

1) Family number: 77538055 (CN210027102U)

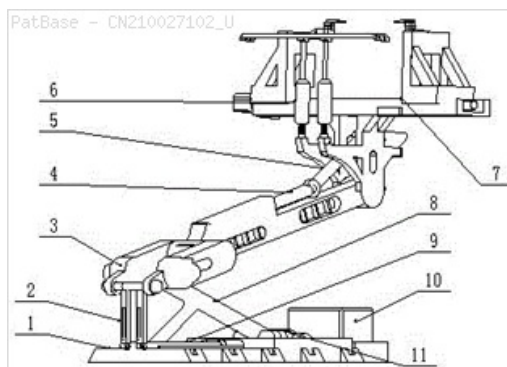
© PatBase

Title: NOVEL CONTACT NETWORK AUTOMATIC WIRING DEVICE

Abstract: The utility model provides a novel automatic wiring device for an overhead line system. The device mainly comprises a fixed underframe, lifting connecting rod, an upper arm rod and a horizontal balance push rod, the device is composed of a horizontal balance connecting rod, a standby pantograph head, a working platform, a lower arm rod, a lifting push rod, a control box, an air bag, a stepping motor, a fixed workbench, a guide wheel, an automatic bolt tightening device, an image recognition probe, a sliding workbench, a ball screw, a tensioning wheel, a pantograph bearing platform, a pantograph damping spring, a pantograph height adjusting hydraulic device and a carbon sliding plate. When the device is used for wiring, an image recognition camera at the front end of a working platform is used for recognizing the position of a U-shaped clamp on a dropper hung on a carrier cable, a stepping motor is used for driving a ball screw to adjust a sliding block to the abdominal muscle of the U-shaped clamp, and a contact wire wound on a pulley is fed into the U-shaped clamp. The automatic bolt tightening device on the sliding block tightens the connecting bolt to obtain proper pre-tightening force, and the contact line is installed on the first dropper.

Classifications:

International (IPC 8-9): B60L5/22 B60M1/28 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
■ CN210027102 U	20200207	CN201920117191U	20190124

Priority:

CN201920117191U 20190124

Probable Assignee: UNIV EAST CHINA JIAOTONG

Assignee(s): (std): EAST CHINA JIAOTONG UNIV ; UNIV EAST CHINA JIAOTONG

Inventor(s): (std): HU HUATAO ; WANG CHAOWEN ; WANG ZEYUAN ; YIN BICHAO ; ZHU HAIYAN ; ZHU ZHIHE

2) Family number: 34895061 (DE102006019612B3)

© PatBase

Title: IMPACT DETECTING DEVICE FOR OVERHEAD CONTACT LINE SYSTEM-ELECTRICAL TRAIN, HAS TWO ACCELERATION SENSORS AND SOUND SENSOR ARRANGED, WHERE OUTPUT SIGNALS OF SENSORS ARE COMBINED AND PROCESSED IN EVALUATION AND CONTROL DEVICE

Abstract: The device has an acceleration sensor (5) arranged in a region of a frictional strip (2) at a pantograph (1) for detecting an acceleration value. An acceleration sensor (6) is arranged in the region of a base (3) of the pantograph for detecting another acceleration value that acts on the pantograph. A sound sensor (7) is arranged for detecting sound waves that proceed from a contact region between the pantograph and an overhead contact line. An evaluation and control device (8) combines and processes multiple output signals of the two acceleration sensors and sound sensor.

Classifications:

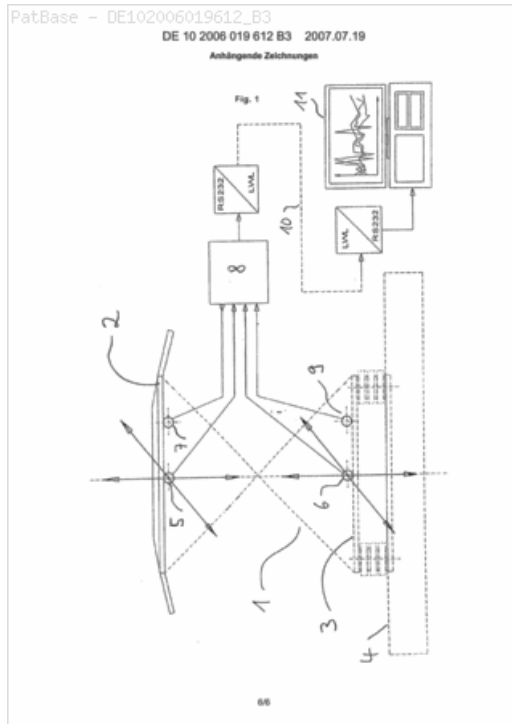
International (IPC 8-9): B60M1/28 G01B17/08

G01N19/08 (Advanced/Invention);

B60M1/00 G01B17/08 G01N19/00 (Core/Invention)

CPC: B60M1/28 B60L5/20 B60L2200/26

European: B60L5/20 B60M1/28 L60L200/26



Family:

Publication number	Publication date	Application number	Application date
DE102006019612 B3	20070719	DE200610019612	20060425

Priority:

DE200610019612 20060425

Probable Assignee:

DB NETZ AG

Assignee(s): (std):

DB NETZ AG

Inventor(s): (std):

POHL PETER

3) Family number: 74789116 (WO19117796A1)

© PatBase

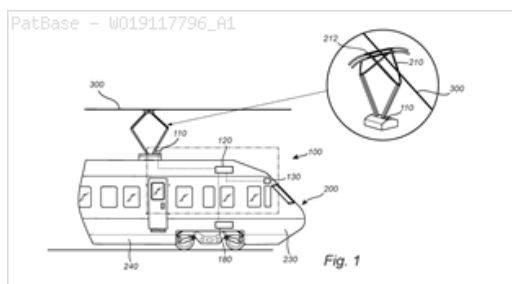
Title: DETECTION OF MAINTENANCE STATUS FOR A PANTOGRAPH AND/OR A CONTACT WIRE

Abstract: According to a first aspect of the invention, a method (400) for determining a maintenance status for a pantograph arranged on a vehicle and/or a contact wire intended to be in electrical contact with the pantograph is provided. The method comprises the steps of monitoring at least longitudinal, vertical or lateral accelerations of the pantograph, detecting an acceleration pattern based on the monitored accelerations; and determining accelerations in a direction above a predetermined value in the detected acceleration pattern. The method further comprises determining a maintenance status for the pantograph and/or the contact wire based on the detected acceleration pattern, and wherein the maintenance status indicates a level of wear on the pantograph and/or the contact wire. According to a second aspect a corresponding system is provided.

Classifications:

International (IPC 8-9): B60L5/24 B60M1/28 (Advanced/Invention)

CPC: B61L15/0081 B61L25/025 B60M1/28 B60L5/24 B60L3/00



Family:

Publication number	Publication date	Application number	Application date
SE201751530 A1	20190613	SE20170051530	20171212
SE541871 C2	20200102	SE20170051530	20171212
WO19117796 A1	20190620	WO2018SE51296	20181212

Priority:

SE20170051530 20171212

Probable Assignee:

RAILWAY METRICS AND DYNAMICS SWEDEN AB

Assignee(s): (std):

RAILWAY METRICS AND DYNAMICS SWEDEN AB

Inventor(s): (std):

LINDQVIST JAN

Agent(s):

AWA SWEDEN AB

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

4) Family number: 52802132 (US2015362385A)

© PatBase

Title: OPTICAL MONITORING SYSTEM

Abstract: A monitoring system (1) for an electric vehicle (11) that draws current from a conductor (13), the system (1) comprising: a plurality of sensor modules (31) distributed at spaced intervals throughout a conducting block (3) of a current collector (5), wherein the conducting block (3) contacts the conductor (13) in operation of the vehicle (11) and each said sensor module comprises an FBG (Fibre Bragg Grating) strain sensor (35) configured to output a first optical signal that varies in response to changes in strain and temperature of the conducting block (3) and a strain-isolated FBG temperature sensor (37) that is configured to output a second optical signal that varies in response to changes in temperature of the conducting block (3); an optical source (15) for illuminating each said sensor module (31); means (19) for optically coupling said optical source (15) to each said sensor module (31); and an optical signal interpretation module (17) configured to receive first and second optical signals from each said sensor module (31) via said optical coupling means (19), said optical signals being generated by said sensor modules (31) in response to illumination of said sensor modules (31) by said optical source (15), said interpretation module (17) being configured to capable of determining from said optical signals a temperature-independent strain measurement for each said sensor module (31).

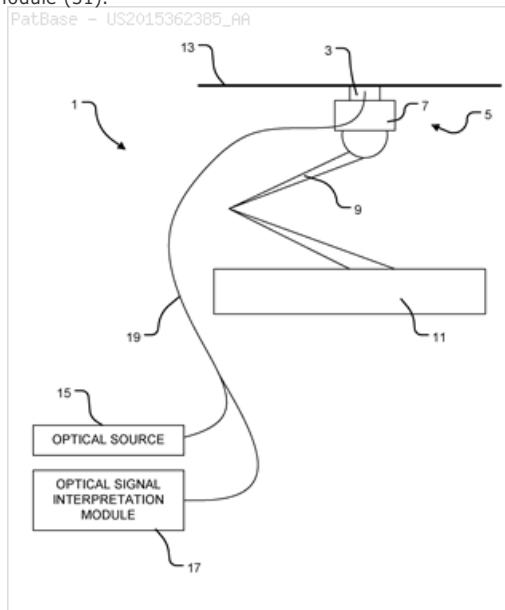
Classifications:

International (IPC 8-9): B60L5/20 B60M1/28 G01B11/16 G01K11/32 G01L1/24 (Advanced/Invention);

B60M1/28 (Advanced/Non-invention)

CPC: G01L1/246 G01K11/3206 B60L5/20 B60L2200/26 B60M1/28

US: 356/32

**Family:**

Publication number	Publication date	Application number	Application date
CA2899668 AA	20150729	CA20132899668	20131107
EP2994335 A1	20160316	EP20130827003	20131107
GB201220078 A0	20121219	GB20120020078	20121107
GB201512867 A0	20150902	GB20150012867	20131107
GB2511473 A1	20140910	GB20120020078	20121107
GB2525785 A1	20151104	GB20150012867	20131107
US2015362385 AA	20151217	US20130764271	20131107
US9587995 BB	20170307	US20130764271	20131107
WO14072436 A1	20140515	WO2013EP73314	20131107

Priority:

GB20120020078 20121107 WO2013EP73314 20131107

Probable Assignee: CITY UNIV

Assignee(s): (std): CITY UNIV LONDON ; CITY UNIVERSITY LONDON ; UNIV CITY

Assignee(s): CITY UNIV ; GRATTAN KEN ; OUS TALAL ; SUN TONG

Inventor(s): (std): SUN TONG ; GRATTAN KEN ; OUS TALAL ; GRATTAN KENNETH T V

Inventor(s): KENNETH T V GRATTAN ; TALAL OUS ; TONG SUN

Agent(s): MILTONS IP PI; MILHENCH MARK LORNE; FINCH AND MALONEY PLLC

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

5) Family number: 8479152 (WO9427839A1)

© PatBase

Title: AUTOMATIC SELF-PROPELLING APPARATUS FOR OVERHANGING CONTACT LINES

Abstract: Subject-matter of this invention is an automatic self-propelling apparatus for overhanging contact lines comprising one or two messenger cables (28, 29; 32) and two conductor wires (30, 31) and consisting of two symmetrical sections, which are operable in both movement directions and are arranged upon a railway truck provided with two drive and control cabs, said sections being mounted upon a platform (13) vertically movable by means of an articulated parallelogram structure (shears) (14), each above mentioned section including, as essential component parts: a device (27) for receiving the conductor wires (30, 31) and for detecting any twist thereof around the longitudinal axis; a lower spreading apart and clamping assembly to spread apart and to lock in certain positions the conductor wires (30, 31) as they emerge from the

twist detecting device (27); an upper spreading apart and clamping assembly (25) to receive from the external supply, to spread apart and to lock in certain positions the above quoted messenger cables (28, 29); two power operated magazines (16, 18; 17, 19) containing the necessary sets of hangers to be used in an overhanging cycle; a cylindrical/cartesian robot (20, 21) having five degrees of freedom and provided with a beam bearing a telescopic cross-arm (22) with devices mounted at its end for picking up, positioning and fastening the hangers, said robot being adapted to pick up the hangers from said magazines (16, 18; 17, 19) and to install them between said messenger cables (28, 29; 32) and said conductor wires (30, 31), as well as a computer based system to cause the railway truck to move forwardly at a rigorously constant speed and the robot to move rearwardly at the same speed, so that a null relative speed exists between the robots and the line, and to control all other steps related to powering the magazines, picking up the hangers from the magazines and installing them.

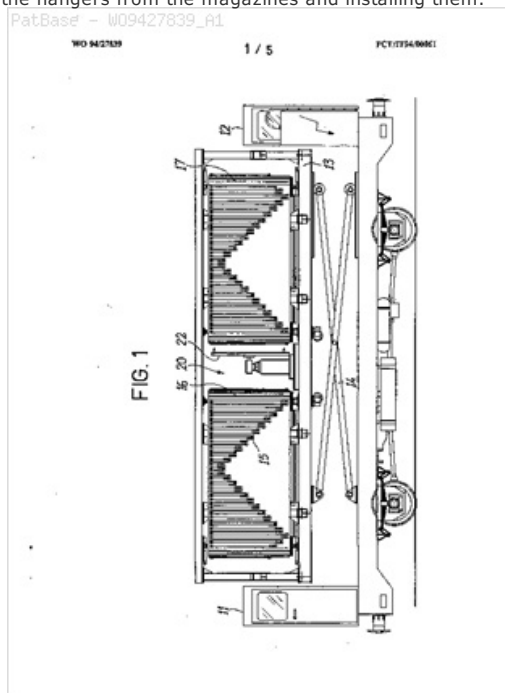
Classifications:

International (IPC 8-9): B60M1/28 B61D15/12 (Advanced/Invention);
B60M1/00 B61D15/00 (Core/Invention);
B60M (Subclass/Invention)

International (IPC 1-7): B60M B60M1/28 B61D15/12

CPC: B60M1/28 B61D15/12

European: B60M1/28 B61D15/12



Family:

Publication number	Publication date	Application number	Application date
AU199468075 A1	19941220	AU19940068075	19940517
DE69402314 D1	19970430	DE19946002314	19940517
DE69402314 D1	19970430	DE19946002314T	19940517
EP0701513 A1	19960320	EP19940916392	19940517
EP0701513 B1	19970326	EP19940916392	19940517
IT1261672 B	19960529	IT1993RM00339	19930521
ITRM930339 A0	19930521	IT1993RM00339	19930521
ITRM930339 A1	19941122	IT1993RM00339	19930521
WO9427839 A1	19941208	WO1994IT00061	19940517

Priority:

IT1993RM00339 19930521 WO1994IT00061 19940517

Probable Assignee: SARTEM SPA

Assignee(s): (std): DEL PRIORI MARIO ; SARTEM SPA ; TALLO VALERIO

Assignee(s): SARTEM S P A ; SARTEM S P A ROM ROMA IT

Inventor(s): (std): PRIORI MARIO DEL ; TALLO VALERIO ; DEL PRIORI MARIO

Inventor(s): DEL PRIORI MARIO I 00145 ROMA IT ; TALLO VALERIO I 00145 ROMA IT ; VALERIO TALLO ; MARIO DEL PRIORI

Designated states: AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK ES FI FR GA GB GE GN GR HU IE IT JP KG KP KR KZ LK LU LV MC MD MG ML MN MR MW NE NL NO NZ PL PT RO RU SD SE SI SK SN TD TG TJ TT UA US UZ VN

6) Family number: 31457180 (EP1496369B1)

© PatBase

Title: OPTICAL METHOD AND APPARATUS FOR MONITORING AN ELECTRIC CONDUCTOR

Abstract: A railway overhead power supply electrical cable (2, 21-25) optical monitoring procedure has Bragg grating fibre optical sensors (41-45, 51- 56) in cable components fed from the catenary (21-25) so that a light signal (LS) fed into the cable is modified to give temperature (M1,2) or strain measurements at the sensor location. - Includes Independent claims for equipment using the procedure.

Classifications:

International (IPC 8-9): B60M1/28 G01L1/24

G01R15/14 (Advanced/Invention);

G01R31/02 (Advanced/Non-invention);

B60M1/00 G01L1/24 G01R15/14 (Core/Invention);

G01R31/02 (Core/Non-invention)

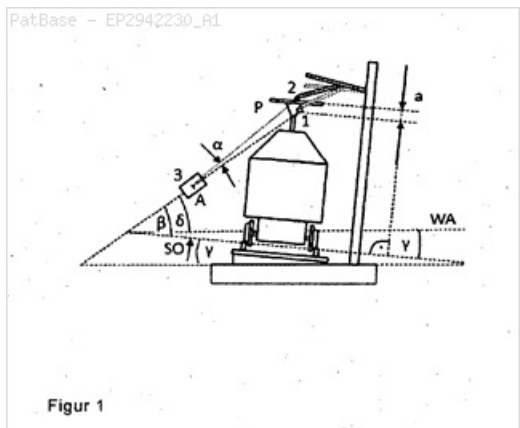
International (IPC 1-7): G01L1/24 G01R15/14 G01V8/16 G01V8/24

CPC: G01R31/58 B60M1/28 G01R15/142

European: B60M1/28 G01R15/14B S01R31/02B

verwendet wird, wobei € unter Verwendung einer/s Kamera/Laserscanners ein Anhubmessgeraet zwischen Fahrdrabt und Gleisebene positioniert oder ueber die Stuetzpunktgeometrie eine Bahnberechnung des Fahrdrabtes durchgefuehrt wird sowie der korrekte Anhub a nach der Beziehung $a = h + m \cdot \frac{1}{1 - x} \cdot d - h$ ermittelt wird **Machine translation:** The invention relates to a method for the measurement of the lift electric traction lines to driving because of the rail-bound traffic, wherein the measurement with the aid of an optical detection is performed. The invention is based on the object of developing a process which allows a mobile use, can be reduced in a very short period of time, and wherein the measurement technique is arranged outside the track and a high degree of measuring accuracy. This is in accordance with the present invention is achieved by virtue of a calibrated angle sensor is used, wherein € using a/s camera/laser scanner a lift gauge wire between driving and track plane or via the support point geometry is a path calculation of the contact wire is performed as well as the correct lift a in accordance with the relationship $a = h + m \cdot \frac{1}{1 - x} \cdot D - H$ is determined

Classifications:
International (IPC 8-9): B60M1/28 B61L23/00 G01B11/00
G01B11/14 (Advanced/Invention)
CPC: B60M1/28



Family:

Publication number	Publication date	Application number	Application date
DE102014208734 A1	20151112	DE201410208734	20140509
DE502015005184 D1	20180823	DE201550005184T	20150506
EP2942230 A1	20151111	EP20150001352	20150506
EP2942230 B1	20180725	EP20150001352	20150506

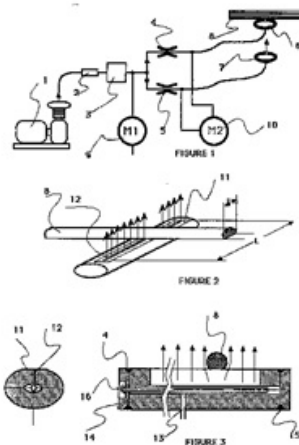
Priority:
DE201410208734 20140509 EP20150001352 20150506
Probable Assignee: DEUTSCHE BAHN AG
Assignee(s): (std): DB SYSTEMTECHNIK GMBH ; DEUTSCHE BAHN AG
Inventor(s): (std): SCHUESSLER STEFAN
Agent(s): ZINKEN SOMMER RAINER
Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

9) Family number: 6241262 (FR2651730B) © PatBase

Title: DISPOSITIF DE MESURE DE LA LARGEUR DE FROTTEMENT D'UN FIL CONDUCTEUR D'ENERGIE ELECTRIQUE CATENAIRE.

Abstract: The invention relates to a device for measuring the wiping width of a catenary electrical power conducting line under tension using a differential pneumatic means. It includes 2 slit hollow cylinders (6) and (7), one of which wipes (rubs) the catenary line (8), the cylinders being supplied with compressed air through 2 capillary tubes (4) and (5). Two manometric sensors (9) and (10) constantly measure the differences in pressure on the one hand between the compressed air and the ambient atmosphere, and, on the other hand, between the two internal cavities of the cylinders. The ratio of the second measurement to the first provides a value which is proportional to the wiping width of the conducting line.

Classifications:
International (IPC 8-9): B60L5/32 (Advanced/Invention);
B60L5/18 (Core/Invention)
International (IPC 1-7): B60M1/28 G01B13/04
CPC: B60L2200/26 B60L5/32
European: B60L5/32

**Family:**

Publication number	Publication date	Application number	Application date
FR2651730 A1	19910315	FR19890011974	19890913
FR2651730 B1	19911227	FR19890011974	19890913

Priority:

FR19890011974 19890913

Probable Assignee:

CLAUSIN JACQUES

Assignee(s): (std):

CLAUSIN JACQUES

Inventor(s): (std):

JACQUES CLAUSIN

Inventor(s):

CLAUSIN JACQUES

10) Family number: 80103265 (EP3686549A1)

© PatBase

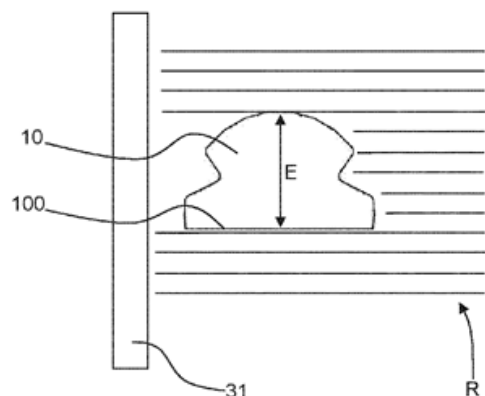
Title: DEVICE FOR CONTACTLESS MEASUREMENT OF THE THICKNESS OF A CONTACT WIRE OF AN OVERHEAD LINE
DISPOSITIF DE MESURE SANS CONTACT D'UNE EPAISSEUR D'UN FIL DE CONTACT D'UNE C

Abstract: Source: EP3686549A1 [FR] L'invention concerne un dispositif (1) de mesure d'une épaisseur (E) d'un fil de contact (10) d'une caténaire s'étendant au-dessus d'une voie ferrée, le fil de contact étant destiné à être en contact avec un pantographe d'un véhicule ferroviaire circulant sur la voie ferrée, le dispositif comprenant: - un bâti (2) destiné à être porté par une perche (7), le bâti présentant un passage d'engagement (P) du fil de contact; - des moyens de mesure de l'épaisseur du fil de contact à l'intérieur du passage d'engagement, les moyens de mesure comprenant une source lumineuse (30) configurée pour créer une ombre projetée du fil de contact; - un capteur optique (31) configuré pour capter l'ombre projetée.

Machine translation: The invention relates to a device (1) for measuring a thickness (E) of a contact wire (10) of a catenary extending above a track ferree, the contact wire being intended to be in contact with a pantograph of a railway vehicle traveling on the route, the device comprising: a frame- ferree (2) intended to be worn by a pole (7), the frame having a passage of engagement (P) of the contact wire ; - means for measuring the thickness of the contact wire within the passage of commitment, the measuring means comprise a light source (30) configured to create a shadow projected the contact wire ; - an optical sensor (31) configured to capture the shadow projected.

Classifications:**International (IPC 8-9):** B60M1/28 G01B11/06

G01B11/24 (Advanced/Invention)

CPC: B60M1/28 G01B11/2433 G01B2210/58**Fig. 1****Family:**

Publication number	Publication date	Application number	Application date
EP3686549 A1	20200729	EP20200150828	20200109
FR3091919 A1	20200724	FR20190000453	20190118

Priority:

FR20190000453 20190118

Probable Assignee: 4NRJ

Assignee(s): (std): 4NRJ

Inventor(s): (std): GASSELIN BENOIT ; LEGUEL ANTHONY

Inventor(s): ANTHONY LEGUEL ; BENOIT GASSELIN

Agent(s): LEQUIEN PHILIPPE; LEGI LC

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

11) Family number: 41729338 (US2009320554A)

© PatBase

Title: TROLLEY WIRE WEAR MEASURING DEVICE

Abstract: [Object] To ensure a wear measurement over an entire section of a trolley wire and to facilitate the wear measurement, and also to perform the measurement during daytime, without being affected by structures existing around the trolley wire. [Means to solve] A line sensor 5 and an illumination lamp 6, which are placed in a direction of a scanning line perpendicular to a laying direction of a trolley wire, are mounted on a test car 1. The line sensor 5 shoots a pantograph contact surface of the trolley wire by the running of the test car, and this image signal is saved in a recording device 8 through a measurement computer 7. The measurement computer 7 arranges luminance signals of scanning lines, obtained by the line sensor 5, in time series, and creates a line sensor image. The measurement computer 7 gets a binary operated line sensor image from this line sensor image. The measurement computer 7 further removes sky parts from this binary operated line sensor image and detects edges of a trolley wire worn portion, then determines a width of the trolley wire worn portion through an overall width of the trolley wire and a height, viewed from the line sensor, of the trolley wire.

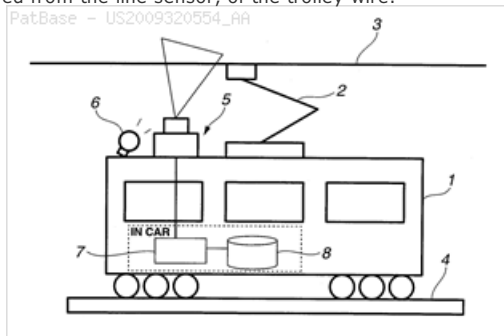
Classifications:

International (IPC 8-9): B60M1/28 G01B11/02 G01N21/86 G01N3/56 G06T11/20 H01L27/00 (Advanced/Invention); B60M1/00 G01B11/02 G01N3/56 G06T11/20 (Core/Invention)

CPC: G01B11/24 B60M1/28

European: B60M1/28 G01B11/24

US: 250/208.1 250/559.01 73/7 73/7P



Family:

Publication number	Publication date	Application number	Application date
CN101529198 A	20090909	CN200780037256	20070814
CN101529198 B	20101208	CN200780037256	20070814
EP2071277 A1	20090617	EP20070792478	20070814
EP2071277 A4	20141022	EP20070792478	20070814
EP2071277 B1	20190116	EP20070792478	20070814
JP2008089524 A2	20080417	JP20060273524	20061005
JP4973108 B2	20120711	JP20060273524	20061005
KR101214645 B1	20121221	KR20097006827	20070814
KR20090052381 A	20090525	KR20097006827	20070814
RU2009108733 A	20101110	RU20090108733	20070814
RU2416068 C2	20110410	RU20090108733	20070814
US2009320554 AA	20091231	US20070440876	20070814
US8071967 BB	20111206	US20070440876	20070814
WO08044389 A1	20080417	WO2007JP65835	20070814

Priority:

JP20060273524 20061005 WO2007JP65835 20070814

Probable Assignee: MEIDENSHA CORP

Assignee(s): (std): MEIDENSHA ELECTRIC MFG CO LTD ; MEJDENSHA CORP ; NIWAKAWA MAKOTO ; WATABE YUSUKE

Assignee(s): MEIDENSHA ELECTRIC MFG CO ; MEIDENSHA CORP ; MEJDENSHA KORPOREJSHN ; MEIDENSHA KK

Inventor(s): (std): MAKOTO NIWAKAWA ; NIVAKAVA MAKOTO ; NIWAKAWA MAKOTO ; VATABE JUSUKE ; WATABE YUSUKE ; YUSUKE WATABE

Agent(s): MANITZ FINSTERWALD AND PARTNER GBR; MANITZ FINSTERWALD PATENTANWALTE PARTMBB; FOLEY AND LARDNER LLP SUITE 500; FOLEY AND LARDNER LLP; HASHIMOTO TAKESHI ET AL

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

12) Family number: 70711403 (EP3409530A1)

© PatBase

Title: ASSEMBLY DEVICE AND METHOD FOR PREASSEMBLING OVERHEAD SECTIONS FOR AN OVERHEAD ELECTRICAL LINE

Abstract: Source: EP3409530A1 [DE] Die Montagevorrichtung (2) dient zur teilautomatisierten, einfachen Vormontage von Haengern (8) fuer eine elektrische Oberleitung, wobei die Haenger zur Befestigung zwischen einem Fahrdrabt und einem Trageil der Oberleitung ausgebildet sind und ein jeweiliger Haenger (8) ein Haengerseil sowie eine erste Kausche (32a) und eine zweite Kausche (32b) aufweist, die unter einem definierten Abstand zueinander am Haengerseil (22) mit Hilfe jeweils einer Klemmhuele (34) am Haengerseil (22) fixiert sind, wobei die Montagevorrichtung (2) aufweist - ein erstes Fixierelement (44a) zur Fixierung der ersten Kausche (32a), - eine erste Presseinheit (40a) zur Ausbildung einer Klemmverbindung zwischen dem Haengerseil (22) und der Klemmhuele (34) im Bereich der ersten Kausche (32a), - vorzugsweise eine erste Klemmeinheit (42a) zum Festklemmen des auf eine gewuenschte Laenge abgelaengten Haengerseils (22) im Bereich des ersten Fixierelements (44a), - ein zweites Fixierelement (44b) zur Fixierung der zweiten Kausche (32b), - eine zweite Presseinheit (40b), zur Ausbildung einer Klemmverbindung zwischen dem Haengerseil (22) und der Klemmhuele (34) im Bereich der zweiten Kausche (32b), - vorzugsweise eine zweite Klemmeinheit (42b) zum Festklemmen des auf die gewuenschte Laenge abgelaengten Haengerseils (22) im Bereich des zweiten Fixierelements (44b), wobei - das zweite Fixierelement (44b) und die zweite Presseinheit (40b) gemeinsam auf einen verfahrbaren Schlitten (6a) angeordnet sind, der relativ zum ersten Fixierelement (44a) zur Einstellung des definierten Abstands zwischen den beiden Fixierelementen (44a,b) verfahrbar ist, so dass ein auf die gewuenschte Laenge abgelaengtes und mit den Klemmhuelen (34) und den Kauschen (32a, b) versehenes Haengerseil (22) vor der Ausbildung der Klemmverbindung an den Fixierelementen (40a, b) eingehaengt werden kann. **Machine translation:** The mounting device (2) serves for semi-automated, simple pre-assembly of hand (8) for an electric overhead line, wherein the hanger for attaching between a contact wire and a suspension rope of the overhead line and a respective hanger (8) is a hanger rope, and a first cable eye (32a) and a second cable eye (32b) at a defined distance from one another on the hanger rope (22) with the aid of in each case one clamping sleeve (34) at the hanger rope (22), wherein the mounting device (2) - a first fixing element (44a) for fixing the first cable eye (32a), - a first pressing unit (40a), to form a clamp connection between the hanger rope (22) and the clamping sleeve (34) in the region of the first cable eye (32a), - preferably includes first clamp unit (42a) to clamp the to a desired length Cut beveled hanger rope (22) in the region of the first fixing element (44a), a second fixing element (44b) securing the second cable eye (32b), a second pressing unit (40b), to form a clamp connection between the hanger rope (22) and the clamping sleeve (34) in the region of the second cable eye (32b), preference is given to using a second clamp unit (42b) to clamp the cable to the desired length cut beveled hanger (22) in the region of the second fixing element (44b), wherein the second fixing element (44b) and the second pressing unit (40b) together on a displaceable carriage (6a) are arranged relative to the first fixing member (44a) for adjustment of the defined distance between the two fixing elements (44a is movable.b), such that a cut to the desired length and marked with the clamping sleeves (34) and the Kauschen (32a, b) A hanger rope (22) prior to the formation of the clamping connection at the fixing elements (40a) and (b) may be hung.

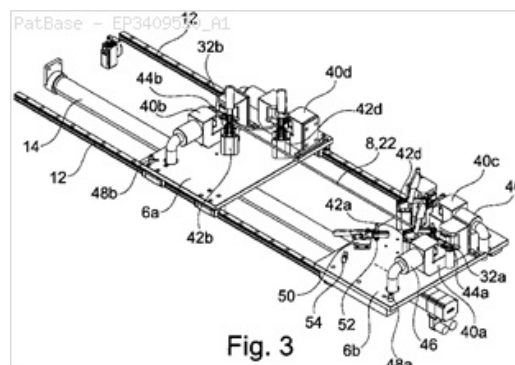
Classifications:

International (IPC 8-9): B60M1/225 H01R43/04

H01R43/28 (Advanced/Invention);

B60M1/28 (Advanced/Non-invention)

CPC: B60M1/225 B60M1/28 H01R43/04 H01R43/28



Family:

Publication number	Publication date	Application number	Application date
DE202018103063 U1	20180816	DE201820103063U	20180530
EP3409530 A1	20181205	EP20180175244	20180530

Priority:

DE201710209228 20170531

Probable Assignee: RICHARD BERGNER ELEKTROARMATUREN GMBH AND CO KG

Assignee(s): (std): RICHARD BERGNER ELEKTROARMATUREN GMBH AND CO KG

Inventor(s): (std): MURR MANFRED ; SCHWARZ UDO ; STENGEL MARKUS

Agent(s): FDST PATENTANWAELTE

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

13) Family number: 60743415 (DE102014208741B4)

© PatBase

Title: VORRICHTUNG ZUM KALIBRIEREN EINER ANHUBMESSEINRICHTUNG UND/ODER ZUR MESSUNG DER STEIFIGKEIT ELEKTRISCHER FAHRLEITUNGEN AUF FAHRWEGEN DES SCHIENENGEBUNDENEN VERKEHRS UNTER SPANNUNG

Abstract: Source: DE102014208741B4 [DE] Die Erfindung betrifft eine Vorrichtung zur Messung der Steifigkeit von elektrischen Fahrleitungen auf Fahrwegen des schienengebundenen Verkehrs unter Spannung, wobei die Messung mit Hilfe einer optischen Erfassung durchgeführt wird. Der Erfindung liegt die Aufgabe zugrunde, ein Verfahren zu entwickeln, welches einen mobilen Einsatz erlaubt, in sehr kurzer Zeit auf und abgebaut werden kann, wobei die Messtechnik auf dem Gleise angeordnet wird und eine hohe Messgenauigkeit aufweist. Dies wird erfindungsgemäss dadurch erreicht, dass die Vorrichtung zweigeteilt ausgeführt ist, wobei der erste Teil eine Anhubstange (3) mit Isolierstück (4) umfasst, die eine Klemmeinrichtung (2) fuer den Fahrdrabt (1), ein Teleskopteil (5), einen Kraftsensor (6) und eine Auswerteeinheit (7) aufweist und der zweite Teil eine Einrichtung (8) zur definierten Auslenkung des Fahrdrabtes (1) mit einer auf einem Gleis (10) beweglichen Auflage (9) umfasst.

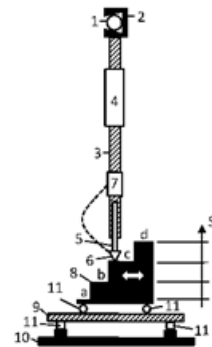
Classifications:

International (IPC 8-9): B60M1/28 B61K9/08

G01L1/00 (Advanced/Invention)

CPC: B60M1/28 G01L5/0057

Figur 1



8/11

Family:

Publication number	Publication date	Application number	Application date
DE102014208741 A1	20151112	DE201410208741	20140509
DE102014208741 B4	20160121	DE201410208741	20140509

Priority:

DE201410208741 20140509

Probable Assignee: DB SYSTEMTECHNIK GMBH

Assignee(s): (std): DB SYSTEMTECHNIK GMBH

Inventor(s): (std): BRAUN FRANZ ; ENGLBRECHT FRANZ ; SCHUESSLER STEFAN

14) Family number: 68496550 (EP3279027B1)

© PatBase

Title: ARRANGEMENT WITH A NETWORK DEVICE THAT IS DESIGNED FOR FIXING TO A CONTACT WIRE OF A CURRENT-CARRYING OVERHEAD WIRE AMENAGEMENT D'UN DISPOSITIF DE RESEAU QUI EST CONCU POUR ETRE FIXE SUR UNE LIGNE AERIEENNE D'UNE LIGNE AERIEENNE DE CONTACT PARCOURU

Abstract: Source: EP3279027A1 [DE] Die Erfindung betrifft eine Anordnung mit einer Netzwerkvorrichtung (10), die zur Befestigung an einem Fahrdrabt einer stromdurchflossenen Oberleitung (1) ausgebildet ist, wobei: € die Netzwerkvorrichtung (10) mindestens eine induktive Energiegewinnungseinrichtung (14) aufweist, die beim bestimmungsgemaessen Gebrauch der Netzwerkvorrichtung (10) relativ zu der Oberleitung (1) so angeordnet und ausgebildet ist, dass aus der induzierten Spannung und dem daraus resultierenden Induktionsstrom Energie fuer den elektrischen Betrieb der Netzwerkvorrichtung (10) gewinnbar ist, und € die Anordnung mindestens einen Transceiver (12) aufweist, der ausgebildet ist, Signale von zumindest einem Sensor, der Betriebs- und/oder Zustandsparameter der Oberleitung (1) und/oder des/der der Oberleitung (1) zugeordneten Schienenweges und/oder Strasse zu erzeugen, zu empfangen und an einen weiteren Transceiver, der nicht Teil der Anordnung ist, zu senden, wobei der mindestens eine Transceiver (12) der Anordnung elektrisch mit der mindestens einen induktiven Energiegewinnungseinrichtung (14) verbunden ist und daher beim bestimmungsgemaessen Gebrauch der Anordnung mit Energie von der mindestens einen induktiven Energiegewinnungseinrichtung (14) versorgbar ist, € die Netzwerkvorrichtung (10) zumindest zwei der induktiven Energiegewinnungseinrichtungen (14.1, 14.2) aufweist, wobei die zumindest zwei induktiven Energiegewinnungseinrichtungen (14.1, 14.2) beim bestimmungsgemaessen Gebrauch der Netzwerkvorrichtung (10) an unterschiedlichen Positionen bezueglich einer Umfangersrichtung um die Oberleitung angeordnet sind und/oder unterschiedliche wirksame Querschnittsflaechen aufweisen, und € die Anordnung zumindest einen Zustandssensor (31) oder eine Anordnung von Zustandssensoren aufweist, der/die elektrisch mit den zumindest zwei induktiven Energiegewinnungseinrichtungen (14.1, 14.2) verbunden ist und ausgebildet ist, Signale zu erzeugen, die jeweils einem elektrischen Betriebszustand der zumindest zwei induktiven Energiegewinnungseinrichtungen (14.1, 14.2) entsprechen.

Classifications:

International (IPC 8-9): B60M1/02 B60M1/13 B60M1/26 B60M1/28 B61L23/00 B61L27/00 G08C17/02 H02J50/10 H02K3/28 (Advanced/Invention)
CPC: B60M1/24 B60M3/06 B60M5/00 B61L23/04 B61L27/0088 B60M1/02 B60M1/13

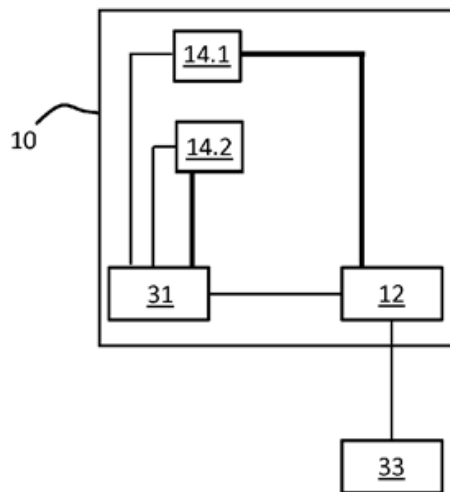


Fig. 6

Family:

Publication number	Publication date	Application number	Application date
■ CN109383329 A	20190226	CN201810871884	20180802
■ DE102016114322 A1	20180208	DE201610114322	20160803
■ DE502017001830 D1	20190814	DE201750001830T	20170802
■ EP3279027 A1	20180207	EP20170184504	20170802
■ EP3279027 B1	20190724	EP20170184504	20170802
■ IN201814028871 A	20190208	IN201814028871	20180801

Priority:

DE201610114322 20160803 EP20170184504 20170802

Probable Assignee: POWERLINES PRODUCTS GMBH**Assignee(s):** (std): POWERLINES PRODUCTS GMBH**Inventor(s):** (std): FISCHER MICHAEL ; FISCHER H MICHAEL**Agent(s):** PATENTANWAELTE BRESSEL U PARTNER MBB**Designated states:** AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR**15) Family number: 63484582** (NL2012366B)

© PatBase

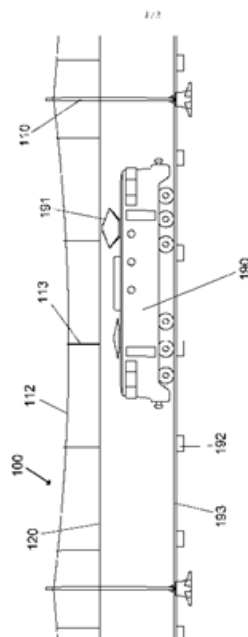
Title: WERKWIJZE VOOR HET INSPECTEREN VAN EEN RIJDRAAD VAN EEN BOVENLEIDINGSYSTEEM, EEN RIJDRAAD EN EEN BOVENLEIDINGSYSTEEM DAT DE RIJDRAAD OMVAT.**Abstract:** Source: NL2012366B [NL] WERKWIJZE VOOR HET OPTISCH INSPECTEREN VAN EEN RIJDRAAD VAN EEN BOVENLEIDINGSYSTEEM VAN BIJVOORBEELD EEN TREIN.**Classifications:****International (IPC 8-9):** B60M1/13 B60M1/28 (Advanced/Invention)

Fig. 1A

Family:

Publication number	Publication date	Application number	Application date
 NL2012366 A1	20151112	NL20142012366	20140305
 NL2012366 B1	20151203	NL20142012366	20140305

Priority:

NL20142012366 20140305

Probable Assignee: RAILTECH BV**Assignee(s):** (std): RAILTECH BV**Inventor(s):** (std): HENDRIK DANIEL VAN HARTEN