02D1/00

CPC: Y10T408/14 B25F5/00

European: B25F5/00

US: 173/1 173/176 173/176S 173/183 173/183S 173/1P 173/2 173/2P 173/2S 408/6 408/6S 73/494 73/514.04



Family:

Publication number	Publication date	Application number	Application date
AT408480 E	20081015	AT20040009679T	20040423
DE602004016592 D1	20081030	DE200460016592T	20040423
EP1470898 A2	20041027	EP20040009679	20040423
EP1470898 A3	20051109	EP20040009679	20040423
EP1470898 B1	20080917	EP20040009679	20040423
US2004211573 AA	20041028	US20040829994	20040422
US2008202786 AA	20080828	US20080150459	20080428
US2009120657 AA	20090514	US20090355086	20090116
US2010263891 AA	20101021	US20100765436	20100422
US2011180284 AA	20110728	US20110081544	20110407
US7395871 BB	20080708	US20040829994	20040422
US7487845 BB	20090210	US20080150459	20080428
US7730963 BB	20100608	US20090355086	20090116
US7938194 BB	20110510	US20100765436	20100422
US8555997 BB	20131015	US20110081544	20110407

Priority:

US20030465064P 20030424

US20040829994 20040422

US20080150459 20080428

US20090355086 20090116

US20100765436 20100422

US20110081544 20110407

Probable Assignee: BLACK AND DECKER INC

Assignee(s): (std): BLACK AND DECKER INC ; BRADUS ROBERT ; CARRIER DAVID A ; PUZIO DANIEL

Inventor(s): (std): BRADUS ROBERT ; PUZIO DANIEL ; CARRIER DAVID A

Agent(s): BELL IAN STEPHEN ET AL; HARNESS DICKY AND PIERCE PLC; HARNESS DICKY AND PIERCE PLC
STANLEY B AND D

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

7) Family number: 62769019 (CN205718904U)

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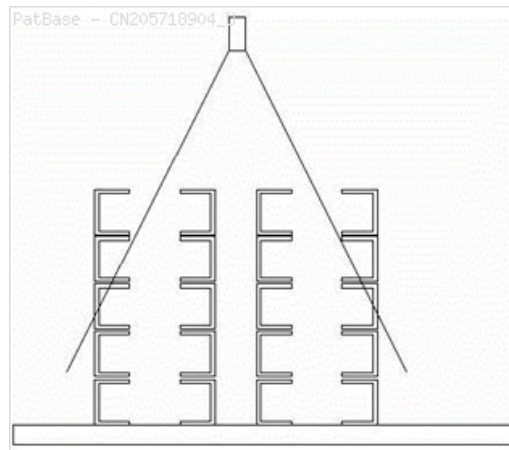
Title: TIRE LOCATION AND HIGH INTELLIGENT SCANNING SYSTEM ON TRAY

Abstract: The utility model relates to a tire location and high intelligent scanning system on tray and scan method belong to tire production automated system technical field. Including being used for transport tray's conveyer belt, the measurement portal has been erect to the both sides of conveyer belt, measures a plurality of cross arrangement were just being installed on one side length direction to the tray to the portal photoelectric sensor, distance measuring sensor, measures portal both sides relative position department and all installs photoelectric switch, and the motor is installed to the one end of conveyer belt, installs rotary encoder on the output shaft of motor, and photoelectric sensor, distance measuring sensor, photoelectric switch, motor, rotary encoder all are controlled by the observing and controlling system. The utility model relates to an ingenious, low cost can be at the in -process of tray one -shot, and the central point who measures every buttress tire simultaneously puts and piles up neatly the height, and measurement of efficiency is high, moreover when the tire takes place to misplace, also can measure and snatch central point and put.

Classifications:

International (IPC 8-9): G01B11/00 G01B21/02 (Advanced/Invention)

CPC: G01B11/00 G01B21/02



Family:

Publication number	Publication date	Application number	Application date
CN105716557 A	20160629	CN201610246075	20160420
CN105716557 B	20180918	CN201610246075	20160420
CN205718904 U	20161123	CN201620332348U	20160420

Priority:

CN201610246075 20160420 CN201620332348U 20160420

Probable Assignee: YANTAI TUOWEI MACHINERY CO LTD

Assignee(s): (std): YANTAI TOWIN INTELLIGENT TECH CO LTD ; YANTAI TUOWEI MACHINERY CO LTD

Assignee(s): YANTAI TUOWEI MACHINERY CO ; YANTAI TOWIN INTELLIGENT TECHNOLOGY CO ; WEI MACHINERY CO LTD YANTAI EXTENSION ; YANTAI BILLITON WEI INTELLIGENT TECHNOLOGY CO

Inventor(s): (std): LIU ZENGQIANG ; LI HONGBIN ; SU ZHAOFENG ; WANG JINDOU ; LI WUBIN

8) Family number: 10447020 (US5271894A)

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Title: Chemiluminescent analyzer

Abstract: In a chemiluminescent analyzer for measuring a concentration of an object gas in a sample gas by mixing the sample gas with a reaction gas and measuring light generated in a chemical reaction between the object gas and the reaction gas, the two gases flow through a double tube composed of an outer tube and an inner tube, and are mixed at the end of the tubes. The end of the inner tube is closed, and one or more outlets are provided at the side wall of the inner tube near the closed end. The flow of the gas coming out of the inner tube through the outlet or outlets crosses the flow of the gas in the outer tube, which enhances the mixture of the two gases and increases the chance of reaction between the object gas and the reaction gas. Since the flow of the mixed gas is directed toward the inner wall of the outer tube, the solid or liquid reaction product between the impurities in the sample gas and the reaction gas precipitates on the inner wall of the outer tube, not on a transparent glass plate separating the gases and the photometer for measuring the reaction emission (light).

Classifications:

International (IPC 8-9): G01N21/76 (Advanced/Invention); G01N21/76 (Core/Invention)

International (IPC 1-7): G01N21/76

CPC: G01N21/766

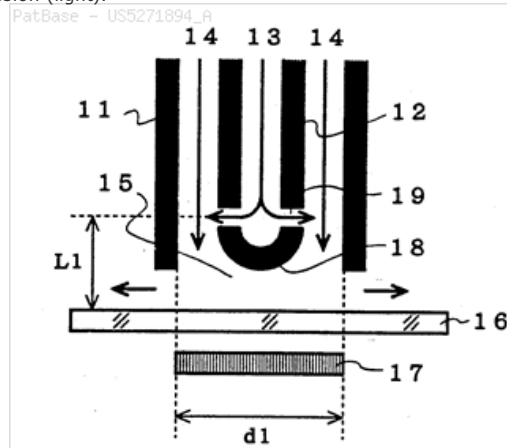
European: G01N21/76G

US: 422/52 422/82.05 422/86 436/172 73/864.81 73/864.85 73/864.91

JP F-Term: 2G054 2G054/AA01 2G054/AB10 2G054/BA02 2G054/BA04 2G054/BB10 2G054/CA06 2G054/CB10 2G054/EA01 2G054/FA10

2G054/FA50 2G054/JA11 2G054/JA20

JP F-Index: G01N21/76



Family:

Publication number	Publication date	Application number	Application date
DE4305652 A1	19930902	DE19934305652	19930225
DE4305652 C2	20020207	DE19934305652	19930225
JP3104383 B2	20001030	JP19920078686	19920227
JP5240793 A2	19930917	JP19920078686	19920227
US5271894 A	19931221	US19930020394	19930222

Priority:

JP19920078686 19920227

Probable Assignee: SHIMADZU CORP

Assignee(s): (std): SHIMADZU CORP

Assignee(s): SHIMADZU CORP KYOTO ; SHIMADZU CORP KYOTO JP

Inventor(s): (std): MATSUHISA HIROAKI ; SUMI SHINGO ; KOZAKURA MASARU ; MIKI HIDEYUKI

Inventor(s): MIKI HIDEYUKI KYOTO JP ; KOZAKURA MASARU KYOTO JP ; SUMI SHINGO SHIGA JP ; MATSUHISA HIROAKI KYOTO JP

9) Family number: 52239023 (US2015190056A)

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Title: OPTICAL MEASUREMENT APPARATUS

Abstract: An optical measurement apparatus according to the present invention includes: an irradiation fiber; a plurality of light receiving fibers; a light source unit that generates and outputs light to irradiate a biological tissue and supplies the light to the irradiation fiber; a measurement unit that has a plurality of measurement units and performs spectrometry on each returned light from the biological tissue, the returned light output by each of the light receiving fibers; and a control unit that causes a predetermined storage unit to store a measurement result by the measurement unit; and the control unit causes the storage unit to store a measurement result after each measurement unit starts measurement for characteristic value obtainment, the measurement result being data necessary to obtain a characteristic value of the biological tissue.

Classifications:

International (IPC 8-9): A61B1/00 A61B1/06 A61B5/00 A61B5/1459 G01N21/27 G01N21/47 G02B23/26 H04L7/00

H04L7/06 (Advanced/Invention)

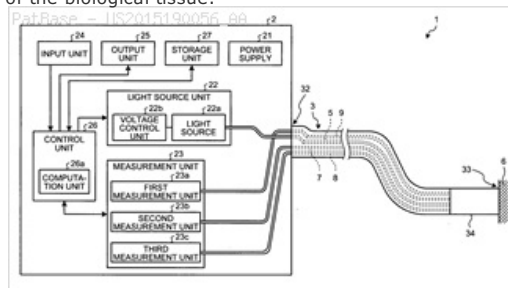
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US: 600/477

JP F-Term: 2H040 2H040/CA09 2H040/CA11 2H040/CA27 2H040/DA03 2H040/GA06 2H040/GA11 4C061 4C161 4C161/GG15 4C161/HH51 4C161/QQ02 4C161/RR02

JP F-Index: A61B1/00/300/D A61B1/00/334/D A61B1/00/550

A61B1/018/515 G02B23/26



Family:

Publication number	Publication date	Application number	Application date
CN103153160 A	20130612	CN201280003237	20120418
CN103153160 B	20150902	CN201280003237	20120418
EP2604173 A1	20130619	EP20120776623	20120418
EP2604173 A4	20141210	EP20120776623	20120418
JP2012147585 A1	20140728	JP20120549172T	20120418
JP5204931 B1	20130605	JP20120549172T	20120418
US2015190056 AA	20150709	US20120679577	20121116
WO12147585 A1	20121101	WO2012JP60468	20120418

Priority:

US20110479108P 20110426

WO2012JP60468 20120418

US20120679577 20121116

Probable Assignee: OLYMPUS CORP

Assignee(s): (std): KAMIMURA KENJI ; OLYMPUS MEDICAL SYSTEMS CORP

Assignee(s): OLYMPUS CORP

Inventor(s): (std): KAMIMURA KENJI

Agent(s): SCHICKER SILVIA; SAKAI HIROAKI

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

10) Family number: 15369027 (US4310238A)

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Title: ELECTROSTATIC COPYING APPARATUS

Abstract: First and second sensors (37), (39) are provided in a developing tank (36) containing a liquid developer consisting of a liquid carrier or dispersant and toner particles dispersed in the carrier. The first sensor (37) measures the electrical resistivity of the developer whereas the second sensor (39) measures the optical transmissibility thereof. Additional toner is supplied into the developer to maintain the transmissibility at a value which is a predetermined function of the resistivity. The transmissibility value is reduced as the resistivity increases, thereby maintaining the copy image density constant. The first sensor (37) includes two electrodes immersed in the developer and an A.C. or D.C. voltage is applied thereacross. The current flow through the electrodes (37) and thereby the developer is measured to determine the resistivity of the developer. Where the applied voltage is D.C., an arrangement is provided to mechanically scrape accumulated developer off the electrodes (37) at intermittent intervals.

Classifications:

International (IPC 8-9): G03G15/10 G03G15/11 (Advanced/Invention);

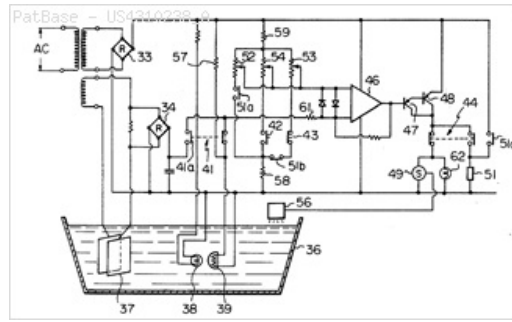
G03G15/10 G03G15/11 (Core/Invention)

International (IPC 1-7): G03G15/00 G03G15/06 G03G15/10

CPC: G03G15/105 Y10S222/01

European: G03G15/10D1

US: 118/689 222/DIG.1 355/14D 399/233 399/64



Family:

Publication number	Publication date	Application number	Application date
DE3033695 A1	19810402	DE19803033695	19800908
DE3033695 C2	19830331	DE19803033695	19800908
JP56039569 A2	19810415	JP19790115555	19790908
JP56039570 A2	19810415	JP19790156529	19791203
US4310238 A	19820112	US19800181609	19800827

Priority:

JP19790115555 19790908 JP19790156529 19791203

Probable Assignee: RICOH CO LTD

Assignee(s): (std): RICOH KK

Assignee(s): RICOH CO ; RICOH CO LTD ; RICOH CO LTD 3 6 1 CHOME NAKAMAGOME OTA KU TOKYO J ; RICOH CO LTD 3 6 1 CHOME NAKAMAGOME OTA KU TOKYO JAPAN ACORP OF JAPAN ; RICOH CO LTD TOKYO JP ; RICOH COMPANY LTD

Inventor(s): (std): KIMURA TAROU ; MIYAGAWA SEIICHI ; HASHIMOTO JIYUNICHIROU ; HASHIMOTO JUNICHIRO ; KIMURA TARO ; MIYAKAWA SEIICHI ; MOCHIZUKI MANABU

Inventor(s): HASHIMOTO JUNICHIRO TOKYO JP

11) Family number: 60993029 (CN204924092U)

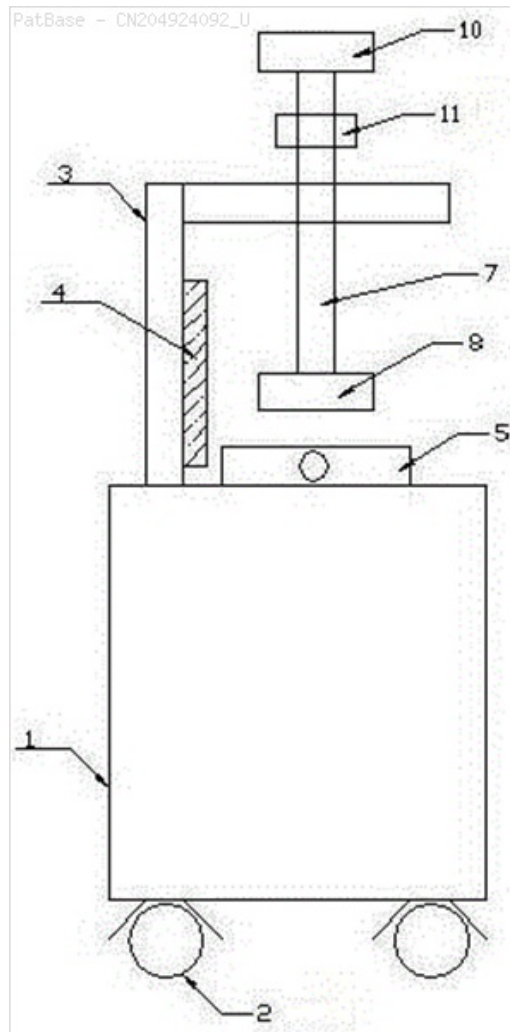
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Title: QUICK DETECTION DEVICE OF DUST BOARD

Abstract: The utility model belongs to the technical field of the motor accessory is used, specifically disclose a quick detection device of dust board, include vertical block, reach the universal wheel that sets up in vertical block bottom, and the L type support frame of setting on one side of vertical block upper portion, and set up the dust board fixing base that just is located below the L type support frame in the middle of vertical block upper portion, and set up the gangbar that just runs through the installation at L type support frame on one side, reach the die holder of being connected with gangbar one end, and the brake valve lever who sets up at the gangbar other end. The utility model discloses, its reasonable in design, satisfy the requirement of pipelined measurement standard, more original methods of measurement, measurement of efficiency improve more than the one time at least, lay the dust board on the fixing base during use, the control gangbar moves down, slightly takes the dust board die holder of scale to compare greatly through the size the same with the dust board structure, and upper and lower dust board material is more convenient simultaneously, 3, because of the difference of measuring the product, can dismantle, change the die holder, a tractor serves several purposes, application scope are extensively.

Classifications:

International (IPC 8-9): G01B5/00 (Advanced/Invention)

**Family:**

Publication number	Publication date	Application number	Application date
CN105115383 A	20151202	CN201510572623	20150910
CN105115383 B	20180608	CN201510572623	20150910
CN204924092 U	20151230	CN201520697290U	20150910

Priority:

CN201510572623 20150910 CN201520697290U 20150910

Probable Assignee: TAICANG WEIGUAN ELECTROMECHANICAL CO LTD

Assignee(s): (std): TAICANG WEIGUAN ELECTROMECHANICAL CO LTD

Assignee(s): TAICANG WEIGUAN ELECTROMECHANICAL CO

Inventor(s): (std): LIN LANYING

12) Family number: 53324036 (CN202814363U)

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Title: AUTOMATIC AREA MEASUREMENT INSTRUMENT

Abstract: Source: CN202814363U **Machine translation:** The utility model belongs to the field of instrumentation technology, in particular to a harsh environment suitable for automatic measurement area meter. The utility model is an automatic navigation main robot, driven by a motor layer, sensor layer, the Master layer, the wireless network transmission layer. The utility model has automatic navigation and go along the wall function, can automatically measure the area where the environment is suitable for high temperature, high pressure, high radiation and other harsh environments, the use of the machine measurement, measurement results more accurate, higher measurement efficiency.

Classifications:

International (IPC 8-9): G01B11/28 (Advanced/Invention)

Publication number	Publication date	Application number	Application date
CN202814363 U	20130320	CN201220277964U	20120613

CN201220277964U 20120613

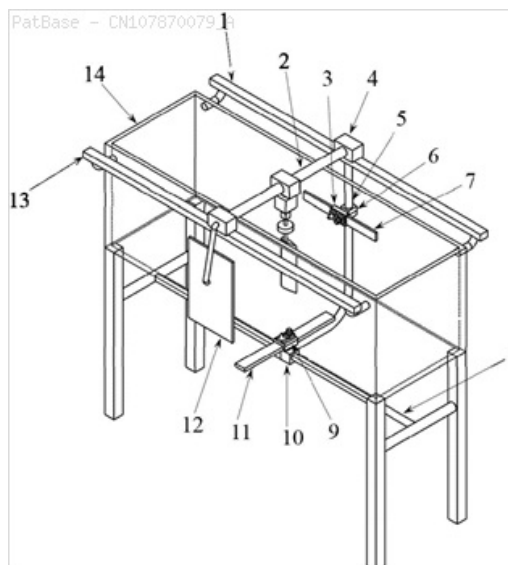
Assignee(s): (std): HARBIN ENGINEERING UNIV ; UNIV HARBIN ENG

Inventor(s): (std): OU DONGYUE ; PANG YAN ; HAO GUOQUAN ; GUO BAOTENG ; HU YUANHANG

Abstract: The invention provides a flow field measurement system and measurement method under model pitching movement. A first upper guide rail and a second upper guide rail are arranged on a water tank, lowerguide rails are arranged on a support, two trailers are arranged on the two upper guide rails, lateral connecting rods are arranged on a first trailer, first sliders are arranged on the lateral connecting rods, a second trailer is connected with reflectors through connecting rods, second sliders are arranged on the lower guide rails, sliding vanes are arranged on the first sliders and the second sliders, bases are arranged on the two sliding vanes, a laser device and a camera are arranged on each base, a horizontal connecting rod is arranged between the first trailer and the second trailer, athird slider is arranged on the horizontal connecting rod, a stepping motor and an encoder are arranged at the lower end of the third slider, the lower end of the encoder is connected with a force balance, and the lower end of the force balance is connected with a wing profile to be detected. The system and the method are low in cost, high in measurement efficiency, applicable to measurement of model dynamic pitching movement and also applicable to flow field measurement of a model in other specific dynamic movement modes.

International (IPC 8-9): G01M10/00 G01P5/20 (Advanced/Invention)

CPC: G01M10/00 G01P5/20



Family:

Publication number	Publication date	Application number	Application date
CN107870079 A	20180403	CN201711079817	20171106
CN107870079 B	20190806	CN201711079817	20171106

Priority:

CN201711079817 20171106

Probable Assignee: UNIV HARBIN ENG**Assignee(s):** (std): HARBIN ENGINEERING UNIV ; UNIV HARBIN ENG**Inventor(s):** (std): WANG LIANZHOU ; GUO CHUNYU ; XUE RONG ; LIU TIAN ; ZHANG DONGHAN ; XU PEI ; ZHAO DAGANG**14) Family number: 72898042** (CN109238497A)

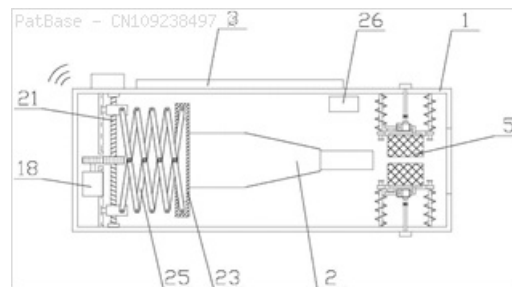
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Title: ELECTRONIC THERMOMETER WITH AUTOMATIC DISINFECTION FUNCTION

Abstract: The invention relates to an electronic thermometer with an automatic disinfection function. The electronic thermometer comprises a main body, a temperature sensing head and a display screen and further comprises a disinfection mechanism and a storage mechanism; the disinfection mechanism comprises two processing assemblies, and each processing assembly comprises a wiping unit and an infusion unit; and the storage mechanism comprises a motor, a first gear, a second gear, a push plate, sliding blocks, a telescopic frame and two mobile assemblies. According to the electronic thermometer with the automatic disinfection function, by means of the disinfection mechanism, sponge blocks can completely wipe and disinfect the temperature sensing head, the manual wiping and disinfection process of a user is avoided, the working intensity of the user is reduced, the temperature measurement efficiency is improved, and the user can more conveniently use the thermometer; and by means of the storage mechanism, the temperature sensing head can be controlled to be stored in the main body, the condition that the temperature sensing head is exposed to the outside to be damaged is avoided, the storage and protection effects are achieved on the temperature sensing head, the service life of the electronic thermometer is prolonged, and the practicability and reliability of the electronic thermometer are greatly improved.

Classifications:**International (IPC 8-9):** A61L2/18 A61L2/24

G01K11/00 (Advanced/Invention)

CPC: A61L2/18 A61L2/24 G01K11/00**Family:**

Publication number	Publication date	Application number	Application date
CN109238497 A	20190118	CN201811041391	20180907

Priority:

CN201811041391 20180907

Probable Assignee:

LIU XIANGJING

Assignee(s): (std):

LIU XIANGJING

Assignee(s):

LIUXIANG JING

Inventor(s): (std):

LIU XIANGJING

15) Family number: 42928051 (US2010194855A)

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Title: THREE-DIMENSIONAL MEASURING DEVICE AND BOARD INSPECTION DEVICE

Abstract: A three-dimensional measuring device includes an irradiation means capable of irradiating a striped light pattern used for a spatial encoding method and a striped light pattern used for a phase shift method on a measurement object part on a board main body, an imaging means capable of imaging a measurement object part irradiated by the light pattern, an image control means for controlling imaging by the imaging means, a first calculation means for calculating a height of the measurement object part according to the phase shift method based on a multiplicity of image data imaged by the imaging means, and a second calculation means capable of using the spatial encoding method to identify a line corresponding to the measurement object part from among the image data at a time of calculation by the first calculation means by the phase shift method based on the image data.

Classifications:**International (IPC 8-9):** G01B11/02 G01B11/24 G01B11/25 G01N21/17

G01N21/956 H04N13/00 H05K3/00 (Advanced/Invention);

G01B11/24 G01N21/17 G01N21/88 H05K3/00 (Core/Invention)

CPC: G01N21/95684 H05K1/0269 H05K3/3484 G01B11/25**European:** G01B11/25 G01N21/956R T05K1/02D4 T05K3/34F6B**US:** 348/42 348/42P 348/E13.001 348/E13.001S 356/27 382/154**JP F-Term:** 2F065 2F065/AA24 2F065/AA53 2F065/CC01 2F065/CC26

2F065/DD06 2F065/FF04 2F065/FF41 2F065/GG07 2F065/HH05

2F065/HH07 2F065/HH12 2F065/JJ03 2F065/JJ09 2F065/JJ26 2F065/LL28

2F065/MM03 2F065/PP15 2F065/QQ24

JP F-Index: G01B11/25/H

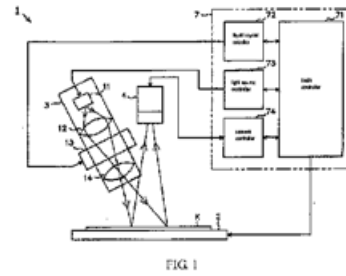


FIG. 1

Family:

Publication number	Publication date	Application number	Application date
CN101889190 A	20101117	CN200880101595	20080718
CN101889190 B	20121017	CN200880101595	20080718
DE112008002148 B4	20160121	DE200811002148T	20080718
DE112008002148 T5	20100617	DE200811002148T	20080718
JP2009042015 A2	20090226	JP20070206112	20070808
JP4931728 B2	20120516	JP20070206112	20070808
KR101152842 B1	20120612	KR20097023245	20080718
KR20100051589 A	20100517	KR20097023245	20080718
TW200916719 A	20090416	TW20080128043	20080724
TWI384194 B	20130201	TW20080128043	20080724
US2010194855 AA	20100805	US20080669433	20080718
US8436890 BB	20130507	US20080669433	20080718
WO09019966 A1	20090212	WO2008JP62985	20080718

Priority:

JP20070206112 20070808 WO2008JP62985 20080718

Probable Assignee: CKD CORP**Assignee(s):** (std): CKD COPORATION ; CKD CORP ; MAMIYA TAKAHIRO**Inventor(s):** (std): MAMIYA TAKAHIRO ; TAKAHIRO MAMIYA**Agent(s):** OSHA LIANG LLP; KAWAGUCHI MITSUO

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 KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

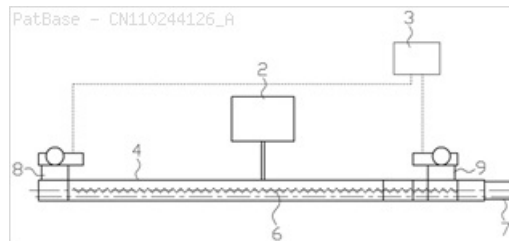
16) Family number: 75889058 (CN110244126A)

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Title: WIRE RESISTANCE VALUE NUMERICALLY-CONTROLLED PRECISE MEASUREMENT GRATING RULER DEVICE

Abstract: The invention discloses a wire resistance value numerically-controlled precise measurement grating ruler device and relates to resistance value measurement devices. The device comprises a wire measurement table, a grating ruler (1), a grating ruler displayer (2) and a direct-current resistance tester (3), wherein a sliding rail (5) and a lead screw (6) are fixed to a carrying table (4) longitudinally in parallel, a driving motor (7) is fixed to one end of the carrying table (4) and is connected with the lead screw (6) to drive the lead screw (6) to rotate, a stationary fixture (8) is fixed to the other end of the carrying table (4), a movable fixture (9) is arranged on the sliding rail (5) and is connected with the lead screw (6), a grating reading head of the grating ruler (1) is fixed to the movable fixture (9), and the input end of the direct-current resistance tester (3) is connected with a wire clamping device (11) of the stationary fixture (8) and a wire clamping device (11) of the movable fixture (9) respectively. The device is easy to operate, precise in positioning, high in measurement efficiency, visual in numerical display and capable of accurately completing inspection and detection work.

Classifications:**International (IPC 8-9):** G01B11/02 G01R27/02 (Advanced/Invention)**CPC:** G01B11/02 G01R27/02



Family:

Publication number	Publication date	Application number	Application date
CN110244126 A	20190917	CN201910514363	20190614

Priority:

CN201910514363 20190614

Probable Assignee: MUDANJIANG QUALITY AND TECHNICAL SUPERVISION INSPECTION AND TESTING CENTER

Assignee(s): (std): MUDANJIANG QUALITY AND TECHNICAL SUPERVISION INSPECTION AND TESTING CENTER

Assignee(s): MUDANJIANG CITY OF QUALITY AND TECHNICAL SUPERVISION INSPECTION AND TESTING CENTER

Inventor(s): (std): ZHOU CHUNYANG ; LI GUANGHE ; ZHOU YAN ; YU HUIJUN ; CHEN WENZHAO

17) Family number: 75882059 (CN110243512A)

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Title: DUMMY TRUNK TORQUE MEASURING DEVICE

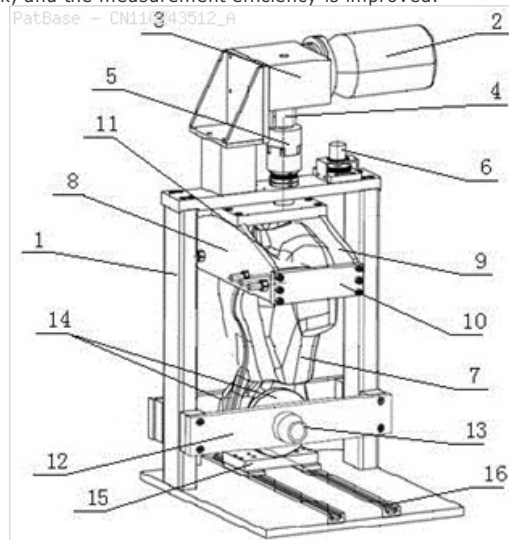
Abstract: The invention discloses a dummy trunk torque measuring device which comprises a main body frame, wherein a servo motor is arranged above the main body frame and is connected with a speed reducing mechanism device, a torque sensor is arranged at the bottom end of the speed reducing mechanism device, a reset coupler connected with the top end of the main body frame is arranged at the bottom end of the torque sensor, an angle sensor positioned below the servo motor is arranged at the top end of the main body frame, a dummy trunk is arranged inside the main body frame, a clamping mechanism is arranged at the outer top of the dummy trunk, a positioning mechanism is arranged at the outer bottom of the dummy trunk, and the bottom end of the dummy trunk is connected with an installation mechanism. The dummy trunk torque measuring device has the advantages that the design adopts the self-resetting function of the dummy trunk, and then the function of self-return torque of the dummy trunk under the state without external force is generated through the distance between the reset coupler, the convenience is improved for the torsion measurement of the dummy trunk, and the measurement efficiency is improved.

Classifications:

International (IPC 8-9): G01L3/00 G01M17/007

G01M7/08 (Advanced/Invention)

CPC: G01L3/00 G01M7/08 G01M17/0078



Family:

Publication number	Publication date	Application number	Application date
CN110243512 A	20190917	CN201910653342	20190719

Priority:

CN201910653342 20190719

Probable Assignee: SHANGHAI GUANCHI AUTOMOBILE SAFETY TECH CO LTD

Assignee(s): (std): SHANGHAI GUANCHI AUTOMOBILE SAFETY TECH CO LTD

Assignee(s): SHANGHAI GUANCHI AUTOMOBILE SAFETY TECHNOLOGY CO ; SHANGHAI CROWN CHI AUTOMOTIVE SAFETY TECHNOLOGY CO LTD

Inventor(s): (std): YIN JIONG ; WANG SHENGMING ; DA GANG

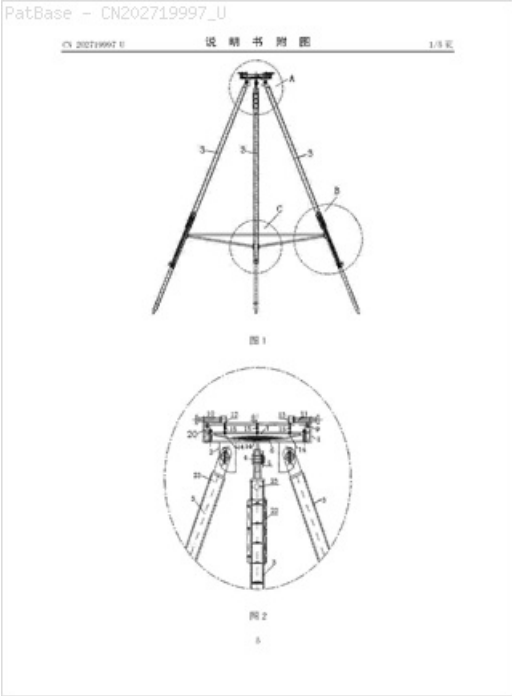
18) Family number: 53028059 (CN202719997U)

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Abstract: The utility model discloses an automatic leveling support used in measurement. Three support bars are hinged with and fixed on three support bar connection seats located on a bottom of a shell respectively. An organic glass container which is filled with mercury and an upper horizontal plate are fixed on the shell respectively. Left and right clamping bolts are connected with left and right clamping sheets after threads pass through the shell respectively. The upper horizontal plate is equipped with three sensitivity fine-tuning sleeve pins comprising probes which are inserted into the organic glass container respectively. The each probe is equipped with a liquid level sensor. The each support bar comprises an upper support sleeve and lower support sleeve. One end thread of a clamping butterfly cap passes through the upper support sleeve and is tightly borne against the lower support sleeve. The two upper support sleeves are provided with stepping motors respectively. A first end located in a screw rod of the upper support sleeve is connected with a stepping motor output shaft and a second end is cooperated with an internal thread of the lower support sleeve. The leveling support comprises an automatic control system which contains a single chip microcomputer and controls the stepping motor and the liquid level sensor. By using the support of the utility model, measurement efficiency is greatly increased and labor intensity is reduced.

Classifications:

International (IPC 8-9): G01D11/30 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN202719997 U	20130206	CN201220389068U	20120808

Priority:

CN201220389068U 20120808

Probable Assignee: GEZHOUBA GROUP NO 2 ENG CO LTD

Assignee(s): (std): GEZHOUBA GROUP NO 2 ENG CO LTD ; GEZHOUBA GROUP NO 2 ENGINEERING CO LTD ; GEZHOUBA GROUP NO2 ENG CO LTD

Assignee(s): GEZHOUBA GROUP NO2 ENGINEERING CO

Inventor(s): (std): SONG SHUJUN ; AI CHUNRONG ; MA JINGANG ; WU DANZHONG

19) Family number: 63596065 (CN205792077U)

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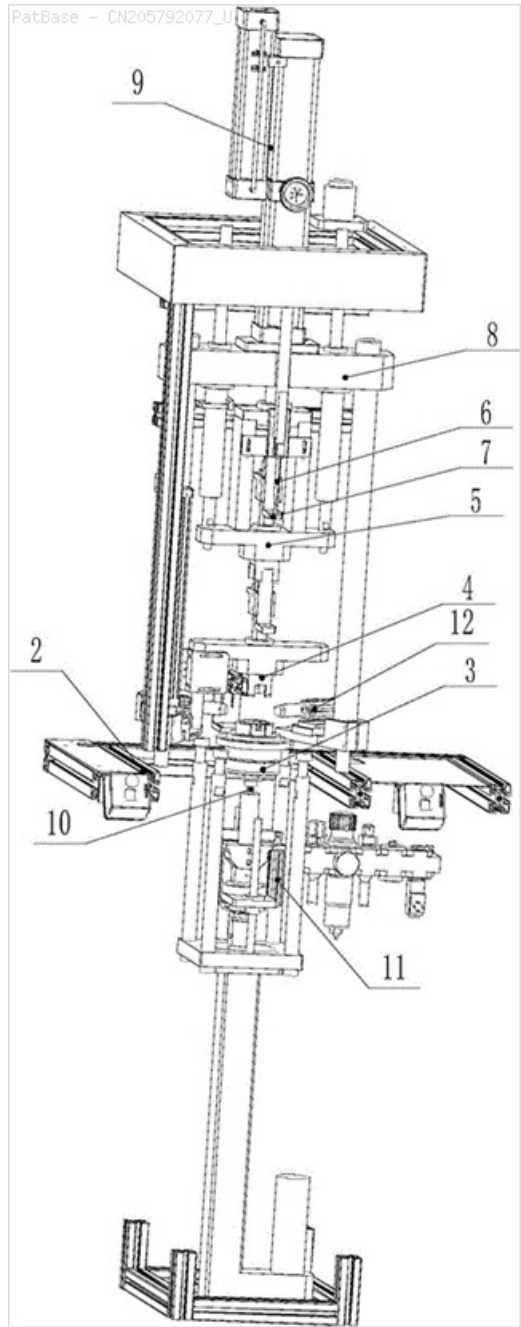
Title: ROTOR AXLE CLEARANCE MEASURING DEVICE OF CAR RADIATOR FAN MOTOR

Abstract: The utility model discloses a rotor axle clearance measuring device of car radiator fan motor, including the frame, be provided with operation platform in the frame, the last die that is fixed with down of operation platform, down be provided with the jack on the die, vertical slidable mounting has a lower ejector pin in the frame, down the ejector pin is by ejector pin lift power device drive down, and vertical slidable mounting has last moulding -die in the frame, is provided with the through -hole that corresponds with the electric motor rotor axle on going up the moulding -die, and vertical slidable mounting has the last ejector pin that corresponds with the rear end of electric motor rotor axle in the frame, goes up that the ejector pin is in in the through -hole and is driven by last ejector pin lift power device, installs the upward measuring mechanism of ejector pin displacement or lower ejector pin displacement of measurement in the frame. This axle clearance measuring device can be fast measures the rotor axle clearance of motor, and measuring result is more accurate, and measurement of efficiency is higher, and the axle in adaptable large batch electric motor rotor clearance is surveyed and is detected.

Classifications:

International (IPC 8-9): G01B5/14 H02K15/00 (Advanced/Invention)

CPC: G01B5/14 H02K15/00



Family:

Publication number	Publication date	Application number	Application date
CN105958745 A	20160921	CN201610504540	20160630
CN105958745 B	20180501	CN201610504540	20160630
CN205792077 U	20161207	CN201620677792U	20160630

Priority:

CN201610504540 20160630 CN201620677792U 20160630

Probable Assignee: JIANGSU LANGXIN ELECTRIC CO LTD

Assignee(s): (std): JIANGSU LANGXIN ELECTRIC CO LTD

Assignee(s): LONG LETTER ELECTRIC CO LTD JIANGSU ; JIANGSU LANGXIN ELECTRIC CO

Inventor(s): (std): LU YONG ; YAO XIAOJUN

20) Family number: 77476067 (CN110736451A)

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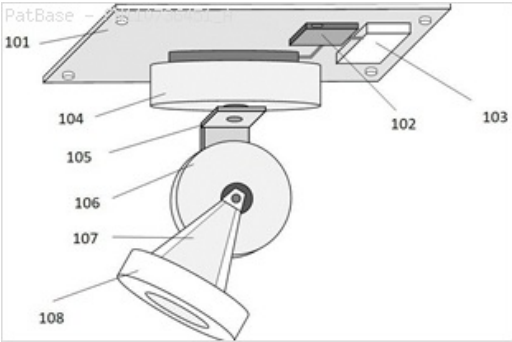
Title: Ultrasound-based visual environment harsh UAV detection system and detection method (Machine translation)

Abstract: Source: CN110736451A **Machine translation:** The present invention provides a method of ultrasound-based visual environment harsh UAV airborne detection system, detection system, including unmanned aerial vehicles and ground stations; airborne detection system comprising a base, a control unit, a power supply module, and the vertical axis, the horizontal axis of the first motor module, the motor module, the second connecting arm connecting arm and ultrasonic ranging module. The present

invention also discloses a detection system based on ultrasonic harsh environment UAV visual detection methods. The present invention uses an aerial drone carried out for complex terrain measurement, such as smoke, fog and other inclement visual environment has a great advantage. The present invention uses UAV detection and data transceiver, high measurement efficiency, easy operation, high reliability.

Classifications:

International (IPC 8-9): B64C39/02 B64D47/00 G01C1/00 G01C15/00 G01C5/00 G01S15/08 G01S19/14 G05D1/04 G05D1/08 G05D1/10 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN110736451 A	20200131	CN201911246942	20191209

Priority:

CN201911246942 20191209

Probable Assignee:

SOUTHWESTERN UNIV

Assignee(s): (std):

SOUTHWESTERN UNIV

21) Family number: 54525067 (JP2013148542A)

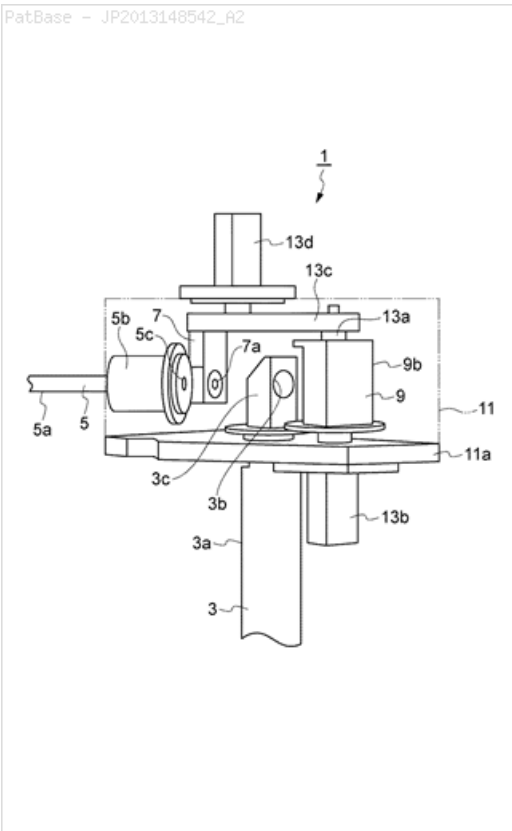
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Title: FLUORESCENCE MEASUREMENT DEVICE

Abstract: PROBLEM TO BE SOLVED: To allow a fluorescence measurement with an excitation light wavelength changed to be achieved with high measurement efficiency, and enable reduction in dimensions of a device.SOLUTION: A fluorescence measurement device 1 comprises: an excitation light source section 3 for generating excitation light; a light guide section 5 for guiding the excitation light from one end part to the other end part and also, guiding fluorescence generated in a specimen S in response to irradiation of the excitation light from the other end part to the one end part; a light detection section 7 for detecting the fluorescence; a reflection-type diffraction grating section 9 for splitting the excitation light emitted from the excitation light source section 3 to output the split excitation light to an opening 5c of the light guide section 5 and also, splitting fluorescence emitted from the opening 5c of the light guide section 5 to output the split fluorescence to the light detection section 7; a motor 13b for oscillating the reflection-type diffraction grating section 9 so as to be able to vary an angle with respect to an optical axis Lof the excitation light emitted from the excitation light source section 3 and an optical axis Lof the fluorescence emitted from the opening 5c of the light guide section 5; and a motor 13d for moving the light detection section 7 so as to be able to vary a position with respect to the reflection-type diffraction grating section 9.

Classifications:

International (IPC 8-9): G01N21/64 (Advanced/Invention)
JP F-Term: 2G043 2G043/AA03 2G043/CA03 2G043/EA01 2G043/GA04 2G043/GB03 2G043/HA01 2G043/HA03 2G043/JA04 2G043/KA02 2G043/KA03 2G043/LA01
JP F-Index: G01N21/64/Z



Family:

Publication number	Publication date	Application number	Application date
JP2013148542 A2	20130801	JP20120011104	20120123

Priority:

JP20120011104 20120123

Probable Assignee: HAMAMATSU PHOTONICS KK**Assignee(s):** (std): HAMAMATSU PHOTONICS KK**Inventor(s):** (std): TOMIYAMA KIMIYUKI ; MATSU HISAYUKI ; ISHIKAWA KATSUYA**22) Family number: 59246070** (US2016349037A)

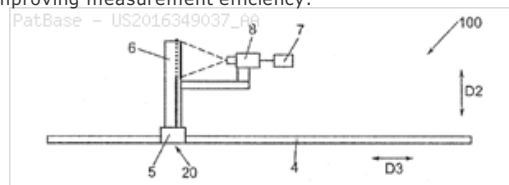
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Title: TARGET MATERIAL THICKNESS MEASURING APPARATUS

Abstract: Embodiments of the present invention disclose a target material thickness measuring apparatus including: a support; and a plurality of distance measuring units mounted on the support and arranged in a first direction, the plurality of distance measuring units being configured to respectively measure thicknesses of portions of a target material at a plurality of positions in the first direction. A plurality of thickness values of different portions of the target material along a straight line can be obtained at one time, for example, by performing a single measurement of thicknesses of the portions of the target material at the plurality of positions by means of the plurality of distance measuring units, thereby improving measurement efficiency.

Classifications:**International (IPC 8-9):** G01B11/06 G01B11/28 G01B5/06

G01B5/207 (Advanced/Invention)

CPC: G01B11/06 G01B5/061 G01B5/207 G01B11/0608 G01B2210/42**US:** 1/1 356/630**Family:**

Publication number	Publication date	Application number	Application date
CN104613844 A	20150513	CN201510061271	20150205
CN104613844 B	20190312	CN201510061271	20150205
US2016349037 AA	20161201	US20150913163	20150728
US9778024 BB	20171003	US20150913163	20150728
WO16123934 A1	20160811	WO2015CN085296	20150728

Priority:

CN201510061271 20150205

WO2015CN085296 20150728

Probable Assignee: BOE TECHNOLOGY GROUP CO LTD**Assignee(s):** (std): BOE TECHNOLOGY GROUP CO LTD ; HEFEI XINSHENG OPTOELECTRONIC TECHNOLOGY CO LTD ; HEFEI XINSHENG OPTOELECTRONICS TECHNOLOGY CO LTD**Assignee(s):** HEFEI XINSHENG OPTOELECTRONICS TECHNOLOGY CO ; HEFEI XINSHENG OPTOELECTRONIC TECHNOLOGY CO ; BOE TECHNOLOGY GROUP CO**Inventor(s):** (std): ZHENG CONGYI ; PENG LIANG ; CUI DAYONG ; LI YEFA ; WANG DEYONG ; ZHENG CONGQI ; CHOI DAEYOUNG**Agent(s):** WESTMAN CHAMPLIN AND KOEHLER PA; CHINA SCIENCE PATENT AND TRADEMARK AGENT LTD

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

23) Family number: 30469070 (US2004124366A)

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Title: APPARATUS AND METHODS RELATING TO HIGH SPEED SPECTROSCOPY AND EXCITATION-EMISSION MATRICES

Abstract: Spectral measurement devices and methods able to provide EEMs and other spectral measurements. The devices rapidly and specifically illuminate a sample and detect resulting light emanating from the sample. Such devices can use acousto-optic tunable filters (AOTFs) to selectively illuminate the sample with illumination light substantially only in a desired illumination wavelength(s). This provides high detection sensitivity, large measurement dynamic range and scans of the full 400-1000 nm light range (or more) at rates as fast as about 1 second, or even as fast as video rates. In another aspect, methods and systems relating to the analysis of autofluorescence emanating from melanin under long wavelength visible light (VIS) and near infrared (NIR) excitation.

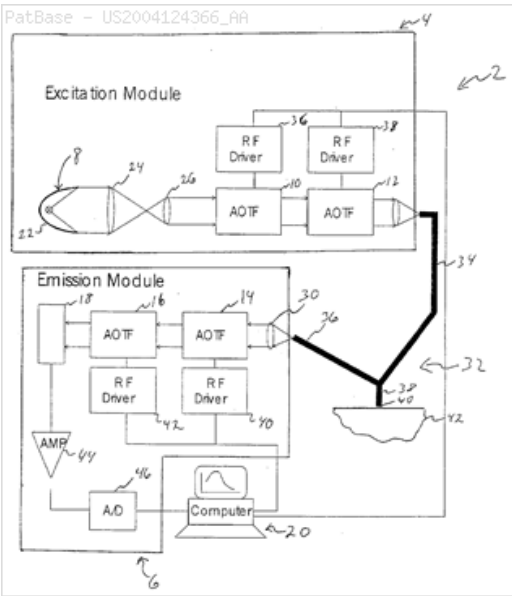
Classifications:**International (IPC 8-9):** A61B5/103 G01J3/12 G01J3/44 G01N21/64

G01N27/447 (Advanced/Invention)

International (IPC 1-7): G01J3/12 G01N21/64 G01N27/447**CPC:** A61B5/448 G01J3/1256 G01J3/4406 G01N21/6486 G01N27/44721 G01N2021/6484**European:** A61B5/44D G01J3/12G G01J3/44B G01N21/64R

G01N27/447B3A S01N21/64P12

US: 250/458.1 250/458.100P



Family:

Publication number	Publication date	Application number	Application date
AU2003273668 AA	20040423	AU20030273668	20031002
US2004124366 AA	20040701	US20030677632	20031002
WO04031746 A1	20040415	WO2003CA01519	20031002

Priority:

US20020415827P 20021002 US20030677632 20031002 WO2003CA01519 20031002

Probable Assignee: LUMEN TECHNOLOGIES INC

Assignee(s): (std): HUANG ZHIWEI ; LUI HARVEY ; SPECTRAVU MEDICAL INC ; ZENG HAISHAN

Assignee(s): LUMEN HEALTH INNOVATIONS INC ; LUMEN TECHNOLOGIES INC ; IFIRE TECHNOLOGY CORPLUMEN HEALTH INNOVATIONS INC

Inventor(s): (std): ZENG HAISHAN ; LUI HARVEY ; HUANG ZHIWEI

Inventor(s): HAISHAN ZENG ; HARVEY LUI ; ZHIWEI HUANG

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ 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