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[EPODOC: SS 11] system and module and platform and bracket and beam and node

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[SS 12] system and module and platform and bracket and beam

Results in EPODOC 11

[SS 13] ..li



1/11 © EPODOC / EPO

PN - [CN209513218U](#) U 20191018

PR - CN201920204021U 20190215

AP - CN201920204021U 20190215

DT - I

PA - SHENZHEN JPT OPTO ELECTRONICS CO LTD

TI - Semiconductor laser comprehensive performance test **system**

AB - A semiconductor laser comprehensive performance test **system** comprises a test **platform**, an optical **module**, a power detection assembly arranged on the test **platform**, a spectrum detection mechanism arranged on the test **platform**, and a data processing device. The optical **module** comprises an optical shaping lens arranged on the test **platform** and a polarization light splitting device corresponding to the optical shaping lens; the power detection assembly comprises a first power meter and a second power meter which correspond to the polarization **beam** splitter; power detection values of the first power meter and the second power meter are output to the data processing device; the spectrum detection mechanism comprises a **bracket** arranged on the test **platform**, a test optical fiber connected with the bracket, and a spectrum collector connected with the test optical fiber; spectral data generated by conversion of the spectral collector is output to the data processing device; the **bracket** and the optical **module** are correspondingly arranged; and the data processing device analyzes the wavelength characteristics of the semiconductor laser according to the spectral data, so that the test efficiency of the semiconductor laser is improved.

2/11 © EPODOC / EPO

PN - [CN109238968](#) A 20190118

PR - CN201811237676 20181023

AP - CN201811237676 20181023

DT	- I
CT	- STSE (A) CN104359862 A 20150218 [A] (FOSHAN CITY NANHAI DISTR OPTOMEDIC TECHNOLOGY CO LTD) [A] 1-4 * 全文 *; CN104458691 A 20150325 [A] (ZC OPTOELECTRONIC TECHNOLOGIES LTD) [A] 1-4 * 全文 *; CN105510347 A 20160420 [A] (ZC OPTOELECTRONIC TECH LTD) [A] 1-4 * 全文 *; CN205538714U U 20160831 [A] (LASER FUSION RES CT CHINA ACADEMY ENGINEERING PHYSICS) [A] 1-4 * 全文 *; CN105943183 A 20160921 [A] (HARBIN INSTITUTE TECHNOLOGY) [A] 1-4 * 全文 *; CN106248585 A 20161221 [A] (SHANGHAI INST OPTICS & FINE MECH CAS) [A] 1-4 * 全文 *; CN107084917 A 20170822 [Y] (UNIV BEIJING) [Y] 1-4 * 说明书第3-4页, 图1-3 *; CN108226040 A 20180629 [A] (UNIV NANKAI) [A] 1-4 * 全文 *; CN201653881U U 20101124 [A] (UNIV SOUTHEAST) [A] 1-2 * 全文 *; CN102393370 A 20120328 [A] (SHANGHAI INST OPTICS & FINE ME) [A] 1-2 * 全文 *
CTNP	- STSE (A) [Y] - 袁婷联 等, "光热显微术: 基于光吸收的单分子成像技术", 《PROGRESS IN CHEMISTRY》 [Y] 1-4 * 第609-610页, 图1(b) *
CI	- G01N21/01 (CN) - G01N21/63 (CN)
PA	- HARBIN INST TECHNOLOGY
TI	- Photo-thermal heterodyning microimaging detection system and method
AB	- The invention provides a photo-thermal heterodyning microimaging detection system and method, and belongs to the technical field of microimaging detection. The system comprises a right angle bracket , a two-dimensional piezoelectric moving table, a supporting bar, a supporting bar holder, a dichroscope, a 1/4 wave plate, a cage type

mirror **bracket** supporting seat, a polarization **beam** splitter cube, a 600nm long pass filter, a spectroscope, an avalanche photodiode **module**, a CCD camera, a lock-in amplifier, a two-dimensional piezoelectric moving table controller, a computer, an office table, a 638nm laser, a 532nm laser, an acoustic optical modulator driver, a mirror **bracket** supporting rod, a 20* **beam** reduction mirror, a rotation moving table, an acoustic optical modulator, a lifting moving table, a first reflector, an optical **platform**, a cage type mirror **bracket** connecting rod, a second reflector, a three-dimensional moving table, an objective lens cantilever mounting rack, a 100* objective lens, a dark box and various connecting lines. The photo-thermal heterodyning microimaging detection **system** provided by the invention has the advantages of greatly improving the signal extraction and resolving power by utilizing a heterodyning detection manner, thereby improving the signal-to-noise ratio of the photo-thermal microimaging.

3/11 © EPODOC / EPO

- PN - [CN108178070](#) A 20180619
- PNFP - CN108178070B B 20200703
- PR - CN201711437807 20171226
- AP - CN201711437807 20171226
- DT - I
- CT - || STSE (A)
[JPH07125975](#) A 19950516 [A] (MITSUBISHI HEAVY IND LTD)
 [A] 1-9
 * 全文 *;
[CN202508804U](#) U 20121031 [Y] (GEZHOUBA GROUP FOUNDATION ENG CO LTD)
 [Y] 1-9
 * 说明书第4-28段、附图1-2 *;
[CN203653151U](#) U 20140618 [Y] (INST OF EXPLORATION TECH CHINESE ACADEMY OF GEOL SCIENCES, et al)
 [Y] 1-9
 * 说明书第23-31段、附图1-8 *;
[CN106865439](#) A 20170620 [Y] (JIANGSU MARITIME INST)
 [Y] 1-9
 * 说明书第4-26段、附图1-2 *
- CI - B66C13/00 (CN)
 - B66C13/20 (CN)
 - B66D5/14 (CN)
- PA - (A)
 CNOOC ENERGY TECH & SERV LTD
- TI - (A)
 Small wellhead-type steel wire equipment for offshore oilfield
- AB - (A)
 The invention discloses small wellhead-type steel wire equipment for an offshore oilfield. The small wellhead-type steel wire equipment comprises a roller winch support **module** assembly and a control power **module** assembly; the roller winch support **module** assembly comprises a bottom channel steel **bracket**, telescopic

hydraulic cylinder brackets, a top cross **beam**, a steel wire pulley, a steel wire rope pulley, a small hydraulic crane and a hydraulic steel wire roller assembly; the hydraulic steel wire roller assembly comprises roller bottom plates, side plates, roller bearings, a spindle, a steelwire roller, a transmission gear, a hydraulic motor and a wire coiling device; and the control power **module** assembly comprises an operating floor assembling body, a hydraulic oil pump, an explosion-proof motor, a hydraulic oil tank, a hydraulic **system** radiator, an explosion-proof electric control box and an operation panel. The small wellhead-type steel wire equipment for the offshore oilfield can meet the requirements that the occupation area of an offshore **platform** is small, the equipment weight is low, and operation equipment takes place flexibly.

4/11 © EPODOC / EPO

- PN - [CN107677608](#) A 20180209
- PR - CN201610621763 20160802
- AP - CN201610621763 20160802
- DT - I
- CT - || STSE (A)
[JP2005172774](#) A 20050630 [A] (SEMICONDUCTOR RES FOUND)
 [A] 1
 * 全文 *;
[JP2005172779](#) A 20050630 [Y] (SEMICONDUCTOR RES FOUND)
 [Y] 1
 * 说明书第18段、第25段、第30段、图3及图6 *;
[US2012037804](#) A1 20120216 [A] (FEDERICI JOHN F [US])
 [A] 1
 * 全文 *;
[US2012261575](#) A1 20121018 [A] (AVERITT RICHARD [US], et al)
 [A] 1
 * 全文 *;
[CN103575654](#) A 20140212 [A] (HUBEI JIUZHUYANG INFRARED SYSTEM CO LTD)
 [A] 1
 * 全文 *;
[CN103634044](#) A 20140312 [A] (BEIJING INST RADIO METROLOGY & MEASUREMENT)
 [A] 1
 * 全文 *;
[CN104280786](#) A 20150114 [Y] (UNIV HEBEI UNITED)
 [Y] 1
 * 说明书第21-28段及图1 *
- CI - G01N21/17 (CN)
- PA - BEIJING REMOTE SENSING EQUIPMENT INST
- TI - Terahertz quasi-optical active scanning reflection imaging **system**
- AB - The invention discloses a terahertz quasi-optical active scanning reflection imaging **system**, which comprises a terahertz source (1), a diagonal horn (2), a chopper (3), a receiving detector (8), a scanning **bracket** sampling **platform** (7), a data acquisition **module** (9) and a measurement control and data processing **module** (10), and further comprises: a **beam** splitter (5), a Fresnel lens A (4) and a Fresnel lens B (6). Compared to the closest existing device, the terahertz quasi-optical active scanning

reflection imaging **system** of the present invention has the following characteristics that the beamsplitter can effectively avoid the image distortion, and the two Fresnel lenses can significantly reduce the **beam** waist radius of the terahertz wave and improve the spatial resolution of the imaging, such that the improved target transmission image can be obtained.

5/11 © EPODOC / EPO

- PN - [CN107560656](#) A 20180109
- PR - CN201710782789 20170903
- AP - CN201710782789 20170903
- DT - I
- CT - || STSE (A)
[CN101477359](#) A 00000000 [A]
 [A] 1-2
 * 全文 *;
[CN202351671U](#) U 00000000 [A]
 [A] 1-2
 * 全文 *;
[CN202735798U](#) U 00000000 [Y]
 [Y] 1-2
 * 说明书第6-28段, 附图1 *;
[US2015069060](#) A1 00000000 [A]
 [A] 1-2
 * 全文 *;
[CN104677418](#) A 00000000 [Y]
 [Y] 1-2
 * 说明书第26-31段, 附图1-2 *
- PA - CITIC HIC KAICHENG INTELLIGENT EQUIPMENT CO LTD
- TI - **System** and method for detecting open state of well lid and locating well lid based on rail robot
- AB - The invention discloses a **system** and method for detecting the open state of a well lid and locating the well lid based on a rail robot. The **system** includes a rail robot device, an I-**beam** rail, an RFIDgeographical tag, a mounting **bracket**, a wifi base station, and a data analysis **platform**. The rail robot device includes: a rail robot body, a RFID reader, an illumination sensor, a microprocessor, a power **module**, a lithium battery and a motor. The rail robot is equipped with the illumination sensor. Each well lid is provided with a RFID geographical tag. When detecting a light source with specific intensity in a running process on the rail, the robot determines a position by means of RFID and determines whether the well lid at the position is open so as to determine the position of the open well lid. The **system** avoids casualties caused by the theft and the damage of well lids in urban streets and has a great value to the application and promotion of various urban large and medium-sized underground galleries.

6/11 © EPODOC / EPO

- PN - [CN206454282U](#) U 20170901
- PR - CN201621245370U 20161118

AP - CN201621245370U 20161118

DT - I

PA - GUANGXI NANNING MOMA CULTURE COMMUNICATION CO LTD

TI - Photoelectricity bamboo pole dance stage **system**

AB - The utility model discloses a photoelectricity bamboo pole dance stage **system**, including receiving arrangement and the numerical control banks **module**, projection imaging **module**, the intelligent smoking control **platform module** that connect in parallel with drive circuit respectively, numerical control banks **module** includes intelligent lamp and control intelligent lamp's sound console, receiving arrangement is used for accepting the projection by the projection imaging **module** of numerical control backstage **module** control. The utility model discloses utilize the light **beam** to replace the entity bamboo pole, replaced manual operation's bamboo pole dance, not only make the exclusive amusement mode of this minority no longer be limited by operating personnel, make this exclusive minority artistic as extensively to promote, solved the difficulty of activity tissues such as personnel, place, stage property in addition, make the participant of any age **bracket** all can participate in at any time, still avoided the problem of jumping the easy tumble injury of dancer, falling.

7/11 © EPODOC / EPO

PN - [CN205309597U](#) U 20160615

PR - CN201521136841U 20151230

AP - CN201521136841U 20151230

DT - I

PA - HAN'S LASER TECH IND GROUP CO LTD

TI - Laser cutting machine production **system** and go up integrative device of unloading thereof

AB - The utility model relates to a laser cutting machine production **system** and go up integrative device of unloading thereof. The foretell integrative device of unloading of going up for to cut the work piece and carry to the workstation from the raw materials **platform** and cut and unload the finished product to the finished product **platform**, including hanging **beam**, support, feed mechanism, unloading mechanism, slide, actuating mechanism and control assembly. The hanging **beam** includes hanging **beam** body and first guide rail, and first guide rail is fixed in on the hanging **beam** body, the support is fixed in on the hanging **beam** body, feed mechanism includes sucking disc subassembly and sucking disc mounting **bracket**, and vacuum generator is connected with the sucking disc, unloading mechanism pitches and switch determine **module** including the material, and switch determine **module** is used for detecting the position of support and sends sensing signal, the slide is used for sliding and sets up in the workstation, actuating mechanism drive hanging **beam** body is for the table movement. The work efficiency of the integrative device of unloading is higher in the aforesaid, upper and lower material mechanism sharing support, and the part of whole device is less, and consequently, simple structure and the cost of going up the integrative device of unloading are lower.

8/11 © EPODOC / EPO

PN - [CN204920986U](#) U 20151230

PR - CN201520697516U 20150909

AP - CN201520697516U 20150909

DT - I

PA - CHINA RAILWAY CONSTR BRIDGE ENG BUREAU GROUP CO LTD

TI - Light -duty top pushes away sliding tunnel lining **platform** truck

AB - The utility model provides a light -duty top pushes away sliding tunnel lining **platform** truck, include stencil assembly and stencil assembly inboard portal subassembly and the **bracket** assembly between stencil assembly and the portal subassembly and be used for a hydraulic pressure of receiving a stencil assembly receipts **module system** all, stencil assembly includes that top template and symmetry articulate left side template and the right side template in top template both sides, the portal subassembly includes that the left -hand door frame erects the roof **beam**, right portal erects roof **beam**, portal crossbeam, supporting **beam** and two portals and erects the lower longeron of installing respectively the roof **beam** lower part, the longeron supports on the piston shoes of walking rail down, the walking rail is along vertically setting up in the tunnel bottom surface, the longeron tip is equipped with jack and the guide rail clamp that vertical top pushed away down, supporting **beam** has laid the top side walk slab and driving guidance tape. The utility model discloses simplified the structure of lining cutting **platform** truck, the finite space in make full use of tunnel alleviates the dead weight of lining cutting **platform** truck greatly to production manufacturing cost has been reduced.

9/11 © EPODOC / EPO

PN - [CN103738156](#) A 20140423

PNFP - CN103738156B B 20160113

PR - CN201310742664 20131230

AP - CN201310742664 20131230

DT - I

CT - || STSE (A)
[CN101073986](#) A 20071121 [A] (GM GLOBAL TECH OPERATIONS INC [US]);
[CN102371886](#) A 20120314 [A] (GATE SRL);
[CN202294243U](#) U 20120704 [A] (WEIFANG HENGAN RADIATOR GROUP CO LTD);
[KR20100069043](#) A 20100624 [A] (HALLA CLIMATE CONTROL CORP [KR]);
[CN203651448U](#) U 20140618 [R] (LIFAN IND GROUP CO LTD);
[CN203186079U](#) U 20130911 [A] (CHERY AUTOMOBILE CO LTD);
[CN202319878U](#) U 20120711 [A] (CHONGQING ZHIXIN IND CO LTD);
[JPH05185848](#) A 19930727 [A] (NISSAN MOTOR)

PA - (A)
LIFAN IND GROUP CO LTD

TI - (A)
Mounting **bracket module** suitable for cross flow type radiator **system**

AB - (A)
The invention discloses a mounting **bracket module** suitable for a cross flow type radiator **system**. The mounting **bracket module** comprises a radiator upper mounting **bracket** and two radiator lower mounting brackets, the radiator upper mounting **bracket** is a strip-shaped horizontal plate extending up and down, upper

mounting locating pins with axes extending up and down are respectively welded to the upper portion of the left end and the upper portion of the right end of the radiator upper mounting **bracket**, bending parts vertically downwards are respectively arranged at the positions of a left rear corner and a right rear corner of the radiator upper mounting **bracket**, every bending part is provided with a first mounting hole, and second mounting holes are respectively arranged at the positions of a left front corner and a rear front corner of the radiator upper mounting **bracket**. Every radiator lower mounting **bracket** comprises a horizontal mounting **platform** and mounting supporting feet surrounding the periphery of the horizontal mounting **platform**, every horizontal mounting **platform** is provided with a counter bore, and the lower end of every mounting supporting foot is provided with an overturned edge. Upper **beam** mounting pin hole sites and lower **beam** mounting pin hole sites of a water tank are not changed, and the shortcoming of the stress capability of the radiator **system** in the travelling process can be effectively overcome.

10/11 © EPODOC / EPO

- PN - [CN202655751U](#) U 20130109
- PR - CN201220307670U 20120628
- AP - CN201220307670U 20120628
- DT - I
- PA - HANGZHOU DAHE THERMO MAGNETICS CO LTD
- TI - Semi-automatic assembling device of thermoelectric cooling **module**
- AB - The utility model discloses a semi-automatic assembling device of a thermoelectric cooling **module**, comprising a **bracket**, a moving bed, a machine body and an electronic control **system**, wherein the **bracket** comprises uprights and a **beam**; the moving bed is arranged between the uprights; the moving bed comprises a bed body, a horizontal guide rail arranged on the bed body and a working **platform** which is arranged on the horizontal guide rail and is capable of sliding along the horizontal guide rail; the working **platform** is provided with a plurality of working areas; the machine body comprising a vertical plate, a lifting guide rail, a lifting cylinder and a fixed seat is arranged on the **beam**; the fixed seat is provided with a rotary cylinder; and a rotating shaft of the rotary cylinder is provided with a vacuum mechanical arm. According to the semi-automatic assembling device of the thermoelectric cooling **module** provided by the utility model, the vacuum mechanical arm is used for replacing the manual operation in the assembling process, and the moving bed is used for transferring assembly parts, so that the work efficiency is increased, and the assembling precision is improved; and in addition, reciprocation and rotation are realized by using pneumatic elements, so that the structure is simplified, and the production cost is lowered.

11/11 © EPODOC / EPO

- PN - [CN1987430](#) A 20070627
- PNFP - CN1987430B B 20110112
- PR - CN200610147557 20061220
- AP - CN200610147557 20061220
- DT - I

PA - (A)
UNIV DONGHUA [CN]

- (B)
UNIV DONGHUA

TI - (A B)
Integrated multifunction chip instrument

AB - (A B)
The multifunctional chip instrument includes photoelectric detection **module** (PDM), high voltage power supply **module**, temperature heating control **module**, and **system** control **module**. PDM is composed of traveling mini-type working **platform**, optical path, chip **bracket**, and high voltage electrode **bracket**. First lens set, first filter, second lens set, and half transparent and half reflective mirror (HTRM) are setup along direction of laser **beam**. HTRM is placed at 45 degrees with laser **beam**. The chip **bracket** is place on direction of reflecting **beam** of HTRM. After passing through HTRM, excited fluorescence **beam** reflected from the microflow-controlled chip enters into reflector with diverter switch and CCD detector. Second filter, third lense set, diaphragm, and photomultiplier are setup on reflected light path. The chip instrument possesses functions of PCR amplification, and electrophoresis on chip, DNA segment separation, and co-focusing laser induced fluorescent scanning etc.

[SS 13] ..li 4-11



4/11 © EPODOC / EPO

PN - [CN107677608](#) A 20180209

PR - CN201610621763 20160802

AP - CN201610621763 20160802

DT - I

CT - || STSE (A)
[JP2005172774](#) A 20050630 [A] (SEMICONDUCTOR RES FOUND)
 [A] 1
 * 全文 *;
[JP2005172779](#) A 20050630 [Y] (SEMICONDUCTOR RES FOUND)
 [Y] 1
 * 说明书第18段、第25段、第30段、图3及图6 *;
[US2012037804](#) A1 20120216 [A] (FEDERICI JOHN F [US])
 [A] 1
 * 全文 *;
[US2012261575](#) A1 20121018 [A] (AVERITT RICHARD [US], et al)
 [A] 1
 * 全文 *;
[CN103575654](#) A 20140212 [A] (HUBEI JIUZHUYANG INFRARED SYSTEM CO LTD)
 [A] 1
 * 全文 *;
[CN103634044](#) A 20140312 [A] (BEIJING INST RADIO METROLOGY & MEASUREMENT)
 [A] 1
 * 全文 *;

[CN104280786](#) A 20150114 [Y] (UNIV HEBEI UNITED)

[Y] 1

* 说明书第21-28段及图1 *

- CI - G01N21/17 (CN)
- PA - BEIJING REMOTE SENSING EQUIPMENT INST
- TI - Terahertz quasi-optical active scanning reflection imaging **system**
- AB - The invention discloses a terahertz quasi-optical active scanning reflection imaging **system**, which comprises a terahertz source (1), a diagonal horn (2), a chopper (3), a receiving detector (8), a scanning **bracket** sampling **platform** (7), a data acquisition **module** (9) and a measurement control and data processing **module** (10), and further comprises: a **beam** splitter (5), a Fresnel lens A (4) and a Fresnel lens B (6). Compared to the closest existing device, the terahertz quasi-optical active scanning reflection imaging **system** of the present invention has the following characteristics that the beamsplitter can effectively avoid the image distortion, and the two Fresnel lenses can significantly reduce the **beam** waist radius of the terahertz wave and improve the spatial resolution of the imaging, such that the improved target transmission image can be obtained.

5/11 © EPODOC / EPO

PN - [CN107560656](#) A 20180109

PR - CN201710782789 20170903

AP - CN201710782789 20170903

DT - I

CT - || STSE (A)
[CN101477359](#) A 00000000 [A]
[A] 1-2
* 全文 *;
[CN202351671U](#) U 00000000 [A]
[A] 1-2
* 全文 *;
[CN202735798U](#) U 00000000 [Y]
[Y] 1-2
* 说明书第6-28段, 附图1 *;
[US2015069060](#) A1 00000000 [A]
[A] 1-2
* 全文 *;
[CN104677418](#) A 00000000 [Y]
[Y] 1-2
* 说明书第26-31段, 附图1-2 *

PA - CITIC HIC KAICHENG INTELLIGENT EQUIPMENT CO LTD

TI - **System** and method for detecting open state of well lid and locating well lid based on rail robot

AB - The invention discloses a **system** and method for detecting the open state of a well lid and locating the well lid based on a rail robot. The **system** includes a rail robot device, an I-**beam** rail, an RFID geographical tag, a mounting **bracket**, a wifi base station, and a data analysis **platform**. The rail robot device includes: a rail robot body, a RFID reader,

an illumination sensor, a microprocessor, a power **module**, a lithium battery and a motor. The rail robot is equipped with the illumination sensor. Each well lid is provided with a RFID geographical tag. When detecting a light source with specific intensity in a running process on the rail, the robot determines a position by means of RFID and determines whether the well lid at the position is open so as to determine the position of the open well lid. The **system** avoids casualties caused by the theft and the damage of well lids in urban streets and has a great value to the application and promotion of various urban large and medium-sized underground galleries.

6/11 © EPODOC / EPO

PN - [CN206454282U](#) U 20170901
 PR - CN201621245370U 20161118
 AP - CN201621245370U 20161118
 DT - I
 PA - GUANGXI NANNING MOMA CULTURE COMMUNICATION CO LTD
 TI - Photoelectricity bamboo pole dance stage **system**
 AB - The utility model discloses a photoelectricity bamboo pole dance stage **system**, including receiving arrangement and the numerical control banks **module**, projection imaging **module**, the intelligent smoking control **platform module** that connect in parallel with drive circuit respectively, numerical control banks **module** includes intelligent lamp and control intelligent lamp's sound console, receiving arrangement is used for accepting the projection by the projection imaging **module** of numerical control backstage **module** control. The utility model discloses utilize the light **beam** to replace the entity bamboo pole, replaced manual operation's bamboo pole dance, not only make the exclusive amusement mode of this minority no longer be limited by operating personnel, make this exclusive minority artistic as extensively to promote, solved the difficulty of activity tissues such as personnel, place, stage property in addition, make the participant of any age **bracket** all can participate in at any time, still avoided the problem of jumping the easy tumble injury of dancer, falling.

7/11 © EPODOC / EPO

PN - [CN205309597U](#) U 20160615
 PR - CN201521136841U 20151230
 AP - CN201521136841U 20151230
 DT - I
 PA - HAN'S LASER TECH IND GROUP CO LTD
 TI - Laser cutting machine production **system** and go up integrative device of unloading thereof
 AB - The utility model relates to a laser cutting machine production **system** and go up integrative device of unloading thereof. The foretell integrative device of unloading of going up for to cut the work piece and carry to the workstation from the raw materials **platform** and cut and unload the finished product to the finished product **platform**, including hanging **beam**, support, feed mechanism, unloading mechanism, slide, actuating mechanism and control assembly. The hanging **beam** includes hanging **beam** body and first guide rail, and first guide rail is fixed in on the hanging **beam** body, the support is fixed in on the hanging **beam** body, feed mechanism

includes sucking disc subassembly and sucking disc mounting **bracket**, and vacuum generator is connected with the sucking disc, unloading mechanism pitches and switch determine **module** including the material, and switch determine **module** is used for detecting the position of support and sends sensing signal, the slide is used for sliding and sets up in the workstation, actuating mechanism drive hanging **beam** body is for the table movement. The work efficiency of the integrative device of unloading is higher in the aforesaid, upper and lower material mechanism sharing support, and the part of whole device is less, and consequently, simple structure and the cost of going up the integrative device of unloading are lower.

8/11 © EPODOC / EPO

- PN - [CN204920986U](#) U 20151230
- PR - CN201520697516U 20150909
- AP - CN201520697516U 20150909
- DT - I
- PA - CHINA RAILWAY CONSTR BRIDGE ENG BUREAU GROUP CO LTD
- TI - Light -duty top pushes away sliding tunnel lining **platform** truck
- AB - The utility model provides a light -duty top pushes away sliding tunnel lining **platform** truck, include stencil assembly and stencil assembly inboard portal subassembly and the **bracket** assembly between stencil assembly and the portal subassembly and be used for a hydraulic pressure of receiving a stencil assembly receipts **module system** all, stencil assembly includes that top template and symmetry articulate left side template and the right side template in top template both sides, the portal subassembly includes that the left -hand door frame erects the roof **beam**, right portal erects roof **beam**, portal crossbeam, supporting **beam** and two portals and erects the lower longeron of installing respectively the roof **beam** lower part, the longeron supports on the piston shoes of walking rail down, the walking rail is along vertically setting up in the tunnel bottom surface, the longeron tip is equipped with jack and the guide rail clamp that vertical top pushed away down, supporting **beam** has laid the top side walk slab and driving guidance tape. The utility model discloses simplified the structure of lining cutting **platform** truck, the finite space in make full use of tunnel alleviates the dead weight of lining cutting **platform** truck greatly to production manufacturing cost has been reduced.

9/11 © EPODOC / EPO

- PN - [CN103738156](#) A 20140423
- PNFP - CN103738156B B 20160113
- PR - CN201310742664 20131230
- AP - CN201310742664 20131230
- DT - I
- CT - || STSE (A)
[CN101073986](#) A 20071121 [A] (GM GLOBAL TECH OPERATIONS INC [US]);
[CN102371886](#) A 20120314 [A] (GATE SRL);
[CN202294243U](#) U 20120704 [A] (WEIFANG HENGAN RADIATOR GROUP CO LTD);
[KR20100069043](#) A 20100624 [A] (HALLA CLIMATE CONTROL CORP [KR]);
[CN203651448U](#) U 20140618 [R] (LIFAN IND GROUP CO LTD);

[CN203186079U](#) U 20130911 [A] (CHERY AUTOMOBILE CO LTD);
[CN202319878U](#) U 20120711 [A] (CHONGQING ZHIXIN IND CO LTD);
[JPH05185848](#) A 19930727 [A] (NISSAN MOTOR)

- PA - (A)
LIFAN IND GROUP CO LTD
- TI - (A)
Mounting **bracket module** suitable for cross flow type radiator **system**
- AB - (A)
The invention discloses a mounting **bracket module** suitable for a cross flow type radiator **system**. The mounting **bracket module** comprises a radiator upper mounting **bracket** and two radiator lower mounting brackets, the radiator upper mounting **bracket** is a strip-shaped horizontal plate extending up and down, upper mounting locating pins with axes extending up and down are respectively welded to the upper portion of the left end and the upper portion of the right end of the radiator upper mounting **bracket**, bending parts vertically downwards are respectively arranged at the positions of a left rear corner and a right rear corner of the radiator upper mounting **bracket**, every bending part is provided with a first mounting hole, and second mounting holes are respectively arranged at the positions of a left front corner and a rear front corner of the radiator upper mounting **bracket**. Every radiator lower mounting **bracket** comprises a horizontal mounting **platform** and mounting supporting feet surrounding the periphery of the horizontal mounting **platform**, every horizontal mounting **platform** is provided with a counter bore, and the lower end of every mounting supporting foot is provided with an overturned edge. Upper **beam** mounting pin hole sites and lower **beam** mounting pin hole sites of a water tank are not changed, and the shortcoming of the stress capability of the radiator **system** in the travelling process can be effectively overcome.

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- DT - I
- PA - HANGZHOU DAHE THERMO MAGNETICS CO LTD
- TI - Semi-automatic assembling device of thermoelectric cooling **module**
- AB - The utility model discloses a semi-automatic assembling device of a thermoelectric cooling **module**, comprising a **bracket**, a moving bed, a machine body and an electronic control **system**, wherein the **bracket** comprises uprights and a **beam**; the moving bed is arranged between the uprights; the moving bed comprises a bed body, a horizontal guide rail arranged on the bed body and a working **platform** which is arranged on the horizontal guide rail and is capable of sliding along the horizontal guide rail; the working **platform** is provided with a plurality of working areas; the machine body comprising a vertical plate, a lifting guide rail, a lifting cylinder and a fixed seat is arranged on the **beam**; the fixed seat is provided with a rotary cylinder; and a rotating shaft of the rotary cylinder is provided with a vacuum mechanical arm. According to the semi-automatic assembling device of the thermoelectric cooling **module** provided by the utility model, the vacuum mechanical arm is used for replacing the manual operation in the assembling process, and the moving bed is used for transferring

assembly parts, so that the work efficiency is increased, and the assembling precision is improved; and in addition, reciprocation and rotation are realized by using pneumatic elements, so that the structure is simplified, and the production cost is lowered.

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- (B)
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TI - (A B)
Integrated multifunction chip instrument

AB - (A B)
The multifunctional chip instrument includes photoelectric detection **module** (PDM), high voltage power supply **module**, temperature heating control **module**, and **system** control **module**. PDM is composed of traveling mini-type working **platform**, optical path, chip **bracket**, and high voltage electrode **bracket**. First lens set, first filter, second lens set, and half transparent and half reflective mirror (HTRM) are setup along direction of laser **beam**. HTRM is placed at 45 degrees with laser **beam**. The chip **bracket** is place on direction of reflecting **beam** of HTRM. After passing through HTRM, excited fluorescence **beam** reflected from the microflow-controlled chip enters into reflector with diverter switch and CCD detector. Second filter, third lense set, diaphragm, and photomultiplier are setup on reflected light path. The chip instrument possesses functions of PCR amplification, and electrophoresis on chip, DNA segment separation, and co-focusing laser induced fluorescent scanning etc.