

Search history

Search step	Result(s)	Query
1	9571	((MODULAR AND BUILDING AND CONSTRUCTION) AND CONNECTOR)/BI/SA/KEYW/IN/PA

100 Documents

Publication numbers	Title	Current assignees
CA2995397 A1	Connector for a modular building	Z MODULAR HOLDING
WO200827234 A2	System for modular building construction	GLOBAL BUILDING MODULES
KR20160074981 A	Joint construction method of floor base and pillar for modular unit structure using partial reclaimed connecting member	KOREA INSTITUTE OF CONSTRUCTION TECHNOLOGY
CN106812184 A	Building modular same-layer draining device and installing method thereof	PUYANG CITY MINGRUI BUILDING ENERGY SAVING TECHNOLOGY
AT200500584 A	Prefabricated roof construction kit	LUKAS LANG BUILDING TECHNOLOGIES
WO9310315 A1	Connector means for roof panels	ROYAL BUILDING SYSTEMS
CN108222337 A	Fabricated steel structure building externally-hung wall plate and modular mounting method thereof	XUZHOU ZHONGHUA HAN TAI CONSTRUCTION INDUSTRIAL, ...
US5701715 A	Tie connector for modular buildings	BUILDING TECHNOLOGIES
KR101705260 B1	Joint structure of core and modular structure for modular building and construction method therefor	KOREA INSTITUTE OF CONSTRUCTION TECHNOLOGY
WO201359877 A1	Connector for a modular building	INNOVATIVE CONSTRUCTION & DEVELOPMENT
WO200061885 A1	Modular building construction and components thereof	BUILDING MATERIAL DISTRIBUTORS
CN203701360U U	Fast house-building modular metal surface curtain wallboard unit and composite wall	SHENZHEN CHIXIAO BUILDING TECHNOLOGY
CN208857967U U	Modular building connection node structure	SHANGHAI XUNZHU BUILDING TECHNOLOGY
JP50006122 A	Industrialised building systems ltd buildings	INDUSTRIALISED BUILDING SYSTEM
CN108867877 A	Modular building connecting joint structure	SHANGHAI XUNZHU BUILDING TECHNOLOGY
CN204826615U U	Building energy conservation template is exempted from to tear open by modular	ZHEJIANG KEDA NEW BUILDING MATERIALS
CN103343573 A	Modular building with high bearing performance and capable of being produced in industrialized mode and being dismantled and installed rapidly	PRODIGY GREEN BUILDING R & D (CHONGQING) CO
US20140123573 A1	Modular building unit connection system	FULL STACK MODULAR

Publication numbers	Title	Current assignees
CN108316464 A	High-rise modular building and construction method thereof	SHANGHAI HANTAI STEEL MEMBRANE STRUCTURE CONSTRUCTION
CN108726120 A	Rotary transfer platform for assembly building modular house production line	ATLANTIC MODULAR SYSTEM
IL--37086 A	Modular building construction and erection system utilizing selectively oriented modules	BUILDING BLOCK MODULES
CN108729541 A	Construction method of connecting beam type spliced building structure	HUBEI PEIHAN CONSTRUCTION
WO200626444 A2	Modular building roof-rim parapet structure	R J S, ...
CA2134959 A1	Fire rated modular building system	ROYAL BUILDING PRODUCTS, ...
KR101679666 B1	Core structure dor modular building and constructio method therefor	KOREA INSTITUTE OF CONSTRUCTION TECHNOLOGY
KR20090092533 A	Attachment of Unit Modular System, Modular Unit And Manufacturing Method of The Modular Unit	KOREA INSTITUTE OF CONSTRUCTION TECHNOLOGY
KR20090092541 A	Attachment of Unit Modular System, Modular Unit And Manufacturing Method of The Modular Unit	KOREA INSTITUTE OF CONSTRUCTION TECHNOLOGY
CN208857959U U	Modular building structure for steel biasing force of the connection node device	SHANGHAI XUNZHU BUILDING TECHNOLOGY
US3808761 A	Modular building construction	IMPERIAL MODULAR SYSTEMS VANCOUVER BRITISH COLUMBIA
KR20090092540 A	Attachment of Unit Modular System, Modular Unit And Manufacturing Method of The Modular Unit	KOREA INSTITUTE OF CONSTRUCTION TECHNOLOGY
US20090293393 A1	System and method for anchoring a modular building	BUILDING TECHNOLOGIES
KR20090092539 A	Attachment of Unit Modular System, Modular Unit And Manufacturing Method of The Modular Unit	KOREA INSTITUTE OF CONSTRUCTION TECHNOLOGY
KR20090092537 A	Attachment of Unit Modular System, Modular Unit And Manufacturing Method of The Modular Unit	KOREA INSTITUTE OF CONSTRUCTION TECHNOLOGY
KR20130034385 A	Modular unit with connector and floor heating plate	KOREA INSTITUTE OF CONSTRUCTION TECHNOLOGY
US20130109267 A1	Modular kinematic construction kit	MODULAR ROBOTICS
CN103711320 A	Installation method of modular metal curtain wallboard units of high-rise rapidly-built building	SHENZHEN CHIXIAO BUILDING TECHNOLOGY

Publication numbers	Title	Current assignees
AU2012100824 A4	Multistorey building	INNOVATIVE CONSTRUCTION & DEVELOPMENT
CN208563587U U	Method for multi-level modular construction of the corner fitting and its coupled node structure	CHINA CONSTRUCTION MODULAR HOUSING, ...
CN203475605U U	High-bearing performance modular building capable of being produced in industrialized manner and rapidly disassembled and assembled	PRODIGY GREEN BUILDING R & D (CHONGQING) CO
CN105544864 A	Box column structure for 3D modular house building	WENDENG LANDAO BUILDING ENGINEERING
US6457281 B1	Modular building systems	TERON INTERNATIONAL BUILDING TECHNOLOGIES
WO2018121736 A1	Modular same-floor drainage device for building and installing method therefor	PUYANG OCTAVIA BUILDING ENERGY SAVING TECHNOLOGY
CN207402953U U	A modular mold , vertical mould subassembly and prefabricated coincide wall structure for building prefabricated coincide wall body	CHENGDE LVJIAN BUILDING ENERGY SAVING TECHNOLOGY
CN206722109U U	Modular heated board for building	SHANDONG RONGTAI CONSTRUCTION ENGINEERING
CA2081651 A1	Modular prefabricated building panels	INNOVAT CONSTRUCTION SYSTEMS I
WO201111084 A1	Modular robotics	MODULAR ROBOTICS
US5103604 A	Modular building systems	TERON INTERNATIONAL BUILDING TECHNOLOGIES, ...
CN109653378 A	Fully assembled modular multi-layer structure and its construction processes low	CHENGDU JIANGONG INDUSTRIALIZATION CONSTRUCTION
WO200011282 A2	Modular building structures comprised of extruded components	CRANE BUILDING PRODUCTS
KR101413134 B1	Joint system of modular unit structure and base using cross connector	KOREA INSTITUTE OF CONSTRUCTION TECHNOLOGY
CN104533097 A	Recursive stair type construction method for fabricated multi-layer building	CHINA CONSTRUCTION EIGHTH ENGINEERING DIVISION
CN104878932 A	Formwork construction method adopting block-building method	KUNSHAN ZHENG TU CONSTRUCTION FORMWORK APPLICATION TECHNOLOG

Publication numbers	Title	Current assignees
		Y
GB1393790 A	Modular building construction and erection system utilizing selectively oriented modules	BUILDING BLOCK MODULES
CN103850439 A	Modular house construction method	BEIJING TIANGONG CHUANGDAO BUILDING TECHNOLOGY
CN109736501 A	Modular building ceiling structure and its construction method	BUILDING DREAM HIGH TECHNOLOGY CONSTRUCTION
CN105484369 A	Square steel column fixing structure for modular building	WENDENG LANDAO BUILDING ENGINEERING
CN105544969 A	Formwork bar laying construction method, combined type splitting formwork and formwork quick connector	QINGDAO JIANAN CONSTRUCTION, ...
CN102182302 A	Building construction all-steel mold plate and manufacturing and assembling method thereof	CHINA CHEMICAL ENGINEERING SECOND CONSTRUCTION
CN101761245 A	Assembled portable ladder for building construction layer	HUNAN CHANGDA CONSTRUCTION
KR20130034386 A	Modular unit with connector and floor heating plate	KOREA INSTITUTE OF CONSTRUCTION TECHNOLOGY
US20060276100 A1	Interfacings between block type and rod and connector type construction toy sets	BASIC FUN
CA2089025 A1	Molded cladding for building structures	ROYAL TECHNOLOGIES
CN101845849 A	Large-span steel gallery erected between new building and old building and construction method thereof	SECOND CONSTRUCTION ENGINEERING
CN102864936 A	Combination lifting construction method for large-scale high hollow building roof of steel structure	NANTONG UNIVERSITY, ...
CN208618566U U	May be a modular building activities barracks	YUNNAN JIAN JIAN CONSTRUCTION MACHINERY
CN105369982 A	3D modular circular column for building	WENDENG LANDAO BUILDING ENGINEERING
GB9402997 D0	A system for constructing a dismantlable prefabricated modular building	J & J BUILDING SERVICES
CN206859466U U	Assembled composite external wall goes along with sb. to guard him modular construction	JINQIANG BUILDING MATERIAL TECHNOLOGY
KR101773511 B1	Slab using engineered lumber and extendable shear connector and construction method therefor	KOREA INSTITUTE OF CONSTRUCTION TECHNOLOGY
CN108999044 A	Modular subgrade box and steel trestle platform structure	BEIJING URBAN

Publication numbers	Title	Current assignees
	and construction method thereof	CONSTRUCTION
CN105735633 A	Material-saving type modular plastic formwork and construction method thereof	CHINA STATE CONSTRUCTION ENGINEERING, ...
WO2017205910 A1	Improvements in building systems, panel systems, and formwork systems, panels and formwork for building & methods of building using panels and formwork	FAST BUILD SYSTEMS
CN107419901 A	Construction engineering integrated 3D printing and building system and use method thereof	SHANGHAI CONSTRUCTION
CN108755944 A	Construction method of composite connecting assembly-type building structure	HUBEI PEIHAN CONSTRUCTION
CN208009631U U	Frame construction and structure system are connected to three -dimensional modularization building	CHINA CONSTRUCTION STEEL STRUCTURE
CN206591710U U	Steel construction factory building top lid mounting structure	HENAN UNIVERSITY OF URBAN CONSTRUCTION
CN105429438 A	Cabinet-type frequency converter for construction hoist and construction hoist	JOINHAND CONSTRUCTION MACHINERY, ...
CN208430680U U	Modular building curtain	WUHAN BOHONG CONSTRUCTION
CN203603455U U	Tool type hanger suitable for construction of vertical structure of super high-rise building	CHINA CONSTRUCTION FOURTH ENGINEERING DIVISION, ...
CN105756380 A	Construction method of multi-layer large-span assembled integral space steel grid box-type structure factory building	NO 1 CONSTRUCTION ENGINEERING
CN207063699U U	Modular construction guardrail	JINAN FIRST CONSTRUCTION
KR101413131 B1	Joint system of modular unit structure and base using band connector pipe	KOREA INSTITUTE OF CONSTRUCTION TECHNOLOGY
PE9500370 A1	Housing system with structural cored hollow components	ROYAL BUILDING PRODUCTS, ...
CN105507522 A	Profile steel-wrapping material connector for 3D modularized house building	WENDENG LANDAO BUILDING ENGINEERING
CN205712564U U	Steel construction building outer wall is gone along with sb. to guard him integrated level and is assembled wallboard with decorating heat preservation	NORTHWEST UNIVERSITY FOR NATIONALITIES, ...
CN208251764U U	Modular assembly formula hybrid control building structure system	ANHUI CONSTRUCTION ENGINEERING
CN202416560U U	Assembled lightweight steel construction building framework connected by bolts completely	BEIJING CHENG DONG INTERNATIONAL MODULAR HOUSING

Publication numbers	Title	Current assignees
CN105003080 A	Construction technique of sector steel-structured building	SHANGHAI GREENLAND CONSTRUCTION
CN204920241U U	Quick construction structures of building modularization	SHENZHEN QIANDE CONSTRUCTION ENGINEERING
KR101363739 B1	Connection structure of modular unit for entire behavior of modular structure	KOREA INSTITUTE OF CONSTRUCTION TECHNOLOGY
CN104532983 A	Steel pipe concrete composite system of building and masonry construction method thereof	SUZHOU SHIHAO BUILDING MATERIAL NEW TECHNOLOGY ENGINEERING
CN108755926 A	Construction method for dry and wet type composite connecting assembly-type building	HUBEI PEIHAN CONSTRUCTION
RO-126214 A2	The procedure of building a metallic modular construction	PEGEROS IMP EXP
WO200518548 A2	Building element for constructing a modular substructure	PARVIA
CN205875666U U	A platform suspends in midair that is used for building eaves oral area position to be under construction	CHINA CONSTRUCTION SIXTH ENGINEERING DIVISION
US20190136504 A1	Apparatus and systems related to modular construction	MODULAR STEEL SOLUTIONS
CN108661235 A	Integrally-formed type modular wall of fabricated integrated house and construction method thereof	NANJING SIDANDING CONSTRUCTION TECHNOLOGY
CA2947326 A1	Structural modular building connector	VECTORBLOC
WO2018111195 A1	Modular building unit, modular building and method of assembling thereof	C S PTE, ...
FR2232417 A1	Prefabrication of moulded building panels contg. fittings - to standardise modular assembly and servicing	AUTOMATED CONSTRUCTION INDUSTRY

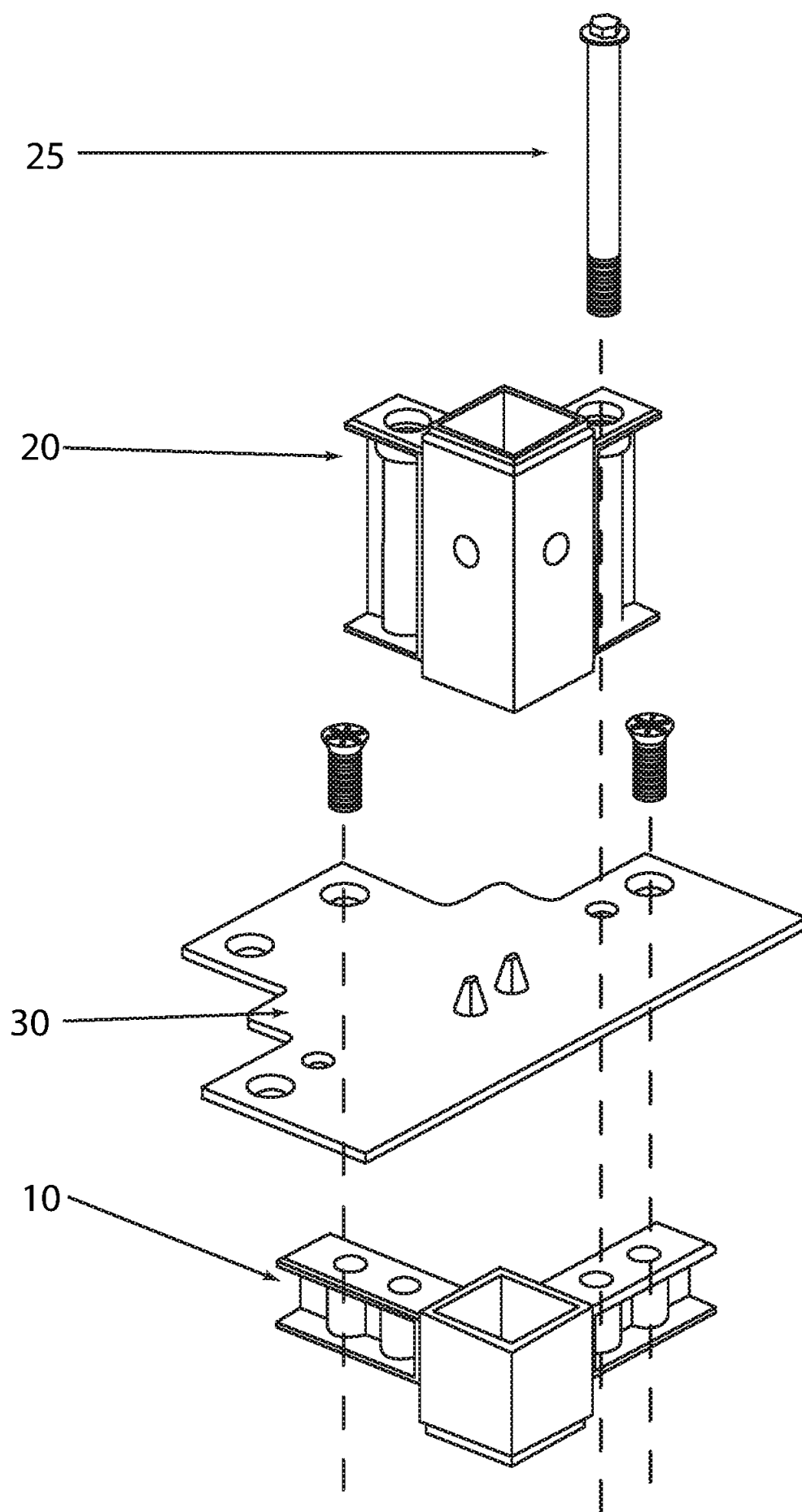
Family 1/100 - FAMPAT - ©Questel

Title

(EP3334868)

Connector for a modular building

Images



Publication data including kind & date

CA2995397	A1	2017-02-23	CA2995397
WO2017/027965	A1	2017-02-23	WO201727965
AU2016308775	A1	2018-04-12	AU2016308775
KR20180040609	A	2018-04-20	KR20180040609
MX2018001821	A	2018-06-11	MX2018001821
IN201817005845	A	2018-06-15	IN201817005845
EP3334868	A1	2018-06-20	EP3334868
CN108291397	A	2018-07-17	CN108291397
JP2018529913	A	2018-10-11	JP2018529913
US20190078321	A1	2019-03-14	US20190078321
EP3334868	A4	2019-03-20	EP3334868
BR112018002870	A1	2019-04-16	BR112018002870

**Abstract**

(EP3334868)

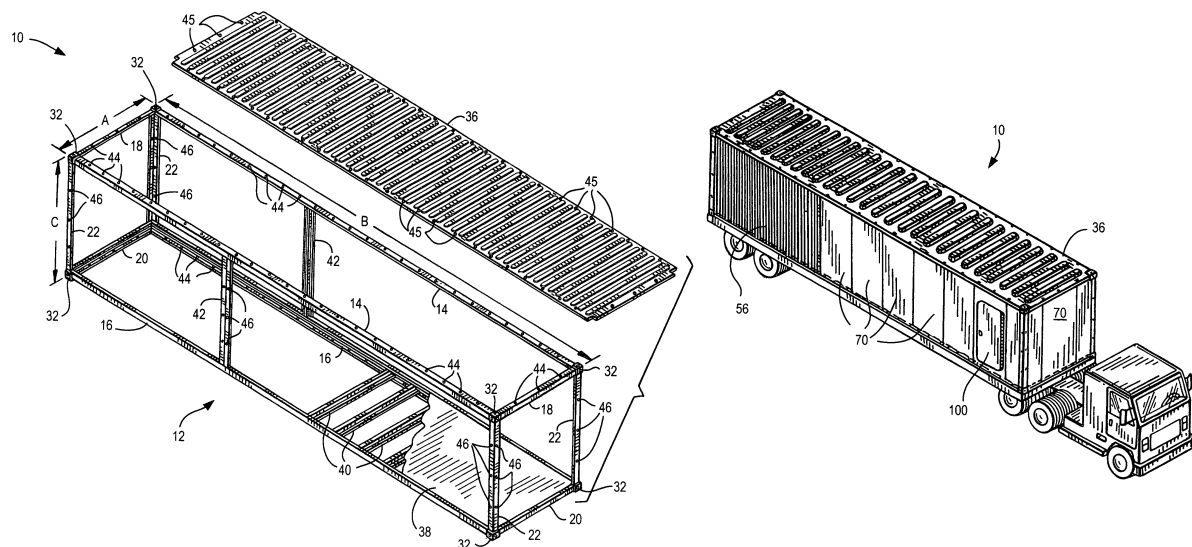
A connector assembly, having an upper connector, a pin coupling the upper connector to a lower connector and a gusset plate sandwiched between the upper and lower connectors. Also, disclosed is a hoistable connector assembly, a lifting frame assembly, a coupling system for modular frame units, a method for assembling a module unit using the connector assembly, and a modular frame unit and building having the connector assembly.

Family 2/100 - FAMPAT - ©Questel

Title

(WO200827234)

System for modular building construction

Images**Publication data including kind & date**

WO2008027234	A2	2008-03-06	WO200827234
WO2008027234	A3	2008-04-24	WO200827234
US20080134589	A1	2008-06-12	US20080134589
US7827738	B2	2010-11-09	US7827738
US20110016802	A1	2011-01-27	US20110016802
US8001730	B2	2011-08-23	US8001730
US20110252719	A1	2011-10-20	US20110252719
US8397441	B2	2013-03-19	US8397441
US20140007522	A1	2014-01-09	US20140007522



US8826600	B2	2014-09-09	US8826600
US20150007506	A1	2015-01-08	US20150007506
US9115504	B2	2015-08-25	US9115504
US20150337527	A1	2015-11-26	US20150337527
US20160160515	A1	2016-06-09	US20160160515

**Abstract**

(WO200827234)

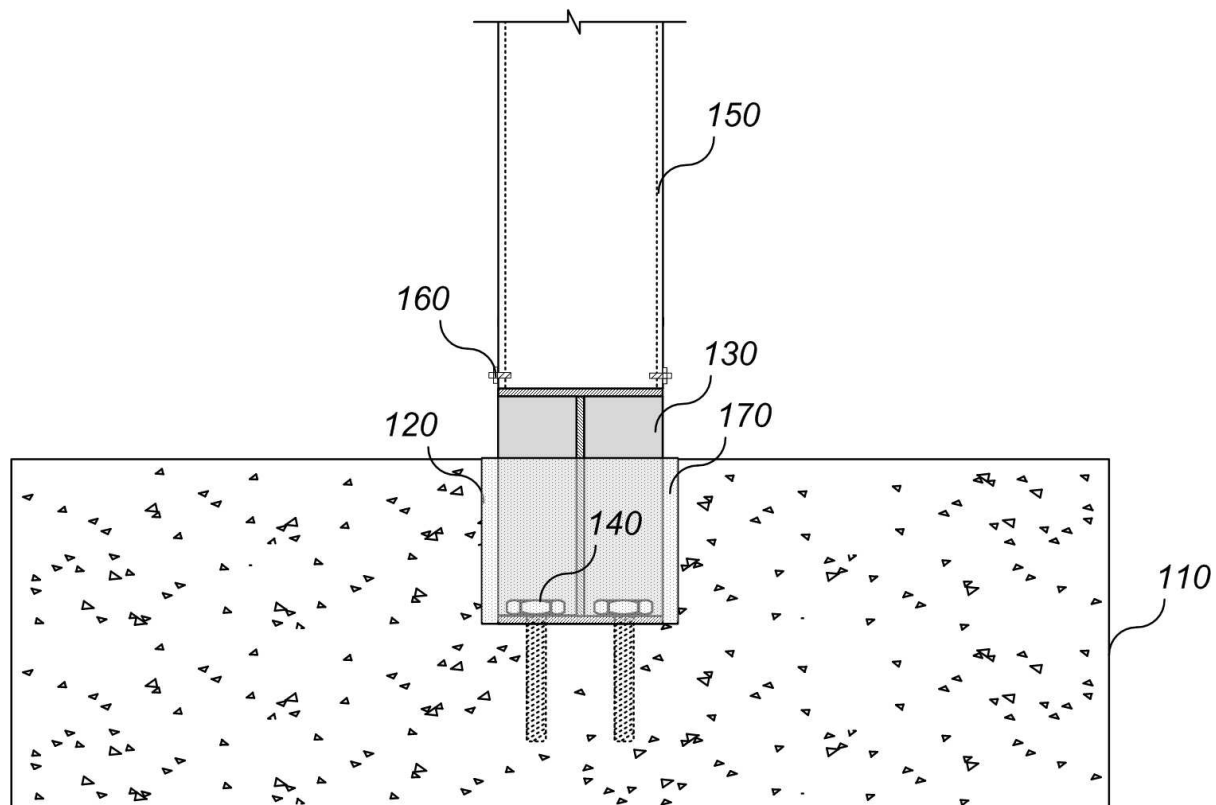
Construction systems for erecting building structures comprise a plurality of prefabricated interconnectable modular building units, each unit comprising a frame shaped as a rectangular parallelepiped and comprised of framing members and a plurality of nodes, each node situated at a corner of said frame for selective interconnection with other units, the nodes and the exterior dimensions of the frame conforming to ISO **shipping** standards such that each unit is **transportable** using the ISO intermodal **transportation** system, and such that when the units are aggregated horizontally and vertically and adjacent units are interconnected, a building structure comprising at least one habitable space is formed. The modular units are assembled in a factory remote from the job site, and are there constructed to a semi-finished state, including installation of one or more of interior fit-out systems and finishes, exterior envelope systems, plumbing systems, electrical systems, environmental systems, and fire protection systems.

Family 3/100 - FAMPAT - ©Questel

Title

(KR101639252)

Joint construction method of floor base and pillar for modular unit structure using partial reclaimed connecting member

Images**Publication data including kind & date**

KR20160074981	A	2016-06-29	KR20160074981
KR101639252	B1	2016-07-13	KR101639252

**Abstract**

(KR101639252)

The present invention provides a construction method for a joint unit of a floor base and a unit pillar of a modular unit structure using a partially embedded connection member. A joint unit is partially embedded into a floor base of a module

unit structure in advance, and the joint unit partially exposed is connected to a unit pillar in order to enable construction with high accuracy. The construction method simplifies site work by excluding site welding of the unit pillar to reduce construction periods and prevents a defect factor in advance. Moreover, an embedment hole is installed in advance, and an error generated when the unit pillar is constructed in a site is completely reduced. An end plate is installed, so tension resistance performance can be maximized. In addition, the connection member and the unit pillar are coupled by a coupling bolt, so assembly, disassembly, and reinstallation are facilitated. The construction method is advantageous to composition of the joint unit of the modular unit structure to perform Manhattanization and improves lateral force resistance of a whole frame. The construction method for a joint unit of a floor base and a unit pillar of a modular unit structure includes: a) a step of setting a partial embedment hole (120); b) a step of constructing the floor base (110); c) a step of installing the connection member (130, 130a-130d) in advance; d) a step of placing and curing a filler (170) in the partial embedment hole (120); and e) a step of completing the joint unit by connecting the unit pillar (150) to the exposed connection member (130, 130a-130d).

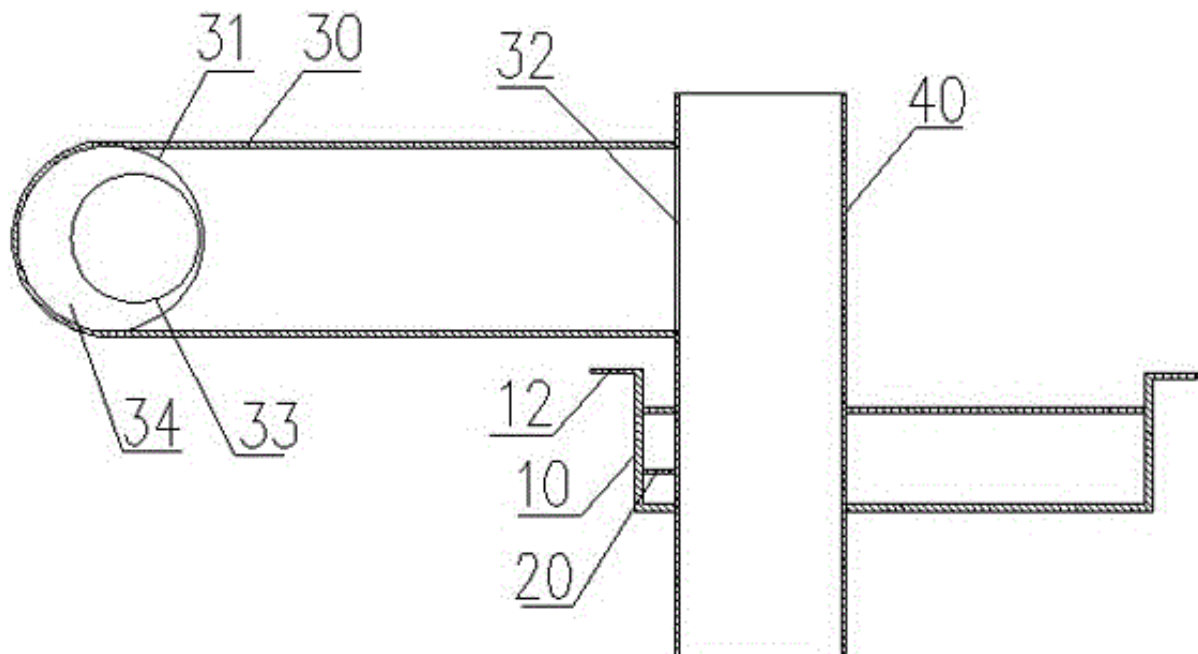
Family 4/100 - FAMPAT - ©Questel

Title

(CN106812184)

Building modular same-layer draining device and installing method thereof

Images



Publication data including kind & date

CN106812184	A	2017-06-09	CN106812184
CN108193740	A	2018-06-22	CN108193740
CN208578106	U	2019-03-05	CN208578106U



Abstract

(CN106812184)

The invention provides a building modular same-layer draining device and an installing method thereof, wherein the draining device comprises a collection box, a vertical pipe connecting pipe penetrated in the collection box and a waste water discharging opening arranged on a top cover of the collection box; a water outlet located in the collection box is arranged on the vertical pipe connecting pipe, and the waste water discharging opening is interconnected with a water outlet; the building modular same-layer draining device is characterized in that a side discharging connector for connecting a draining opening of a pedestal pan is arranged on the vertical pipe connecting pipe, and the side discharging connector comprises a flat-shaped sewage box, and a connecting end of the sewage box and the vertical pipe connecting pipe is provided with a sewage outlet; a pedestal pan connecting opening of which opening direction is perpendicular to the axial line of the vertical pipe connecting pipe is arranged on the side wall of the sewage box. The building modular same-layer

draining device is simple in structure, scientific in design, convenient to use, reliable in performance, excellent in anti-seepage effect, concentrated in water seal and able to prevent odor return, convenient to install the draining opening of the pedestal pan, and not easy to block.

Family 5/100 - FAMPAT - ©Questel

Title

(EP1624125)

Prefabricated roof construction kit

Images

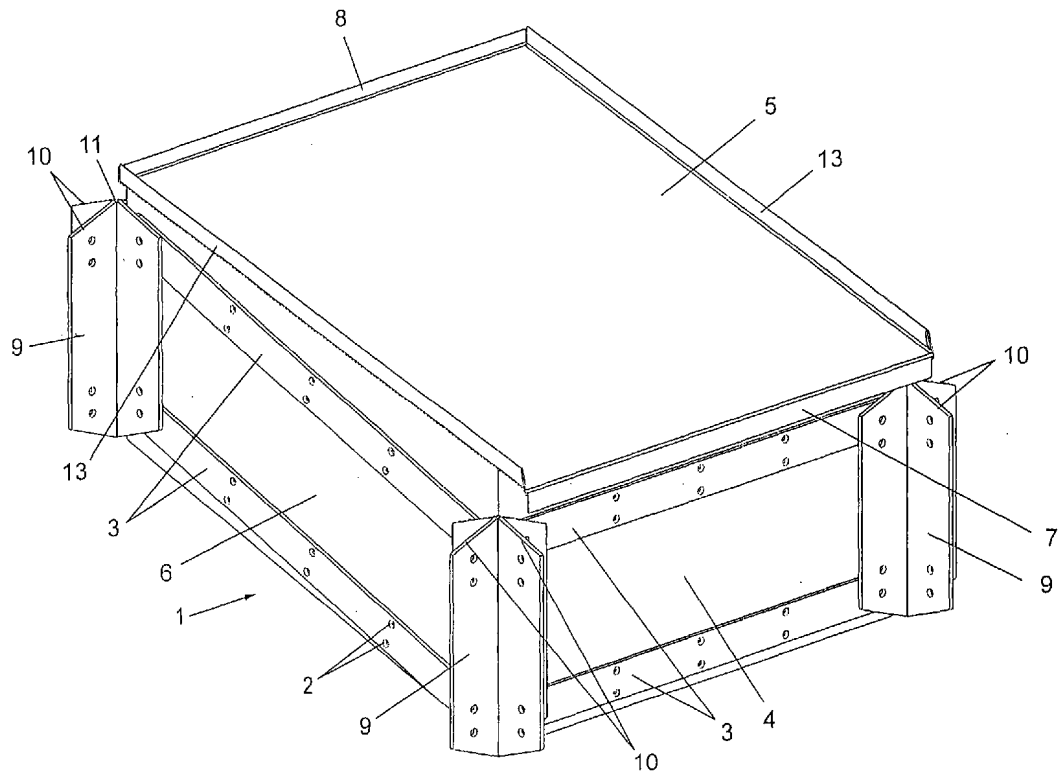


Fig. 1

Publication data including kind & date

ATA5842005	A	2005-09-15	AT200500584
ATA13272004	A	2005-09-15	AT200401327
EP1624125	A2	2006-02-08	EP1624125
AT413717	B	2006-05-15	AT-413717
AT413716	B	2006-05-15	AT-413716
EP1624125	A3	2008-12-10	EP1624125
EP1624125	B1	2011-11-02	EP1624125
AT531865	T	2011-11-15	ATE531865



Abstract

(EP1624125)

Each modular element of the building structure includes a **carrier** element (1) with connection points for adjacent **carrier** elements, and a roof covering connected to the **carrier** element, or formed integrally with it. Each modular element has a square outline in the vertical projection, the shape of the outline having equal dimensions for a defined roof inclination.

Family 6/100 - FAMPAT - ©Questel

Title

(EP-613512)

Connector means for roof panels

Images



AT162576	T	1998-02-15	ATE162576
DE69224208	D1	1998-02-26	DE69224208
ES2112917	T3	1998-04-16	ES2112917
DK0613512	T3	1998-05-04	DK-613512T
DE69224208	T2	1998-05-07	DE69224208
CA2123713	C	1998-07-14	CA2123713
GR3026641	T3	1998-07-31	GR3026641
CZ285577	B6	1999-09-15	CZ-285577
KR100234841	B1	1999-12-15	KR100234841
HU217384	B	2000-01-28	HU-217384
BRPI9206751	B1	2000-05-16	BR199206751



Abstract

(EP-613512)

A connector means (10) embodying the concepts of the present invention is adapted to secure one or more roof panels (45) to a modular building structure (12). Broadly, such a connector means (10) has a horizontally **disposed** base (61) that is adapted to engage a supporting member incorporated in the modular building (12). An inclined, plate portion (65) is supported from the base (61). The plate portion (65) is adapted to receive, and support, a roof panel (45). A locking member (55, 98) frictionally secures each roof panel (45) to the inclined plate portion (65).

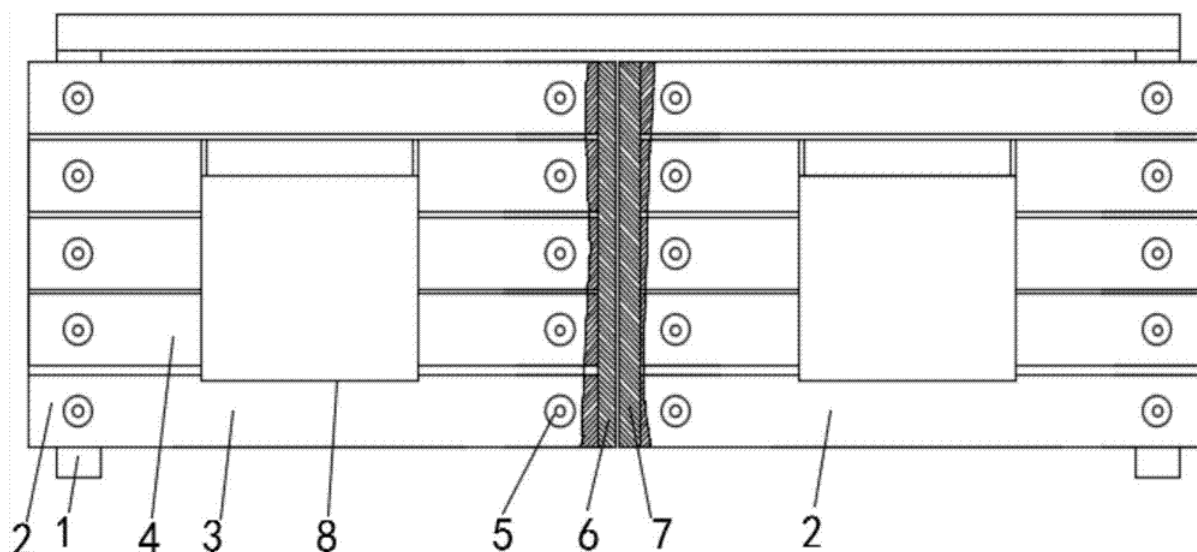
Family 7/100 - FAMPAT - ©Questel

Title

(CN108222337)

Fabricated steel structure building externally-hung wall plate and modular mounting method thereof

Images



Publication data including kind & date

CN108222337 A 2018-06-29 CN108222337



Abstract

(CN108222337)

The invention discloses a fabricated steel structure building externally-hung wall plate and further discloses a modular mounting method of the fabricated steel structure building externally-hung wallplate. The fabricated steel structure building externally-hung wall plate comprises steel structures and plate blocks fixed to the steel structures, the plate blocks comprise long plate bodies and short plate bodies, and lap joint parts are arranged on the connecting positions between the long plate bodies and the short plate bodies and the connection positions between the short plate bodies correspondingly. The two ends of the plate blocks are provided with first connecting blocks and second connecting blocks which are arranged among the upper long plate bodies, the short plate bodies and the lower long plate bodies in a vertical

crossing mode correspondingly. The ends of the long plate bodies or the short plate bodies are provided with grooves of the first connecting blocks or the second connecting blocks correspondingly. According to the fabricated steel structure building externally-hung wall plate and the modular mounting method, the grooves are formed in the ends of the plate bodies, the connecting blocks are arranged in the grooves, and thus when the connecting blocks are assembled into the plate blocks in the offline, the fit tolerance between lap joint concave parts and corresponding lap joint convex parts can be adjusted; and the plate blocks are fixed to the steel structures through bolts, **moving** of the upper plate blocks and the lower plate blocks can be avoided, the connecting blocks on vertical joints between the plate blocks can be matched, and the waterproof performance and the strength of outer wall plates are improved.

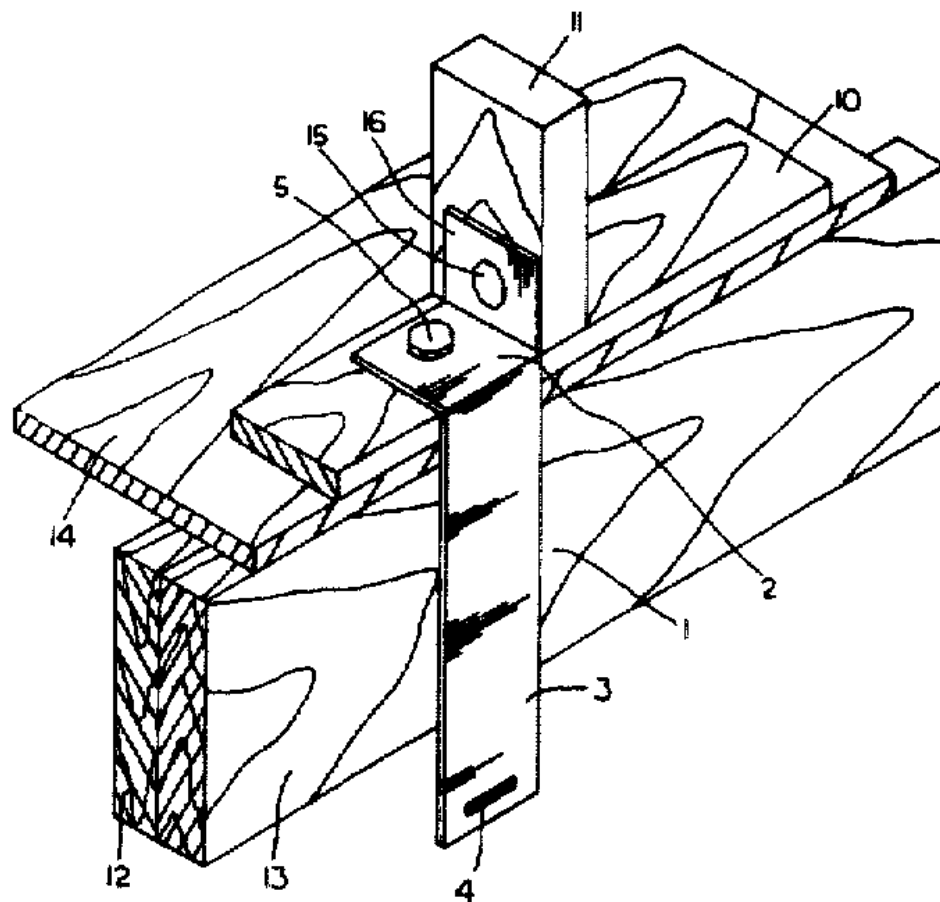
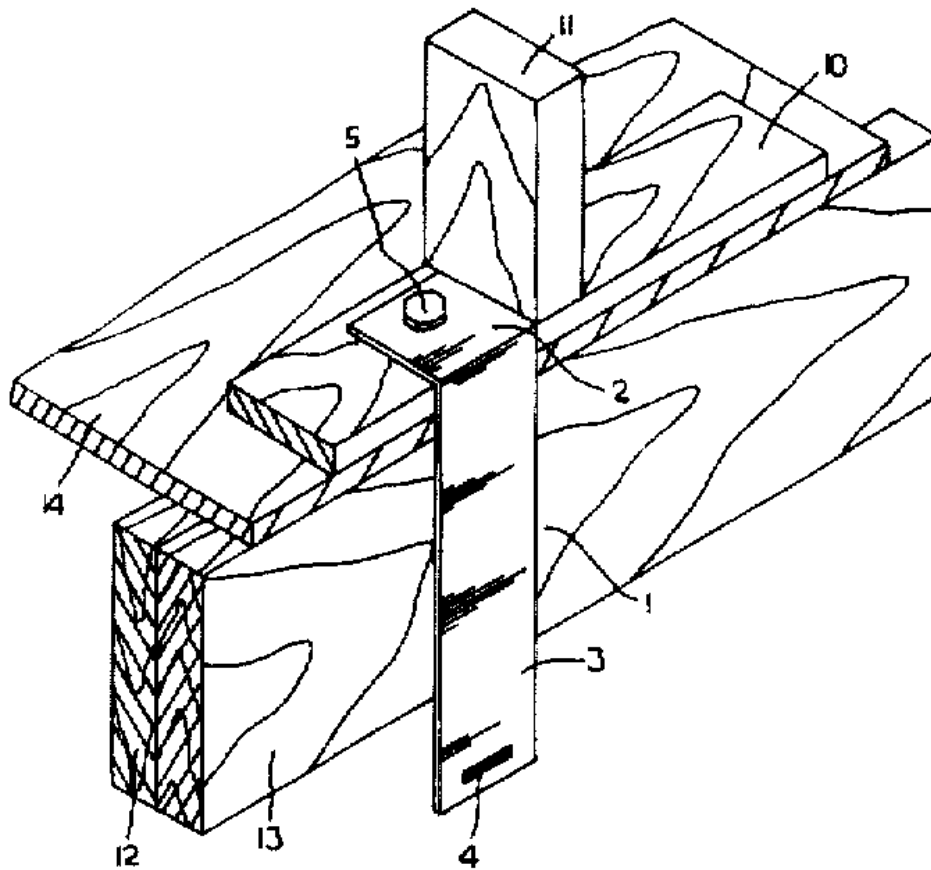
Family 8/100 - FAMPAT - ©Questel

Title

(US5701715)

Tie connector for modular buildings

Images



(US5701715)

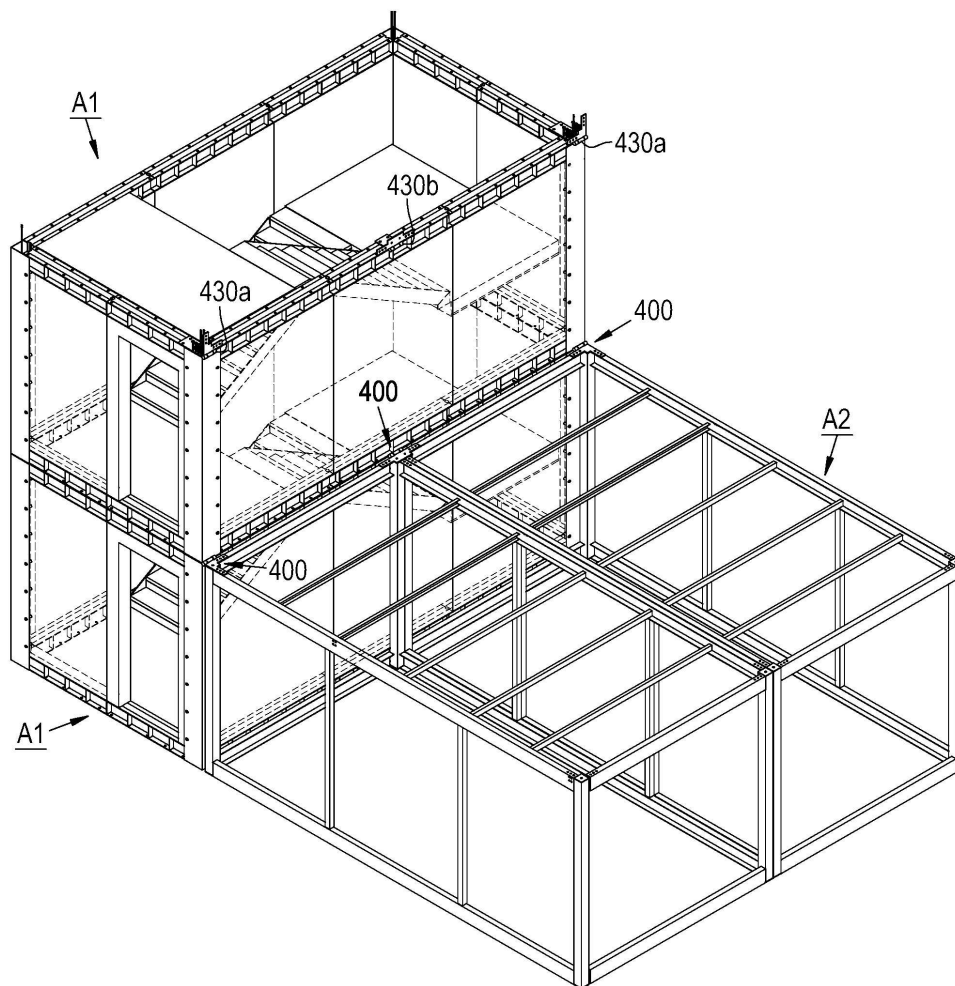
A tie connector for joining a modular type building or the like to the ground. One version of the tie connector having a substantially L-shaped body with an elongated slot through one side. The elongated slot provides an attachment site for a hurricane type strap to be inserted and coupled to a buckle. The opposite end of the tie connectors are attached to horizontal support members around the perimeter of the modular building. The hurricane straps are then inserted through the elongated slots and secured to a ground anchor. Another version of the tie connector provides a Substantially L-shaped body with an additional vertical flap that can be affixed to vertical support members giving additional stability. The elongated slot has the unique feature of rounded edges of sufficient radius thereby omitting any type of cutting effect that might occur when the straps are under high stress conditions.

Family 9/100 - FAMPAT - ©Questel

Title

(KR101705260)

Joint structure of core and modular structure for modular building and construction method therefor

Images**Publication data including kind & date**[KR101705260](#)

B1 2017-02-22 KR101705260

**Abstract**

(KR101705260)

The present invention relates to a connection structure for a core structure (A1) and a modular structure of a modular building, and a construction method for the same capable of rapidly piling and constructing a modular building while minimizing displacement due to a lateral force generated in a core structure (A1) such as an EV shaft in the modular building, and stably constructing the modular building in order for a bending moment not to be transmitted to a peripheral

modular structure. The core structure (A1) connects a complex PC structure, and the modular structure (A2) connects a steel frame structure; thus the connection structure manufactured in a shape of a box body. The core structure (A1) and the modular structure (A2) has a hinge connection structure using a middle transverse connection unit integrally fixated with a connection section steel of the core structure between corner transverse connection units.

Family 10/100 - FAMPAT - ©Questel

Title

(WO201359877)

Connector for a modular building

Images

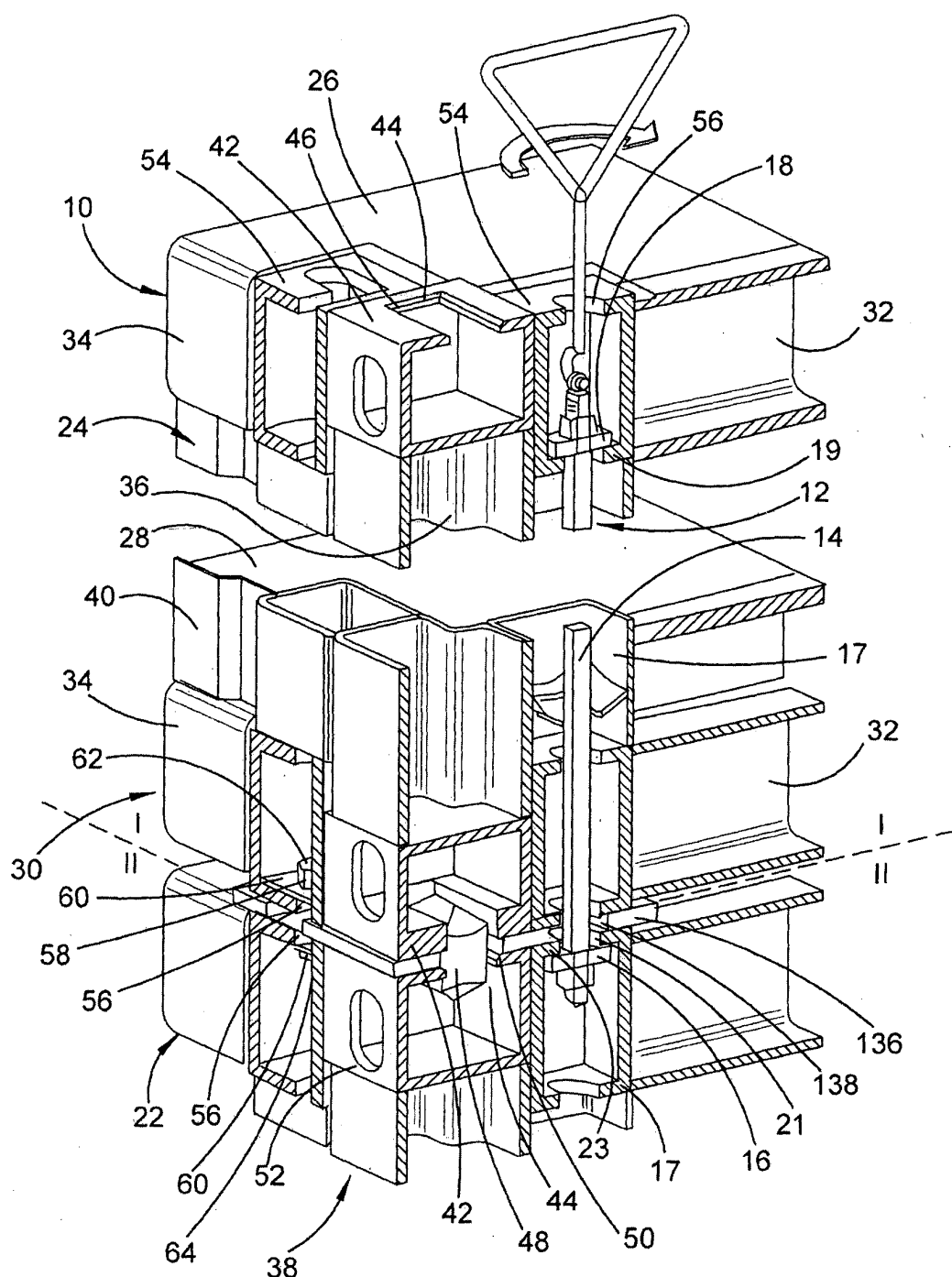


FIGURE 2

Abstract

(WO201359877)

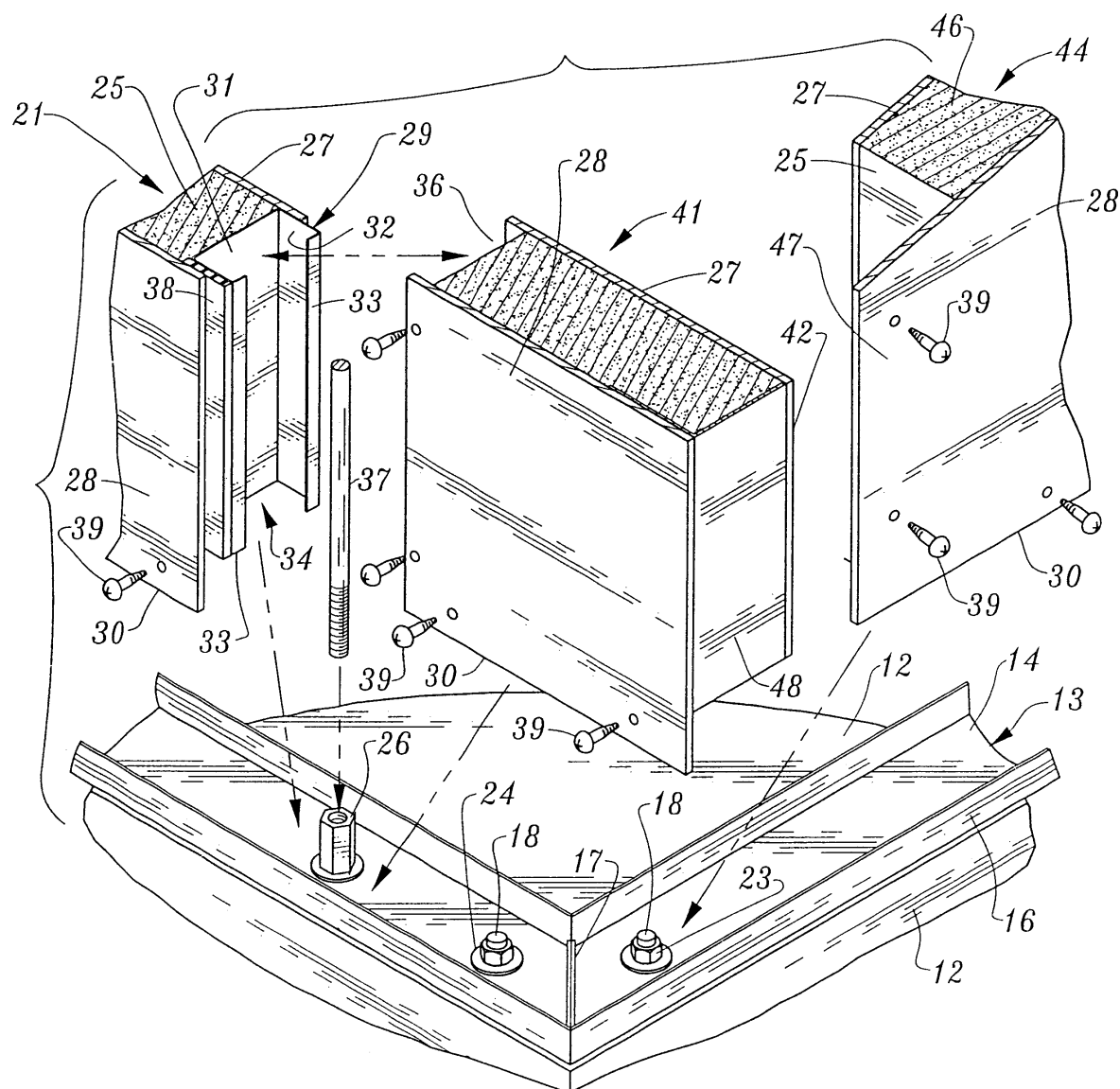
A connector for connecting a first building element to an adjacent building element, comprising: an elongate member having a first anchor at or near one end, the elongate member being adapted to lie in the first building element so that it is **moveable** In use to **move** the first anchor from the first building element into engagement with the adjacent building element; and a second anchor provided on the elongate member in spaced relation to the first anchor and to engage with the first building element, wherein the connector is actuatable in use to reduce a distance between the first and second anchors to connect the first building element with the adjacent building element.

Family 11/100 - FAMPAT - ©Questel

Title

(WO200061885)

Modular building construction and components thereof

Images**Publication data including kind & date**

WO200061885	A1	2000-10-19	WO200061885
AU2746800	A	2000-11-14	AU200027468
US6256960	B1	2001-07-10	US6256960
MXPA01010339	A	2002-10-23	MX2001PA010339

**Abstract**

(WO200061885)

A foundation (12) for a building includes anchor bolts (18) extending around the foundation periphery. A metal lower track (13) is installed over the anchor bolts (18) and secured thereto with nuts (23) and rod couplers (26). Elongated connector rods (37) are threaded onto the upper ends of the couplers (26). Pre-manufactured modular wall panels (21), integrally molded with a metal stud (29) along a first lateral edge and a complementary recess along a second lateral edge, are successively installed in the track (13). A first panel (21) is installed with an open side of the stud (29) surrounding the connector rod (37). The second, adjacent panel (21) is installed with its second lateral edge facing the stud (29). The two panels (21) are slid together to surround and enclose the connector rod (29). The process continues until the entire peripheral wall is formed. A metal upper track (51) is laid over the upper ends of the wall panels with the connector rods (37) extending therethrough. Nuts (23) are used to secure the wall, track, rod, and foundation together, applying compressive forces through the assembled components. A roof assembly (58), including modular roof panels and a ridge beam, is also described.

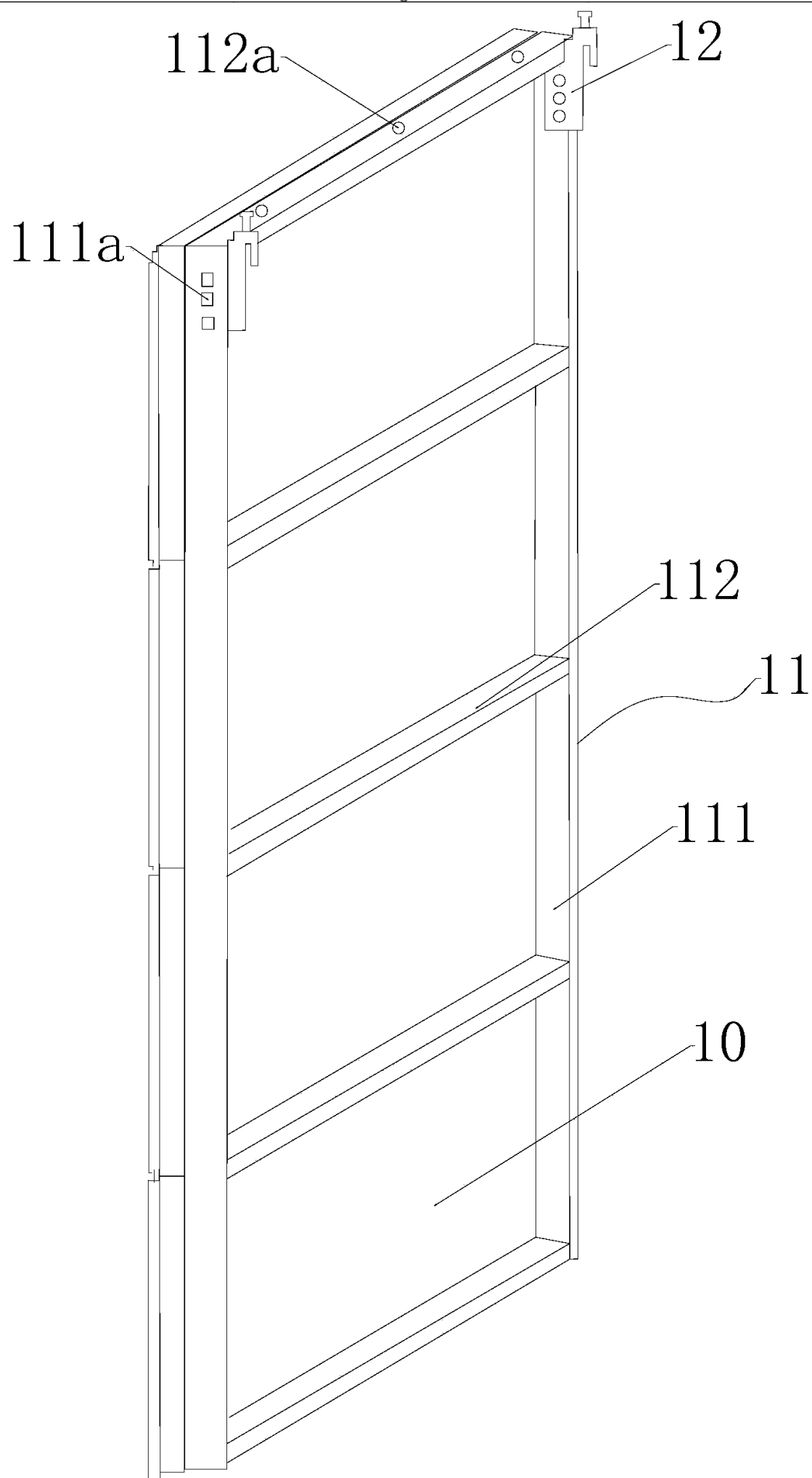
Family 12/100 - FAMPAT - ©Questel

Title

(CN203701360U)

Fast house-building modular metal surface curtain wallboard unit and composite wall

Images



Publication data including kind & date[CN203701360](#)

U

2014-07-09

CN203701360U

**Abstract**

(CN203701360U)

The utility model discloses a fast house-building modular metal surface curtain wallboard unit and a composite wall. The metal surface curtain wallboard unit is installed on the house skeleton rapidly; the surrounding outer wall of the building comprises a metal surface sandwich, a bracing frame fixedly connected to the metal surface sandwich inner side for supporting the metal surface sandwich, and at least two hooks set on the upper portion of the bracing frame for installing the metal surface curtain wallboard unit to the house skeleton. By using the metal surface curtain wallboard unit integrated with the metal surface sandwich board prefabricated in a factory, the support member and the hook, the installation process is simple and convenient, and time is short, therefore, construction period can be effectively shortened to meet demand for light steel composition generation. in addition, the operation of installing the hook on the house skeleton can be done indoor, which is in favor of avoiding safety hidden trouble because of high-altitude outdoor work, and the installation process is simple and no extra auxiliary tools are needed.

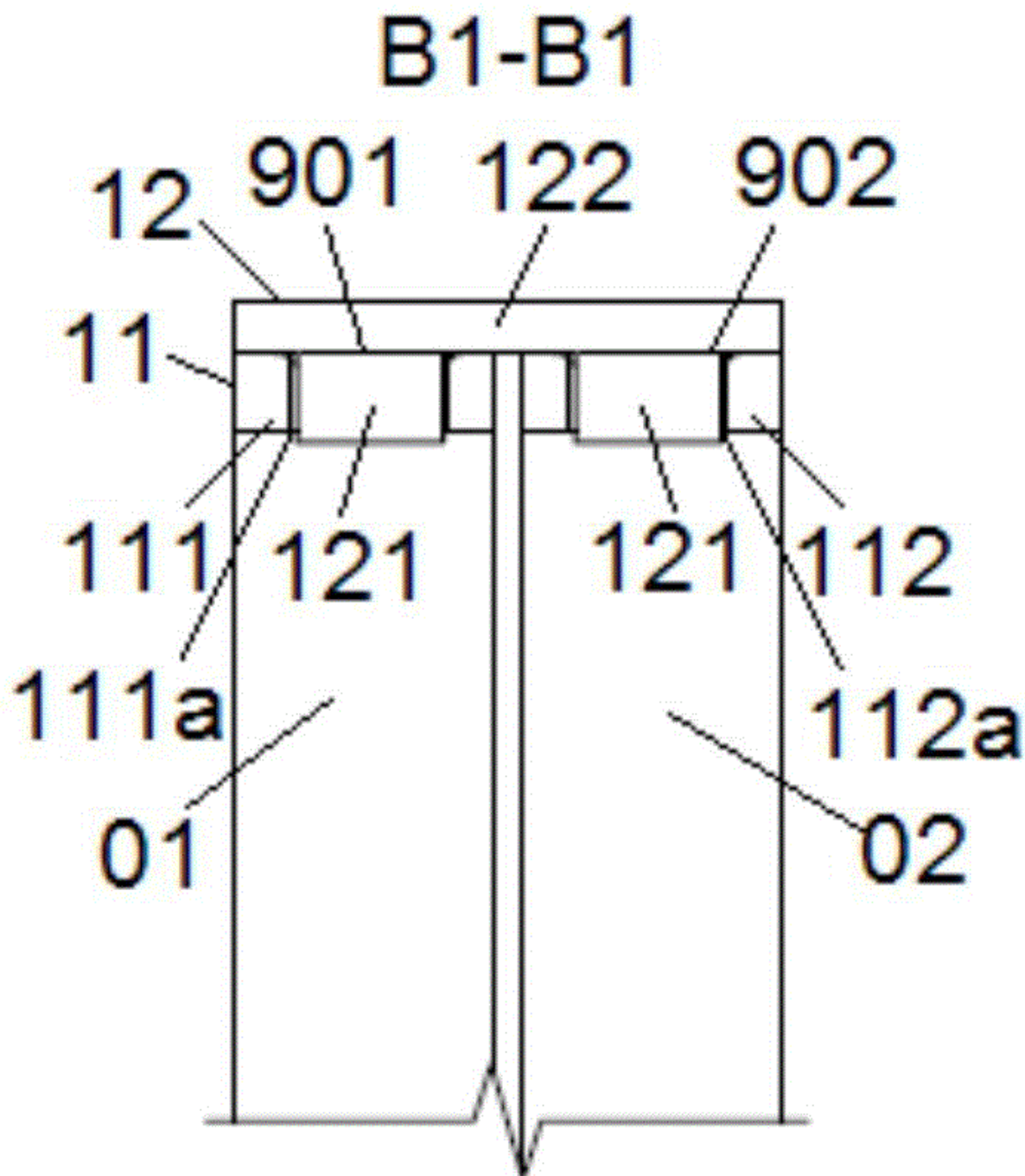
Family 13/100 - FAMPAT - ©Questel

Title

(CN208857967U)

Modular building connection node structure

Images

**Publication data including kind & date**

CN208857967

U

2019-05-14

CN208857967U

**Abstract**

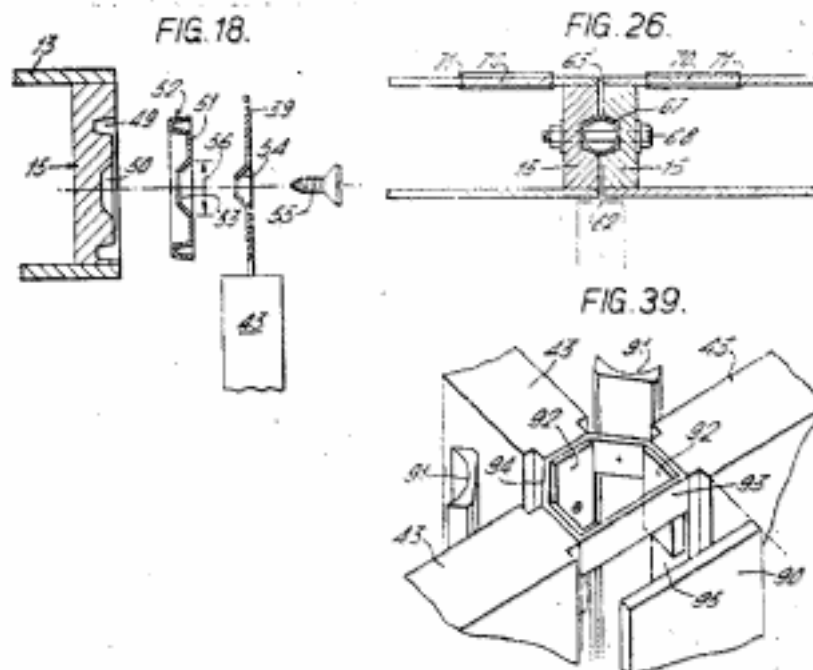
(CN208857967U)

The present utility model relates to a modular building connection node structure, is used to connect the adjacent modular building, including an end plate and the connector; end plate is located on a stud of an adjacent corner of the modular construction, with the modular construction of the lower plate or upper plate bonded, to the end plate is provided with a recess or a through-slit; connector comprises at least two projections and the connecting plate, protrusions protruding from the connecting plate, and located on one side or both sides of the connector plate, a recess or groove matching the protrusion and the end plate, can be inserted in the grooves or troughs of the end plates. The present utility model modular building connection node structure, simple structure, enabling quick connection, construction convenience; suitable for use in modular building multiple layers, it is possible to achieve a same modular construction of the four nodes (column) connection; is not sensitive to the accuracy, the accuracy of the modular construction not requiring excessive claim; in a modular building field applications, modular buildings hidden connection unit, is not exposed.

Title

(GB1455866)

Industrialised building systems ltd buildings

Images**Publication data including kind & date**

JPS506122	A	1975-01-22	JP50006122
AU6275073	A	1975-05-22	AU7362750
GB1455866	A	1976-11-17	GB1455866
IN140853	B	1977-01-01	IN-140853
CA1011914	A	1977-06-14	CA1011914
NZ178401	A	1978-07-10	NZ-178401
NZ178402	A	1978-07-10	NZ-178402
NZ169084	A	1978-07-10	NZ-169084

**Abstract**

(GB1455866)

1455866 Building constructed from room units: partitions INDUSTRIALISED BUILDING SYSTEMS Ltd 15 Nov 1973 [22 Nov 1972] 53109/73 Headings E1A and E1W A building is assembled from room units, each unit being of a size such that the central plane of each wall contains a grid line of an imaginary horizontal modular grid and further so that the central plane of any wall dividing adjacent room units (e.g. the wall shown dashed in Figure 26) contains the centre line of the join between the room units. Wall panels 43 are connected to roof or floor panels 13 by means of plates 39 which may be fixed as shown or fixed by three screws screwed directly into the panel 13. Adjacent roof or floor panels may be interconnected by the bolt 68 and rod 67 arrangement of Figure 26, **removable** discs 70 providing access to the bolt. Adjacent partition walls 43 are interconnected by a collar 93 engaged over brackets 92 on the panel edges. Cover plates 90, 91 are provided. The roof and floor panels are double skimmed and are separated by a gridtype of reinforcement, Figure 3 (not shown). The wall panels are also double-skinned with a core of e.g. fibre-board. Details are given of the mode of selecting the dimensions of the panels so as to ensure the modular arrangement of the walls, Figs. 34 - 38 (not shown).

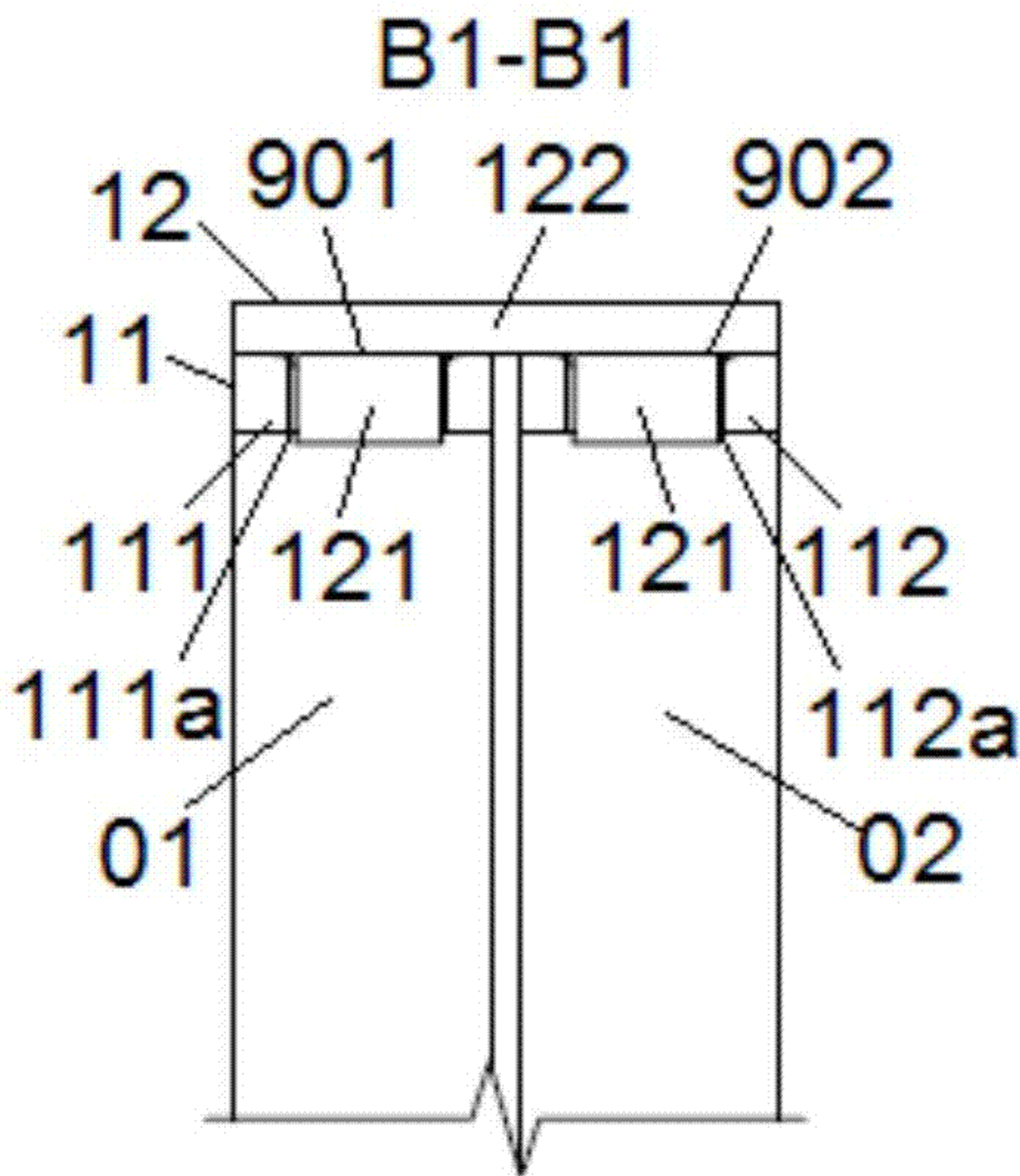
Family 15/100 - FAMPAT - ©Questel

Title

(CN108867877)

Modular building connecting joint structure

Images



Publication data including kind & date

CN108867877

A

2018-11-23

CN108867877



Abstract

(CN108867877)

The invention provides a modular building connecting joint structure. The modular building connecting joint structure is connected with an adjacent modular building, and comprises an end plate and a connector; the end plate is positioned on a stand column of an adjacent corner of the modular building, and is attached to a lower flat plate or an upper flat plate of the modular building; a groove or a through groove is formed in the end plate; the connector comprises at least two projections and a connecting plate; the projections are protruded out of the connecting plate and is positioned on one side or two sides of the connecting plate; and the projections are matched with the groove or through groove of the end plate, and can be inserted in the groove or the through groove of the end plate. The modular building connecting joint structure is simple, rapid connection can be realized, and construction is facilitated; the modular building connecting joint structure is suitable for a multi-floor modular building, and connection of four joints (columns) of the same-floor modular building can be realized; the structure is not sensitive the precision, and over-high precision requirements for the modular building are not needed; and in modular building field application, a connecting unit is concealed in the modular building, and is not visible from the outside.

exposed.

Family 16/100 - FAMPAT - ©Questel

Title

(CN204826615U)

Building energy conservation template is exempted from to tear open by modular

Publication data including kind & date

[CN204826615](#)

U

2015-12-02

CN204826615U



Abstract

(CN204826615U)

The utility model discloses a building energy conservation template is exempted from to tear open by modular, including the template cell cube, the template cell cube comprises exterior sheathing and inner formwork, form the cavity between exterior sheathing and the inner formwork, exterior sheathing and inner formwork all include interior welt and outer welt, the heat preservation has been inlaid between interior welt and the outer welt, connect through metal components between interior welt and the outer welt, and metal components is located the upper and lower both sides of template cell cube respectively and controls both ends, be provided with water flat groove mouth on the metal components on the upper and lower both sides of template cell cube, connect through horizontal metal connecting piece between two relative water flat groove mouths, be provided with the slant notch on the metal components at the left and right sides both ends of template cell cube. The utility model discloses simple structure, the practicality is strong, batch production production, modular installation not only shortening construction period reduces intensity of labour, has improved concrete quality, but also synchronous building energy conservation design standard requirement need not demolish after the construction, economic benefits is showing.

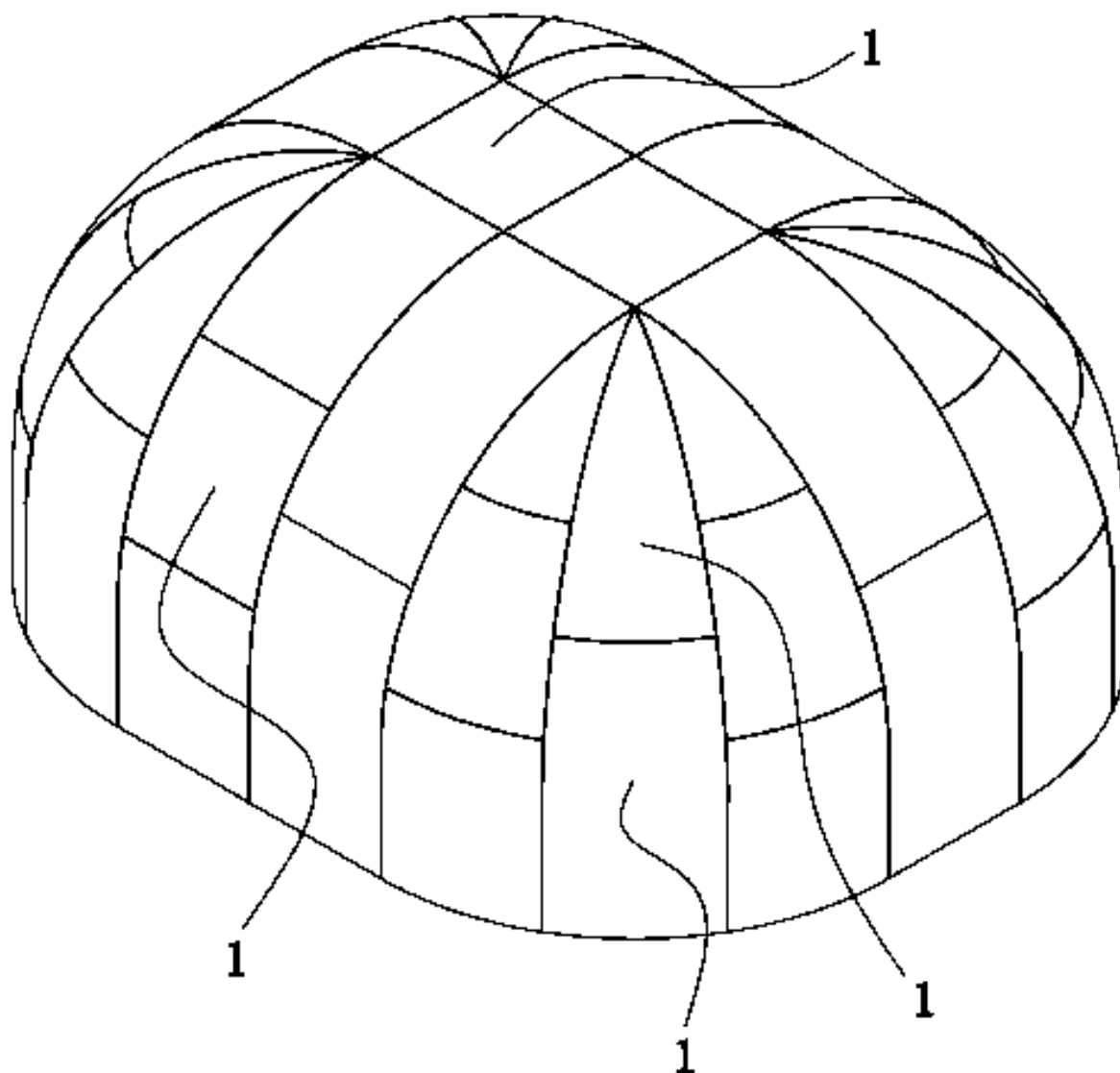
Family 17/100 - FAMPAT - ©Questel

Title

(CN103343573)

Modular building with high bearing performance and capable of being produced in industrialized mode and being dismantled and installed rapidly

Images

**Publication data including kind & date**[CN103343573](#)

A

2013-10-09

CN103343573

[CN103343573](#)

B

2015-08-19

CN103343573B

**Abstract**

(CN103343573B)

The invention relates to modular buildings, in particular to a modular building with high bearing performance and capable of being produced in an industrialized mode and being dismantled and installed rapidly. The modular building comprises a wall and a roof which are formed by brickworks, wherein a part or all of the roof and the wall form an integer, a part or all of the brickworks are formed by modules in an assembling mode, a part or all of the modules in the brickworks are internally provided with reinforcing structural parts, adjacent modules in the brickworks are connected detachably, or / and the adjacent modules are connected detachably through the reinforcing structural parts in corresponding positions. Because of the structure, the modular building has the advantages of improving the bearing performance, waterproofness, construction precision and construction progress, and reducing energy consumption and building cost.

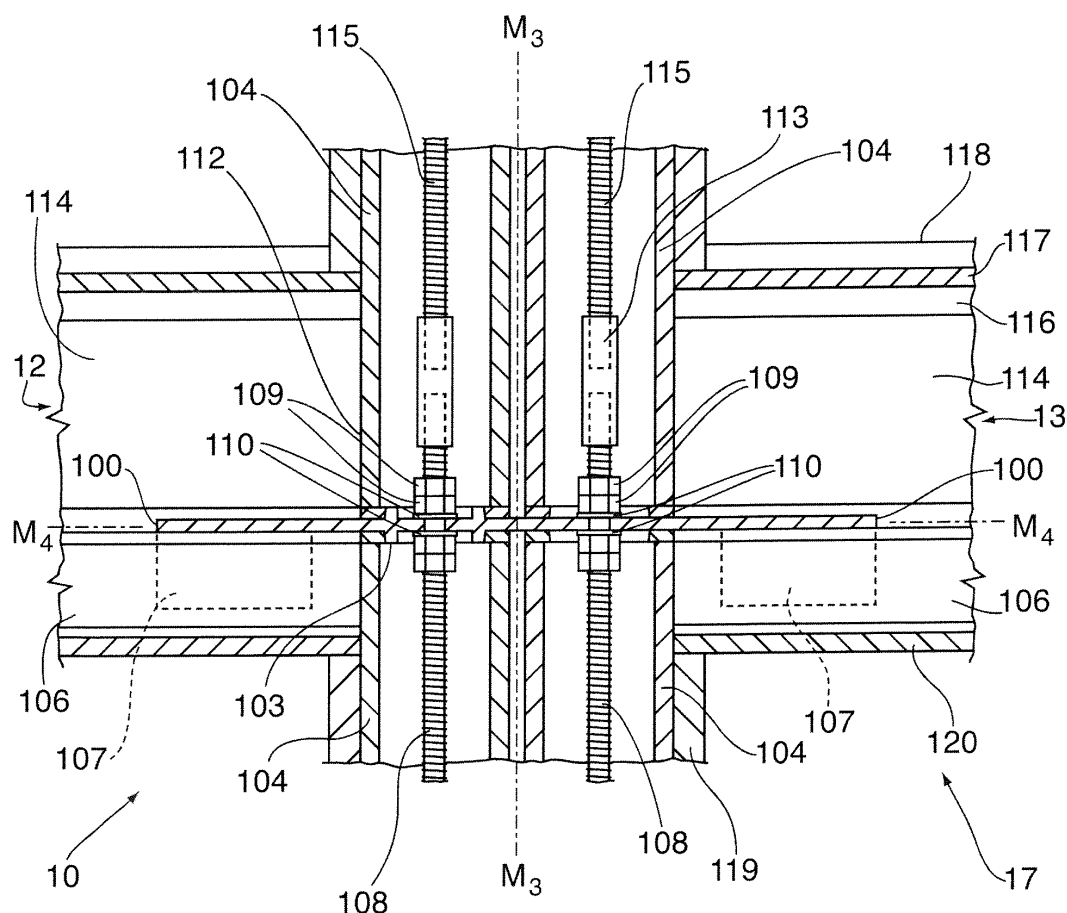
Family 18/100 - FAMPAT - ©Questel

Title

(WO201474508)

Modular building unit connection system

Images



Publication data including kind & date

US20140123573	A1	2014-05-08	US20140123573
WO2014074508	A1	2014-05-15	WO201474508
US9366020	B2	2016-06-14	US9366020



Abstract

(WO201474508)

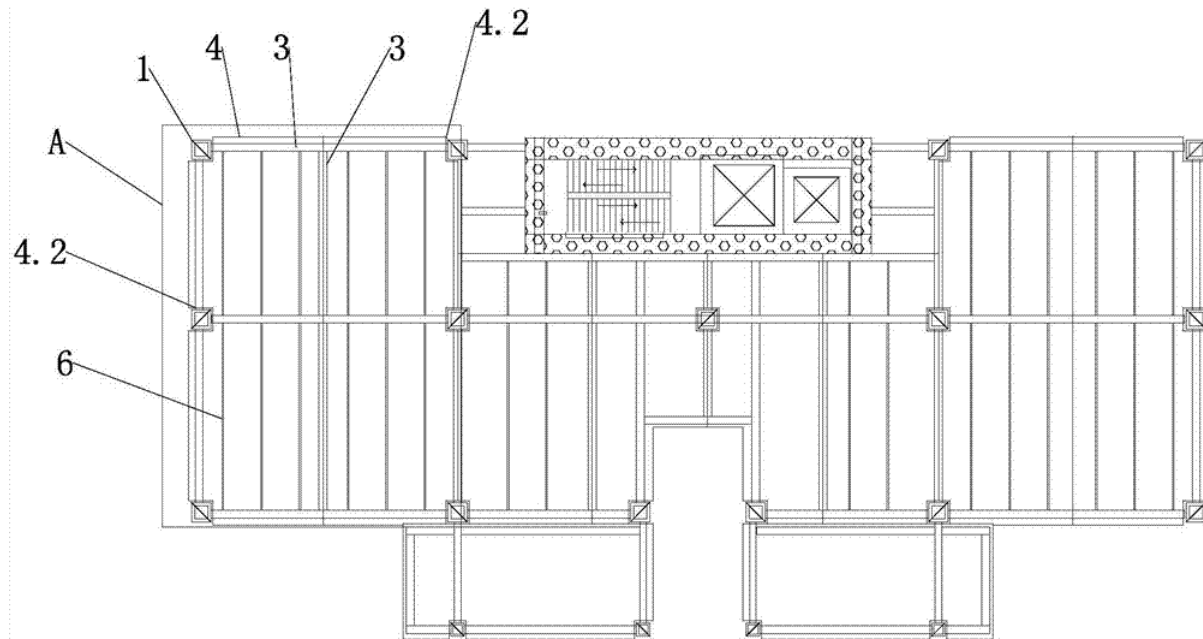
A modular unit connection system for joining together a plurality of box-shaped modular units to form a single or multistory building. The modular building units have elongated hollow structural framing members at their vertical corners and four substantially perpendicular vertical side walls extending between their vertical corner members. The side walls are topped with horizontal framing members which extend between the vertical corner members. The vertical corner members lie within the planes formed by the side walls of the modular units, so that when modular units are laid side by side with their vertical corner members juxtaposed, their vertical corner members and their adjacent side walls abut with no significant space between them. The modular units may be connected at their juxtaposed vertical corner members with generally flat connection plates which overlay the vertical corner members of the modular units being connected and which are fastened to the horizontal framing members adjacent to the vertical corner members. The connection plates may have apertures, which when a connection plate is mounted on an assembly of two, three, or four modular units, overlie the hollow portion of the vertical corner members. Threaded tension rods may extend through the hollow vertical corner members and be coupled to tension rods running through the hollow vertical corner members of vertically aligned modular units forming the successive stories of a multistory modular building.

Family 19/100 - FAMPAT - ©Questel

Title

(CN108316464)

High-rise modular building and construction method thereof

Images**Publication data including kind & date**

CN108316464

A 2018-07-24 CN108316464

**Abstract**

(CN108316464)

The invention discloses a high-rise modular building and a construction method thereof. The high-rise modular building comprises a plurality of layer modular units, the layer modular units comprise a plurality of steel stand columns, main beams and modular boxes, wherein the modular boxes comprise wall modules, box column-avoiding modules, bottom surface modules and top surface modules. The bottom surface modules and the top surface modules are fixedly connected with the wall modules and the box column-avoiding modules separately, the box column-avoiding modules correspond to the positions of the steel stand columns, blanking plates are arranged outside the steel stand columns, the blanking plates and the steel stand columns are fixed, and the blanking plates and the box column-avoiding modules surround the steel stand column. The high-rise modular building is constructed using the steel stand columns, the main beams and the modular boxes are directly machined in a factory, the installation work amount is small, and the cost of manual construction is low; and at the same time, the invention further discloses the construction method of the high-rise modular building, the installation process is simple, and temporary connecting beams are built between the steel stand columns, so that the security of the installation process is enhanced.

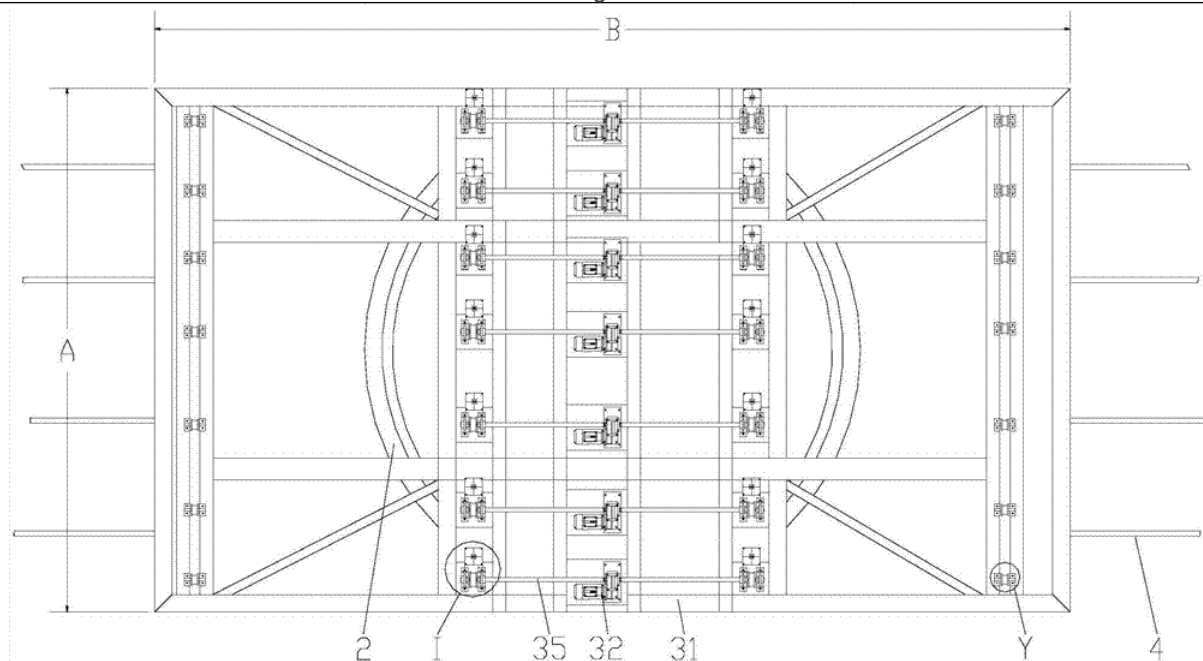
Family 20/100 - FAMPAT - ©Questel

Title

(CN108726120)

Rotary transfer platform for assembly building modular house production line

Images



Publication data including kind & date

CN108726120

A 2018-11-02 CN108726120



Abstract

(CN108726120)

The invention discloses a rotary transfer platform for an assembly building modular house production line. The rotary transfer platform comprises a **moving** mechanism, a rotating mechanism, a supporting transfer mechanism, slide rails and a master control unit. The supporting transfer mechanism, the rotating mechanism and the **moving** mechanism are overlapped from top to bottom in sequence and are in signal connection with the master control unit. At least two slide rails are arranged in parallel in a spaced mode. The slide rails are fixed to the ground. The **moving** mechanism is erected on the slide rails and **moves** along the slide rails. The rotating mechanism is mounted on the upper portion of the **moving** mechanism. The supporting transfer mechanism is connected with the upper portion of the rotating mechanism. The rotary transfer platform has the advantages that through cooperation of the **moving** mechanism, the rotating mechanism and the supporting transfer mechanism, automatic transfer of modular houses between different production lines is achieved; by automatically rotating the angles of the modular houses, the defect that the production lines are hard to connect due to site limitation and the like is overcome.

Family 21/100 - FAMPAT - ©Questel

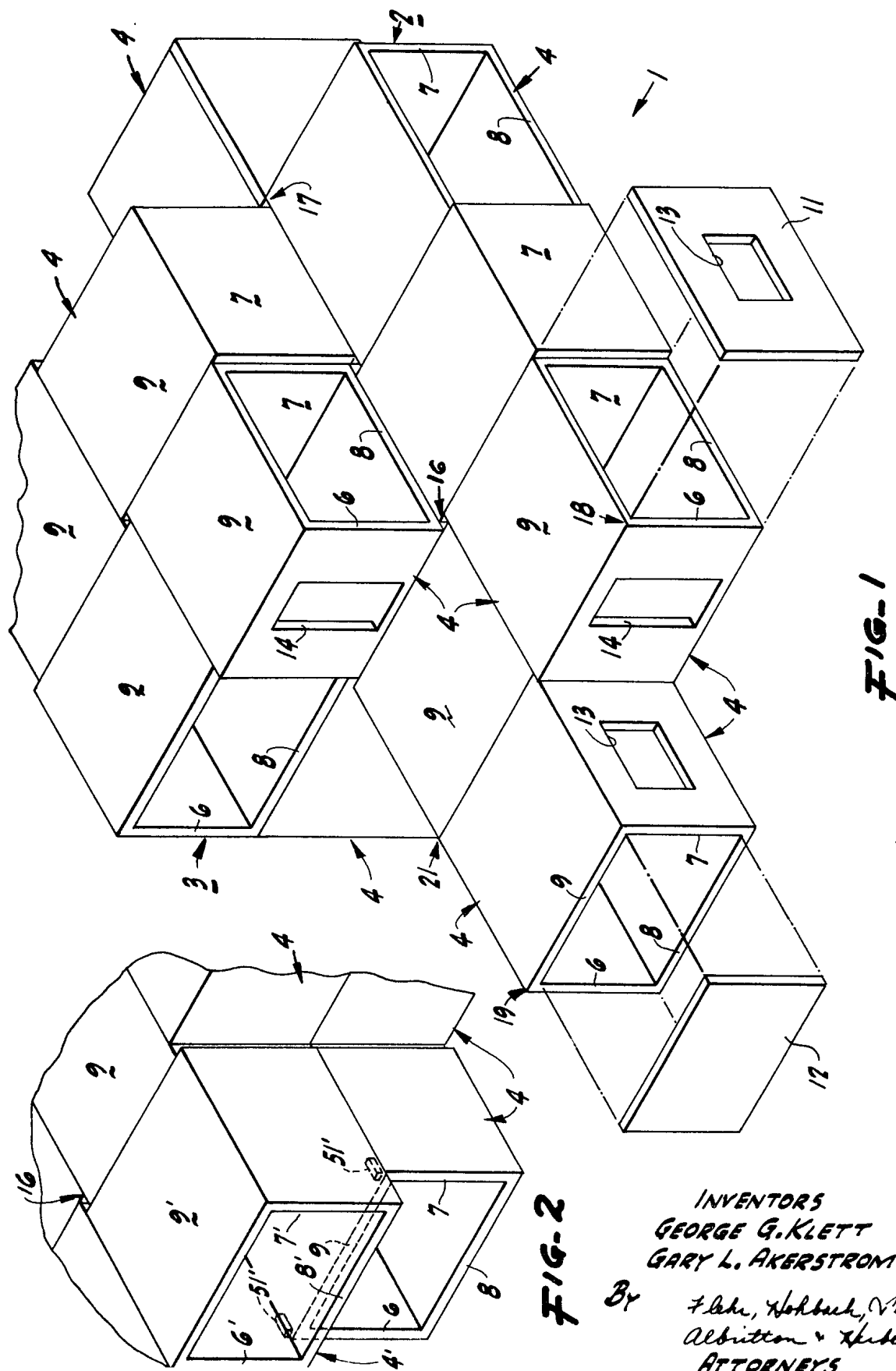
Title

(US3703058)

Modular building construction and erection system utilizing selectively oriented modules

Images

SHEET 1 OF 6



Publication data including kind & date

IL37086

A 1971-08-25 IL--37086

US3703058

A 1972-11-21 US3703058



IL37086

B 1973-04-30 IL--37086

JPS514331

B2 1976-02-10 JP76004331

**Abstract**

(US3703058)

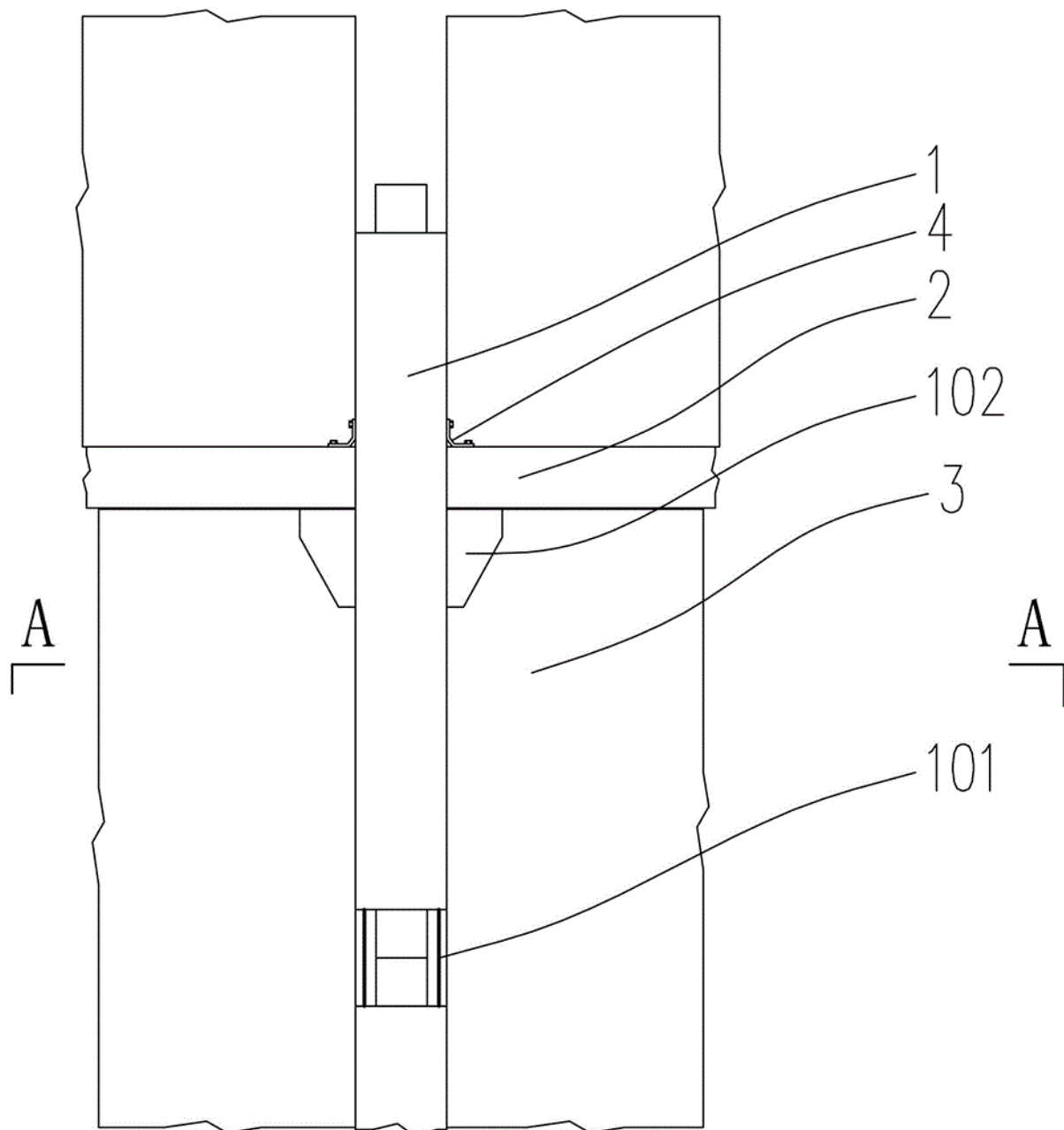
This invention relates to a low cost system for erecting multi-room buildings from preformed modules. Precast concrete modular units having opposing side walls and opposing floor and ceiling panels are oriented in relationship to each other so that a side wall of one module closes off selectively, at least partially, an open end of an adjacent module. Fill-in end wall panels are utilized as required to complete a building construction. Additional floor levels stacked on lower levels are employed to provide a building assembly having a predetermined number of floors. Means are provided for integrally connecting together the series of modules defining each floor level. As required, additional connecting means are provided to secure overlying floor levels with floor levels lying therebelow.

Family 22/100 - FAMPAT - ©Questel

Title

(CN108729541)

Construction method of connecting beam type spliced building structure

Images

[CN108729541](#)

A 2018-11-02 CN108729541

[CN108729541](#)

B 2019-04-16 CN108729541B

**Abstract**

(CN108729541B)

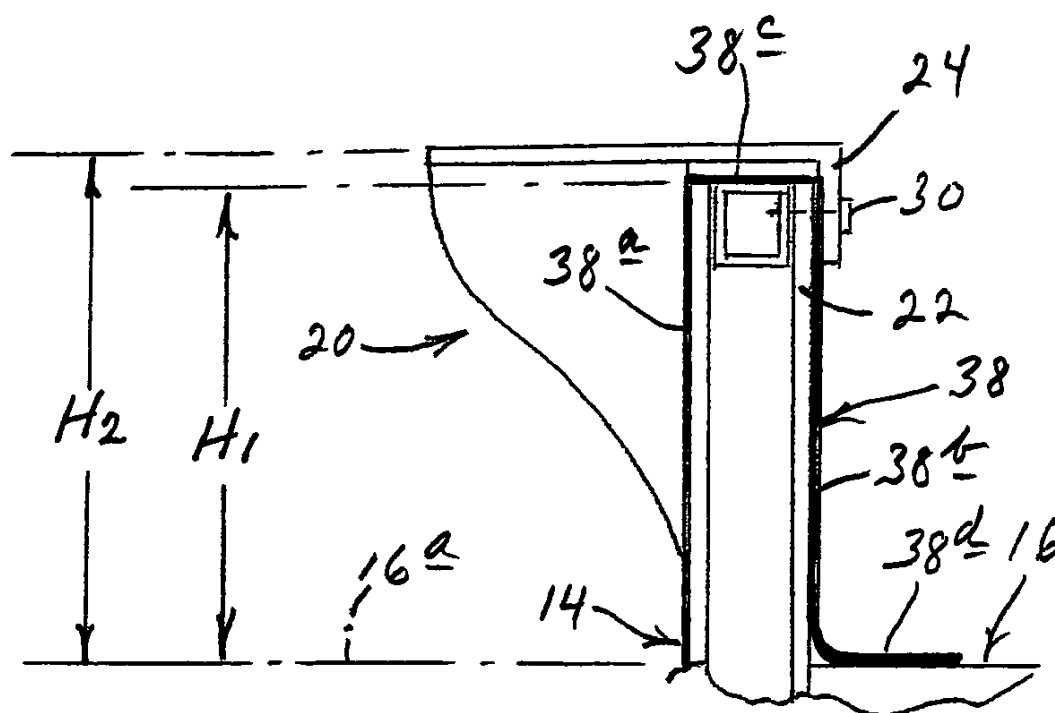
The invention provides a construction method of a connecting beam type spliced building structure. The construction method comprises the following steps that members are prefabricated in a workshop, including at least inner layers and outer layers of columns, cross beams, slabs and shear walls; joints of the columns are located at the positions among the slabs; the columns are hoisted; the shear walls are installed; the cross beams are hoisted and arranged on bracket supports of the columns, wherein the cross beams are prestressed beams; the ends of the cross beams are connected with one another or are connected with the columns by connecting tension steel wires ropes; the slabs are hoisted on the cross beams; a spliced building is obtained by repeating the steps in sequence. The problem can be solved that an existing assembled structure is poor in compressive strength and easily produces stress concentration, the problem of poor anti-seismic property of a cast-in-place concrete structure can be also solved, and the influence on a linear construction period is not large. Members can be decreased by 30%-50%, the hoisting weight can be reduced by 20%-35%, and the construction period is remarkably shortened compared with a cast-in-place structure. The overall anti-seismic property of the building is effectively improved.

Family 23/100 - FAMPAT - ©Questel

Title

(WO200626444)

Modular building roof-rim parapet structure

Images**Publication data including kind & date**[WO2006026444](#)

A2 2006-03-09 WO200626444

[US20060053703](#)

A1 2006-03-16 US20060053703

[WO2006026444](#)

A3 2007-01-04 WO200626444

[US8011150](#)

B2 2011-09-06 US8011150

**Abstract**

(WO200626444)

Modular, selectively employable building parapet roof-rim structure including (a) gravity-docking reception structure deployed along and adjacent at least a portion of the perimeter of a building roof structure which is adjacent the top of a building frame, and (b) a dockable, modular parapet unit including gravity-docking structure **removably** and replaceably dockable, under the influence of gravity, with the reception structure to **dispose** the parapet unit as at least a part of an outwardly visible parapet roof-rim structure associated with the building roof structure. The parapet structure may be associated with moisture-barriering flashing structure which becomes locked into place along the rim of a building roof between inter-engaging components in the parapet structure.

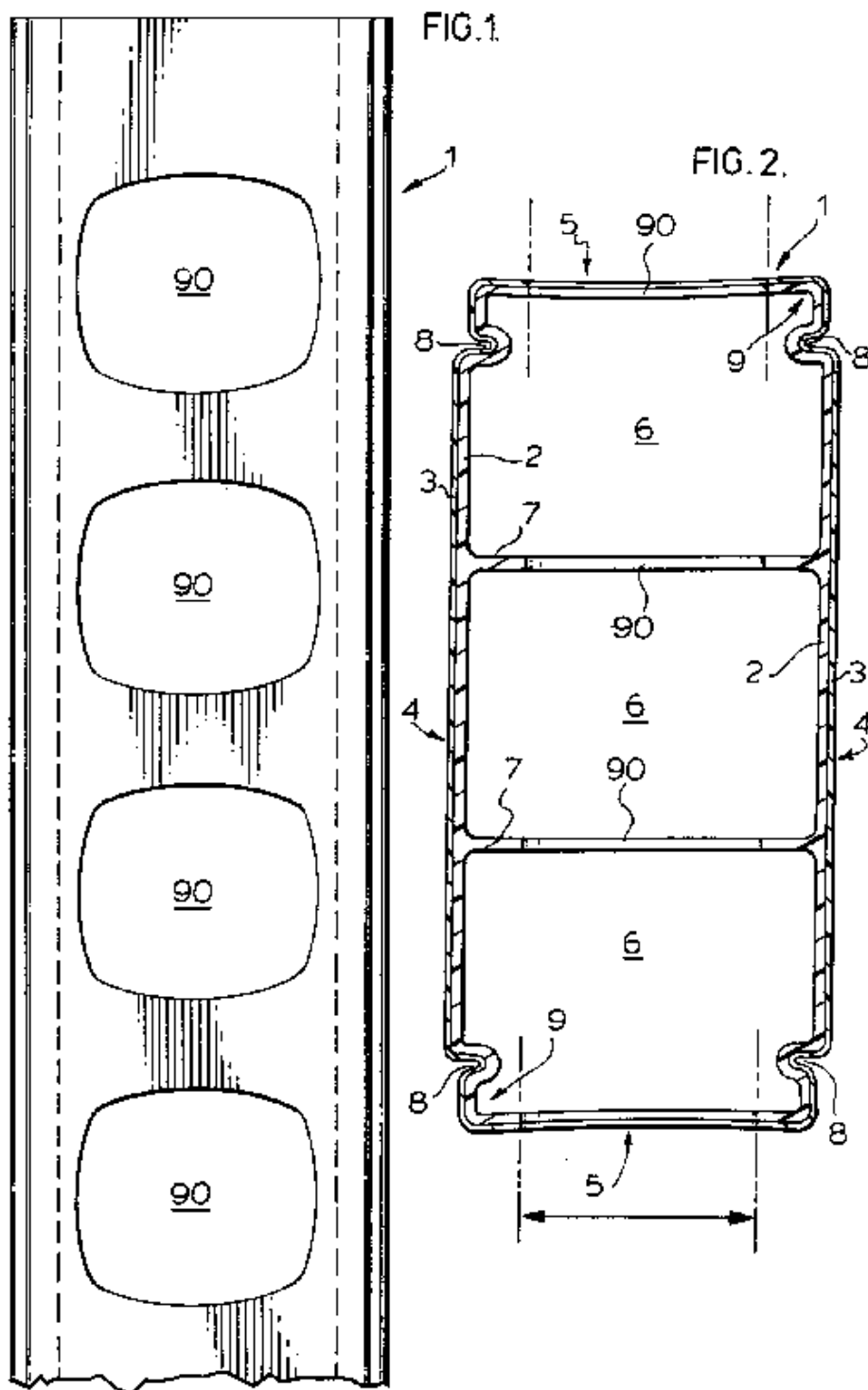
Family 24/100 - FAMPAT - ©Questel

Title

(WO9614480)

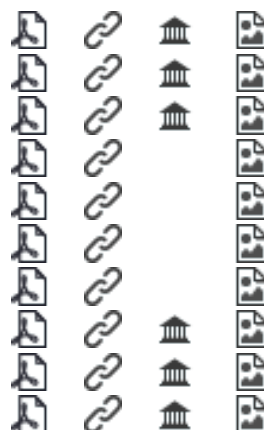
Fire rated modular building system

Images



Publication data including kind & date

CA2134959	A1	1996-05-03	CA2134959
WO9614480	A1	1996-05-17	WO9614480
AU3648595	A	1996-05-31	AU9536485
ZA9508966	B	1996-06-07	ZA9508966
PE64696	A1	1997-01-23	PE9600646
MX9504416	A	1997-04-30	MX9504416
CO4440675	A1	1997-05-07	CO4440675A1
US5953880	A	1999-09-21	US5953880
CA2134959	C	2002-06-11	CA2134959
IN1856/DEL/1995	A	2011-05-13	IN1995DE01856



Abstract

(WO9614480)

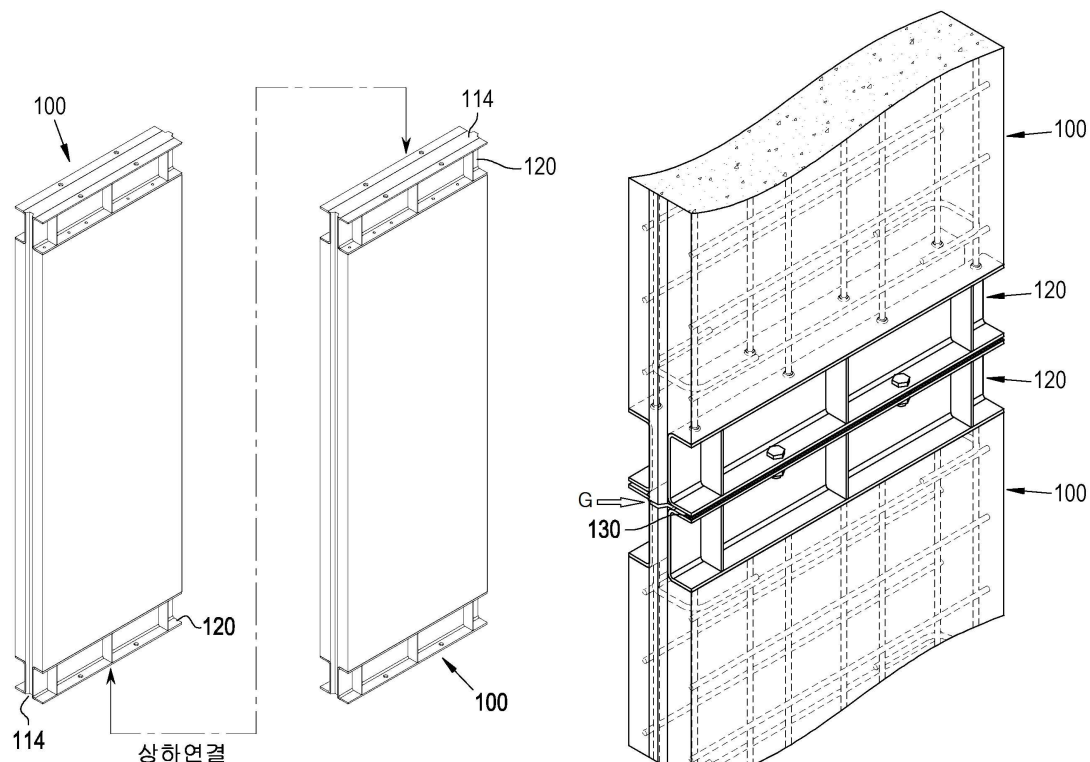
Extruded hollow thermoplastic structural components of rectilinear cross section formed for interlocking assembly with mating components for use in erecting a modular building characterized in that said components are extruded from PVC material which includes a smoke retarding agent which is covered by a skin (3) on surfaces exposed to the environment. Preferably the component is an elongated extruded hollow thermoplastic structural component of rectilinear cross section formed for interlocking assembly with mating components for use in erecting a modular building, characterized in that said component is formed as a co-extrusion of a substrate (2) of PVC containing from about 10 % et 35 % by weight of the substrate of a reinforcing and expansion controlling agent and from about 5 % to about 35 % per weight of the substrate (2) of smoke retarding agent, the total of said agents being less than about 45 % by weight of the substrate, and a thermoplastic skin (3) covering surfaces of said component which remain exposed when said component is interlocked with mating components in a building structure, said substrate (2) being substantially thicker than said skin (3), said skin (3) forming a protective barrier to isolate said smoke retarding agent from exposure to the environment exterior of said component when same is incorporated into a building structure.

Family 25/100 - FAMPAT - ©Questel

Title

(KR101679666)

Core structure dor modular building and constructio method therefor

Images**Publication data including kind & date**[KR101679666](#)

B1 2016-11-28

KR101679666

**Abstract**

(KR101679666)

The present invention relates to a core structure for a mid-to-high-rise modular building and a construction method thereof, capable of rapidly performing stacking and construction while minimizing displacement due to a side force generated in a core structure in the mid-to-high-rise modular building. The core structure for the mid-to-high-rise modular building is formed in a hollow square box shape by connecting PC panels on an upper part, a lower part, a left side, and a right side with each other. The PC panel comprises: a concrete panel part where a protruding connection part is formed on a center of an upper plane and a lower plane of a vertical plate type body part, and a rebar assembly including a buried vertical rebar; and a connection shape steel including an one-side flange connected by a vertical rebar penetrating an upper plane and a lower plane of the concrete panel part on both sides of the protruding connection part.

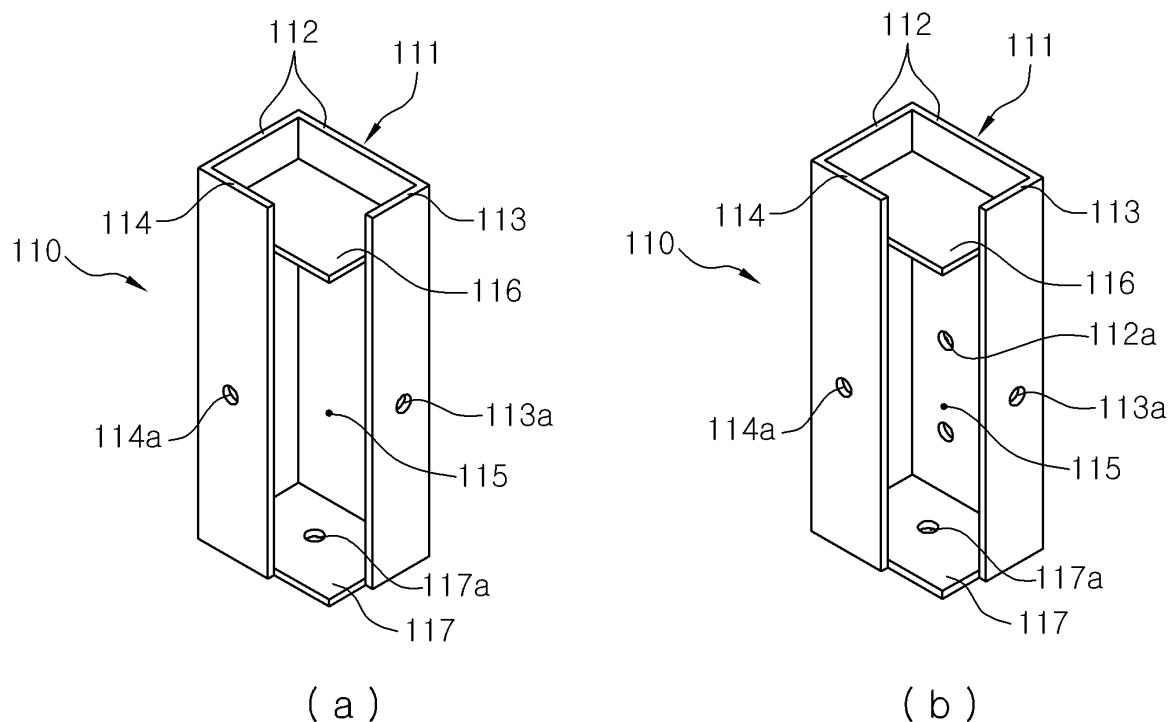
Family 26/100 - FAMPAT - ©Questel

Title

(KR100963580)

Attachment of Unit Modular System, Modular Unit And Manufacturing Method of The Modular Unit

Images



Publication data including kind & date

KR20090092533	A	2009-09-01	KR20090092533
KR100963580	B1	2010-06-15	KR100963580



Abstract

(KR100963580)

A connector of a unit modular system, and a modular unit and a manufacturing method thereof are provided to improve stability of modular structure because the connector is positioned in the edge of the modular unit. A connector(110) of an unit modular system comprises a L-shaped cross section(112) wherein a beam is welded into each outer surface, a basic section steel(111) which consists of a first extension(113) extended from L-shape cross section and a second extension(114), and a first stiffener(116) and a second stiffener(117) which is a reinforcement steel plate for preventing buckling of the basic section steel and is welded into one end and the other end of the basic section steel. The first stiffener is welded into the joint between a column and the basic section steel. The second stiffener is welded into the location corresponding to the flange of the girder.

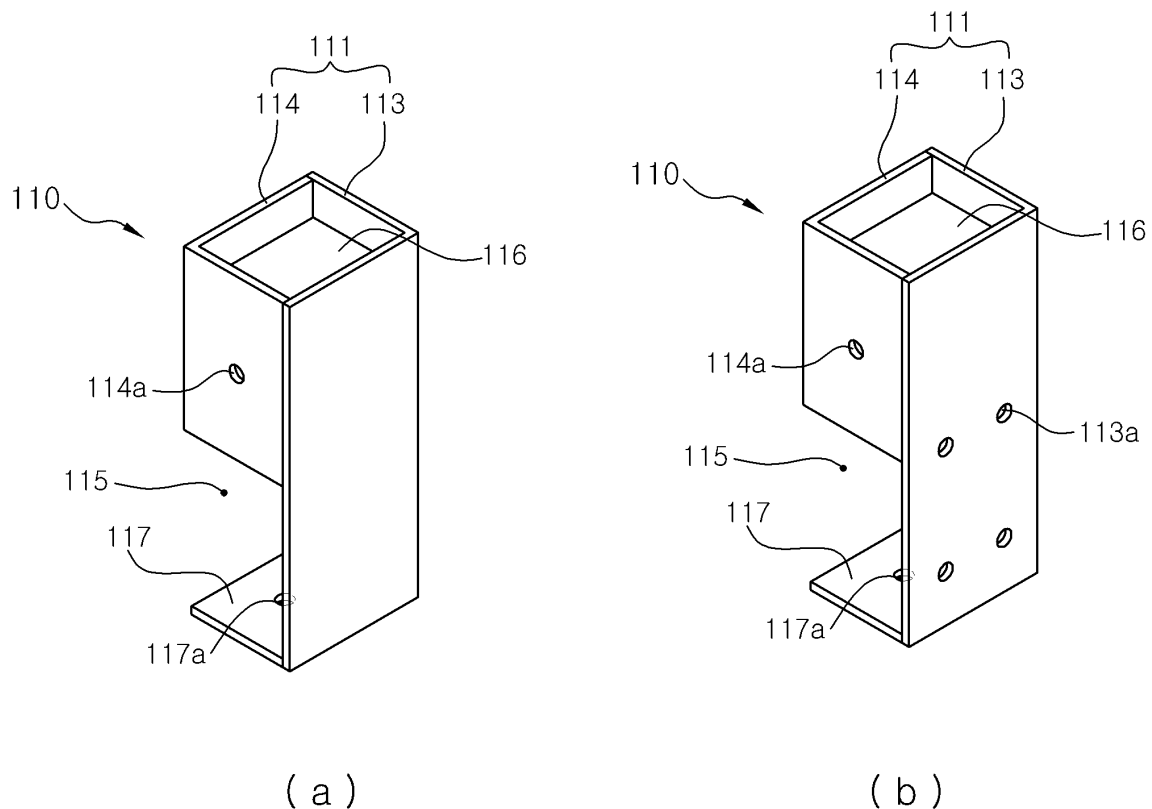
Family 27/100 - FAMPAT - ©Questel

Title

(KR100963587)

Attachment of Unit Modular System, Modular Unit And Manufacturing Method of The Modular Unit

Images



Publication data including kind & date

KR20090092541	A	2009-09-01	KR20090092541
KR100963587	B1	2010-06-15	KR100963587



Abstract

(KR100963587)

A connector of a unit modular system, a modular unit and a manufacturing method thereof are provided to improve stability of modular structure because smooth transmission of the load is enabled. A connector(110) of a unit modular system comprises a basic section steel(111), a first stiffener(116) and a second stiffener(117). The basic section steel comprises a first L-shaped cross section(113) wherein a long beam and a short beam are welded in the outer side thereof, and a second L-shaped cross section(114) whereof the length is relatively short comparing with the first L-shaped cross section. The first stiffener reinforces the basic section steel and is welded to the inner surface of the basic section steel so that the bottom surface of the post is mounted. The second stiffener cooperates with the first stiffener and reinforces the basic section steel and is welded into the other end of the basic section steel.

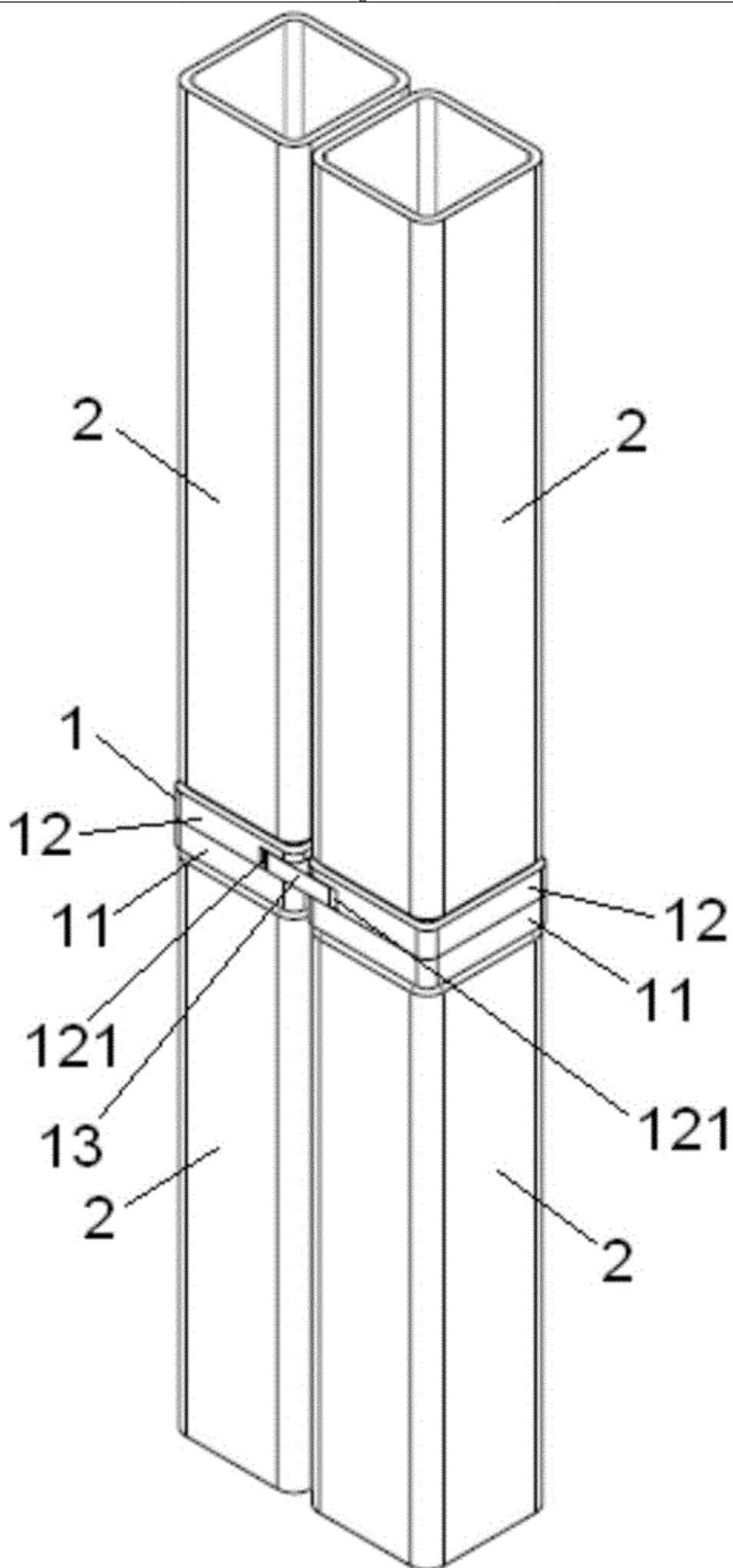
Family 28/100 - FAMPAT - ©Questel

Title

(CN208857959U)

Modular building structure for steel biasing force of the connection node device

Images



Publication data including kind & date[CN208857959](#)

U 2019-05-14

CN208857959U

**Abstract**

(CN208857959U)

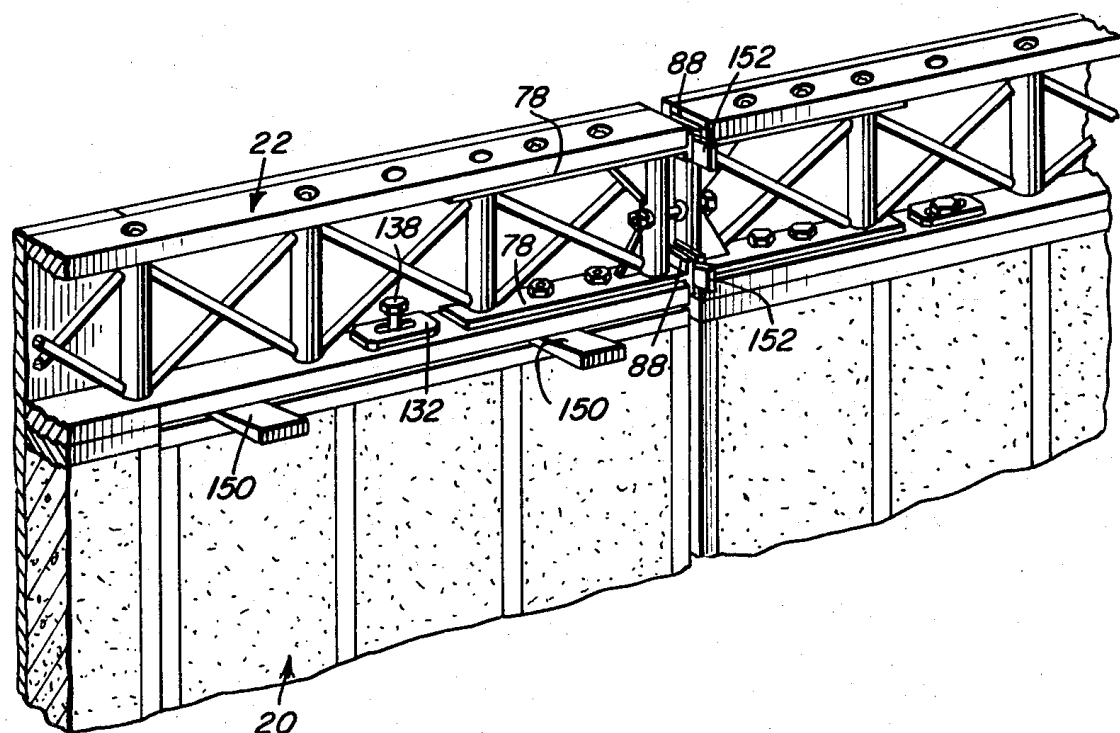
The present utility model provides a modular building structure for steel biasing force of the connection node device, used to connect the upper and lower, left and right combination of four modular construction of the cabinet, cabinet is positioned at the corners of the post; connecting node device includes two upper end plate, two lower end plate and at least one connector plate, wherein, two upper end plate is located on the next two cabinet top of the columns, two lower end plate positioned above the bottom of an upright cabinet two, on the same layer two upper end plate or both of the lower plate are each provided with a groove, the groove of the connecting plate is placed between the upper end plate or both lower ends of the groove of the plate; the two upper end plate, both lower ends of two 1st center of the plate are respectively provided with through holes and two 2nd through-hole, to provide a long vertical strip connecting the upper end plate of the 1st through the two through holes, providing a preload force on the connector body sleeve, the sleeve biasing force of the 2nd through-hole vertically through the lower end plate, grout is injected in the pre-tension sleeve.

Family 29/100 - FAMPAT - ©Questel

Title

(US3808761)

Modular building construction

Images**Publication data including kind & date**[US3808761](#)

A 1974-05-07

US3808761

**Abstract**

(US3808761)

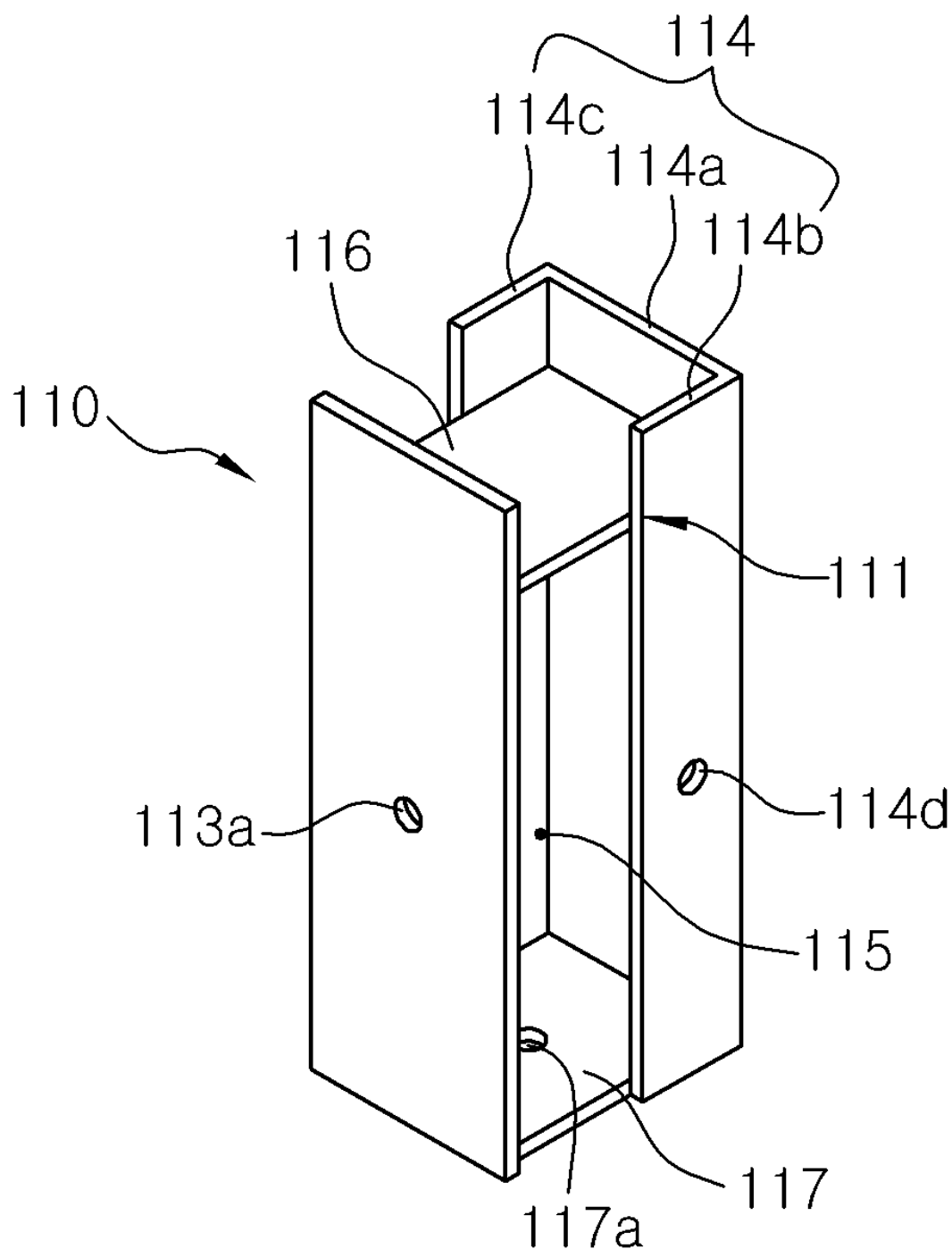
Modular construction utilizing prefabricated modular wall defining support panels in conjunction with overlying modular truss-like support beams which interconnect and allow a selective **removal** or reshuffling of the supporting panels while maintaining the structural integrity of the over-all construction.

Family 30/100 - FAMPAT - ©Questel

Title

(KR100963586)

Attachment of Unit Modular System, Modular Unit And Manufacturing Method of The Modular Unit

Images**Publication data including kind & date**[KR20090092540](#)

A 2009-09-01

KR20090092540

[KR100963586](#)

B1 2010-06-15

KR100963586

**Abstract**

(KR100963586)

A connector of a unit modular system, a modular unit and a manufacturing method thereof are provided to improve stability of modular structure because the post and girder of the modular unit are connected and **movement** of the modular unit is secured. A connector(110) of a unit modular system comprises a basic cross section which is sheet-shaped, a basic

section steel(111) comprising C-shaped cross section(114) wherein a first extension plate(114b) and a second extension plate(114c) are formed, a first stiffener(116) which is welded into the inner surface of the basic section steel in order to reinforce the basic section steel and mount the bottom surface of the post, and a second stiffener(117) which cooperates with the first stiffener and reinforces the basic section steel and is welded into the other end of the basic section steel.

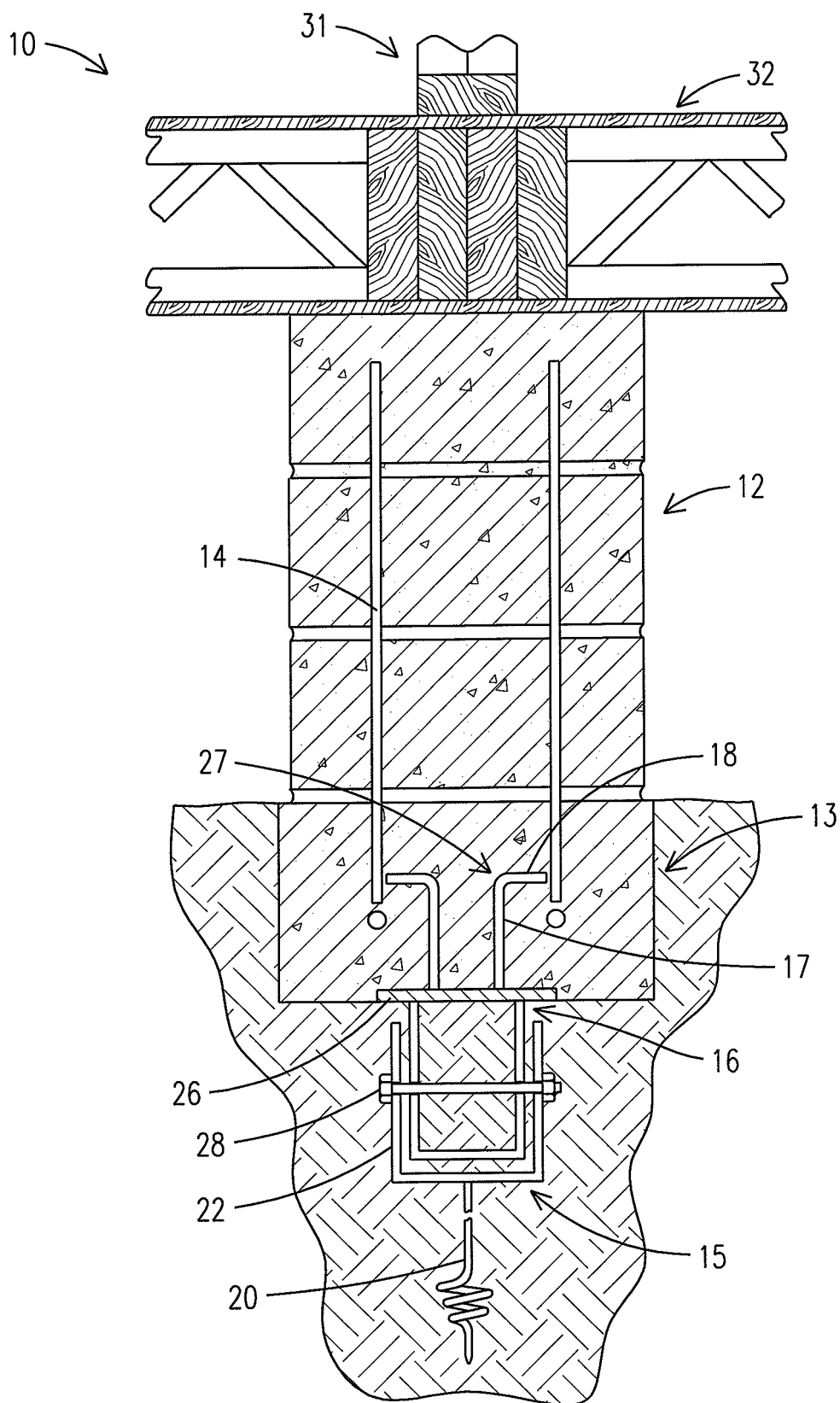
Family 31/100 - FAMPAT - ©Questel

Title

(US8151528)

System and method for anchoring a modular building

Images

**Publication data including kind & date**

US20090293393	A1	2009-12-03	US20090293393
US8151528	B2	2012-04-10	US8151528

**Abstract**

(US8151528)

The present invention provides a system for anchoring a modular or manufactured building. The system includes at least

one concrete pad formed in at least one hole in the ground. The building is coupled to and supported on the ground by the at least one concrete pad. Additionally, the system includes at least one ground anchor buried in the at least one hole below the at least one concrete pad. The system further includes a connector having a first end affixed to the ground anchor and a second end embedded within the concrete pad, for resisting an upward force to the building by high winds.

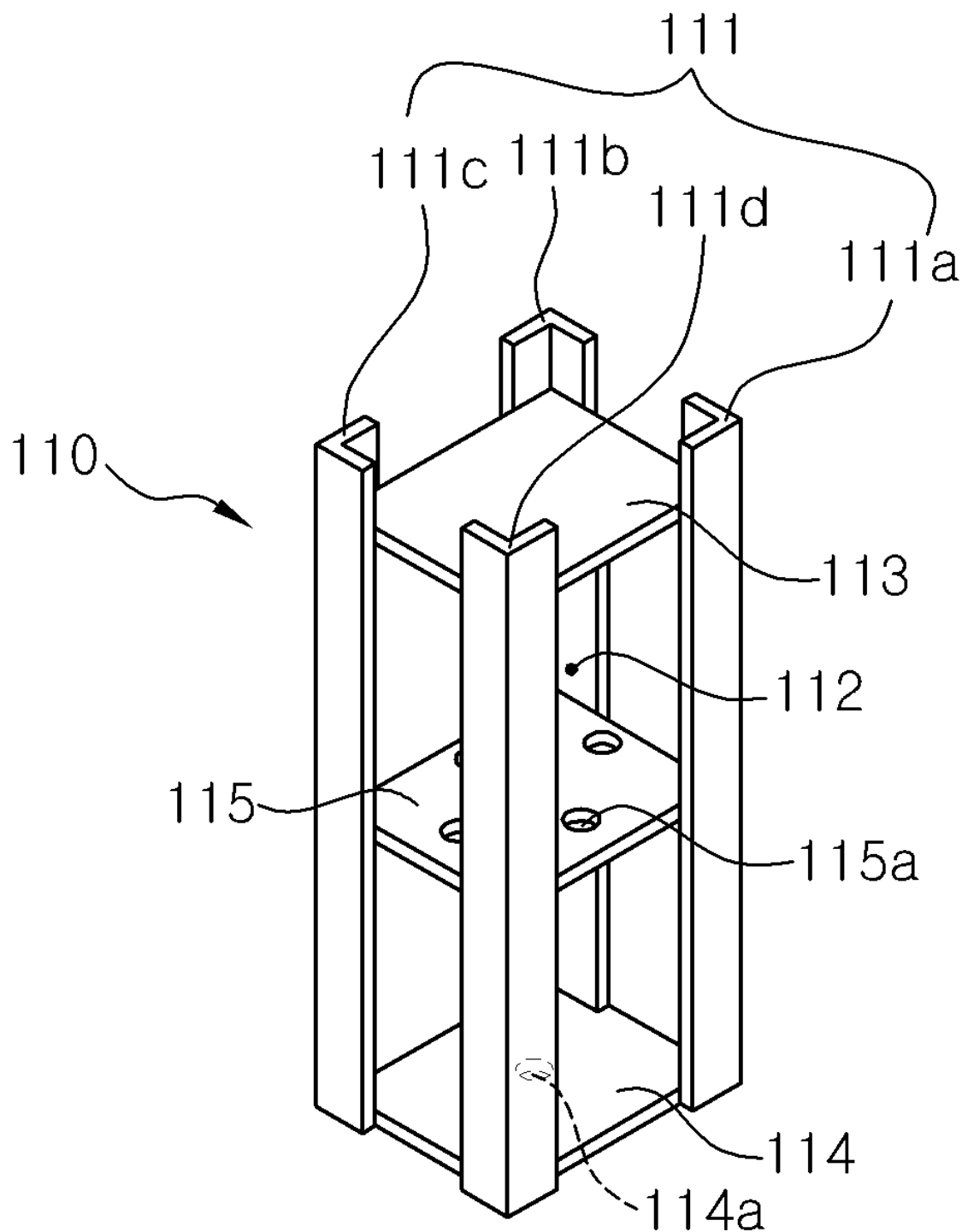
Family 32/100 - FAMPAT - ©Questel

Title

(KR100963585)

Attachment of Unit Modular System, Modular Unit And Manufacturing Method of The Modular Unit

Images



KR20090092539

A 2009-09-01 KR20090092539

KR100963585

B1 2010-06-15 KR100963585

**Abstract**

(KR100963585)

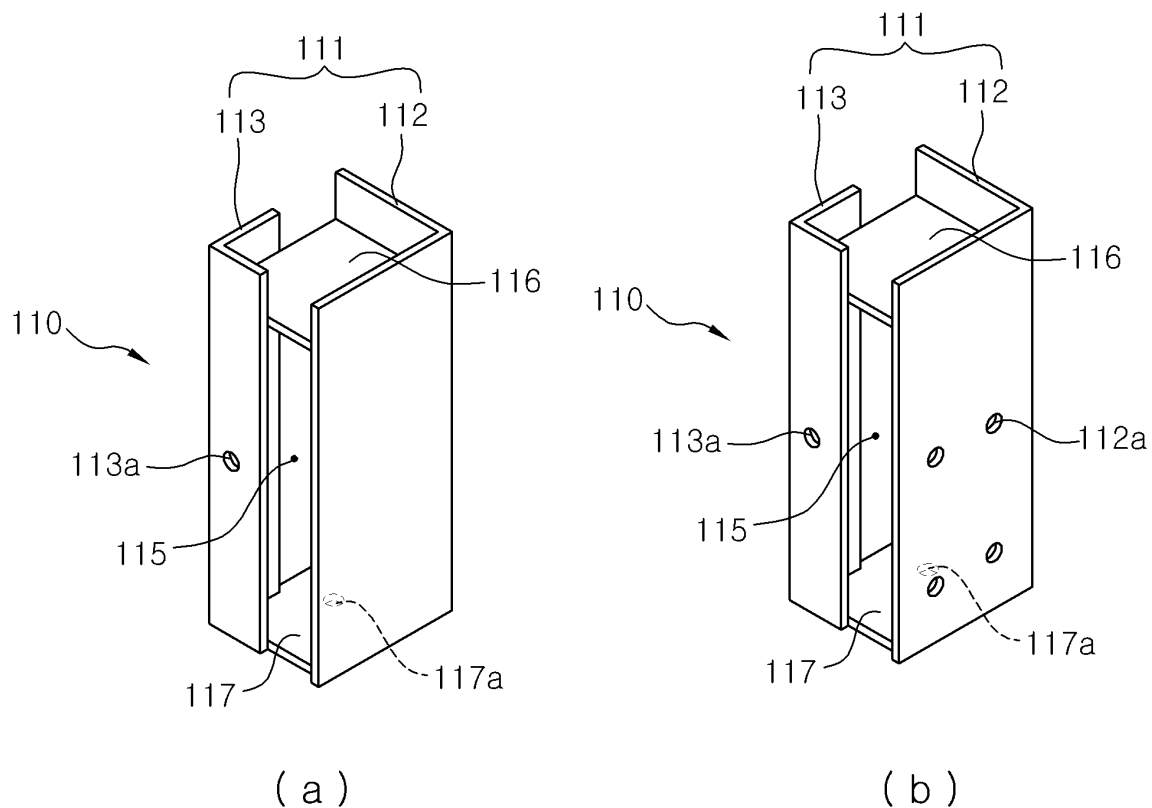
A connector of a unit modular system, a modular unit and a manufacturing method thereof are provided to improve stability of the modular structure because smooth transmission of the load is enabled. A connector(110) of a unit modular system comprises first, second, third and fourth cross sections(111a,111b,111c,111d) which are L-shaped, a basic section steel(111) which is positioned in the edge while an opening(112) is formed between the cross-sections, a first stiffener(113) which is welded into the inner surface of the basic section steel, a second stiffener(114) which cooperates with the first stiffener and reinforces the basic section steel and is welded into other end of the basic section steel, and a third stiffener(115) which reinforces the basic section steel with the first and the second stiffeners and comprises a horizontal unit-coupling hole(115a).

Family 33/100 - FAMPAT - ©Questel

Title

(KR100963583)

Attachment of Unit Modular System, Modular Unit And Manufacturing Method of The Modular Unit

Images**Publication data including kind & date**

KR20090092537

A 2009-09-01 KR20090092537

KR100963583

B1 2010-06-15 KR100963583

**Abstract**

(KR100963583)

A connector of a unit modular system, modular unit and a manufacturing method thereof are provided to improve stability of the modular structure because **movement** of the modular unit is secured and smooth transmission of the load is enabled. A connector(110) of a unit modular system comprises a basic section steel(111), a first stiffener(116) and a second stiffener(117). The basic section steel a first L-shaped cross section(112) and a second L-shaped cross section(113) which is distanced from the first L-shaped cross section, facing it in order to form an opening(115) between the first L-shaped

cross sections. The first stiffener is welded into the inner surface of the basic section steel so that the basic section steel is reinforced and the bottom surface of the column of the modular unit is mounted. The second stiffener cooperates with the first stiffener and reinforces the basic section steel.

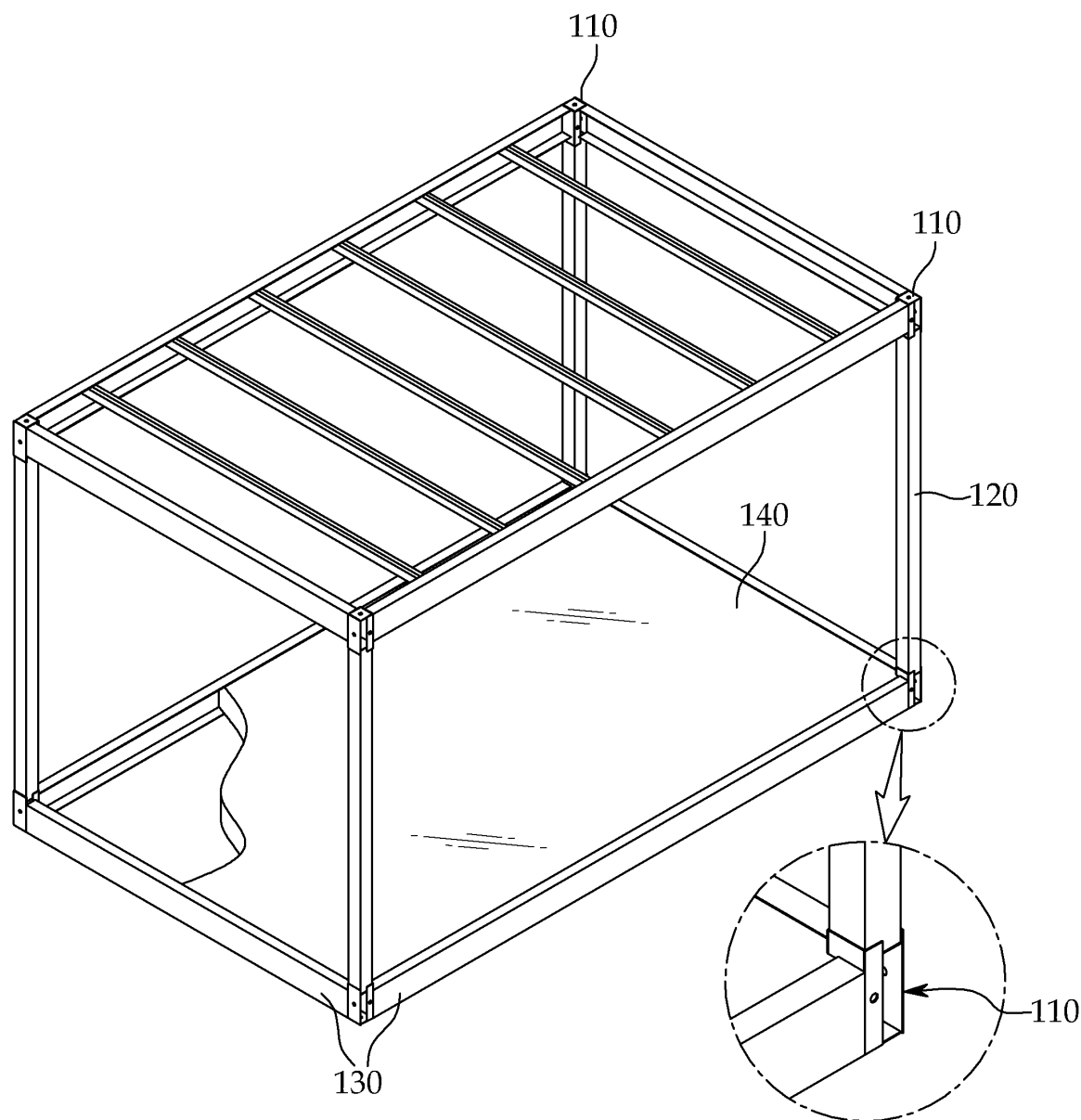
Family 34/100 - FAMPAT - ©Questel

Title

(KR101281849)

Modular unit with connector and floor heating plate

Images



Publication data including kind & date

KR20130034385	A	2013-04-05	KR20130034385
KR101281849	B1	2013-07-03	KR101281849



Abstract

(KR101281849)

PURPOSE: A column insert-shaped connection device and a modular unit including a heating pipe integrated lightweight composite floor are provided to improve the workability with a prefabricated type Korean floor heater layer and to improve the construction stability on the entire structure frame. **CONSTITUTION:** A column insert-shaped connection device and a modular unit including a heating pipe integrated lightweight composite floor comprise a column(120), a beam(130), a bottom floor(140), and a connection unit(110). The connection unit comprises a first stiffener and a second stiffener. The

bottom floor comprises concrete, a joist, and a warm water panel. The beam is connected to the side of the connection unit by welding or bolting, and the column is inserted into the connection unit in a longitudinal direction.

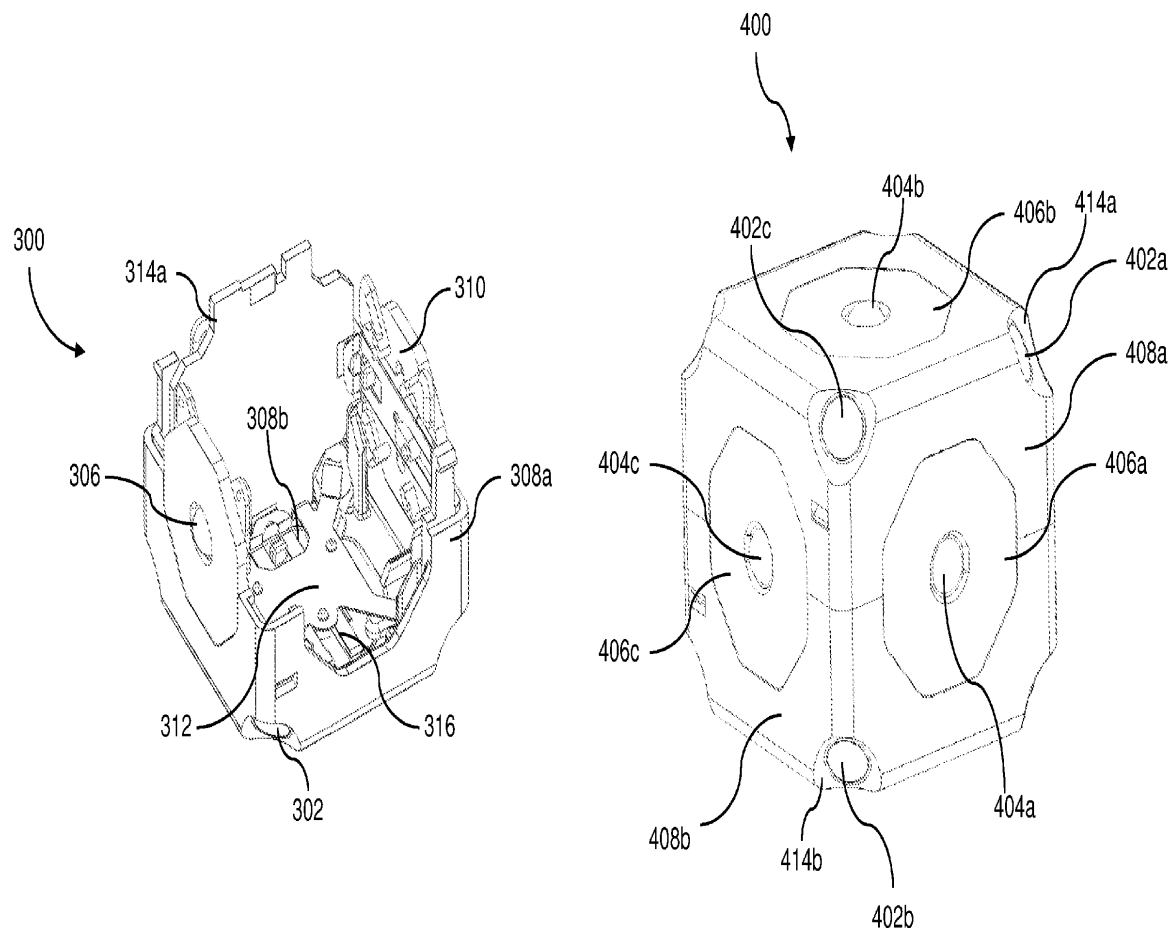
Family 35/100 - FAMPAT - ©Questel

Title

(EP2773436)

Modular kinematic construction kit

Images



Publication data including kind & date

US20130109267	A1	2013-05-02	US20130109267
WO2013066901	A1	2013-05-10	WO2013066901
CN104039406	A	2014-09-10	CN104039406
EP2773436	A1	2014-09-10	EP2773436
US9320980	B2	2016-04-26	US9320980
EP2773436	A4	2016-05-04	EP2773436
CN104039406	B	2017-05-24	CN104039406B



Abstract

(EP2773436)

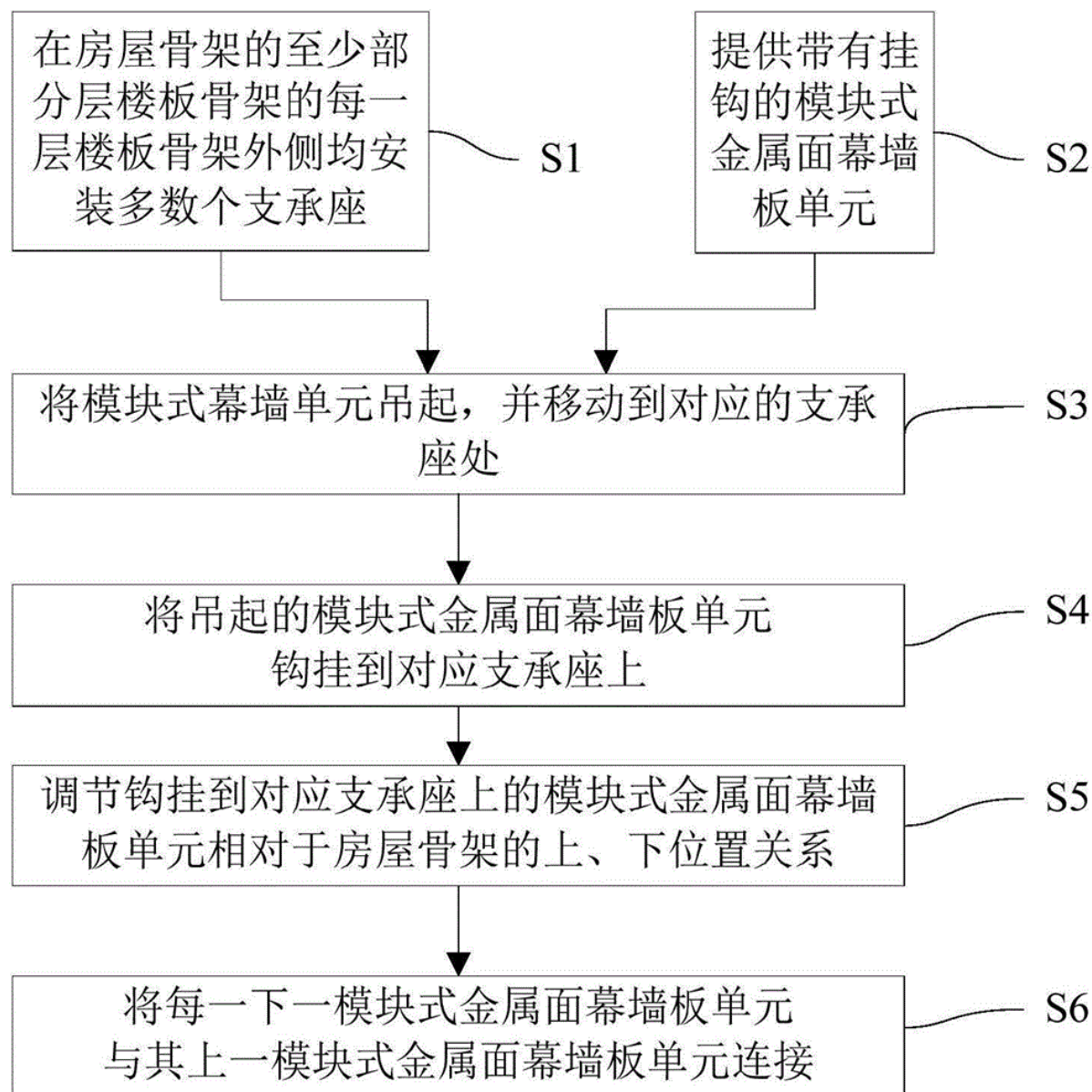
A construction kit comprises a plurality of building modules, wherein at least one of the building modules is functional and adapted to perform a specific behavior. In some embodiments, each of the building modules includes at least one connection face adapted to pass either data or power from a first face of a first building module to a first face of a second building module. In certain other embodiments, each connection face of the building modules is electrically connected with each of the other faces. The kit includes at least one connector adapted to couple the at least one functional module to at least one other module while providing up to three degrees of freedom between the functional module and the at least one other module.

Family 36/100 - FAMPAT - ©Questel

Title

(CN103711320)

Installation method of modular metal curtain wallboard units of high-rise rapidly-built building

Images**Publication data including kind & date**

CN103711320

A 2014-04-09 CN103711320

CN103711320

B 2016-08-17 CN103711320B

**Abstract**

(CN103711320B)

The invention discloses an installation method of modular metal curtain wallboard units of a high-rise rapidly-built building. The method comprises the following steps that a plurality of supporting seats are installed on the outer side of each layer of floor framework of at least part of floor frameworks of a building framework of the high-rise rapidly-built building; the multiple modular metal curtain wallboard units with hooks are provided; the modular metal curtain wallboard units are hoisted respectively and **moved** to the corresponding supporting seats; the hoisted modular metal curtain wallboard units are hooked at the corresponding supporting seats. The method is easy and convenient to operate and short in operation time, and in the industrialization production process, the construction period can be shortened effectively so as to meet the industrialization requirement of the rapidly-built building. The operation that the hooks are installed on the floor frameworks is **carried** out indoors, outdoor operation is not needed, the potential safety hazard caused by high-altitude outdoor

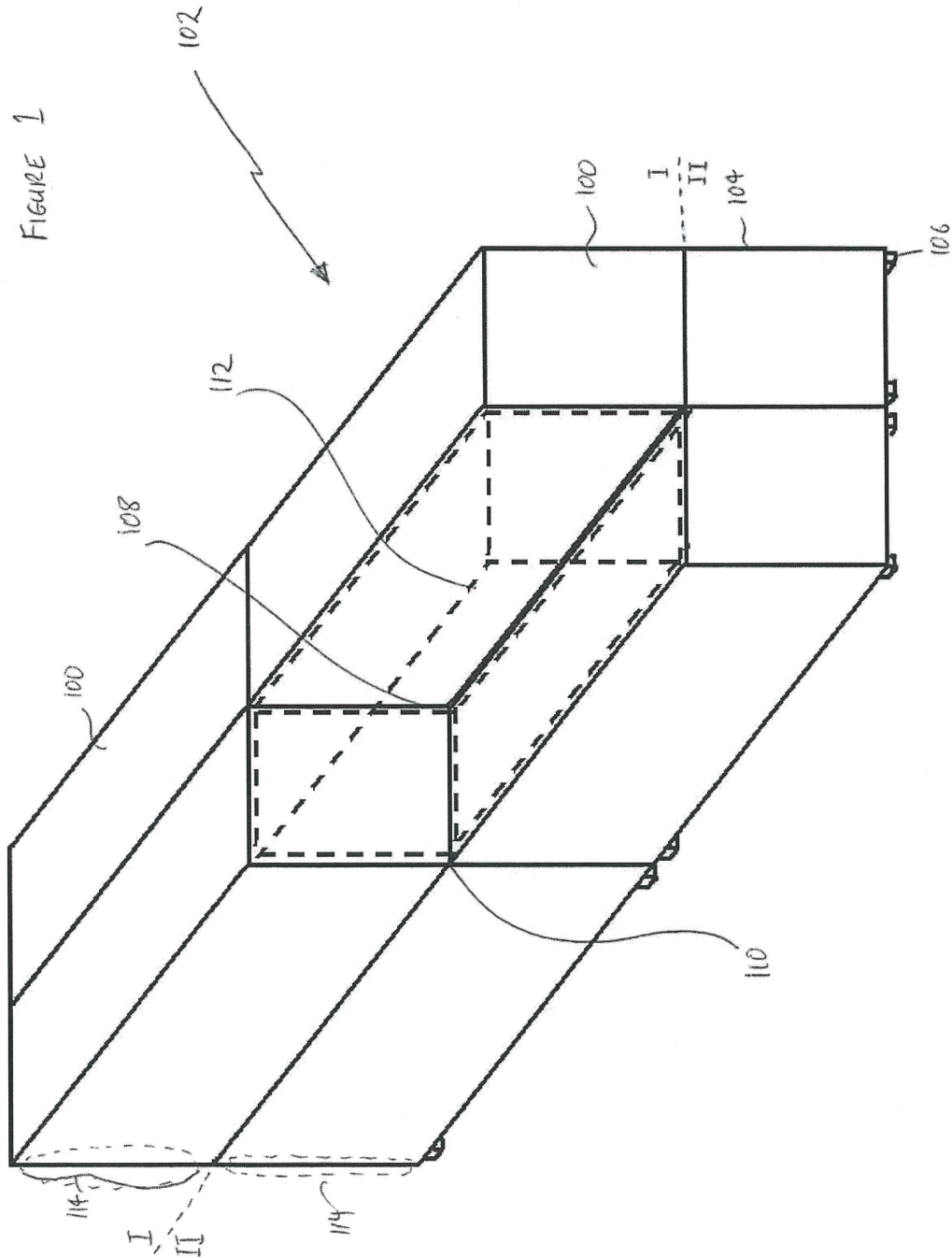
operation is avoided, and too many assistant tools are not needed in the process.

Family 37/100 - FAMPAT - ©Questel

Title
(AU2012100822)
Multistorey building

Images

2012100822 01 Jun 201



Publication data including kind & date

AU2012100824	A4	2012-06-28	AU2012100824
AU2012100822	A4	2012-06-28	AU2012100822
AU2012100849	A4	2012-07-05	AU2012100849



Abstract

(AU2012100822)

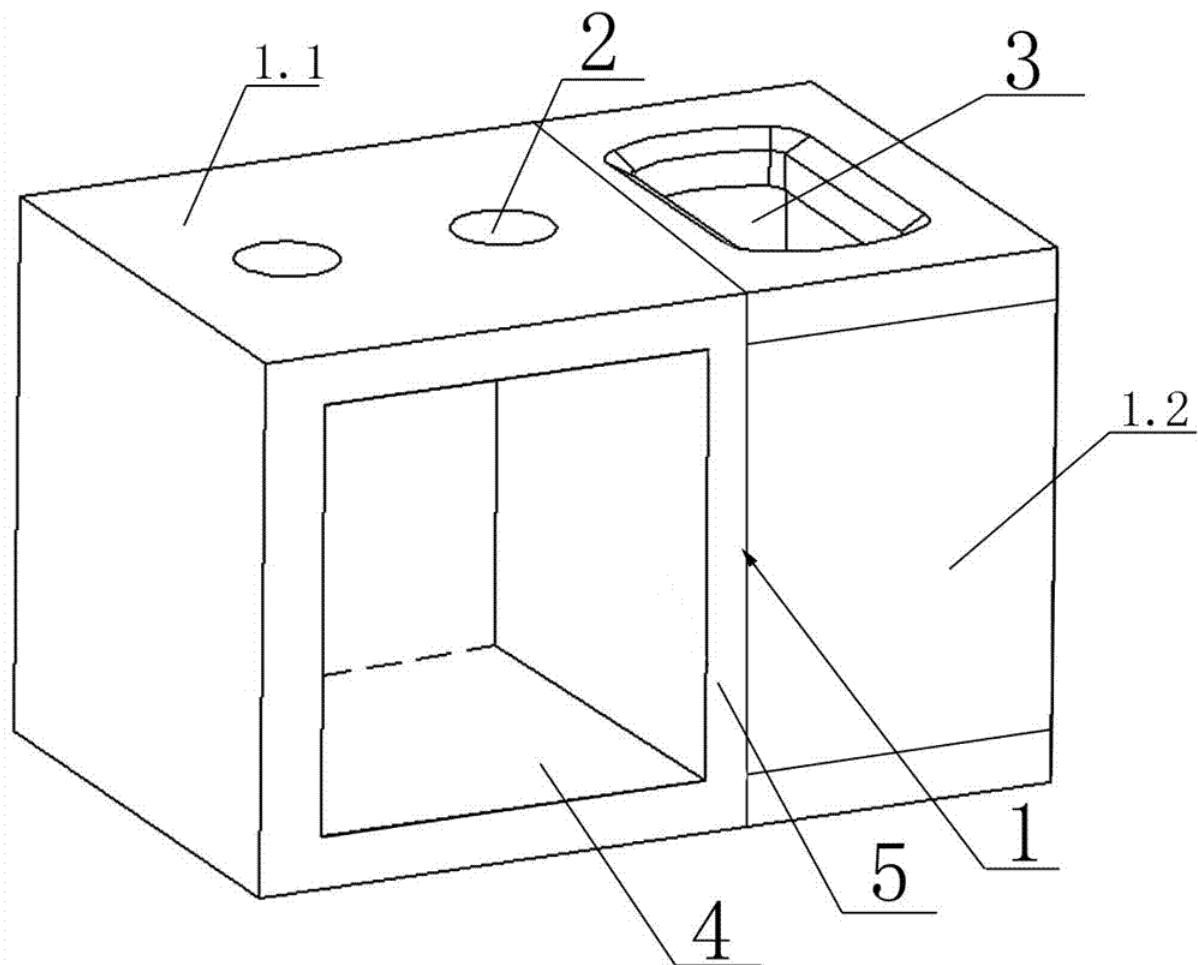
Abstract: A multistorey building comprising: a foundation; a plurality of modules defining rooms of the building and being structurally 5 interconnected with each other at their corners so that any weight transference between modules occurs through the corners; and an interconnection member positioned at each respective corner for fixing in relation to each other all of the modules that meet at the respective corner, wherein the modules and interconnection members form substantially the entire 10 structure of the building above the foundation. fl 'l l 'l 4- /

Family 38/100 - FAMPAT - ©Questel

Title

(CN208563587U)

Method for multi-level modular construction of the corner fitting and its coupled node structure

Images**Publication data including kind & date**[CN208563587](#)

U

2019-03-01

CN208563587U

**Abstract**

(CN208563587U)

A method for multi-level modular construction of the corner pieces and their connection node structure, wherein, for the multilevel modular building corner pieces include corner fitting body; corner fitting body is a rectangular three-dimensional structure; in this order on the top surface or the bottom side of the corner fitting body is provided with bolt holes and the positioning hole, and the positioning elongated hole shape; in the corner pieces and front or rear is provided with a lifting hole, and a lifting hole **disposed** corresponding to the bolt hole; corner fitting body is provided between the top and bottom vertical inner partition wall; bolt holes and positioning holes are located on both sides of the bulkhead. The present utility model solve traditional corner fitting strength and low stiffness and strength of connection between adjacent modules is not easily ensured technology problems.

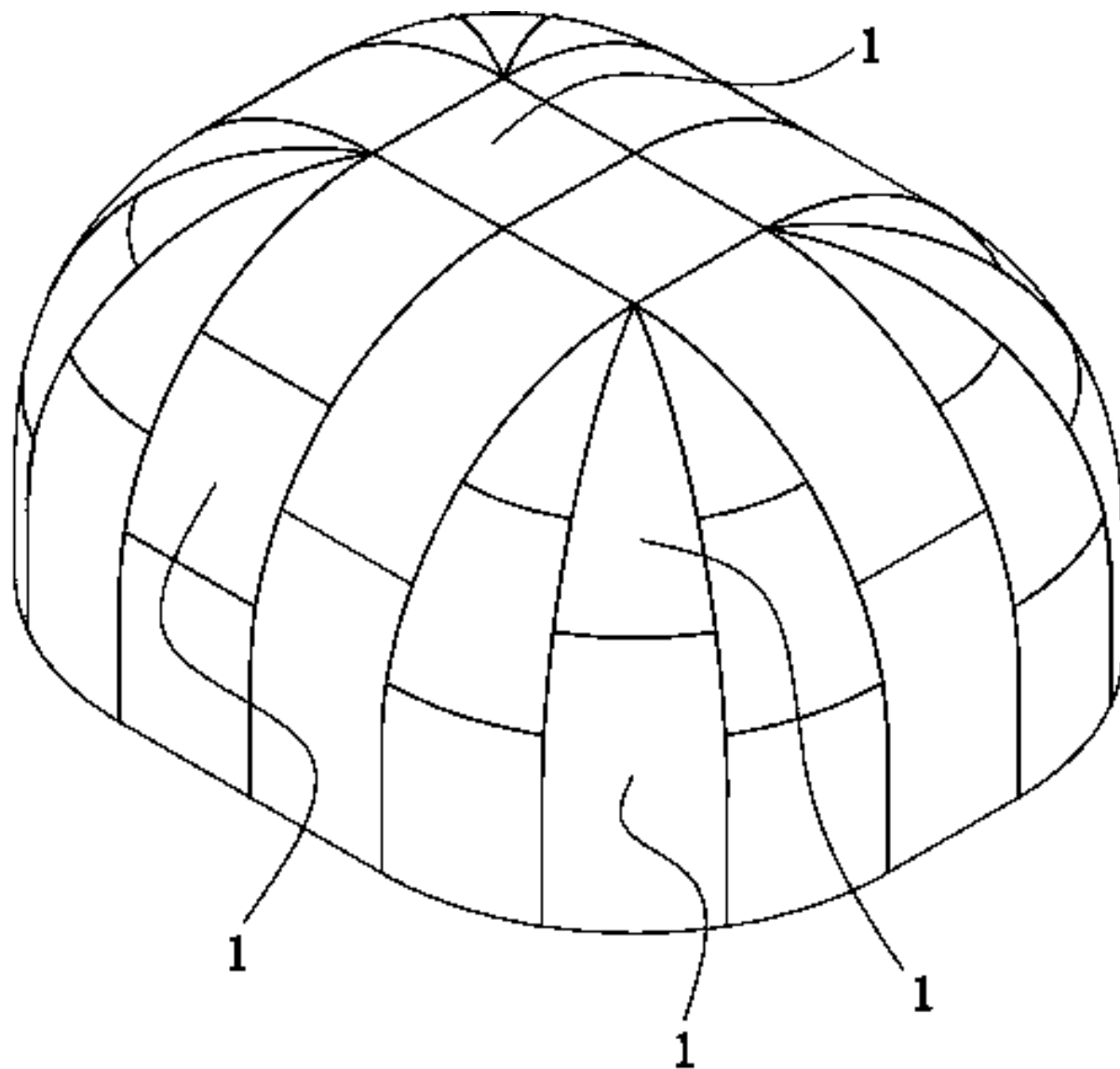
Family 39/100 - FAMPAT - ©Questel

Title

(CN203475605U)

High-bearing performance modular building capable of being produced in industrialized manner and rapidly disassembled and assembled

Images



Publication data including kind & date

[CN203475605](#)

U

2014-03-12

CN203475605U



Abstract

(CN203475605U)

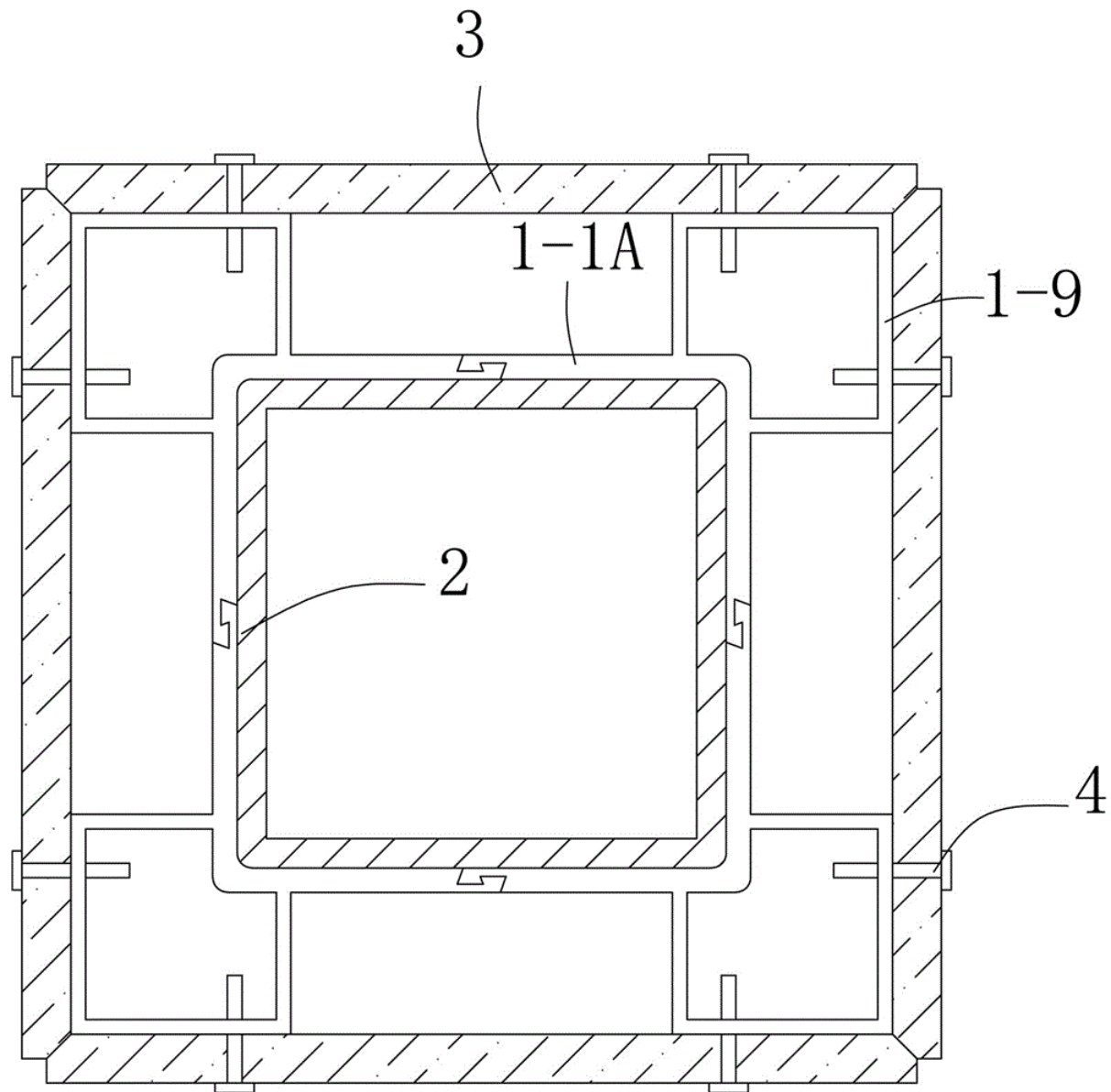
The utility model relates to modular buildings, in particular to a high-bearing performance modular building capable of being produced in industrialized manner and rapidly disassembled and assembled. The modular building comprises a wall and a roof which are respectively formed by brickworks, wherein part or all of the roof and the wall are formed into a whole, part or all of the brickworks are formed by assembling modules, reinforcing structural parts are respectively arranged in part or all of the modules in the brickworks; the adjacent modules in the brickworks are connected detachably, or/and the adjacent modules are connected detachably through the reinforcing structural parts which correspond in position. By adopting a structure adopted by the modular building, the modular building has the advantages that the bearing performance, the waterproofness, the construction precision and the construction progress are improved, and the energy consumption and the building cost are reduced.

Family 40/100 - FAMPAT - ©Questel

Title

(CN105544864)

Box column structure for 3D modular house building

Images**Publication data including kind & date**[CN105544864](#)

A 2016-05-04 CN105544864

**Abstract**

(CN105544864)

The invention relates to a box column structure for 3D modular house building. The box column structure comprises a steel component, a square box type plate body and a connection structure connecting the steel component and the square box type plate body. The connection structure comprises a fastener and fixed parts arranged on the fastener, the fastener is formed by clamp connection of a plurality of connection pieces through clamping parts **disposed** thereon. The fastener is buckled outside the steel component, and the square box type plate body is connected to the fixed parts through bolts. The box column structure for 3D modular house building provided by the invention is designed directed at 3D modular house building requirements, because of the adoption of the connection structure composed of the fastener and the fixed parts, the outside of the box type steel component can be directly packed with a square box type external packing material without welding and concrete pouring, and the installation is simple and fast.

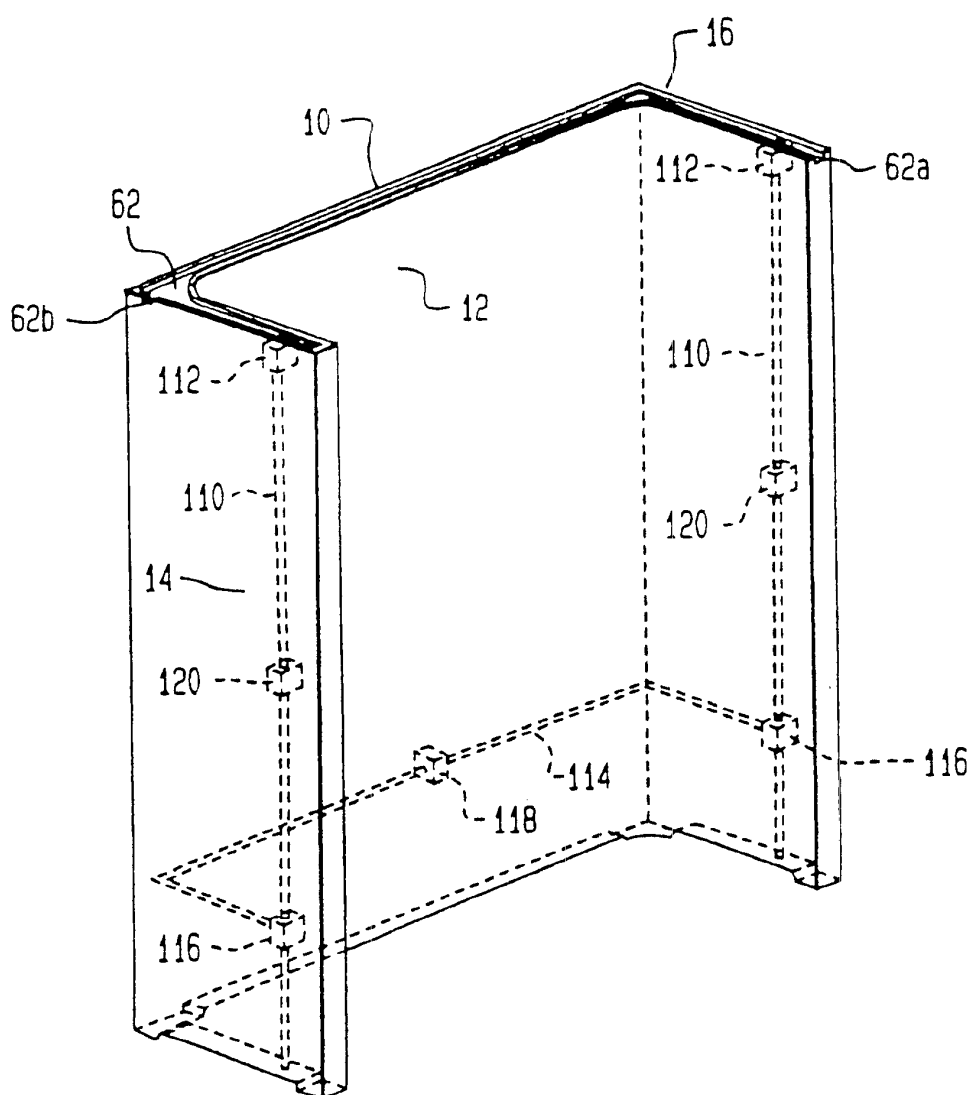
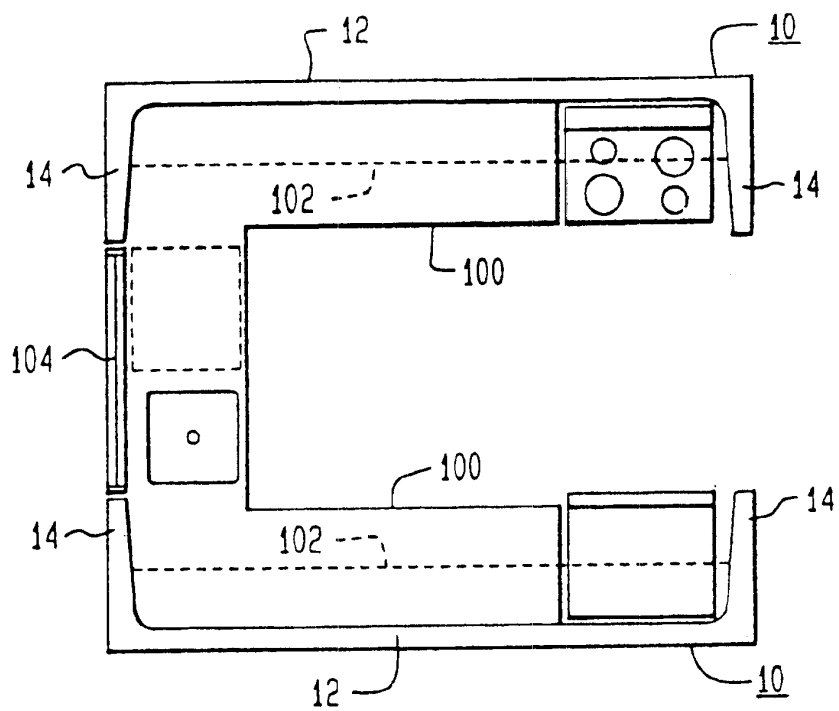
Family 41/100 - FAMPAT - ©Questel

Title

(US6457281)

Modular building systems

Images



Publication data including kind & date[US6457281](#)

B1 2002-10-01 US6457281

**Abstract**

(US6457281)

A building module, modular building constructions and methods for erected same are disclosed. The module is of deep U-shape configuration, defining a space which is able to enclose various facilities within a building structure. A typical module includes a raceway and internal conduit system for power and/or communications system etc. Preset-levelling and self-centering device provide for quick erection of the modules in a wide variety of arrays and configurations to provide exterior walls and to enclose and define interior space.

Family 42/100 - FAMPAT - ©Questel

Title

(WO2018121736)

Modular same-floor drainage device for building and installing method therefor

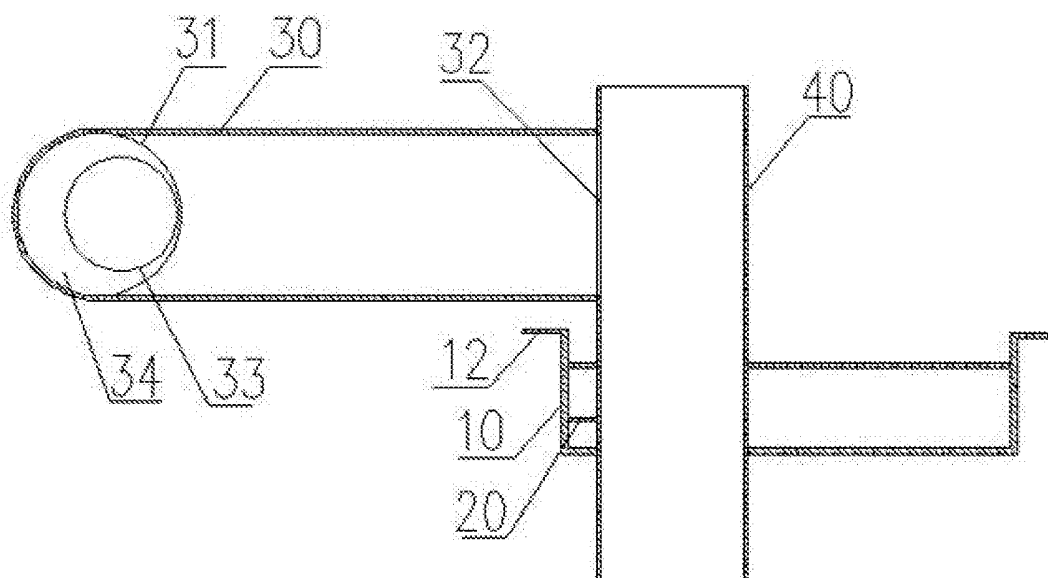
Images

图 3

Publication data including kind & date[WO2018121736](#)

A1 2018-07-05 WO2018121736

**Abstract**

(WO2018121736)

Provided is a modular same-floor drainage device for a building, the device comprising a water collection tank (10), a vertical connecting pipe (40) through the water collection tank (10) and at least one waste water inlet (13) provided on a top cover (11) of the water collection tank, wherein the vertical connecting pipe (40) is provided with a water outlet (41) located inside the water collection tank (10), and the waste water inlet (13) is in communication with the water outlet (41) via a water seal mechanism. Further disclosed is an installing construction method for the modular same-floor-drainage device for a building.

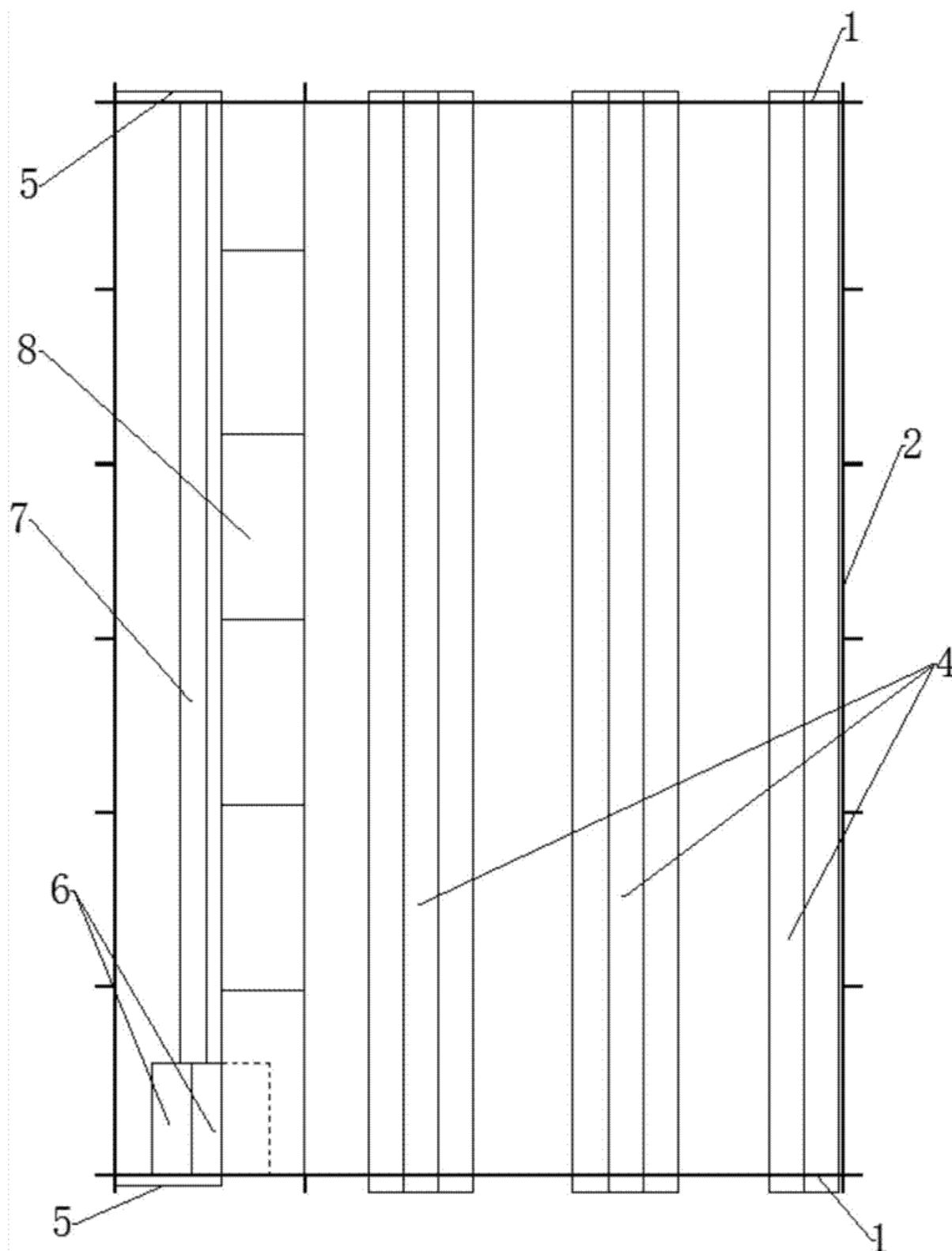
Family 43/100 - FAMPAT - ©Questel

Title

(CN207402953U)

A modular mold , vertical mould subassembly and prefabricated coincide wall structure for building prefabricated coincide wall body

Images



Publication data including kind & date

CN207402953

U 2018-05-25

CN207402953U



Abstract

(CN207402953U)

The utility model discloses a building the modular mold of prefabricated coincide wall body, vertical mould subassembly and its and building the prefabricated coincide wall structure who obtains, modular mold and vertical mould subassembly all adopt the external mold hoarding to close moulding utensil frame, insert the centre form block group and construct and have the prefabricated wall body of aplurality of cast-in -place cavity coincide, and its centre form block group is become

by the cylindrical centre form block group that the several form is the same, easily processing preparation installation and removing, and construction convenience is efficient. Pour the good solid structure of fashioned prefabricated coincide wall structure resistance to shear through this modular mold, vertical mould subassembly, still have the corner and connect the wall body, vertical wall connection construction of being convenient for.

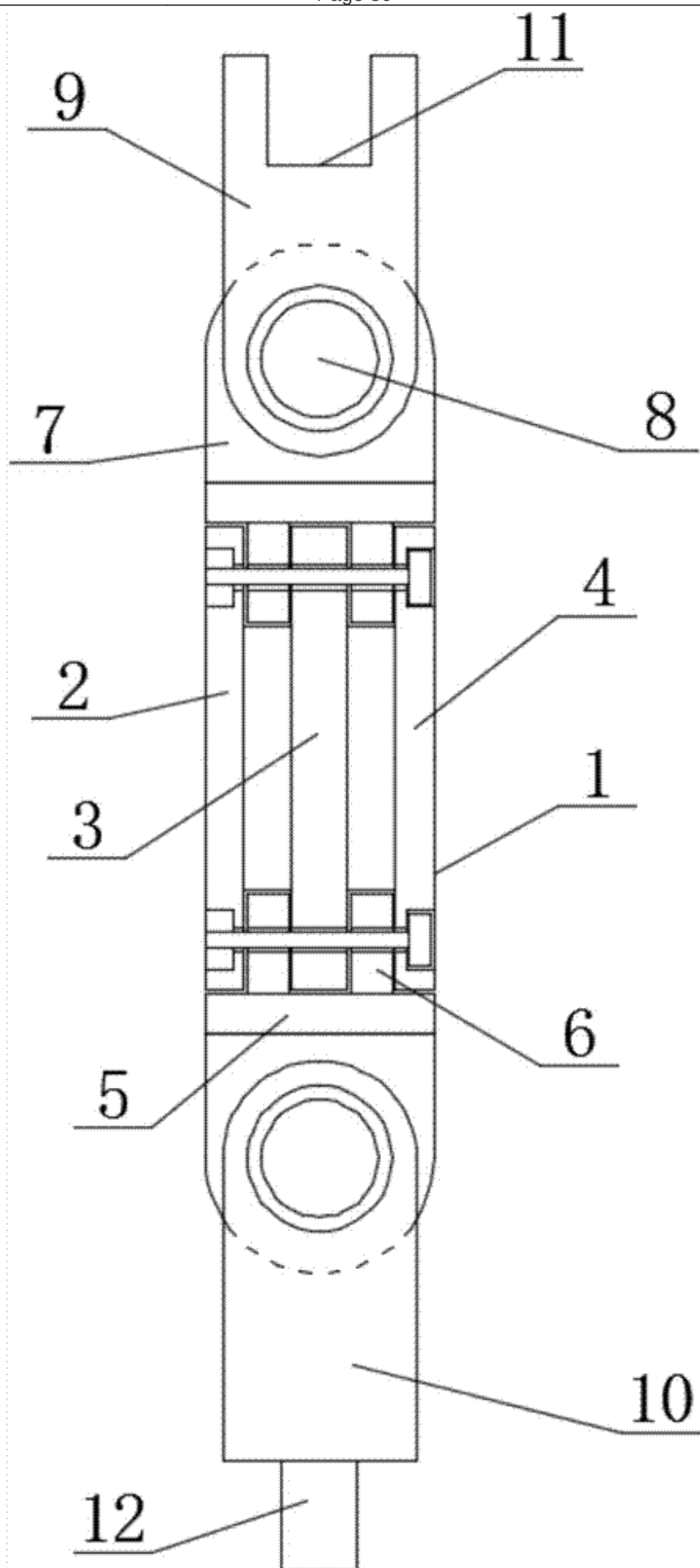
Family 44/100 - FAMPAT - ©Questel

Title

(CN206722109U)

Modular heated board for building

Images



Publication data including kind & date[CN206722109](#)

U 2017-12-08 CN206722109U

**Abstract**

(CN206722109U)

The utility model relates to a heated board field, specifically be a modular heated board for building, this modular heated board for building, through adopting limiting plate no. 1, insulation board main body is constituted with the third -class many panels of limiting plate to limiting plate no. 2, and at limiting plate no. 1, the inside fill insulant material in limiting plate no. 2 and the limiting plate clearance between three, thereby improve the thermal insulation performance of panel, add an installed part of setting up a checkpoint at insulation board main body's both ends simultaneously, and it pegs graft fixedly to add the inserted block through one side of screens installed part, while is at the surface and the limiting plate no. 1 of inserted block, the screw hole is offered with three surfaces of limiting plate to limiting plate no. 2, through bolt thread tightening once more, the compactness of connecting between the reinforcing structure, rotate the installed part through the installation of the another side at the screens installed part simultaneously, the mode of establishing the dwang that adds through the outside rotating the installed part, **carry** out the installation of screens piece no. 1 and screens piece no. 2.

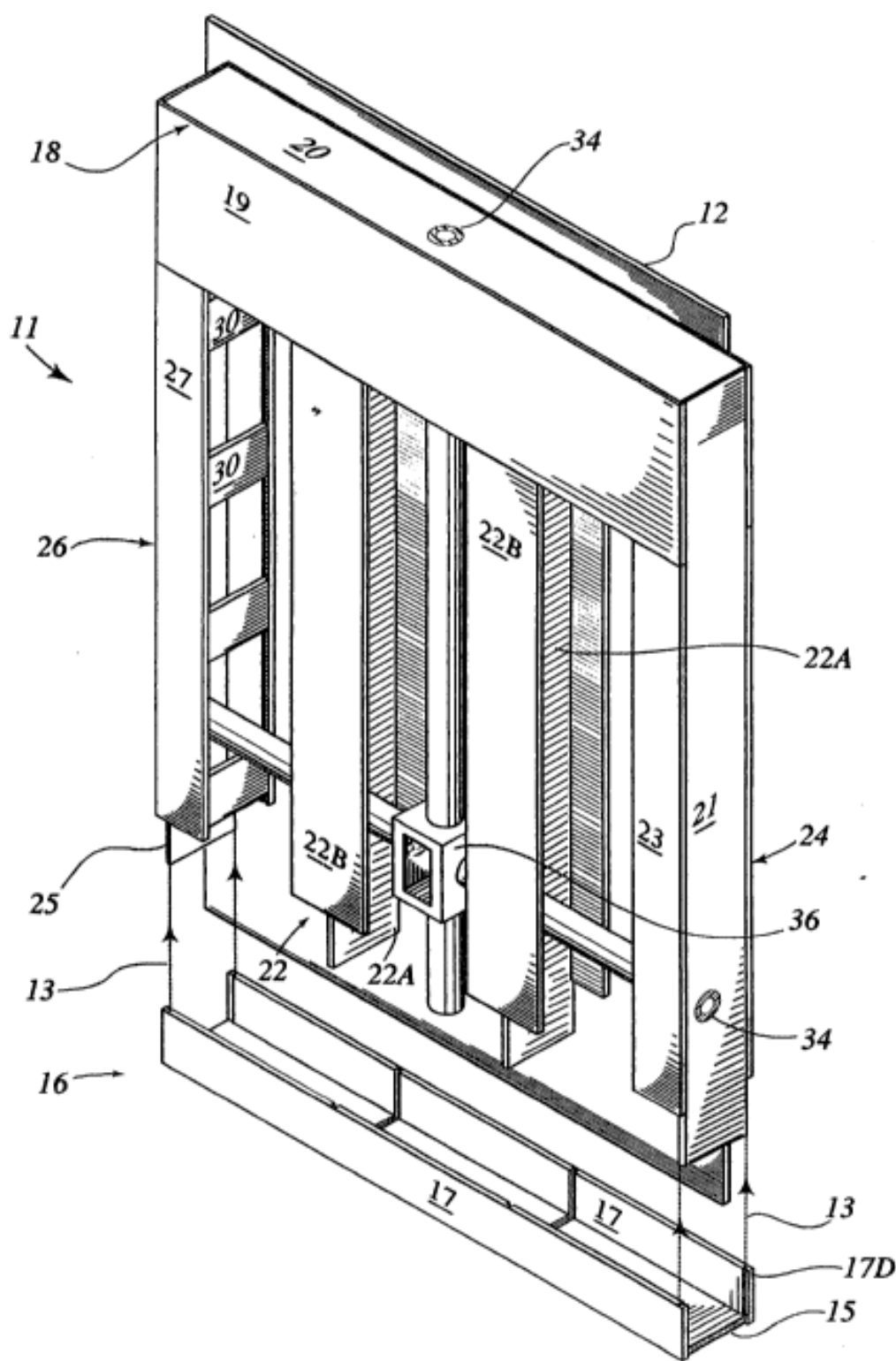
Family 45/100 - FAMPAT - ©Questel

Title

(CA2081651)

Modular prefabricated building panels

Images



Publication data including kind & date

CA2081651

A1 1994-04-29 CA2081651



Abstract

(CA2081651)

Construction and use of a modular system of prefabricated building panels is described: in the system a structural frame of characteristically OSB (oriented strand board) or plywood is formed in jigs under compression, the integrity of the frame being assured by the rabbeting or dovetailing of all joints and the design of the supporting channels and I-struts, and by the gluing and nailing of all parts. In the preferred embodiment for load-bearing and insulating wall, floor and ceiling panels additional rigidity is provided by fire-retardant expanding foam insulation which hardens under pressure inside the frame.

Electrical conduits are pre-set into the frame, which is offset from fastened interior and exterior sheathing boards so that the finished panel will mate in a rabbet joint with an identical panel; thus a series of such panels can be connected in the field with ease. In addition, the exterior sheathing of wall panels extends down to exactly cover the thickness of a joining floor member to prevent thermal loss and wind penetration; and a special corner wall panel has its dimensions reduced by the thickness of a joining wall member, so that the joint can be accommodated without compromising the horizontal modularity of the multiple identical-panel design.

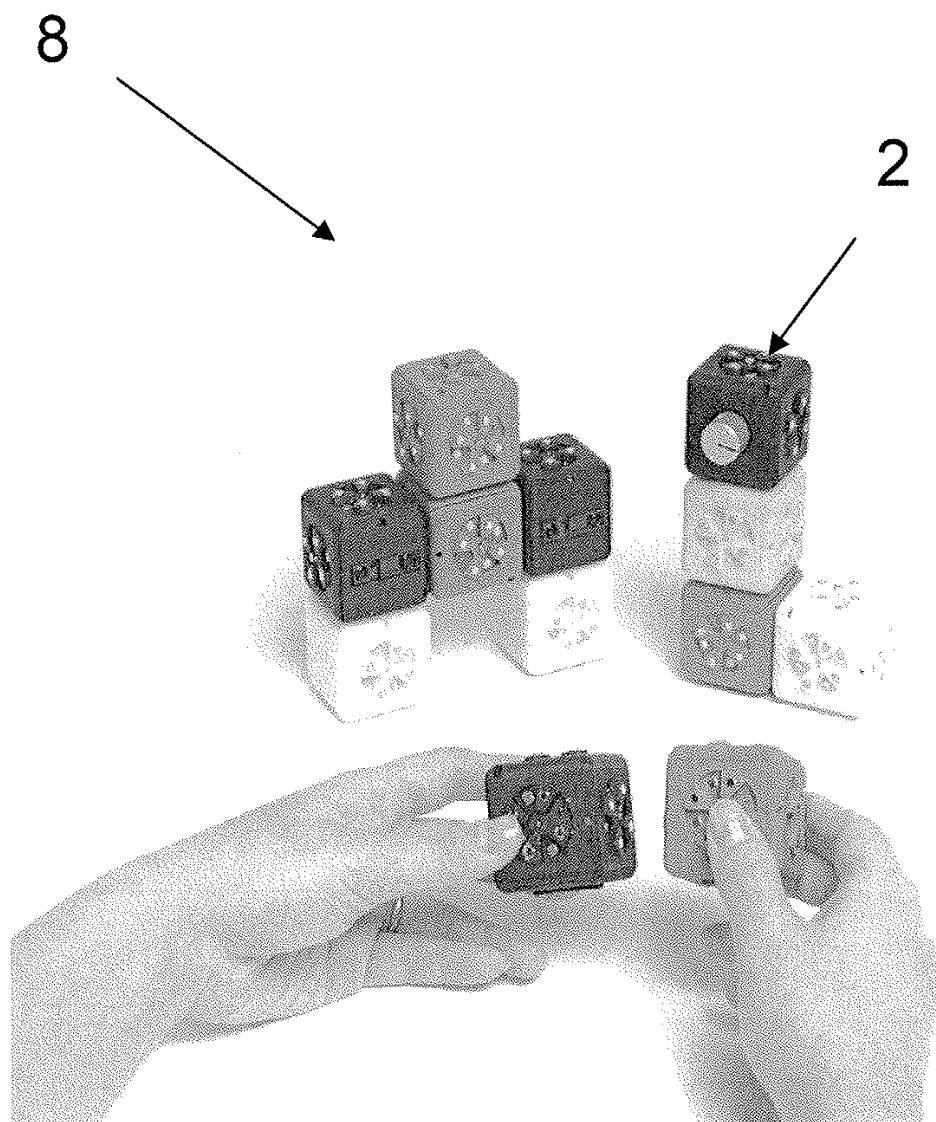
Family 46/100 - FAMPAT - ©Questel

Title

(WO201111084)

Modular robotics

Images



Publication data including kind & date

WO2011/011084	A1	2011-01-27	WO201111084
US20120122059	A1	2012-05-17	US20120122059
US9472112	B2	2016-10-18	US9472112
US20170004717	A1	2017-01-05	US20170004717



Abstract

(WO201111084)

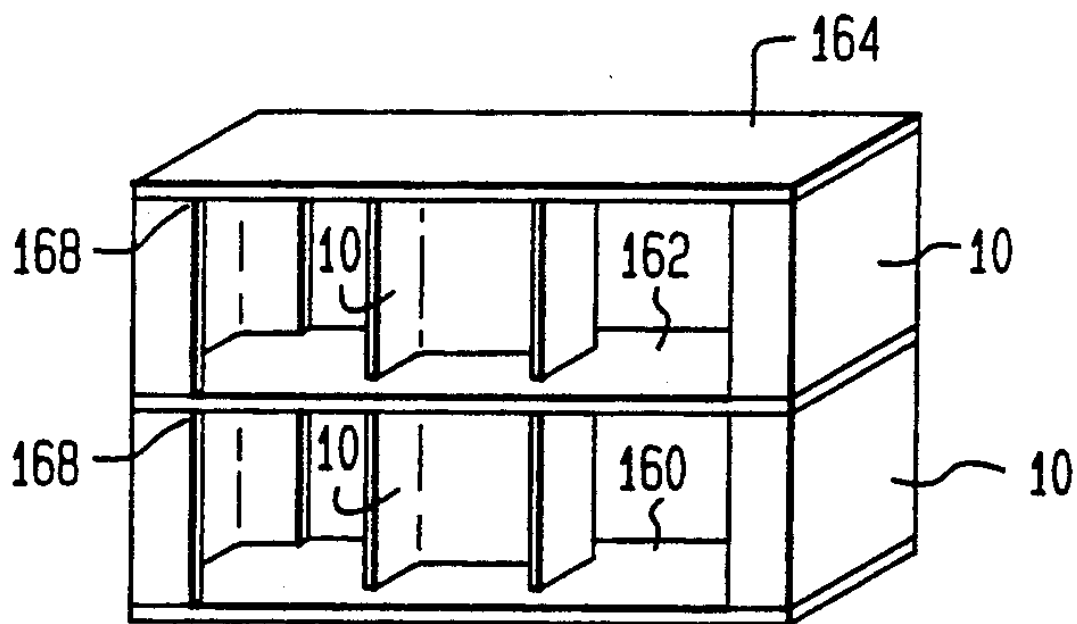
The present invention is a robotics construction kit that serves as a platform for children to engage in problem-solving and innovative thinking in science, technology, engineering, and mathematics. By designing and building robotics constructions from an apparently simple set of blocks that encapsulate the kinetic, electronic, and software elements of robots, children and others can encounter, explore, and experiment with basic principles of science and computation. Unlike existing robotics construction kits for education, the present invention embodies computation in every element, which affords understanding systems of distributed computation, rather than systems of topdown control.

Family 47/100 - FAMPAT - ©Questel

Title

(US5103604)

Modular building systems

Images**Publication data including kind & date**[US5103604](#)

A 1992-04-14 US5103604

**Abstract**

(US5103604)

A building module, modular building constructions and methods for erecting same are disclosed. The module is of deep U-shape configuration, defining a space which is able to enclose various facilities within a building structure. A typical module includes a raceway and internal conduit system for power and/or communications systems etc. Preset-levelling and self-centering devices provide for quick erection of the modules in a wide variety of arrays and configurations to provide exterior walls and to enclose and define interior space.

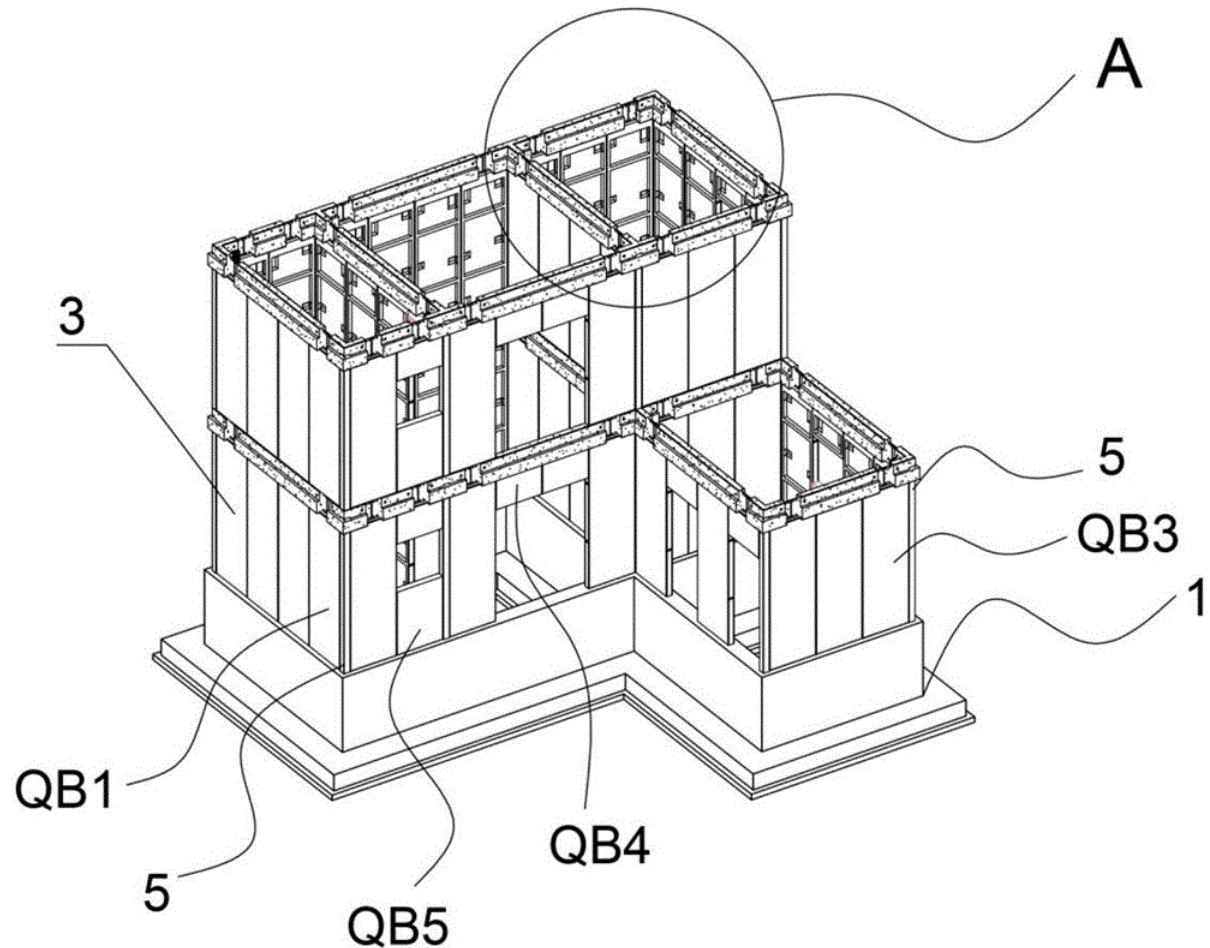
Family 48/100 - FAMPAT - ©Questel

Title

(CN109653378)

Fully assembled modular multi-layer structure and its construction processes low

Images



Publication data including kind & date

[CN109653378](#)

A 2019-04-19 CN109653378



Abstract

(CN109653378)

The present invention multi-story building the complete assembly is disclosed modular low, comprising prefabricated foundation, floor, wall and roof, a wall comprising wallboard QB1, QB2 wallboard, wallboard QB3, QB4 wallboard, wallboard QB5, mounting posts and bolts, and the wallboard QB1, QB2 wallboard, wallboard QB3, QB4 wallboard, wallboard QB5 and the mounting post through bolts being assembled; the floor layer to layer through cross bar, L beams, T-beams and conventional beam connection, with the fully assembled modular roof bolt through a roof of a building floor and fixedly connected to the multi-level, and the roof includes a plurality of steel column and the connecting steel plates, steel column split is formed for mounting the mounting surface of the steel plate is connected, is connected through bolted to the mounting surface of steel sheet. Is assembled with prefabricated through the precast elements, save construction time, while avoiding the influence of cast in situ environmental advantages. The present invention also discloses a fully assembled modular low multi-storied buildings and their construction processes.

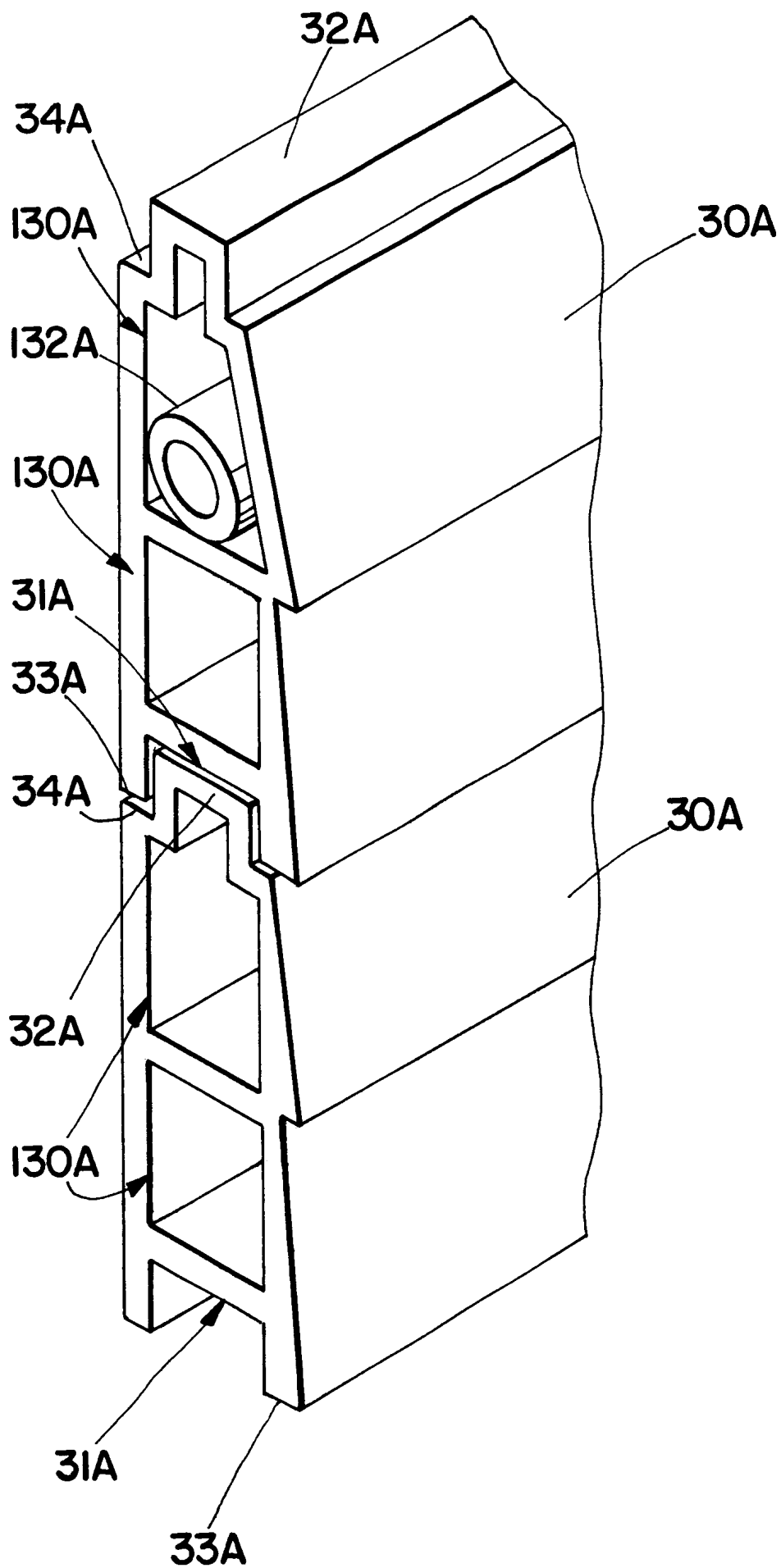
Family 49/100 - FAMPAT - ©Questel

Title

(WO200011282)

Modular building structures comprised of extruded components

Images



Publication data including kind & date

WO200011282	A2	2000-03-02	WO200011282
AU5578299	A	2000-03-14	AU9955782
WO200011282	A3	2000-06-15	WO200011282
US6295778	B1	2001-10-02	US6295778

**Abstract**

(WO200011282)

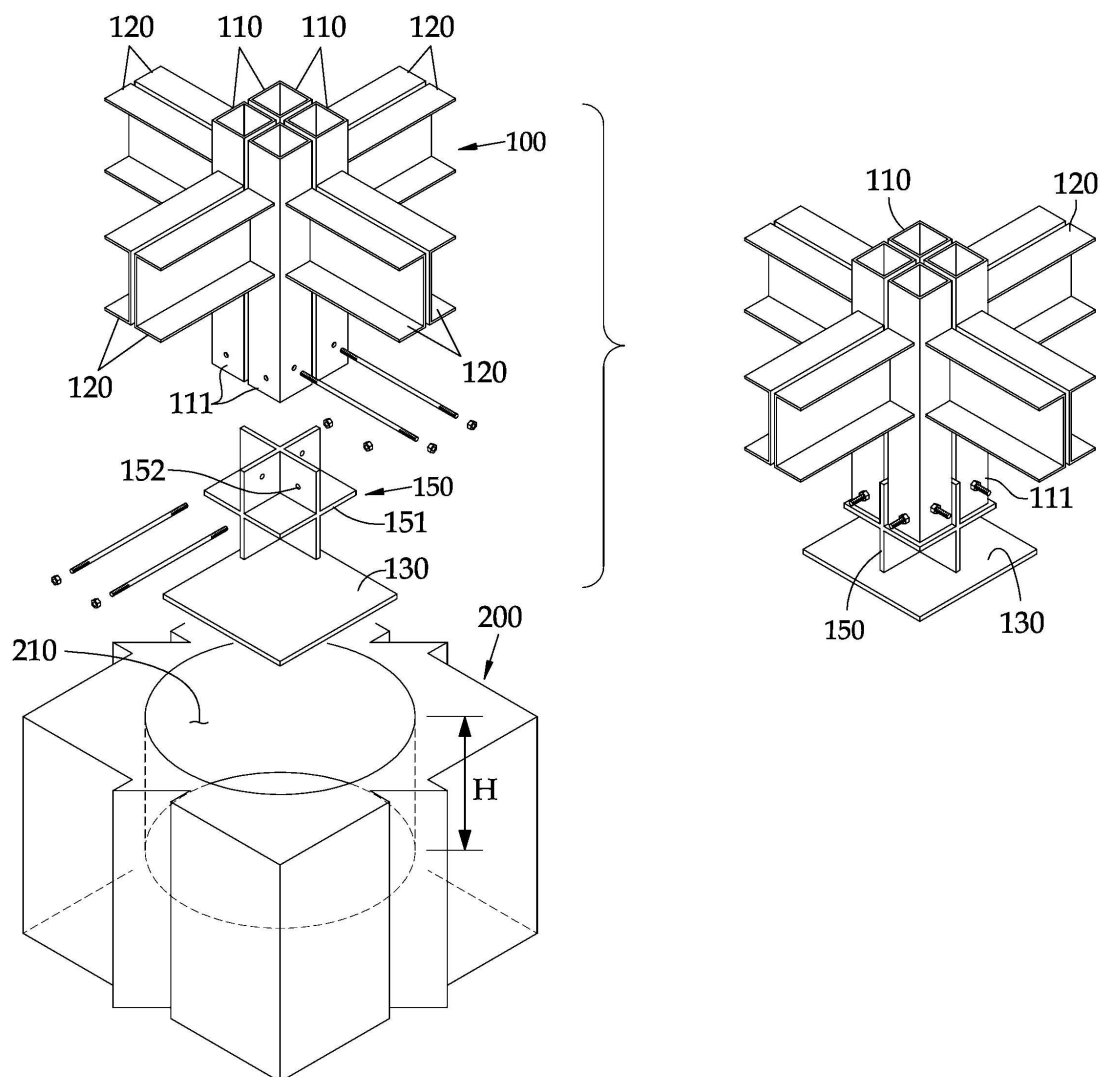
A modular wall structure (20) comprised of a plurality of horizontally-oriented wall panels (30) which are extruded components that are connected together in a stack. A plurality of modular wall structures (20) of the present invention may be connected by fastening panels (40). The fastening panels (40) may also be extruded components. In addition, preferred embodiments of the present invention may include a foundation (60), a roof (50), and an interior wall section (110). The roof (50) may be comprised of a roofing panel (50) which is an extruded component. Similarly, the interior wall section (110) may be comprised of a plurality of horizontally-oriented interior wall panels (30) which are extruded components that are connected together in a stack.

Family 50/100 - FAMPAT - ©Questel

Title

(KR101413134)

Joint system of modular unit structure and base using cross connector

Images

Publication data including kind & date[KR101413134](#)

B1 2014-07-01 KR101413134

**Abstract**

(KR101413134)

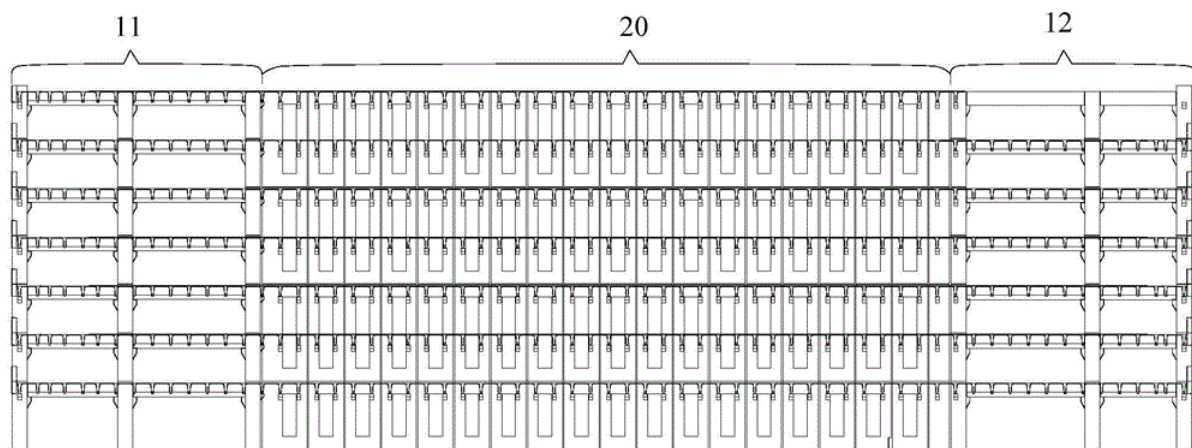
Disclosed is a joint unit structure of a modular unit structure and a base unit a cross connector. A joint unit of a lower pillar of a modular unit structure has a cross connector at the lower part. The base has an embedded hole at a position where the joint unit having the cross connector at the lower part is located. The joint unit having the cross connector at the lower part is inserted into the embedded hole, and fillers are poured into the embedded hole. The pillar of the modular unit structure and the embedded hole are completely combined. Therefore, the foundation and the modular unit structure are completely fixed.

Family 51/100 - FAMPAT - ©Questel

Title

(CN104533097)

Recursive stair type construction method for fabricated multi-layer building

Images**Publication data including kind & date**[CN104533097](#)

A 2015-04-22 CN104533097

[CN104533097](#)

B 2016-08-24 CN104533097B

**Abstract**

(CN104533097B)

The invention relates to a recursive stair type construction method for a fabricated multi-layer building. The method includes the steps of firstly, assembling a first set of walls on the ground, and conducting grouting connection on the first set of wall bodies; secondly, assembling a second set of walls on the side portions of the first set of wall bodies, and conducting grouting connection on the second set of wall bodies; thirdly, assembling floors on the first set of walls where grouting connection has been completed, assembling a third set of walls on the tops of the first set of walls, and conducting grouting connection on the third set of walls; fourthly, assembling floors on the second set of walls where grouting connection has been completed, assembling a fourth set of walls on the tops of the second set of walls, conducting grouting connection on the fourth set of walls, and repeatedly executing the third step and the fourth step till the designed layer height is achieved. The assembly construction of the multi-layer building is conducted through the recursive stair type hoisting method, the construction procedures are reasonably and alternately conducted, and the construction time is effectively saved. By means of the construction method, the work efficiency is greatly improved, the construction cost is reduced, and the construction period is shortened.

Family 52/100 - FAMPAT - ©Questel

Title

(CN104878932)

Formwork construction method adopting block-building method

Publication data including kind & date

CN104878932	A	2015-09-02	CN104878932
CN104878932	B	2017-09-29	CN104878932B

**Abstract**

(CN104878932B)

The invention discloses a formwork construction method adopting a block-building method. The formwork construction method comprises steps as follows: firstly, all formworks in a formwork system are subjected to detailing by the aid of the accurate detailing function of AutoCAD (auto computer aided design), block classification is realized through selection of different materials, all blocks in each formwork are assembled on the ground by simple connecting pieces in a block building mode, and then erection, reinforcement and support of the formwork system are performed. The formwork construction method adopting the block-building method has the advantages of easiness in construction, high construction precision, high safety coefficient, rapidness, high efficiency and the like.

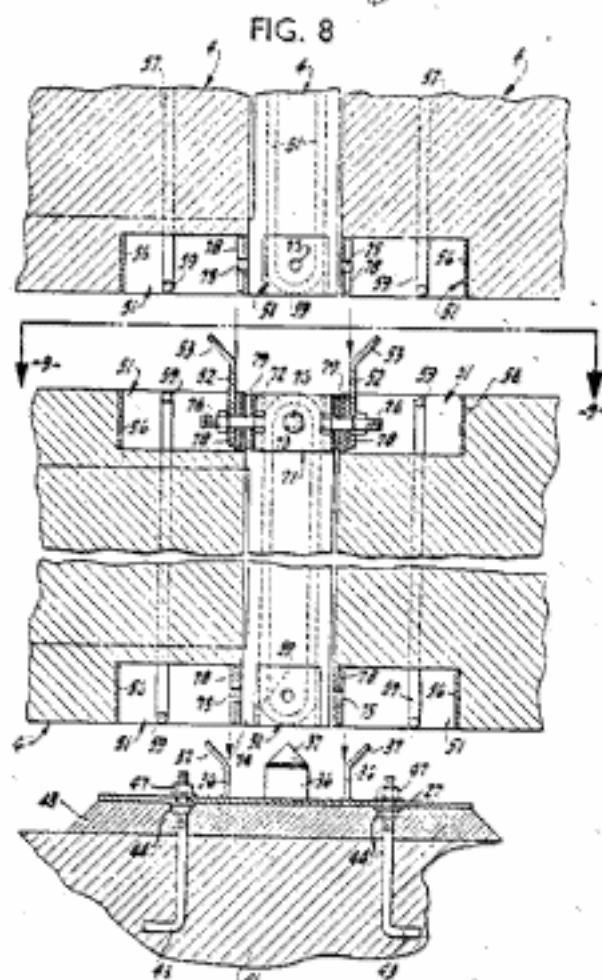
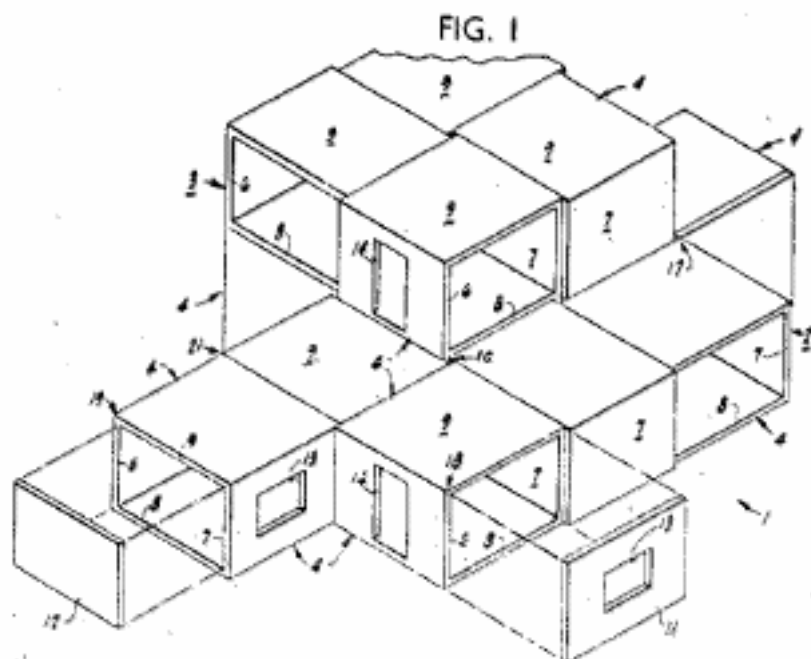
Family 53/100 - FAMPAT - ©Questel

Title

(GB1393790)

Modular building construction and erection system utilizing selectively oriented modules

Images



Publication data including kind & date

GB1393790

A 1975-05-14 GB1393790



Abstract

(GB1393790)

1393790 Prefabricated buildings BUILDING BLOCK MODULES INC 24 Oct 1972 48971/72 Heading E1A In a prefabricated building, such as a multistory building, Fig 1, erected from room units 4 which are of rectangular, tubular construction to define a pair of opposite end walls giving unrestricted access thereto adjacent units are **disposed** at right angles to one another whereby the open end of one unit abuts a side wall of the adjacent unit, external openings in the resulting building being filled in by cladding panels 11, 12. The building is mounted on a foundation 41, Fig 8, having a

securing plate 27 which is vertically adjusted on the foundation by means 43, 44, 47 and is provided with guide means 36, 37 to locate the superimposed unit 4 in position. Each unit 4 is provided with connection boxes 51 for attachment to the foundation and to adjacent units, the box being secured to the unit 4 by re-inforcing rods 59, 61 and anchoring straps for details of which the Specn. and remaining drawings (not shown) should be referred to. One unit 4 is located upon another unit 4 by means of guides 52, 53 and their respective connector boxes are provided with aligned apertures 73 75 to receive bolts 76. A vertical space may be left between certain adjacent units to receive service conduits.

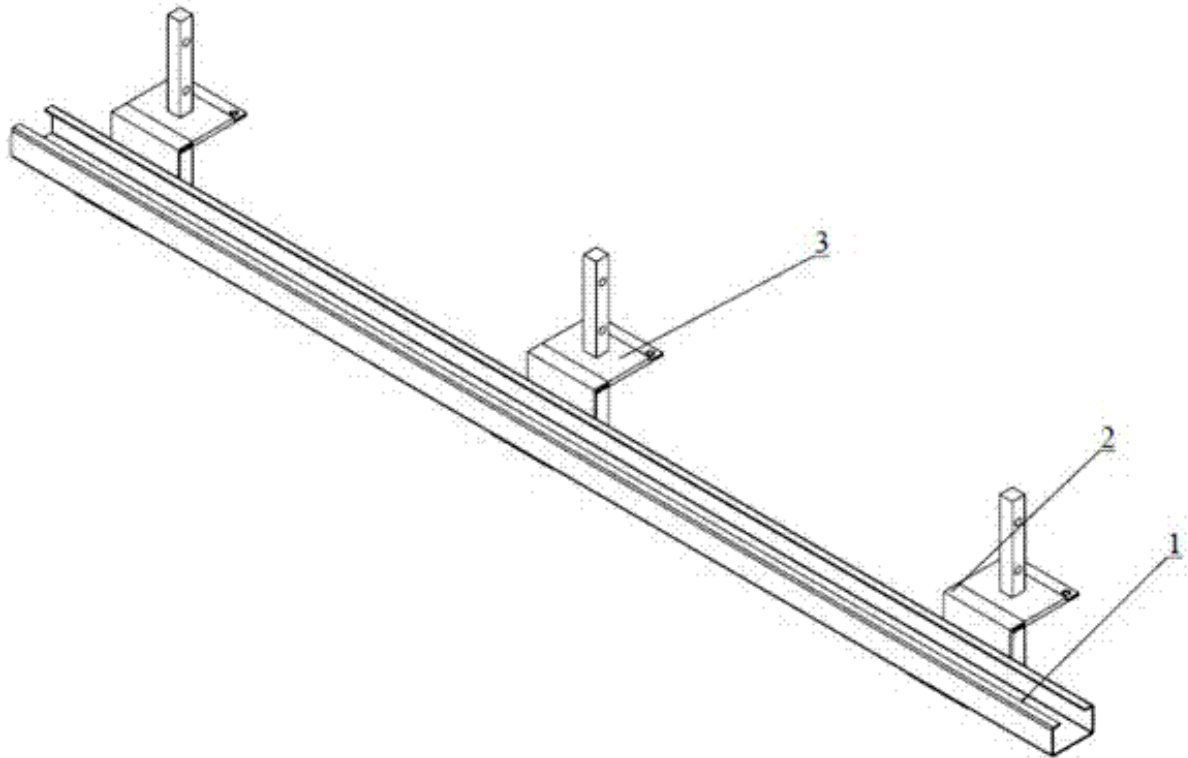
Family 54/100 - FAMPAT - ©Questel

Title

(CN103850439)

Modular house construction method

Images



Publication data including kind & date

CN103850439	A	2014-06-11	CN103850439
CN103850439	B	2017-09-05	CN103850439B



Abstract

(CN103850439B)

The invention discloses a modular house construction method. The method includes operations of foundation regulation, anchor erecting, anchor pavement, floor pavement, supporting column placement and wallboard placement. By the aid of the modular house construction method, defects that in the prior art, construction process is complex, polluting waste is produced during construction, modules are inconvenient to disassembled, and energy-saving and environment protecting performances are unexpected can be overcome, and the method has the advantages that the construction process is simple, no polluting waste is produced during construction, modules are convenient to disassembled, and energy-saving and environment protection performances are fine.

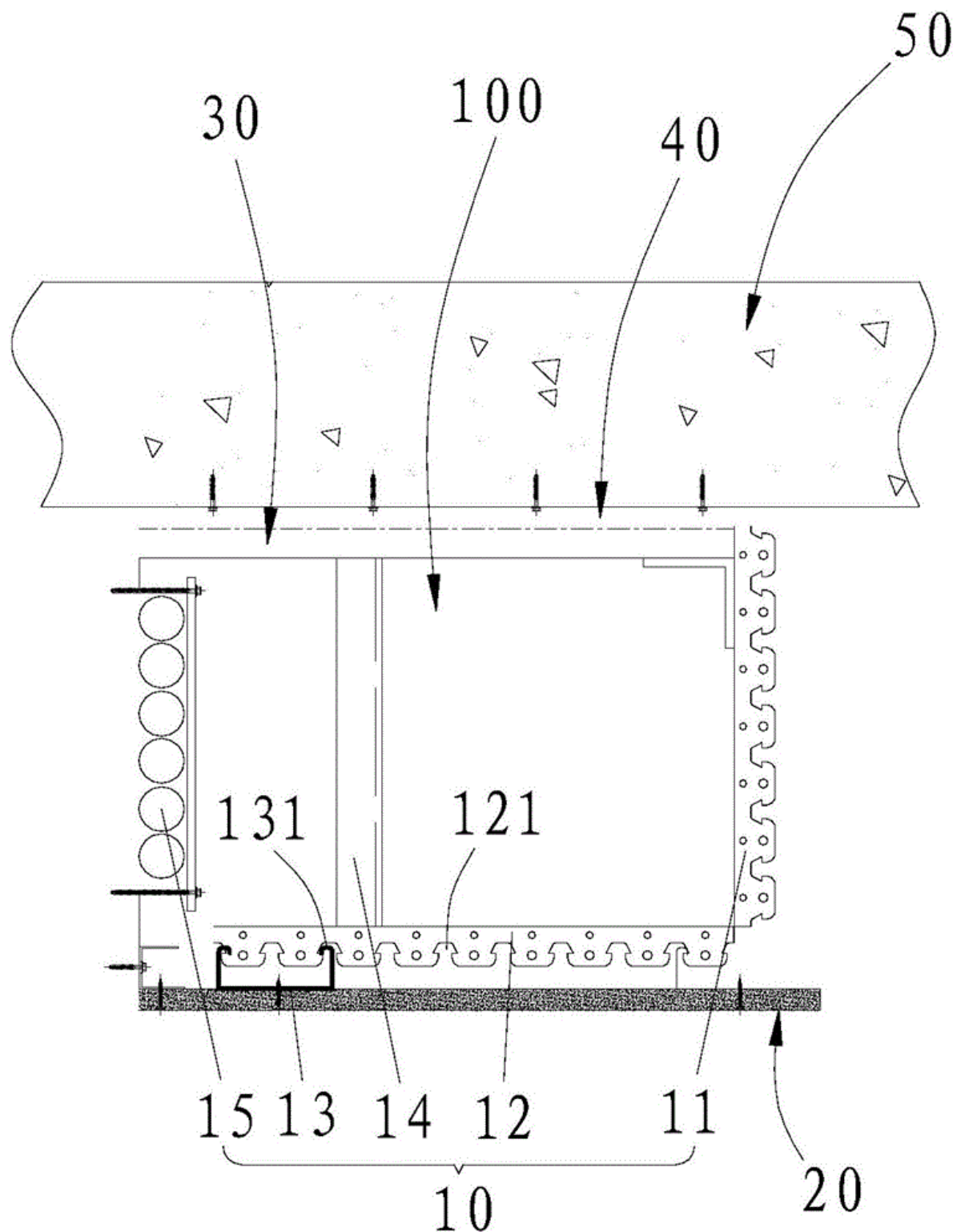
Family 55/100 - FAMPAT - ©Questel

Title

(CN109736501)

Modular building ceiling structure and its construction method

Images



Publication data including kind & date

CN109736501

A 2019-05-10 CN109736501



Abstract

(CN109736501)

The present invention provides a modular building ceiling structure and its construction method, comprising a plurality of unit plates suspended ceiling, the ceiling unit plates includes a main frame and the decorative panel, ornamental panel mounted on the bottom of the main frame, the top of the main frame fitted with a slide rail; fixedly attached to the bottom of the slab to be constructed with a plurality of fixed rails, slides in the longitudinal direction of the sliding rail along a fixed rail fixed guide rails, to the ceiling unit plates positioned to be mounted on the bottom of the floor construction; several ceiling unit plates in turn mounted on the bottom of the slab to be constructed, and the two adjacent ceiling unit between the panels fixedly connected through connectors. This structure at the factory prefabricated in advance through all of the suspended ceiling unit plates, such that each block has a better quality of the unit plates suspended ceiling can be

ensured, at the same time, on-site construction convenient, rapid assembly, improves job efficiency. In addition, since the field without processing, does not generate any construction debris, so as not to pollute the environment.

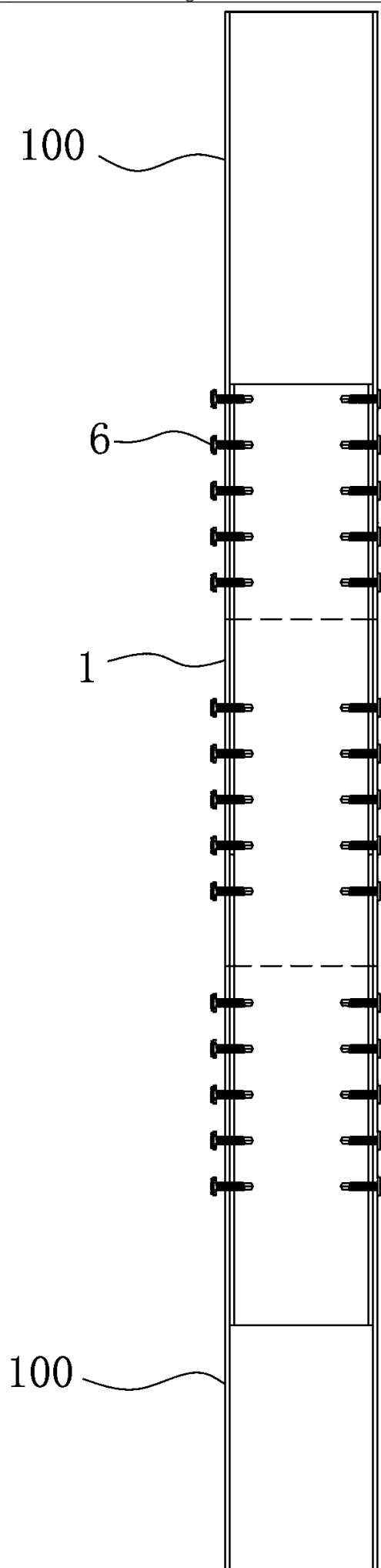
Family 56/100 - FAMPAT - ©Questel

Title

(CN105484369)

Square steel column fixing structure for modular building

Images



Publication data including kind & date[CN105484369](#)

A 2016-04-13 CN105484369

**Abstract**

(CN105484369)

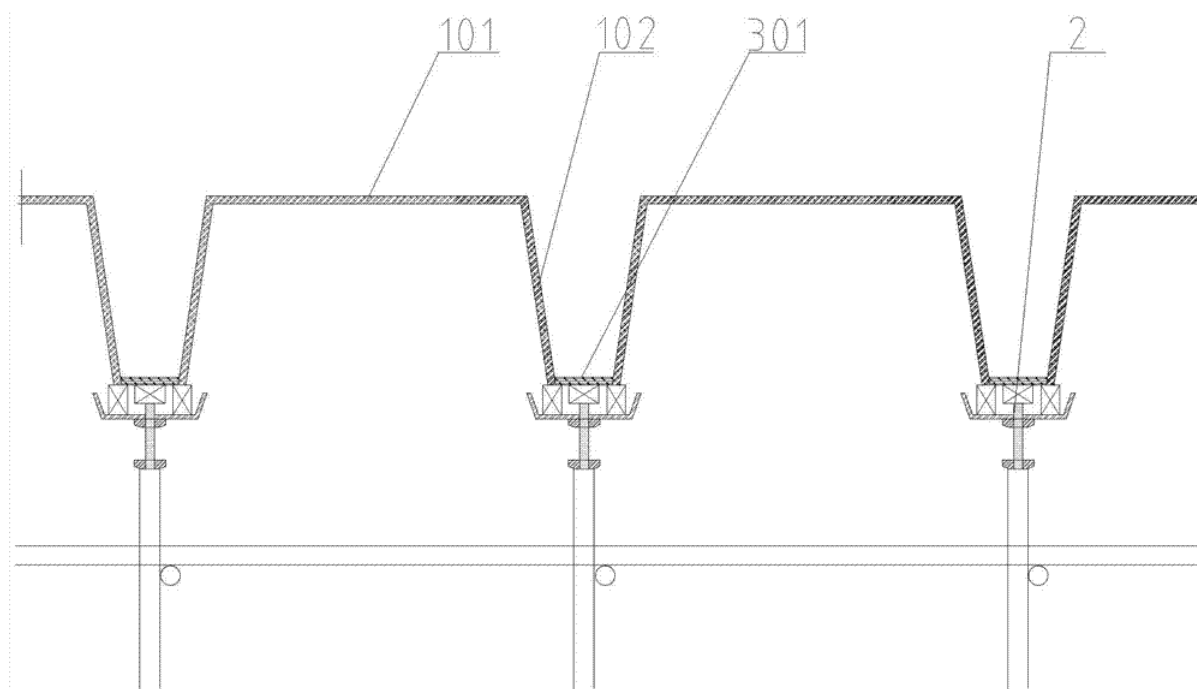
The invention relates to a square steel column fixing structure for a modular building. The square steel column fixing structure comprises a basic fixing part fixed into a floor and square steel columns installed at the upper end and the lower end of the basic fixing part. The basic fixing part comprises a supporting column made of square steel, an upper insertion body and a lower insertion body are arranged at the upper end and the lower end of the supporting column respectively and comprise connecting steel plates fixedly arranged on the peripheral inner wall of the supporting column, the square-tube-shaped upper insertion body and the square-tube-shaped lower insertion body are formed by the connecting steel plates, the width between the outer wall of the square-tube-shaped upper insertion body and the outer wall of the square-tube-shaped lower insertion body is matched with that between the inner walls of the square steel columns, the square steel columns are inserted into the upper insertion body and the lower insertion body, and the upper insertion body and the lower insertion body are fixedly connected with the square steel columns. The modular square steel column fixing structure is simple in structure and convenient to install, and is applied to the modular building, the upper square steel vertical column and the lower square steel vertical column between floors can be rapidly connected, the device can be prefabricated in a workshop, prefabrication and ready-made rapid assembly construction of house boards are achieved, manpower and material resources are saved, and working efficiency is improved.

Family 57/100 - FAMPAT - ©Questel

Title

(CN105544969)

Formwork bar laying construction method, combined type splitting formwork and formwork quick connector

Images**Publication data including kind & date**[CN105544969](#)

A 2016-05-04 CN105544969

[CN105544969](#)

B 2017-08-18 CN105544969B

[CN107355072](#)

A 2017-11-17 CN107355072

[CN107386634](#)

A 2017-11-24 CN107386634

**Abstract**

(CN105544969B)

The invention relates to a formwork bar laying construction method, a combined type splitting formwork and a formwork

quick connector. The method comprises the following construction steps that supporting racks are erected in a full hall mode; a bar paving mode is adopted for laying battens and rib beam formworks; the combined type splitting formwork is installed between rib beams in a laid mode; rib beam steel bars and top plate steel bars are bound; concrete is poured; a side formwork body and a bottom formwork body of the combined type splitting formwork are split; the beam bottom supporting racks and the rib beam formworks are disassembled. The method has the advantages that the battens and the rib beam formworks are laid in a bar mode, compared with an existing full formwork laid mode, the formwork area can be saved, the number of the adopted steel bars is reduced, and the amount of the adopted concrete is reduced; compared with an existing integral plastic formwork, formwork disassembling is finished at least 20 days earlier, the formwork **circulation** cycle is shortened, the formwork lease fee is saved, and the construction period is shortened greatly; the side formwork body and the bottom formwork body of the combined type splitting formwork can be disassembled fast, and rigidity of a whole supporting system is ensured after the formwork is disassembled.

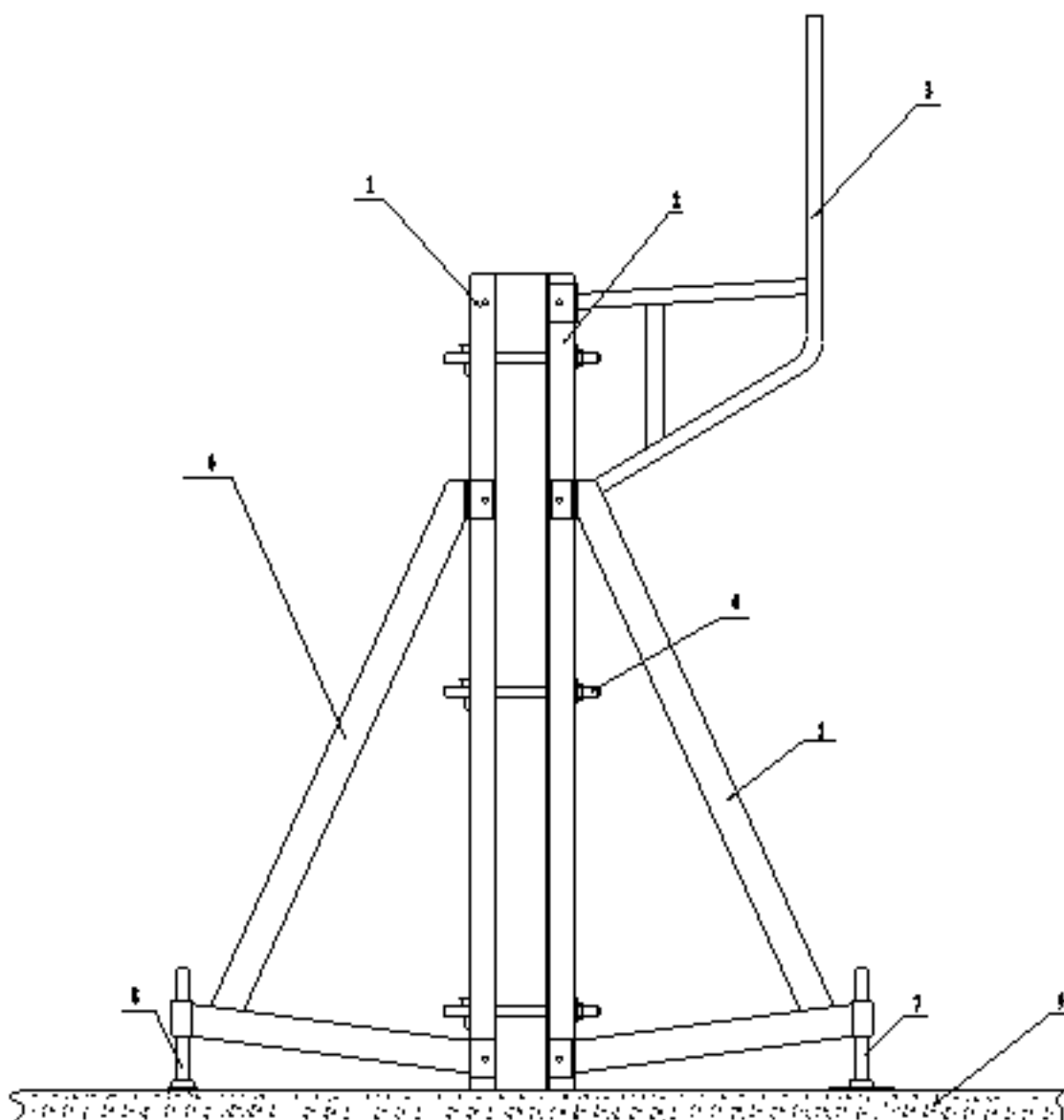
Family 58/100 - FAMPAT - ©Questel

Title

(CN102182302B)

Building construction all-steel mold plate and manufacturing and assembling method thereof

Images



Publication data including kind & date

CN102182302	A	2011-09-14	CN102182302
CN102182302	B	2013-01-30	CN102182302B



Abstract

(CN102182302B)

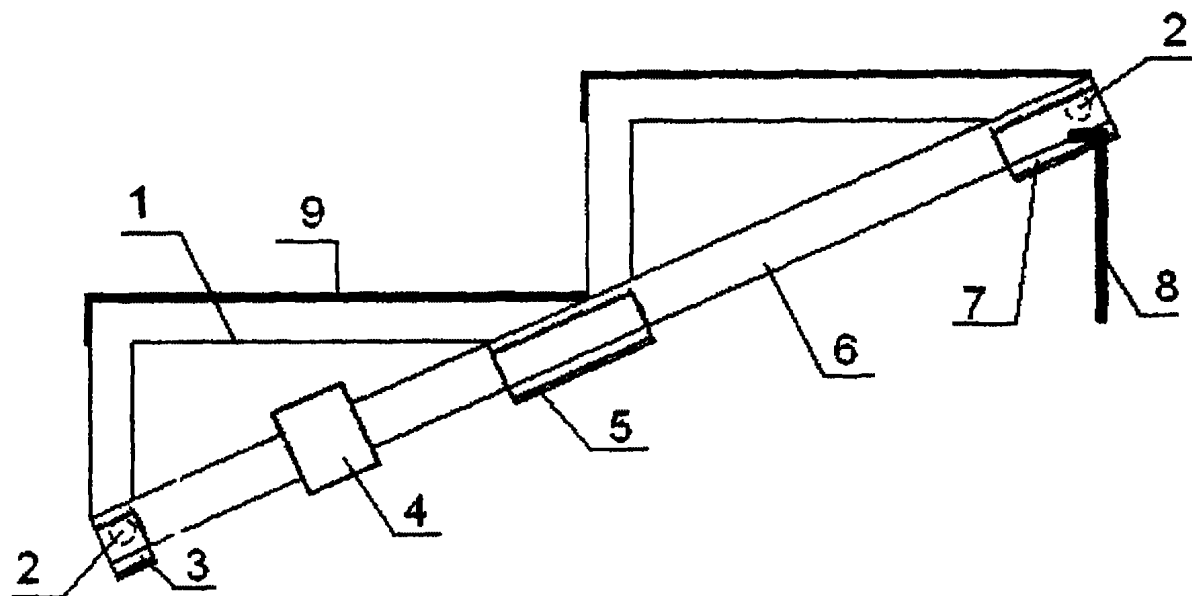
The invention relates to a building construction all-steel mold plate, which belongs to the field of building construction. The building construction all-steel mold plate comprises two major parts, namely a mold plate and auxiliary accessories, wherein the mold plate comprises a flat plate, an external corner, an internal corner, a special-shaped plate and a stunt head; the auxiliary accessories comprise a double-back arris, a double-back arris hook, an oblique back arris, an oblique back arris hook, a wall-penetrating bolt, a hook head bolt, a fastening bolt, a fastener, an operation platform frame, an oblique support, a mold plate hanging hook and a door hole mold right angle; and the building construction all-steel mold plate is characterized in that the flat plate is formed by welding a planar plate with a framework, the framework is formed by assembly welding of rectangular steel pipes, the planar plate is surrounded by the framework, a plurality of horizontal and vertical reinforcing ribs are arranged on one side of the planar plate, the reinforcing ribs are the rectangular steel pipes, and connecting holes are arranged on the framework and the reinforcing ribs. Joint seams are tight, the assembly and the disassembly are flexible, the **transportation** is convenient, the whole hoisting can be realized by a tower hoist, and bulk assembly and bulk disassembly can also be performed. The torsional deformation due to loading can be avoided, when the mold plates are combined for use, the concrete leakage phenomenon at the junctions can be avoided.

Family 59/100 - FAMPAT - ©Questel

Title

(CN101761245B)

Assembled portable ladder for building construction layer

Images**Publication data including kind & date**

CN101761245	A	2010-06-30	CN101761245
CN101761245	B	2011-05-25	CN101761245B

**Abstract**

(CN101761245B)

The invention discloses an assembled portable ladder for a building construction layer, which comprises a pedal skeleton, a pedal, a side beam and a cross beam; the pedal skeleton, the pedal, the side beam and the cross beam form a stairs unit which can be connected end to end by at least two stages; the lower part, the middle part and the upper part of the side beam of the stairs unit are respectively provided with a lower connector, a middle connector and an upper connector; and the middle connector and the upper connector are provided with holes for installing bolts. The side beam is arranged between the lower connector and the middle connector or/and between the middle connector and the upper connector, and is provided with a **movable** connector with adjustable position; and the **movableconnector** is provided with the hole for installing bolts. The bolts are in L-shaped structure. Bolts are adopted for connection when the stairs units are connected end to end. The assembled portable ladder for the building construction layer has simple and reasonable structure, is

convenient to be disassembled and assembled, and is applicable to the cast stairs site of the construction industry.

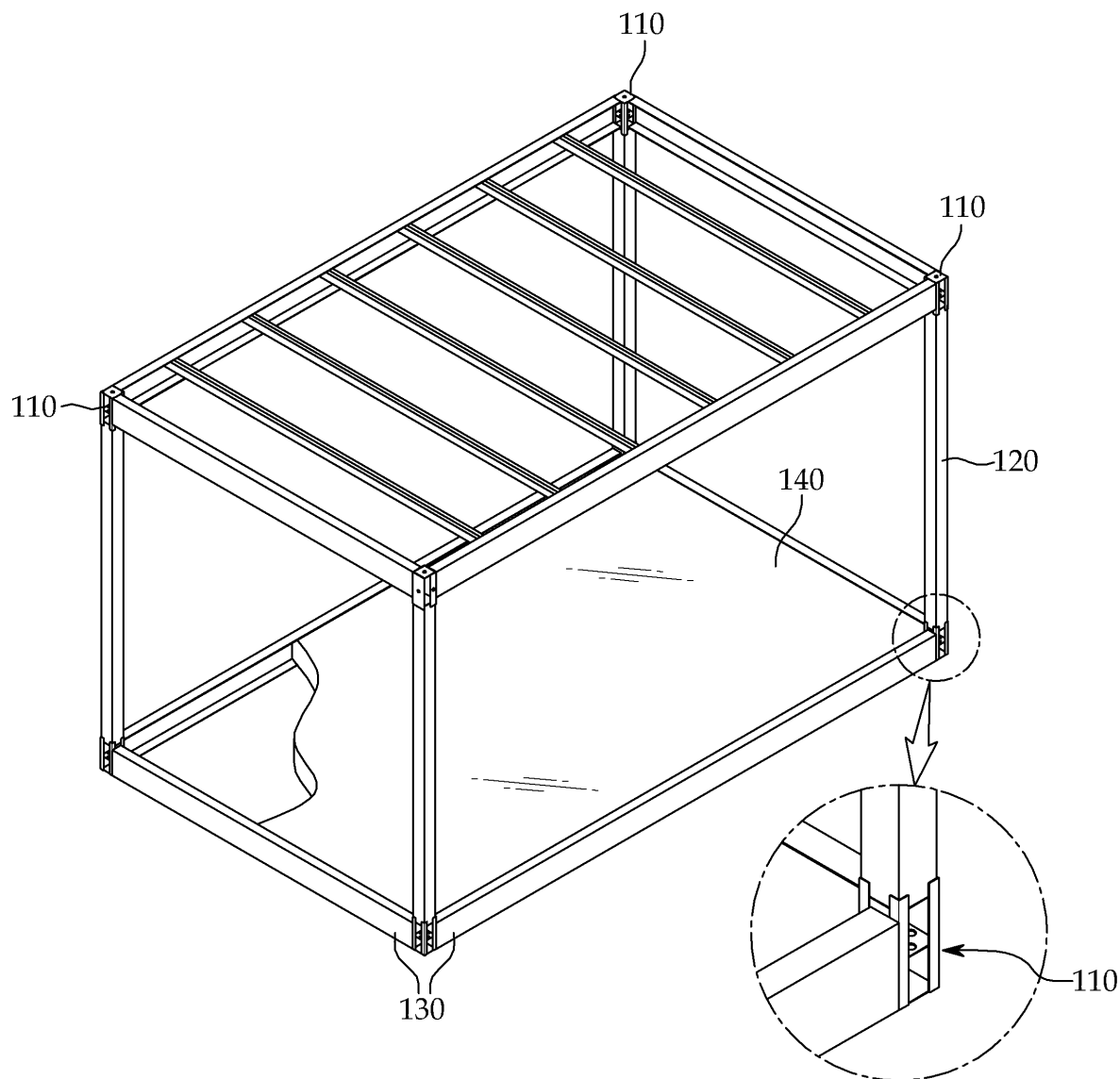
Family 60/100 - FAMPAT - ©Questel

Title

(KR101281843)

Modular unit with connector and floor heating plate

Images



Publication data including kind & date

KR20130034386	A	2013-04-05	KR20130034386
KR101281843	B1	2013-07-03	KR101281843



Abstract

(KR101281843)

PURPOSE: A four sides open type column insert connection unit and a modular unit including a heating pipe integrated lightweight composite floor are provided to easily be connected to the adjacent modular unit with an opening unit while reinforcing a basic section steel through a center stiffener of a connection unit. **CONSTITUTION:** A four sides open type column insert connection unit and a modular unit including a heating pipe integrated lightweight composite floor comprises a column(120), a beam(130), a bottom floor(140), and a connection unit(110). The connection unit comprises a basic section steel, a first stiffener, a second stiffener, and a third stiffener. The third stiffener comprises a horizontal unit connection hole and is connected to the adjacent modular unit by a connection plate through an opening unit. The beam is connected to the side of the connection unit by welding or a bolt, and the column is inserted into the connection unit in a

longitudinal direction.

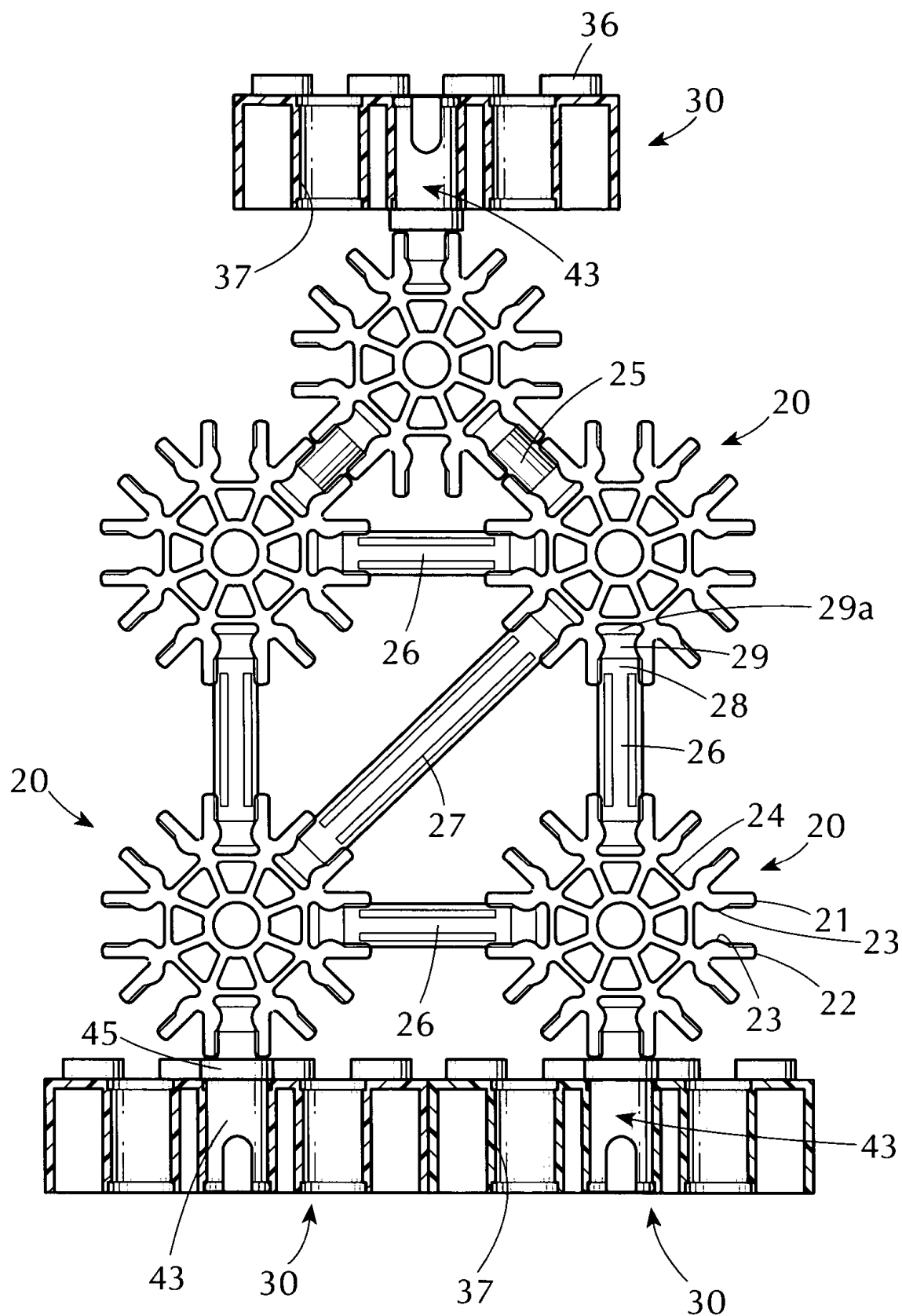
Family 61/100 - FAMPAT - ©Questel

Title

(EP1901824)

Interfacings between block type and rod and connector type construction toy sets

Images



Publication data including kind & date

US20060276100

A1 2006-12-07

US20060276100



WO2006132693	A1	2006-12-14	WO2006132693				
CA2610607	A1	2006-12-14	CA2610607				
AU2006255776	A1	2006-12-14	AU2006255776				
US7267598	B2	2007-09-11	US7267598				
MX2007015372	A	2008-02-14	MX2007015372				
NO20080070	L	2008-02-28	NO20080070				
EP1901824	A1	2008-03-26	EP1901824				
IL187745	A	2008-04-13	IL-187745				
KR20080035561	A	2008-04-23	KR20080035561				
CN101193686	A	2008-06-04	CN101193686				
IN9422/DELNP/2007	A	2008-06-20	IN2007DN09422				
ZA200710060	B	2008-09-25	ZA200710060				
JP2008541985	A	2008-11-27	JP2008541985				
EP1901824	A4	2010-01-06	EP1901824				
KR100957884	B1	2010-05-13	KR100957884				
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EP1901824	B1	2010-10-27	EP1901824				
NZ563761	A	2010-10-29	NZ-563761				
AT485879	T	2010-11-15	ATE485879				
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DK1901824	T3	2011-01-31	DK1901824T				
ES2360581	T3	2011-06-07	ES2360581				
CN101193686	B	2011-06-08	CN101193686B				
CA2610607	C	2011-10-25	CA2610607				
HK1118495	A1	2011-12-02	HK1118495				
IL187745	B	2012-05-31	IL-187745				
JP5527643	B2	2014-04-25	JP5527643				
IN278189	B	2016-12-23	IN-278189				

Abstract

(EP1901824)

A multi-part construction toy incorporating rod and connector elements (26, 20), as well as block elements (30), modified in a way to accommodate the building of hybrid structures utilizing both types of building components. Specialized adapter blocks (30) are provided with openings (37) for receiving special adapter rods (43). A connector element (20) may be attached in the usual manner to an adapter rod (43) projecting from a block element. For existing rod and connector construction toy sets, the adapter blocks are specially dimensioned to enable multiple attachment points to be established such that complex hybrid structures can be formed. For the large existing base of block type sets, the invention provides a specially dimensioned rod and connector set, compatible with existing toy construction blocks, such that the complex hybrid structures described above can also be executed utilizing existing block elements of standard dimensions.

Family 62/100 - FAMPAT - ©Questel

Title

(EP-682733)

Molded cladding for building structures

Images

BR9406443	A	1996-02-13	BR9406443				
BRPI9406443	A1	1996-02-13	BRPI9406443				
KR19967001270	A	1996-02-24	KR19967001270				
CN1117750	A	1996-02-28	CN1117750				
CZ202495	A3	1996-05-15	CZ9502024				
BG99840	A	1996-05-31	BG--99840				
JPH08506155	A	1996-07-02	JP08506155				
HUT73280	A	1996-07-29	HU-T73280				
EP0682733	B1	1996-09-25	EP-682733				
AT143446	T	1996-10-15	ATE143446				
DE69400612	D1	1996-10-31	DE69400612				
DK0682733	T3	1996-11-25	DK-682733T				
ES2093520	T3	1996-12-16	ES2093520				
OA10176	A	1996-12-18	OA--10176				
HK3897	A	1997-01-17	HK9700038				
DE69400612	T2	1997-02-06	DE69400612				
NZ261092	A	1997-04-24	NZ-261092				
GR3022464	T3	1997-04-30	GR3022464				
US5636481	A	1997-06-10	US5636481				
VN0000394	B	1997-11-25	VN----394B				
SG48780	A1	1998-05-18	SG--48780				
BG61882	B1	1998-08-31	BG--61882				
RU2119570	C1	1998-09-27	RU2119570				
AU699036	B2	1998-11-19	AU-699036				
MD1068	G2	1999-03-31	MD---1068				
NO305323	B1	1999-05-10	NO-305323				
HU218240	B	2000-06-28	HU-218240				
RO117553	B1	2002-04-30	RO-117553				

Abstract

(EP-682733)

A molded cladded panel (15) having on the underside thereof a bearing surface formation for bearing on an underlying support surface and a latch means for latching said panel to an underlying support surface, the panel having a profile (17) configured to provide a desired appearance rising above said bearing surface formation. The panel further has means (18) for interfitting with adjoining panels whether in end-to-end or side-by-side relation. Further the invention provides a simple latch keeper for latching engagement with the panel latch means.

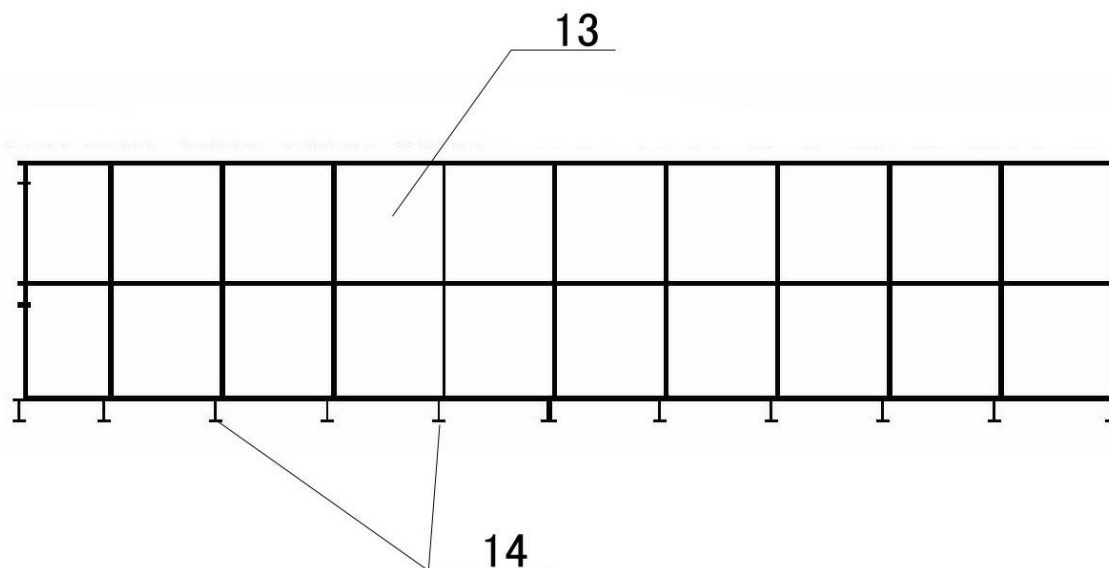
Family 63/100 - FAMPAT - ©Questel

Title

(CN101845849B)

Large-span steel gallery erected between new building and old building and construction method thereof

Images

**Publication data including kind & date**

CN101845849	A	2010-09-29	CN101845849
CN101845849	B	2011-08-24	CN101845849B

**Abstract**

(CN101845849B)

The invention relates to a large-span steel gallery erected between a new building and an old building and a construction method thereof. The steel gallery is connected with the new building by adopting rigid nodes combining high-strength bolts and welding, and the steel gallery is connected with the old building by adopting sliding supports. The construction method is that the steel gallery is assembled into a whole body on the ground and then is lifted to position as a whole body. The invention has the advantages that the construction period is greatly shortened, the labor is saved, the revolving materials are saved, the construction cost is reduced, the requirement on the structural construction quality is satisfied, and the construction method is particularly suitable for large-span and large-tonnage steel gallery under the conditions that the underground conditions are complex, the surrounding environment requirement is high, the original building structures are not demolished and the normal business is required to be not affected.

Family 64/100 - FAMPAT - ©Questel

Title

(CN102864936B)

Combination lifting construction method for large-scale high hollow building roof of steel structure

Publication data including kind & date

CN102864936	A	2013-01-09	CN102864936
CN102864936	B	2014-08-13	CN102864936B

**Abstract**

(CN102864936B)

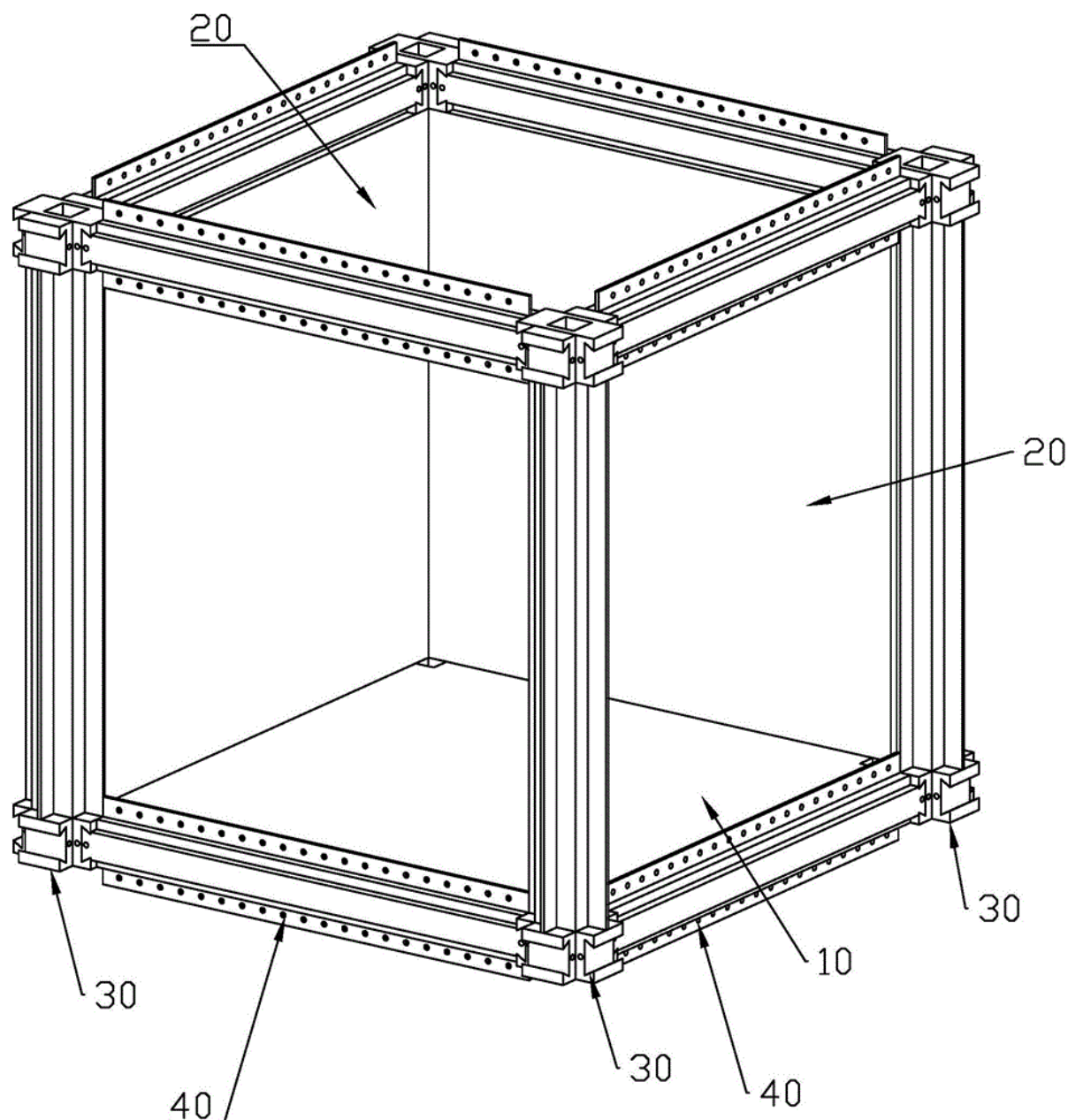
The invention discloses a combination lifting construction method for a large-scale high hollow building roof of a steel structure. The method includes the steps of lattice column support base mounting and lower portion concrete structure reinforcement, roof inner ring integral component in-place implementation, lattice column support mounting, inner ring integral component lifting and traction, mounting of a mast crane on a lattice column support and mounting of a temporary lifting point at the top of the lattice column support, edge girder lifting, secondary girder lifting, lattice column support demounting and the like. Compared with the traditional construction technology, the method has obvious advantages of convenience in construction, quickness, safety, investment saving and wide popularization prospect.

Family 65/100 - FAMPAT - ©Questel

Title

(CN208618566U)

May be a modular building activities barracks

Images**Publication data including kind & date**[CN208618566](#)

U

2019-03-19

CN208618566U

**Abstract**

(CN208618566U)

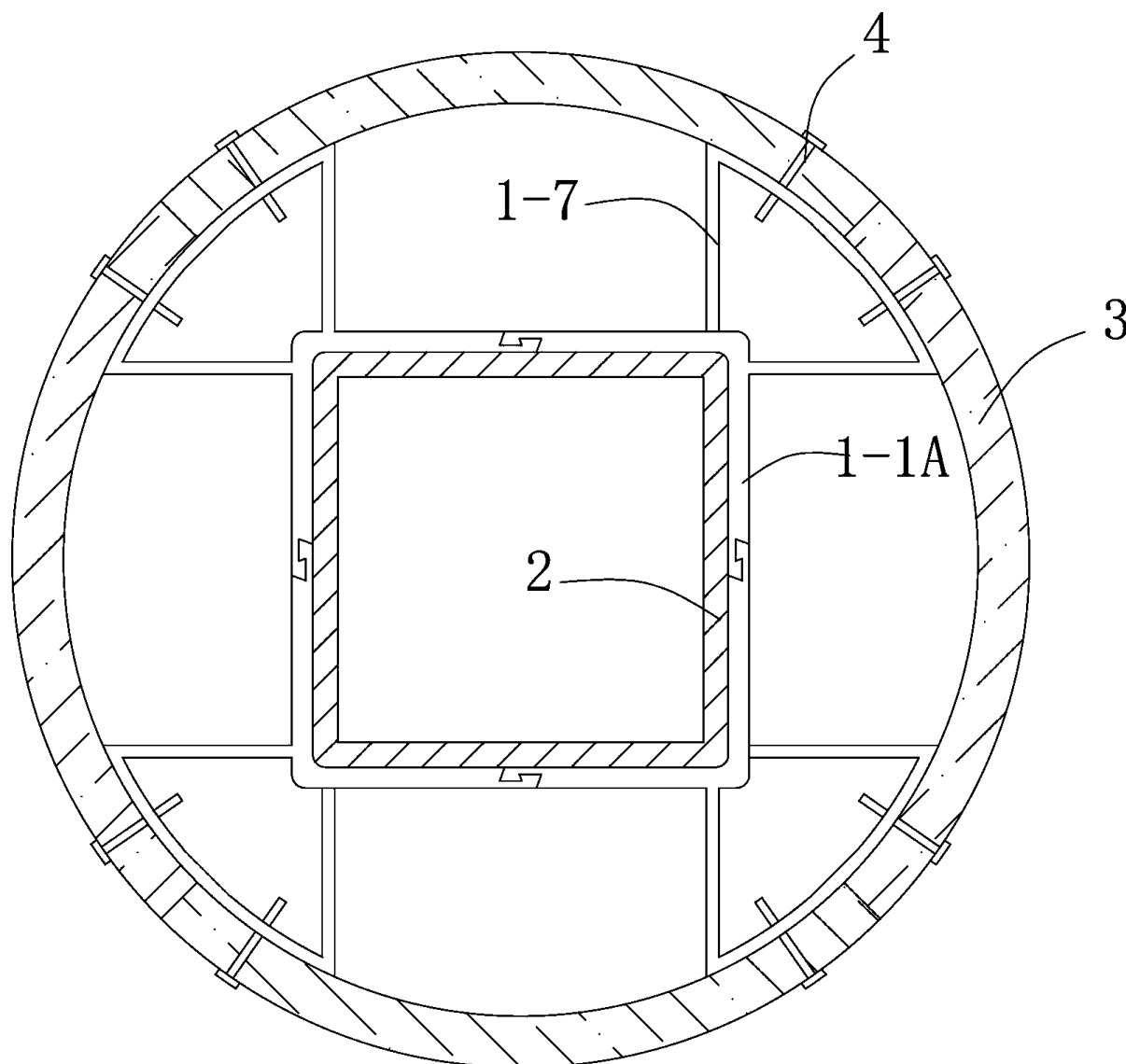
One of the modular building activity barracks, wherein the guard assembly comprises at least one body frame and surround, the body frame includes a plurality of foundational connector, beam and column, the base piece can be inserted into both ends of the beam, both ends of the posts may be inserted into the base connector so as to form the beam vertically, are symmetrically arranged on both side walls of the beam relative to the direction of the 1st flange extending along its length, peripheral side wall of the posts are symmetrically arranged on a flange extending along the length of the 2nd, in a 1st cuff is provided with a screw hole for fixing the peripheral guard assembly of the 1st, surrounding the guard assembly comprises a horizontal peripheral shield and a vertical peripheral guard, the guard is in the horizontal surround horizontal landing on the base frame, the guard has a vertical shape between adjacent vertical periphery of the two vertical columns and enclosing two parallel beams at the top and bottom, and vertical edges of the guard plates around upper and lower ends fixedly connected respectively to the 1st gear side, both side edges of the guard plates respectively with the 2nd vertical surround the cuff overlap.

Family 66/100 - FAMPAT - ©Questel

Title

(CN105369982)

3D modular circular column for building

Images**Publication data including kind & date**[CN105369982](#)

A

2016-03-02

CN105369982

**Abstract**

(CN105369982)

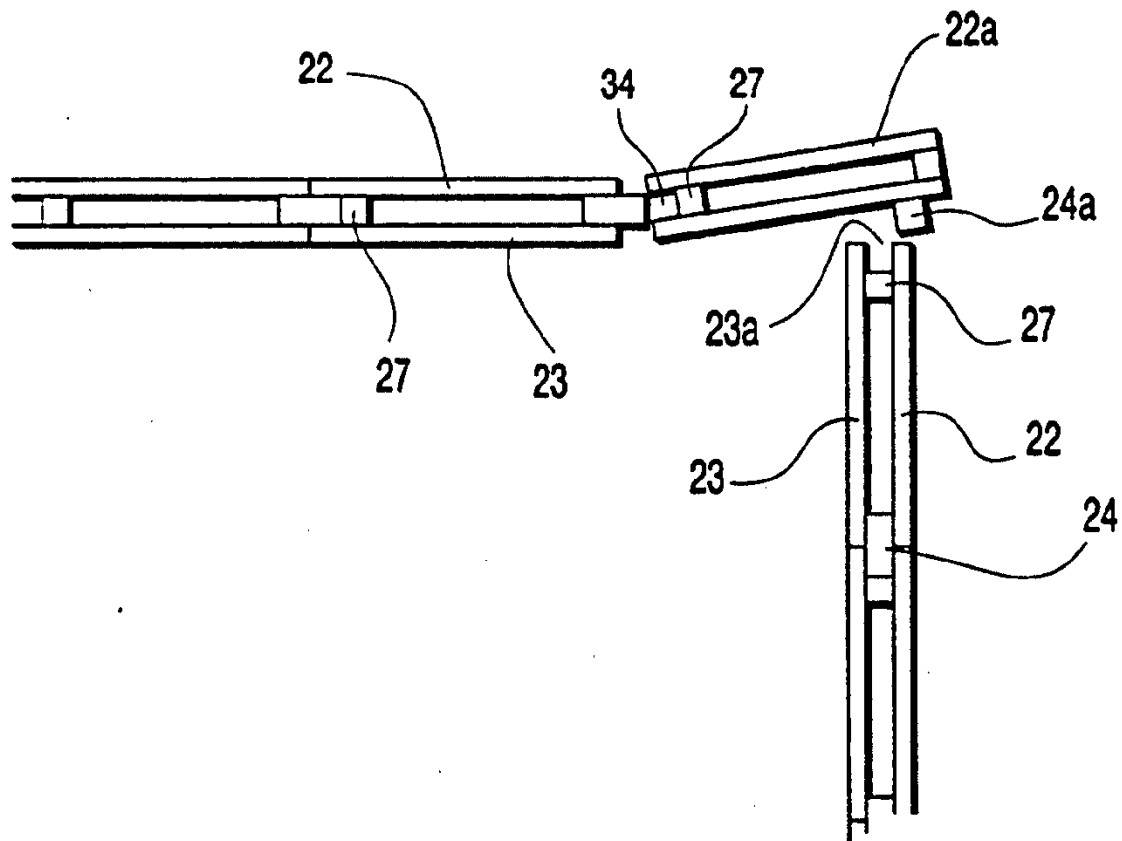
The invention relates to a 3D modular circular column for buildings. The 3D modular circular column comprises a steel member, a cylindrical sheet material body and a connecting structure for connecting the steel member and the cylinder sheet material body; the connecting structure comprises a fastener and a fixed part arranged on the fastener; the fastener is composed of a plurality of connecting pieces in clamp connection by clamp members on the connecting pieces; the fastener is buckled outside the steel member; and the cylinder sheet material body is connected with the fixed part through bolts. The 3D modular circular column is designed according to the requirements of 3D modular building; due to the adoption of the connecting structure composed of the fastener and the fixed part, the outside of a box-type steel member is directly wrapped by a square box-type coating material body without welding or concrete pouring; and the installation is simple and quick.

Family 67/100 - FAMPAT - ©Questel

Title

(WO9419552)

A system for constructing a dismantlable prefabricated modular building

Images**Publication data including kind & date**

GB9402997	D0	1994-04-06	GB9402997
IL108638	A	1994-05-30	IL-108638
WO9419552	A1	1994-09-01	WO9419552
AU6007394	A	1994-09-14	AU9460073
GB2275944	A	1994-09-14	GB2275944

**Abstract**

(WO9419552)

Prefabricated modular buildings are made using a system comprising a plurality of interlocking panels (13, 14, 15) each composed of two cladding layers (22, 23) of rigid material spaced by an internal framework (25, 26, 27, 28, 29) of spacing frame members, in which at least one edge portion of each panel (13, 14, 15) is provided with a longitudinal channel (27a) defined by edge portions of the cladding layers (22a, 23a) projecting beyond an elongate spacing frame member (27) extending generally parallel to the said edge portion, in which, to interconnect the panels, the tongues (24a) of at least some of the panels project orthogonally of the edge portions defining the longitudinal channels (27a).

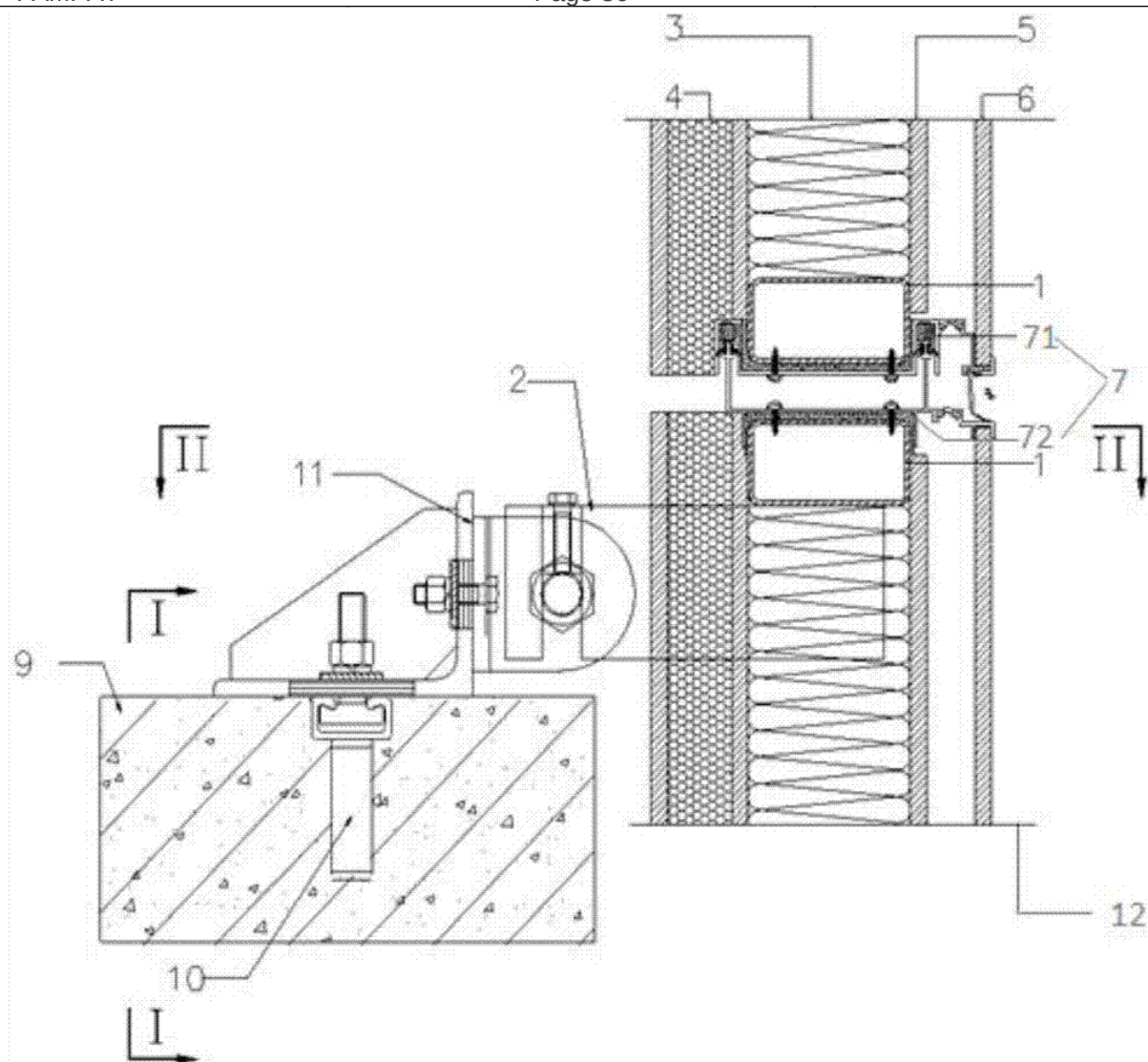
Family 68/100 - FAMPAT - ©Questel

Title

(CN206859466U)

Assembled composite external wall goes along with sb. to guard him modular construction

Images



Publication data including kind & date

CN206859466

U

2018-01-09

CN206859466U



Abstract

(CN206859466U)

The utility model discloses an assembled composite external wall goes along with sb. To guard him modular construction, go along with sb. To guard him the cell cube including a plurality of outer walls, the outer wall is gone along with sb. To guard him the cell cube and is included: skeleton, interior composite wall panel, outer wall base plate and outer decorative plate, the outer wall is gone along with sb. To guard him the cell cube and is further included: with the adjustable pendant of skeleton rigid coupling. The utility model discloses assembled composite external wall goes along withsb. To guard him modular construction china and foreign countries circummmure protect the cell cube structure through skeleton, insulation material, interior composite wall panel, base plate, outer decorative plate's combination use the intensity of having solved outer wall body itself, still have when keeping warm thermal -insulated, waterproof problem the dead weight gently, advantage that fire behavior is good, solve the outer wall through the plug connector and gone along with sb. To guard him connection, waterproof problem between the cell cube, connect the combination of union piece and adjustable pendant through the three -dimensional and use, make composite external wall go along with sb. To guard him the modular construction and can **carry** out three orientation 6 -degree of freedom's regulation when the installation, **eliminated** the external circummmure of main part floor structures construction error and protected the influence that the modular construction was installed.

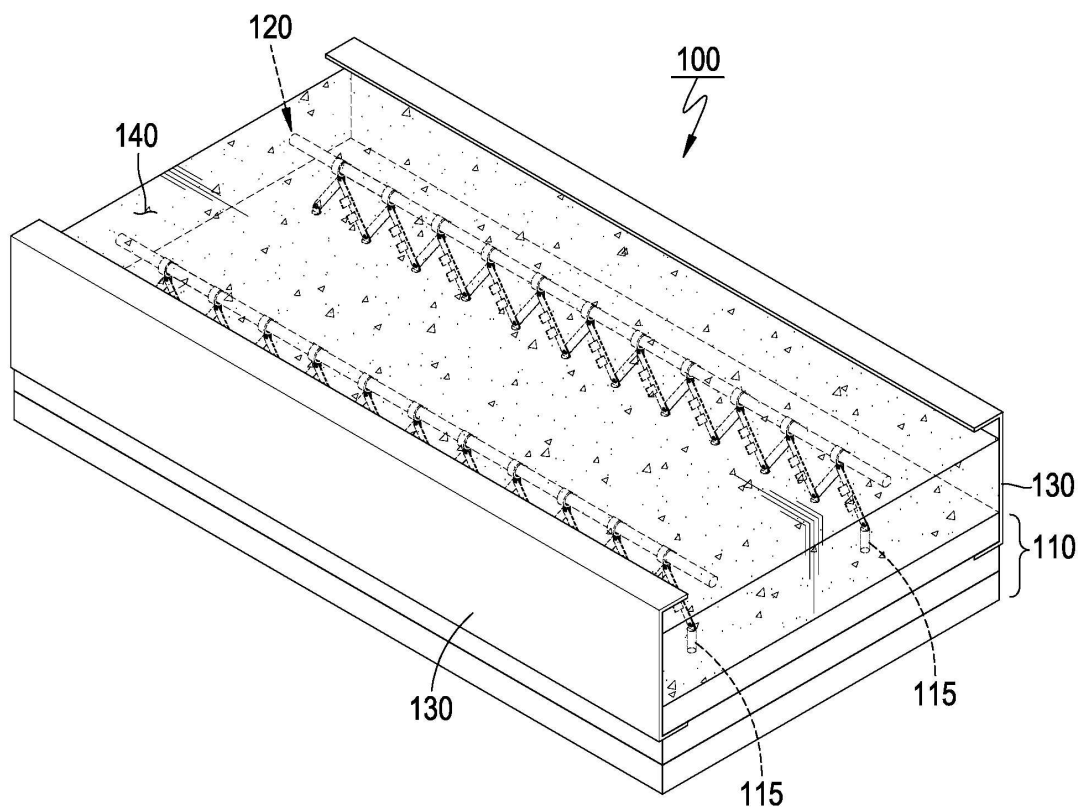
Family 69/100 - FAMPAT - ©Questel

Title

(KR101773511)

Slab using engineered lumber and extendable shear connector and construction method therefor

Images



Publication data including kind & date

KR101773511

B1 2017-09-01

KR101773511



Abstract

(KR101773511)

The present invention relates to a composite floor plate manufactured by using engineering lumber and an extendable shear connector, which is manufactured by combining engineering lumber and concrete as a shear connector, and a construction method thereof which constructs a floor plate of a modular structure. The composite floor plate comprises: a beam-shaped floor plate side surface portion fixed to a side surface of an engineering lumber floor portion at a lower end and extended upward; an extendable shear connector connectively installed with an extendable abdominal region while being unfolded in a floor plate fixing tool of an upper surface of the engineering lumber floor portion, and formed with a steel bar fixing tool integrally formed in an upper end of the extendable abdominal region and being inserted with steel bar and a concrete floor portion formed by placing concrete so that the extendable shear connector can be buried by using the engineering lumber floor portion and the floor plate side surface portion as a mold.

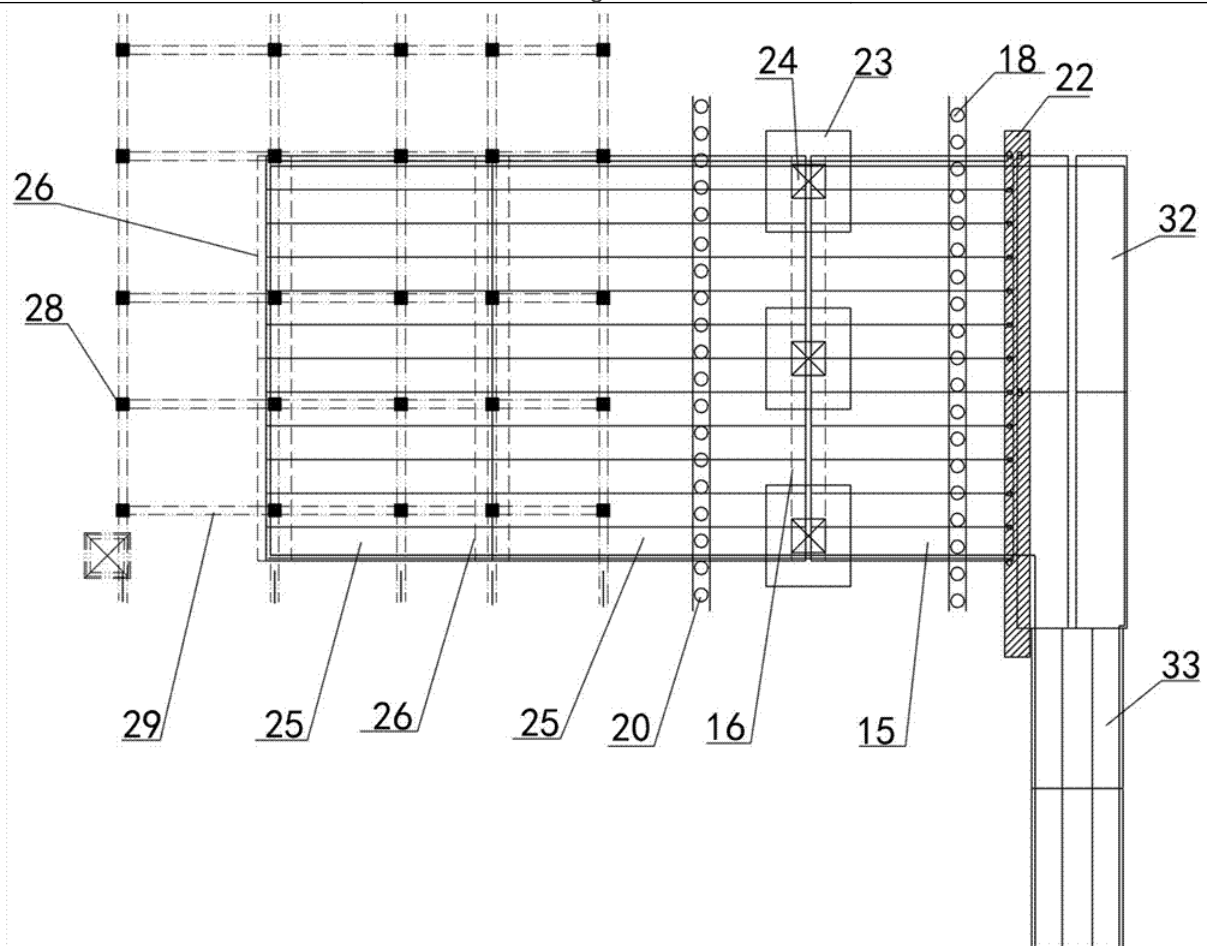
Family 70/100 - FAMPAT - ©Questel

Title

(CN108999044)

Modular subgrade box and steel trestle platform structure and construction method thereof

Images



Publication data including kind & date

CN108999044

A 2018-12-14 CN108999044



Abstract

(CN108999044)

Provided are a modular subgrade box, a steel trestle platform structure and a construction method thereof. The modular subgrade box comprises a subgrade box steel beam, a bottom plate, a top plate, a stiffening rib plate and an end seal plate. The steel trestle platform structure comprises a modular subgrade box, a foundation pit structure and a supporting structure of each stage. The steel trestle platform structure comprises a steel beam, a bottom plate, a top plate, a stiffening rib plate and an end seal plate. The construction method is divided into stages. The invention breaks through the transportation lifeline inside and outside the building, ensures the on-site material **transportation**, becomes the prerequisite for the smooth construction of the structure on schedule, and verifies the rationality of the temporary construction steel trestle road. Modular components are used to greatly reduce the workload of the site, the temporary construction steel trestle road is set up, and the **transportation** channel of the structure is opened. Modular components can be reused, practical maneuverability and reference value is greater, in line with the promotion and application of architectural assembly in China, for the future similar projects to provide new construction ideas, with the value of promotion and application.

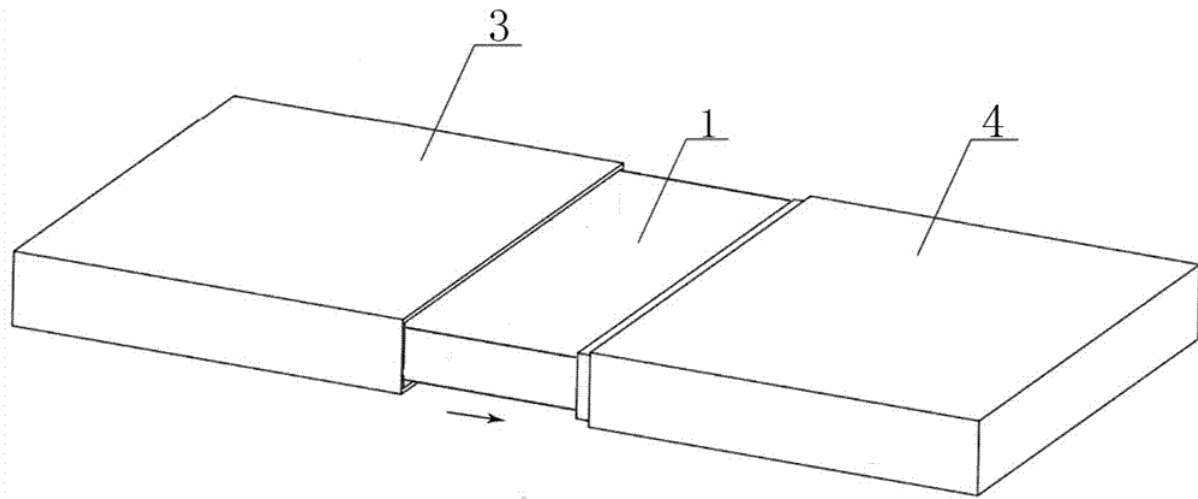
Family 71/100 - FAMPAT - ©Questel

Title

(CN105735633)

Material-saving type modular plastic formwork and construction method thereof

Images

**Publication data including kind & date**

CN105735633	A	2016-07-06	CN105735633
CN105735633	B	2019-02-15	CN105735633B

**Abstract**

(CN105735633B)

Disclosed are a material-saving type modular plastic formwork and a construction method thereof. The formwork comprises a panel. The outer side of the panel is sleeved with a surface skin which is a hollow sealed box body formed by connecting at least two parts in an inserting mode. According to the material-saving type modular plastic formwork and the construction method thereof, according to the functional needs in the application process of the formwork, the formwork is designed to be the panel part and the surface skin part, wherein the surface skin is a wearing part and is responsible for concrete forming quality control and protecting the panel, and the panel is a long-term used part and provides strong support for the formwork. The surface skin and the panel are supplementary to each other so that the number of times of service of the formwork can be increased by a large margin, the service life of the formwork can be prolonged by a large margin, and the problem of resource waste existing in the plastic formwork industry is solved. The surface skin is easy to repair and replace, can be repaired after damaged, and can be recycled and machined to be a new surface skin again if damaged badly, so that the environmental protection and energy saving effects are achieved, the number of times of service of the formwork can be increased by a large margin, and the service life of the formwork can be prolonged by a large margin. The material-saving type modular plastic formwork and the construction method thereof can be widely applied to a concrete pouring formwork system.

Family 72/100 - FAMPAT - ©Questel

Title

(WO2017205910)

Improvements in building systems, panel systems, and formwork systems, panels and formwork for building & methods of building using panels and formwork

Images

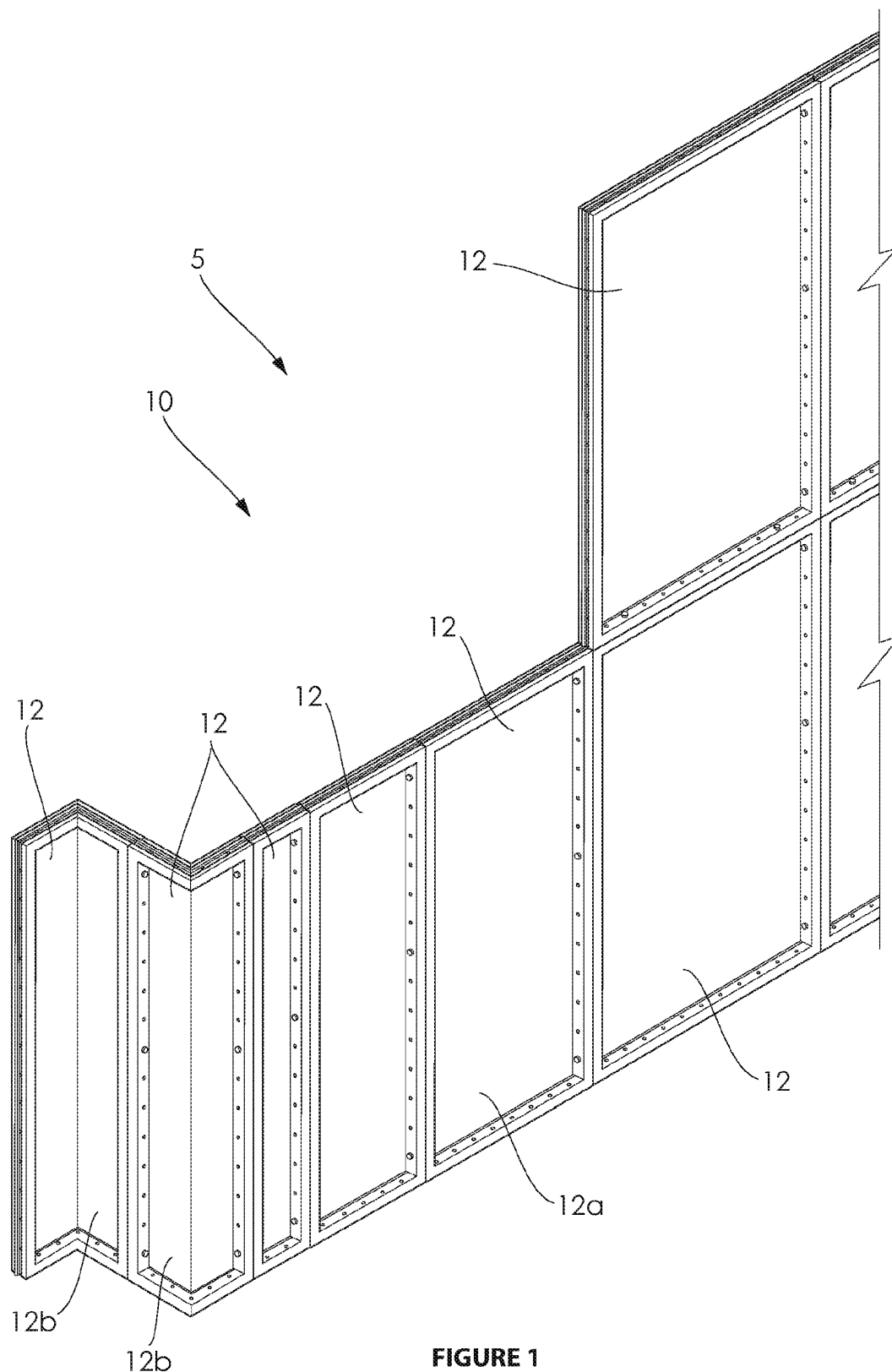


FIGURE 1

Publication data including kind & date

WO2017205910	A1	2017-12-07	WO2017205910
AU2017272907	A1	2018-12-20	AU2017272907
SG11201810636X	A	2018-12-28	SG11201810636X
CN109642431	A	2019-04-16	CN109642431

**Abstract**

(WO2017205910)

A building system (5) including a panel system (10) and a formwork system (78). The panel system (10) includes a plurality

of modular panels (12) arranged to fit with one another in a predetermined grid arrangement (13) to form side walls of a building in a fitted condition. At least the bottom sides (24) of each of the modular panels (12) includes a plurality of apertures (34) that are arranged at predetermined spaced apart locations along the bottom side (24) so as to coincide with the predetermined grid arrangement (13). The formwork system (78) includes a plurality of modular formwork members (80) that are associated with each of the modular panels (12) to provide a supporting slab (72) having slab apertures (76) to allow coupling with the modular panels (12). Modular panels (12), formwork members (80) and associated methods of use are also disclosed.

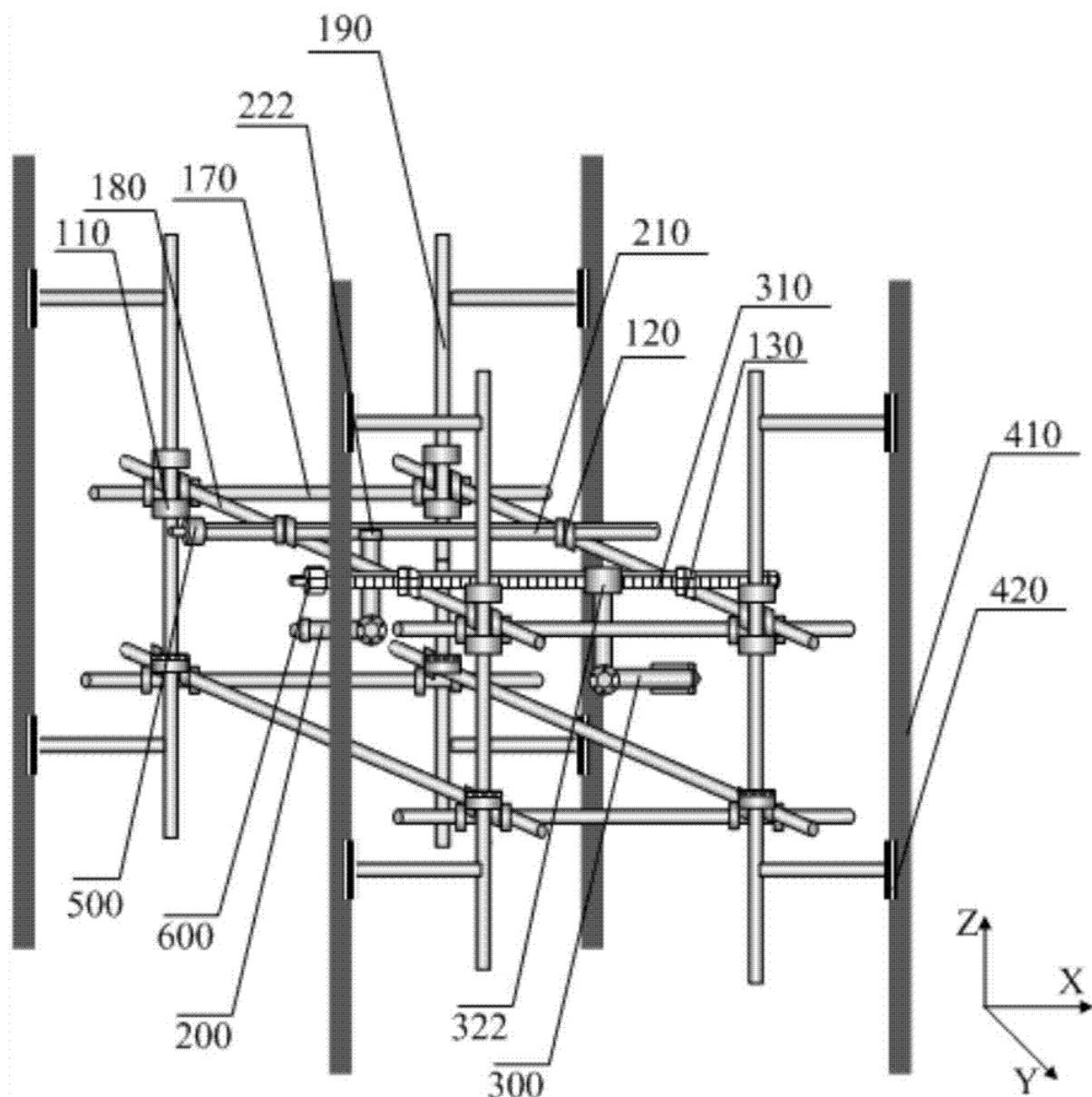
Family 73/100 - FAMPAT - ©Questel

Title

(CN107419901)

Construction engineering integrated 3D printing and building system and use method thereof

Images



Publication data including kind & date

[CN107419901](#)

A 2017-12-01 CN107419901



Abstract

(CN107419901)

In order to solve the problems that an existing 3D printing device cannot conduct construction on a deep foundation basis, and integrated printing and building of the foundation basis and the upper structure cannot be achieved, the invention provides a construction engineering integrated 3D printing and building system and a use method thereof. Due to the fact

that a lifting device is arranged, when construction is conducted on the deep foundation basis, the lifting device can be installed in the deep foundation basis; according to the system, the deep construction position is **moved** through the lifting device, and construction is conducted on the deep foundation basis; after the foundation basis is completed, the system can be **moved** to the portion above the ground through the lifting device, construction is conducted on the upper structure, the upper structure and the foundation basis are integrally formed, and then the problems that the existing 3D printing device cannot conduct construction on the deep foundation basis, and integrated printing and building of the foundation basis and the upper structure cannot be achieved are solved.

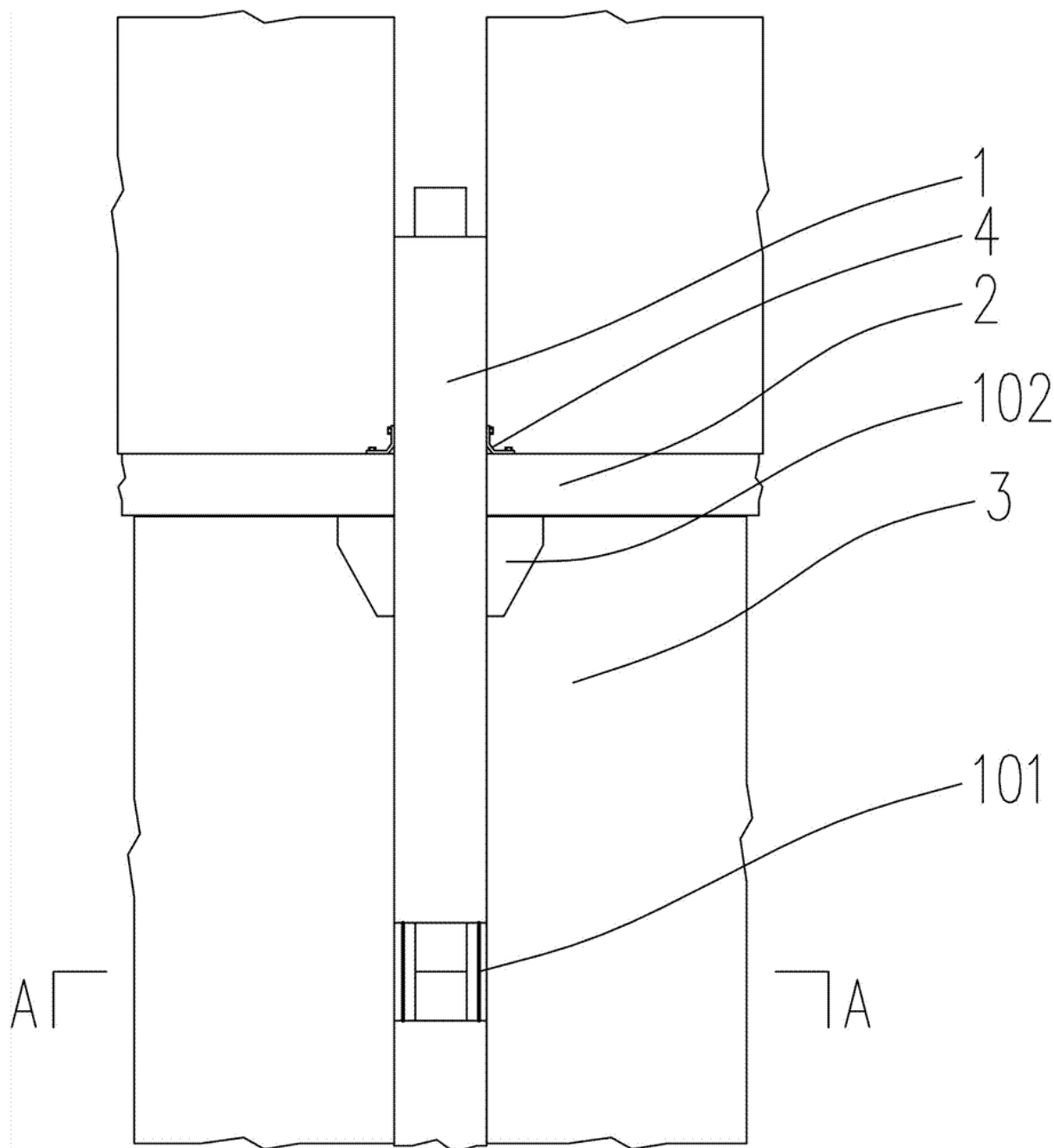
Family 74/100 - FAMPAT - ©Questel

Title

(CN108755944)

Construction method of composite connecting assembly-type building structure

Images



Publication data including kind & date

[CN108755944](#)

A

2018-11-06

CN108755944



Abstract

(CN108755944)

The invention provides a construction method of a composite connecting assembly-type building structure. The construction method comprises the following steps that components are prefabricated in a workshop, wherein the components include vertical columns, crossbeams, floor slabs, shear wall inner layers and shear wall outer layers; joints of the vertical columns are located between the floors, sleeving-connection steel pipes are arranged in the vertical columns and connected through steel pipe connecting pieces, and vertical column reinforcements are arranged on the peripheries of the sleeving-connection steel pipes; the sleeving-connection steel pipes of the vertical columns are hoisted to be connected with the steel pipe connecting pieces in a sleeving mode, and the vertical columns are adjusted to be perpendicular and coaxial; the vertical column reinforcements are connected, and transverse reinforcements are bound; the shear wall inner layers and the shear wall outer layer are hoisted, formworks are erected at the joints, and the joints of the vertical columns and inner cavities of the shear walls are poured into a whole; the crossbeams are hoisted to be placed on bracket supports, and the floor slabs are hoisted on the crossbeams; and the steps are sequentially **circulated**, and composite construction of an assembly-type building is completed. By adopting the construction method of the composite connecting assembly-type building structure, compressive strength and tensile strength can be improved, stress concentration is reduced, the anti-seismic property is improved, and the influence on the linear construction period of construction is little.

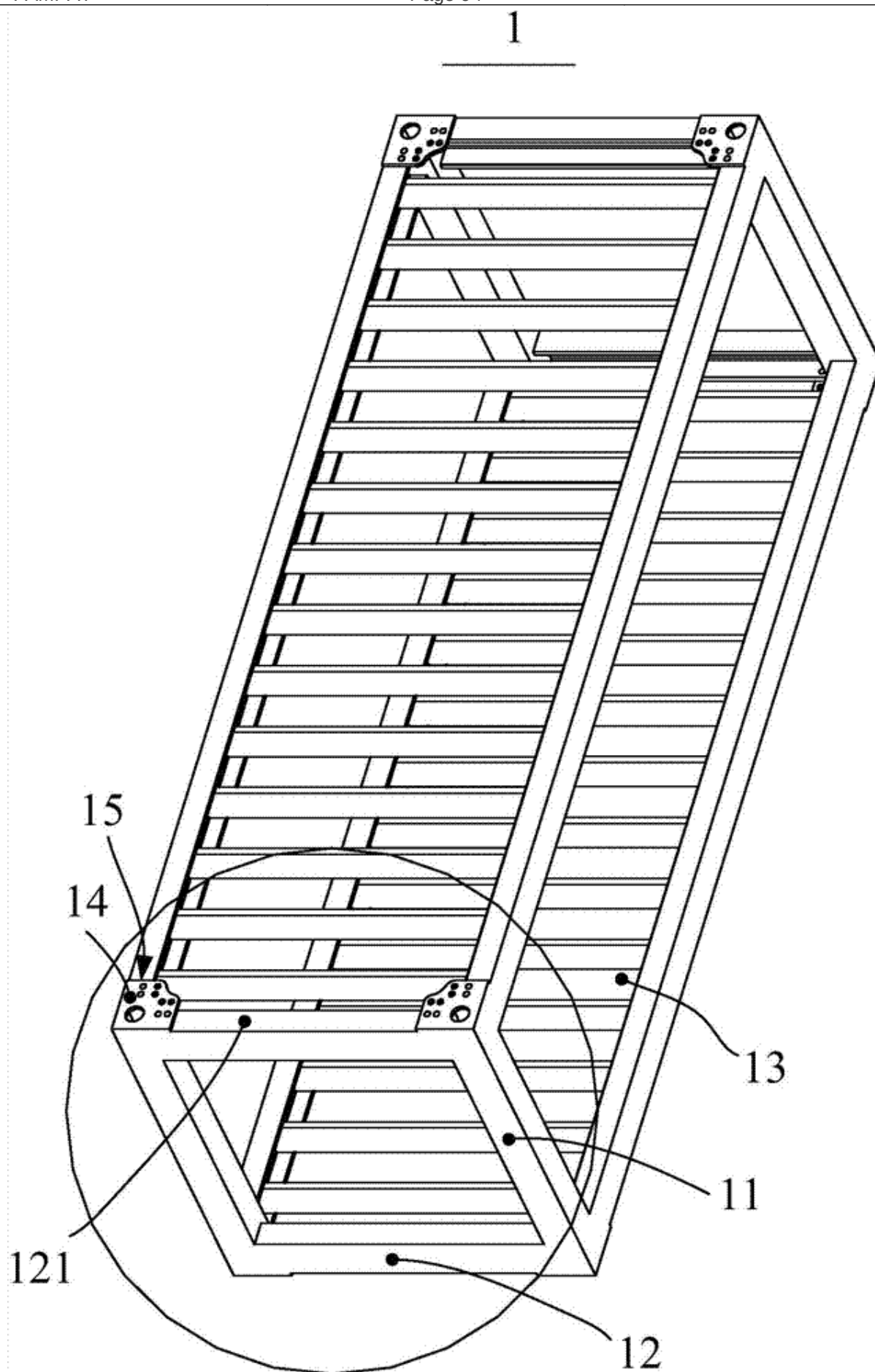
Family 75/100 - FAMPAT - ©Questel

Title

(CN208009631U)

Frame construction and structure system are connected to three -dimensional modularization building

Images



Publication data including kind & date

[CN208009631](#)

U 2018-10-26 CN208009631U



Abstract

(CN208009631U)

The utility model discloses a frame construction is connected to three -dimensional modularization building, include along the vertical direction setting of building and for the module stand of lateral part framework, with the module crossbeam that module stand tip side links to each other and the level sets up, the tip with a plurality of module secondary beam that module crossbeam side links toeach other and the interval sets up, module stand end fixing links to each other there is the module connecting plate, module connecting plate terminal surface still with the pterygoid lamina of module crossbeam links to each other, the module connecting plate is equipped with the through -hole, and is upper and lower adjacent the module connecting plate passes through bolted construction and links to each other, the utility model discloses still disclose an use frame construction's structure system is connected to three -dimensional modularization building. Compared with the prior art, the utility model discloses technical scheme can improve the production efficiency and the mounting structure intensity of frame construction and structure system are connected to three -dimensional modularization building installation.

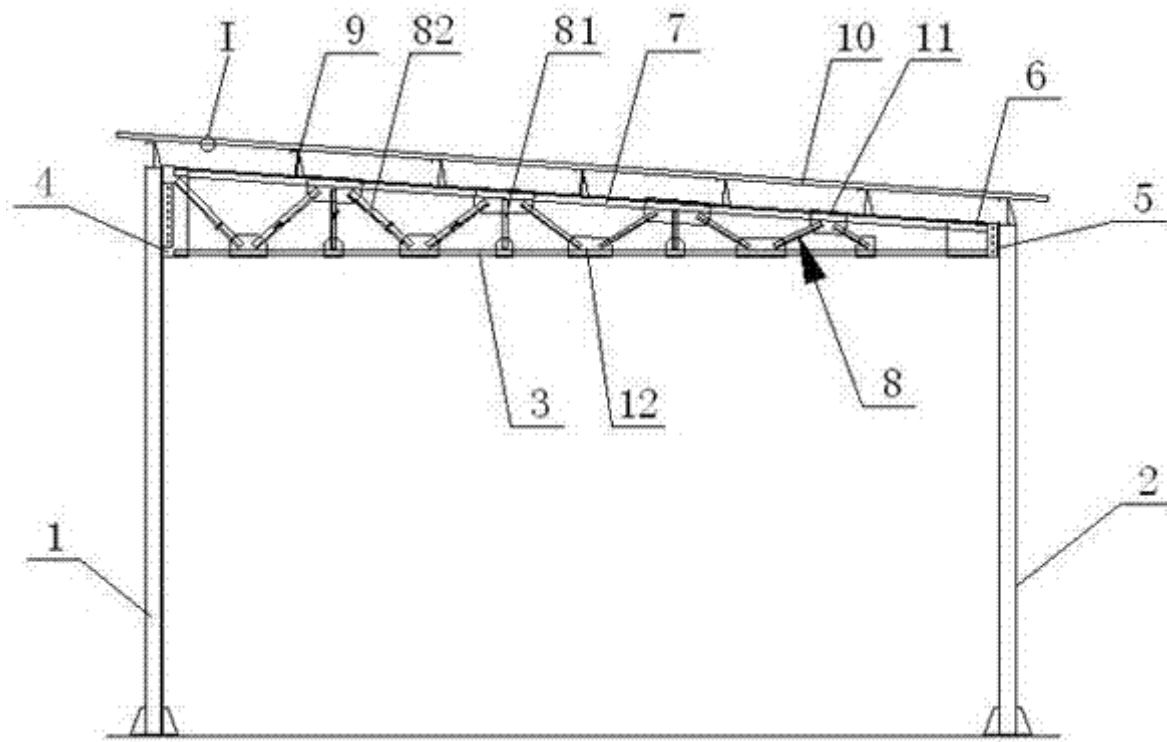
Family 76/100 - FAMPAT - ©Questel

Title

(CN206591710U)

Steel construction factory building top lid mounting structure

Images



Publication data including kind & date

[CN206591710](#)

U 2017-10-27 CN206591710U



Abstract

(CN206591710U)

The utility model provides a steel construction factory building top lid mounting structure, it is including installing the lower chord between left branch strut and right branch strut, the lower chord is laid along the horizontal direction, the left side of lower chord is connected with left locating piece, the right side of lower chord is connected with right locating piece, left side locating piece welded fastening is on left branch strut top, the left side joint of lower chord is in the lower part of left locating piece, the bottom of right side locating piece and the bottom parallel and level of left locating piece, install a guide section of thick bamboo in the left side of right locating piece, guide section of thick bamboo one end is fixed on right locating piece, and the other end of a guide section of thick bamboo is equipped with horizontal opening, interior and the lower part of joint at right locating piece of a guide section of thick bamboo is stretched into on the right side of lower chord. The utility model discloses a modular structure, can reduce the degree of difficulty in when installation like this, do not need large -

scale load machinery in addition to through convenient location structure, the equipment is connected in realization that can be convenient, has avoided the long -time high altitude construction's of workman risk, still is favorable to sparingly cost.

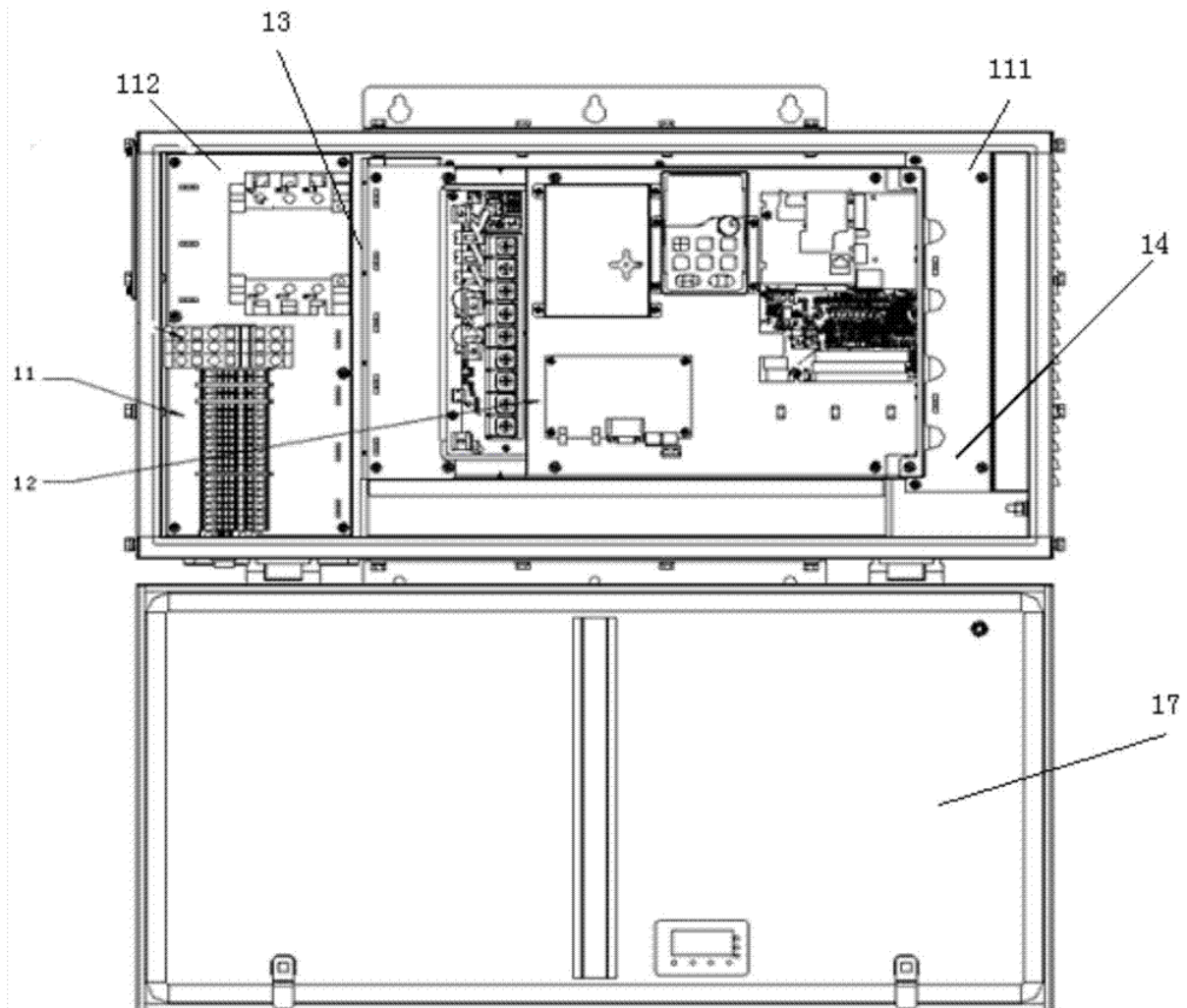
Family 77/100 - FAMPAT - ©Questel

Title

(CN105429438)

Cabinet-type frequency converter for construction hoist and construction hoist

Images



Publication data including kind & date

CN105429438	A	2016-03-23	CN105429438
CN105429438	B	2018-08-14	CN105429438B



Abstract

(CN105429438B)

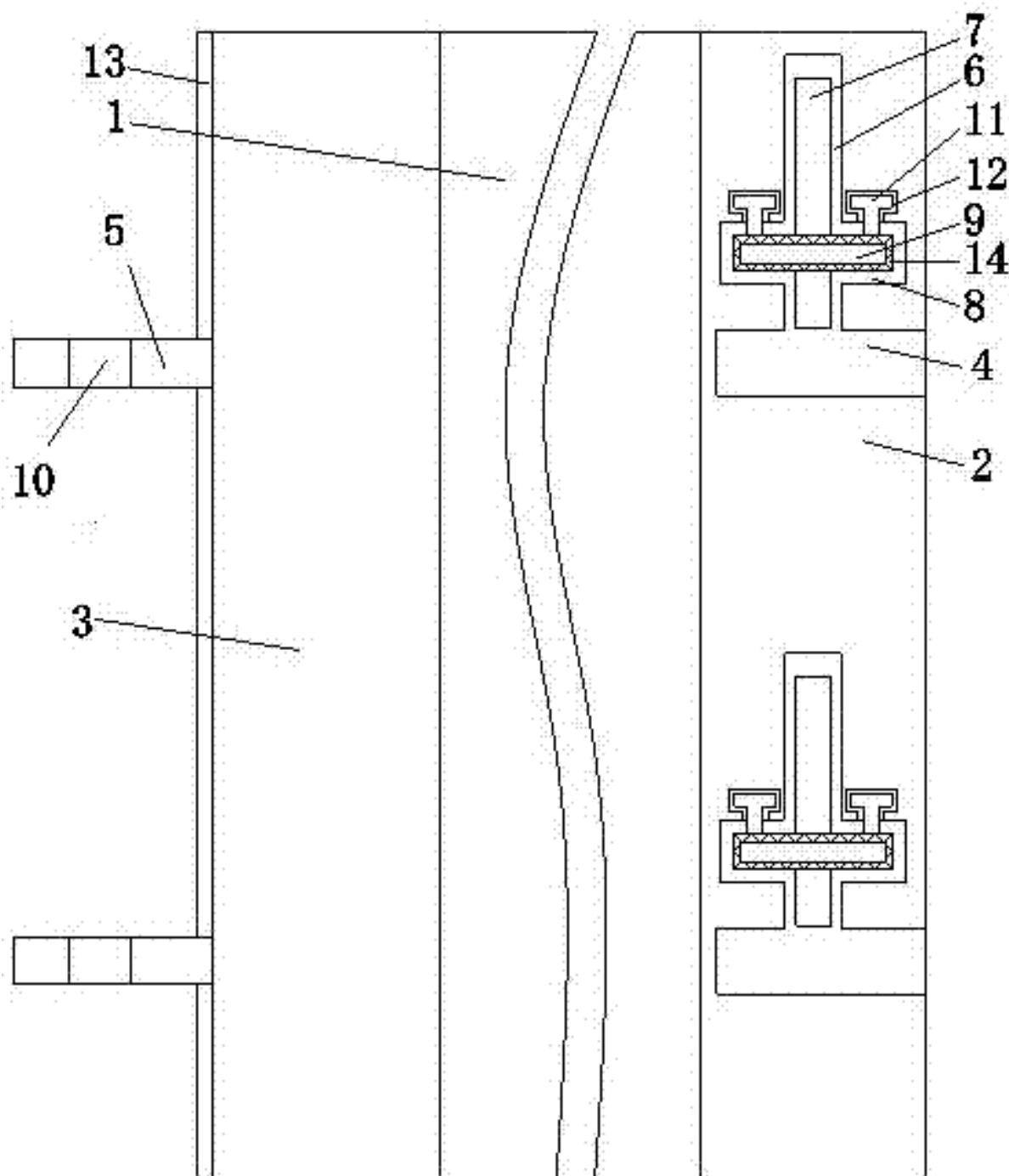
The invention provides a cabinet-type frequency converter for a construction hoist and a construction hoist. The cabinet-type frequency converter for the construction hoist comprises a cabinet assembly, a modular core, a baffle and a cooling air duct, wherein the modular core comprises a core structure assembly, a cooler, a fan assembly, an IGBT module, a brake IGBT module, a rectifier module, a **driving** plate, a control plate and a capacitor; the cooler, the fan assembly, the IGBT module, the brake IGBT module, the rectifier module, the **driving** plate, the control plate and the capacitor are all independently and detachably arranged on the core structure assembly; the baffle divides the inner part of the cabinet assembly into a core cavity and a terminal cavity, and the modular core is fixedly arranged in the core cavity; and the channel where an air inlet, the baffle, the capacitor and the cooler are and an air outlet form the cooling air duct. The inner structure of the frequency converter is improved, the inner structure of the frequency converter is compact, the overall size of the frequency converter is narrowed, and mounting of the frequency converter in a lifting cage is easier.

Family 78/100 - FAMPAT - ©Questel

Title

(CN208430680U)

Modular building curtain

Images**Publication data including kind & date**[CN208430680](#)

U

2019-01-25

CN208430680U

**Abstract**

(CN208430680U)

The utility model belongs to the technical field of the curtain technique and specifically relates to a modular building curtain, including the curtain panel, curtain panel one side is provided with first connecting plate, curtain panel opposite side is provided with the second connecting plate, first connecting plate one side is gone up the lower extreme and has all been offered the slot, secondconnecting plate one side is gone up the lower extreme and is fixed with the picture peg, and the picture peg is located same water flat line with the slot, the picture peg with insert slot gap cooperation, the bar groove has

been seted up to the first connecting plate of slot upside, the bar inslot is provided with spiral shell rasp bar, circular slot has been seted up on the first connecting plate in the spiral shell rasp bar outside, and first connecting plate is all run through to circular slot's both sides, be provided with the screw thread button in the circular slot, and screw thread button rotary sleeve is established in the spiral shell rasp bar outside, the screw thread button carries on spacingly through stop gear, the jack has been seted up to the picture peg upside, and spiralshell rasp bar and the jack screw thread button that cooperatees. The utility model discloses simple structure can splice the combination to the building curtain, and easy installation is quick detachable.

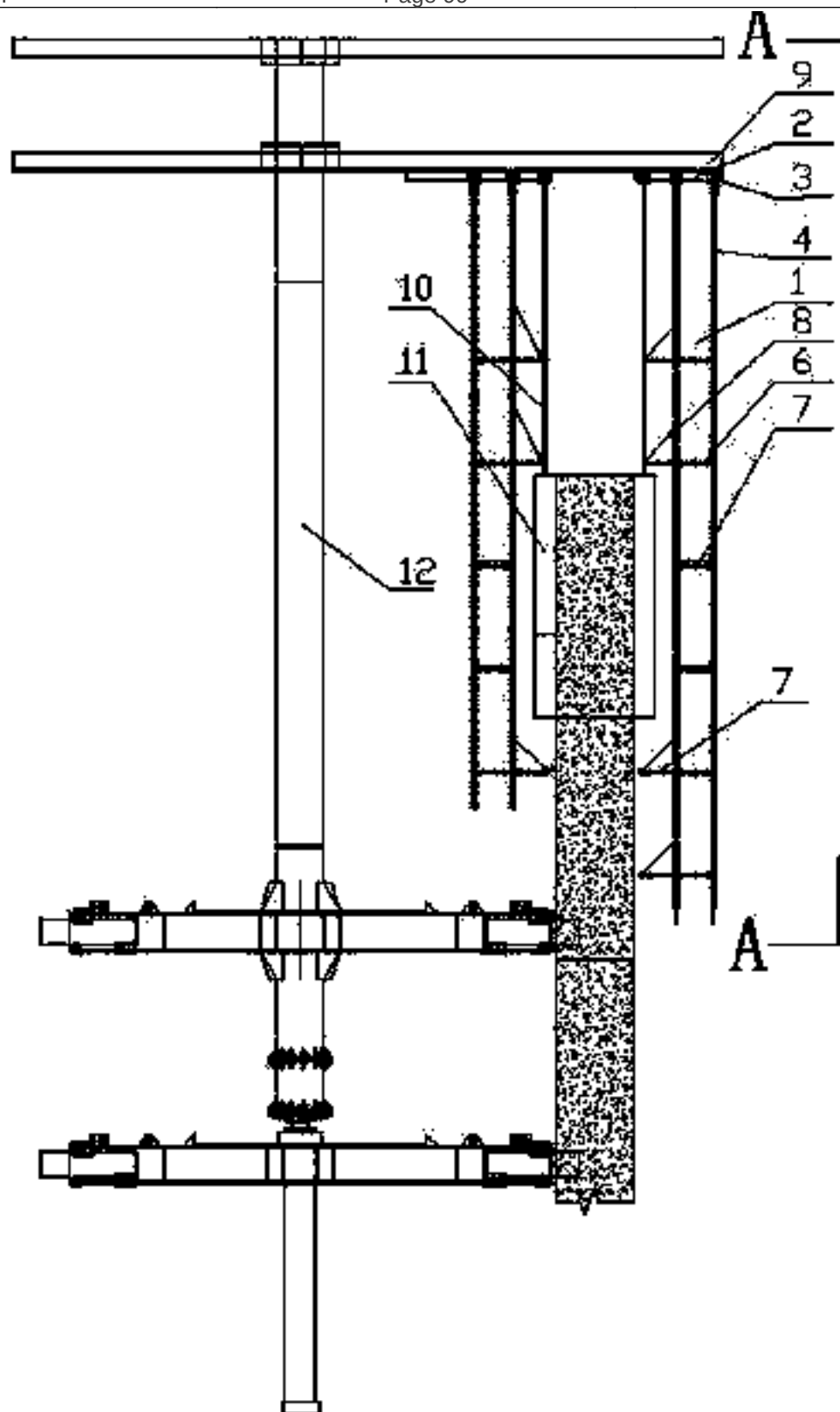
Family 79/100 - FAMPAT - ©Questel

Title

(CN203603455U)

Tool type hanger suitable for construction of vertical structure of super high-rise building

Images

**Publication data including kind & date**

CN203603455

U

2014-05-21

CN203603455U

**Abstract**

(CN203603455U)

The utility model discloses a tool type hanger suitable for construction of the vertical structure of a super high-rise building. The tool type hanger comprises a frame composed of vertical rods, 2-20 walkway plates are arranged inside the frame from bottom to top, turnover plates are arranged outside the walkway plates, a vertical net is arranged on the surface, opposite to the turnover plates, of the frame, pulleys are arranged at the tops of the vertical rods, connecting rods capable of being connected with the vertical rods are arranged on two sides of each turnover plate, the vertical rods are connected

with one another through bolts or hinge pins, the vertical rods are connected with the walkway plates through bolts or hinge pins, the vertical rods are connected with the vertical net through bolts or hinge pins, and the vertical rods are connected with the pulleys through bolts or hinge pins. The components of the tool type hanger can be assembled and connected into independent units through the bolts or the hinge pins on the ground, then the independent units are lifted and installed in overall, tool type assembly of the hanger is achieved, and assembly and installation speed and construction safety are improved.

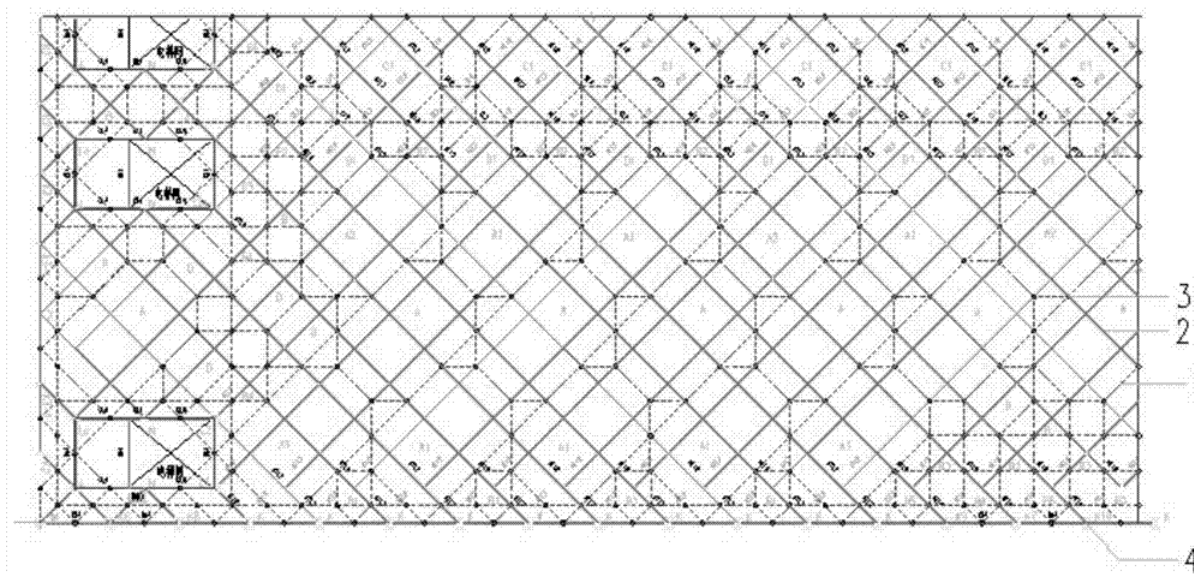
Family 80/100 - FAMPAT - ©Questel

Title

(CN105756380)

Construction method of multi-layer large-span assembled integral space steel grid box-type structure factory building

Images



Publication data including kind & date

CN105756380	A	2016-07-13	CN105756380
CN105756380	B	2018-04-13	CN105756380B



Abstract

(CN105756380B)

The invention discloses a construction method of a multi-layer large-span assembled integral space steel grid box-type structure factory building. The method comprises the following steps of factory building structure division, steel mesh unit grid processing, site construction preparation, component preparation, bearing wall rack assembly, operation platform erection, steel mesh unit grid hoisting, concrete roof cover construction and the like. The construction method is high in construction speed and short in period, is capable of simultaneously realizing concrete part construction and steel structure component assembly, greatly reducing the construction expenses and greatly shortening the construction time; the factory building constructed by the method has the advantages of excellent lateral stiffness, small structural top displacement, good anti-seismic property, no indoor beam and column, free division of a habitable room, convenience in use, beautiful appearance, high utilization ratio and the like.

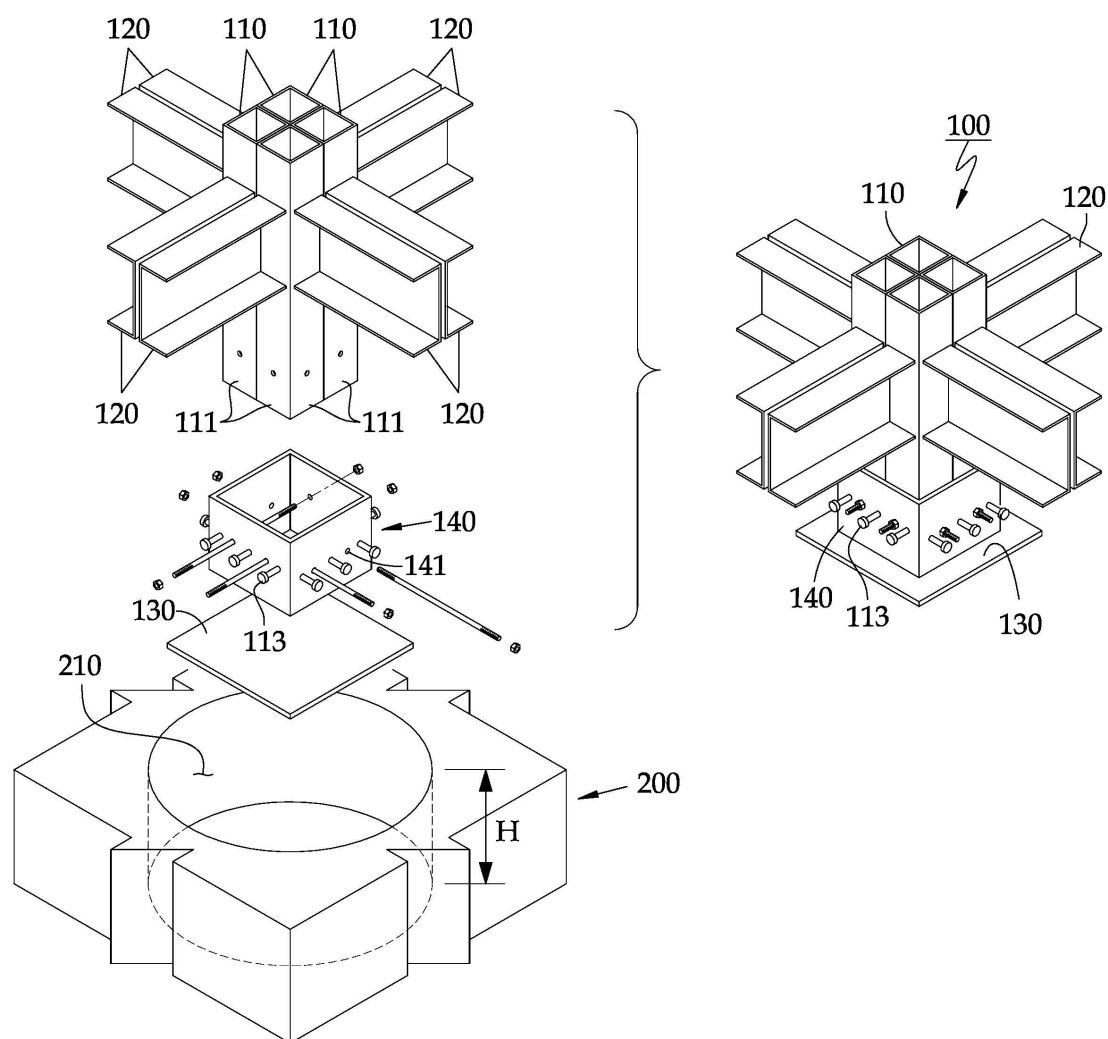
Family 81/100 - FAMPAT - ©Questel

Title

(CN207063699U)

Modular construction guardrail

Images



Publication data including kind & date

[KR101413131](#)

B1 2014-07-01 KR101413131



Abstract

(KR101413131)

Disclosed is a joint structure of a modular unit structure and a base using a band type pipe. The joint part of a lower pillar of the modular unit structure is surrounded and fixed by the band type tube. The base has an embedment hole in advance at a position to which the joint part surrounded and fixed by the band type tube is located. The joint part surrounded and fixed by the band type tube is inserted into the embedment hole. The pillar of the modular unit structure is coupled with the embedment hole by pouring fillers into the embedment hole. Therefore, the base and modular unit structure are completely fixed so that a high-rise building can be constructed.

Family 83/100 - FAMPAT - ©Questel

Title

(EP-760041)

Housing system with structural cored hollow components

Images

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EP0760041	A1	1997-03-05	EP-760041				
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BRPI9507783	A1	1997-08-19	BR199507783				
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RO114821	B1	1999-07-30	RO-114821				
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HU219108	B	2001-02-28	HU-219108				
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FI109138	B	2002-05-31	FI-109138				
MD2041	B2	2002-11-30	MD---2041				
CA2124492	C	2005-12-06	CA2124492				
IN0888/DEL/1995	A	2011-04-29	IN1995DE00888				

Abstract

(EP-760041)

Elongated extruded thermoplastic hollow structural components of rectilinear cross section formed for interlocking assembly for use in erecting a modular building on a supporting base, characterized in that each said component being a coextrusion of a substrate including reprocessed plastic material and a thin smooth protecting thermoplastic skin covering wall surfaces of said component which are exposed when same is interlockingly assembled with mating components, each said component being cored to provide a predetermined pattern of spaced holes along the length of the walls thereof which become internal walls when same is interlockingly assembled with mating components and the holes of mating components being in registration to provide internal **flow** passages therebetween with the corings providing a source of substrate reprocessed plastic feed stock.

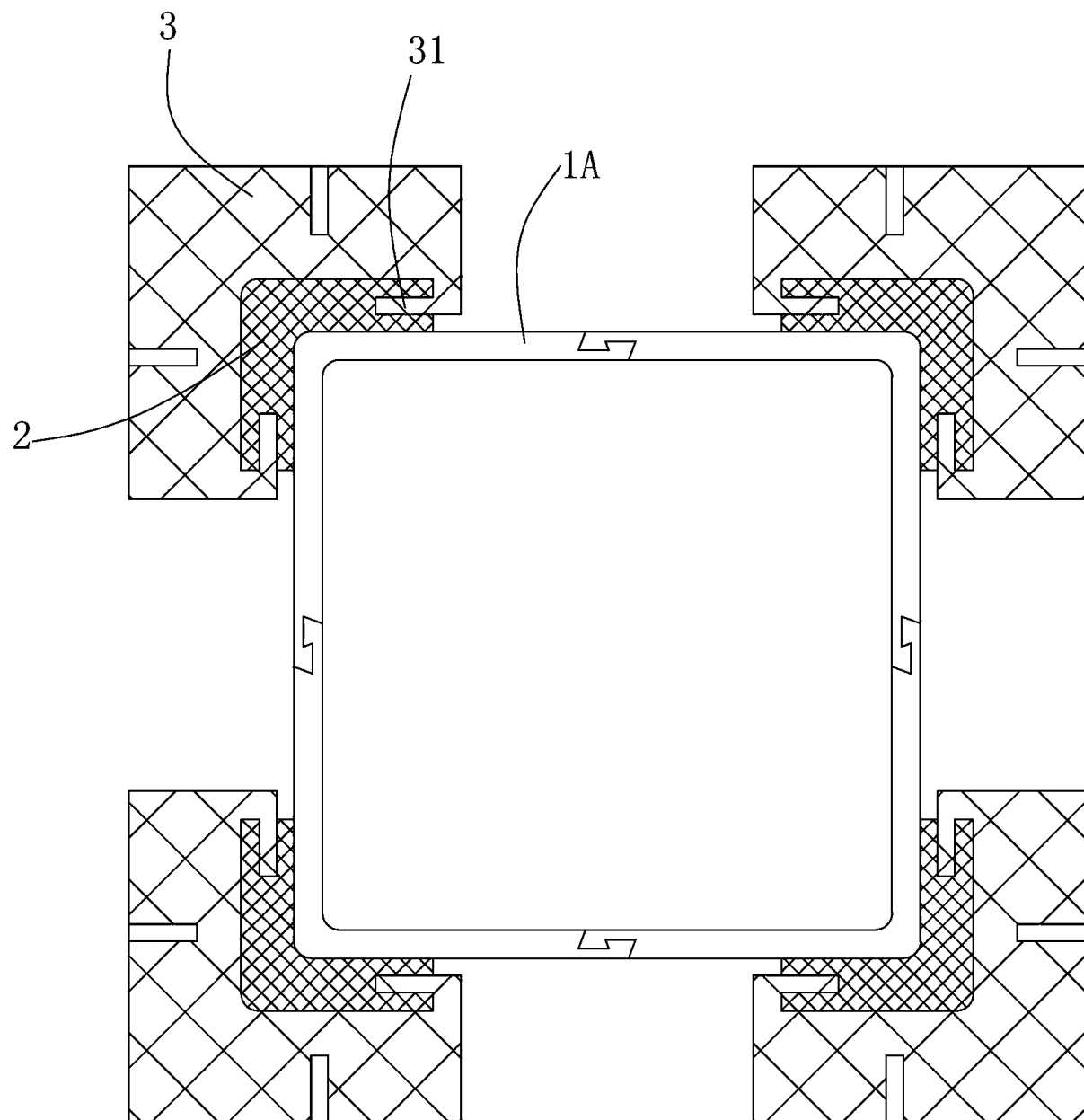
Family 84/100 - FAMPAT - ©Questel

Title

(CN105507522)

Profile steel-wrapping material connector for 3D modularized house building

Images



Publication data including kind & date

CN105507522

A

2016-04-20

CN105507522



Abstract

(CN105507522)

The invention relates to a profile steel-wrapping material connector for 3D modularized house building. The profile steel-wrapping material connector comprises a fastener fastened to profile steel. The fastener is formed by multiple connecting parts clamped by clamping parts arranged on the connecting parts. The connecting parts are provided with clamping blocks, and the lateral ends of the clamping blocks are provided with embedding grooves. The profile steel-wrapping material connector has the characteristics that the connecting parts are connected by the clamping parts to form the fastener fastened to the profile steel, the use of water-coagulation soil is avoided, welding of inner ribs or keel to the profile steel is avoided, and the connector is simple to assemble, widely applicable and convenient and fast to mount.

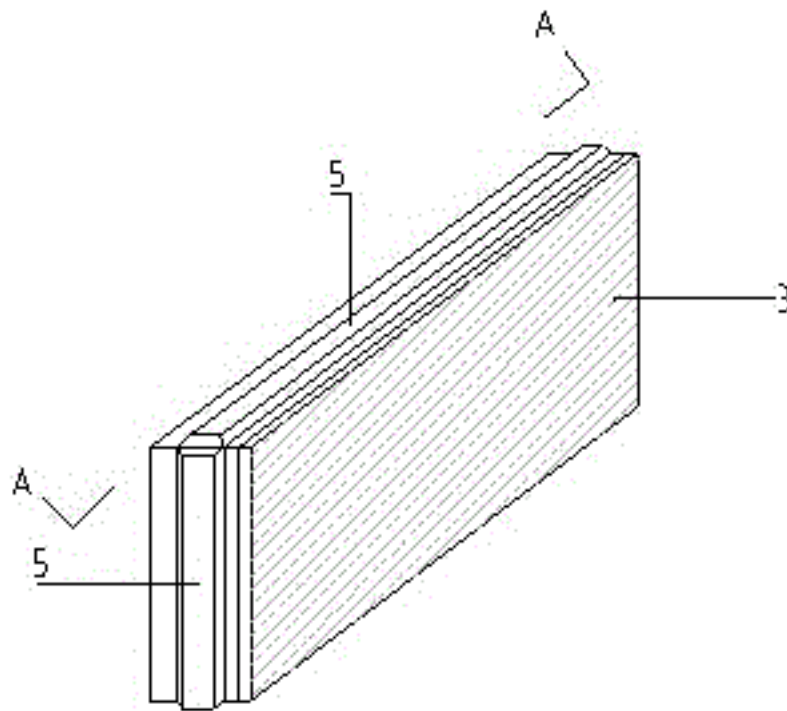
Family 85/100 - FAMPAT - ©Questel

Title

(CN205712564U)

Steel construction building outer wall is gone along with sb. to guard him integrated level and is assembled wallboard with decorating heat preservation

Images



Publication data including kind & date

[CN205712564](#)

U

2016-11-23

CN205712564U



Abstract

(CN205712564U)

The utility model discloses a steel construction building outer wall is gone along with sb. To guard him integrated level and is assembled wallboard with decorating heat preservation is formed by flow state micropore lightweight concrete base member and insulated core board and inorganic decorative board complex, assembles the board and comprises each layer material stratiform complex, micropore lightweight concrete thick liquids and heated board core and the closely compound one pouring shaping of the whole zero clearance of inorganic decoration panel. Base member both sides and upper portion and bottom all are equipped with the convex -concave chase mortise. The utility model discloses utilizing special structure, constituting the heat preservation of building masonry wall decoration and go along with sb. To guard him the integrated layer of constructing, the wallboard is assembled in the utilization, is under construction swiftly, and the load is light behind the one -tenth wall. Satisfy high -rise steel construction building to light load, high functional requirement. Assemble that the board load is light, intensity is high, rigidity is big, keep warm decorative good, the molding size accurate, can realize batch production large -scale production and prefabricated construction.

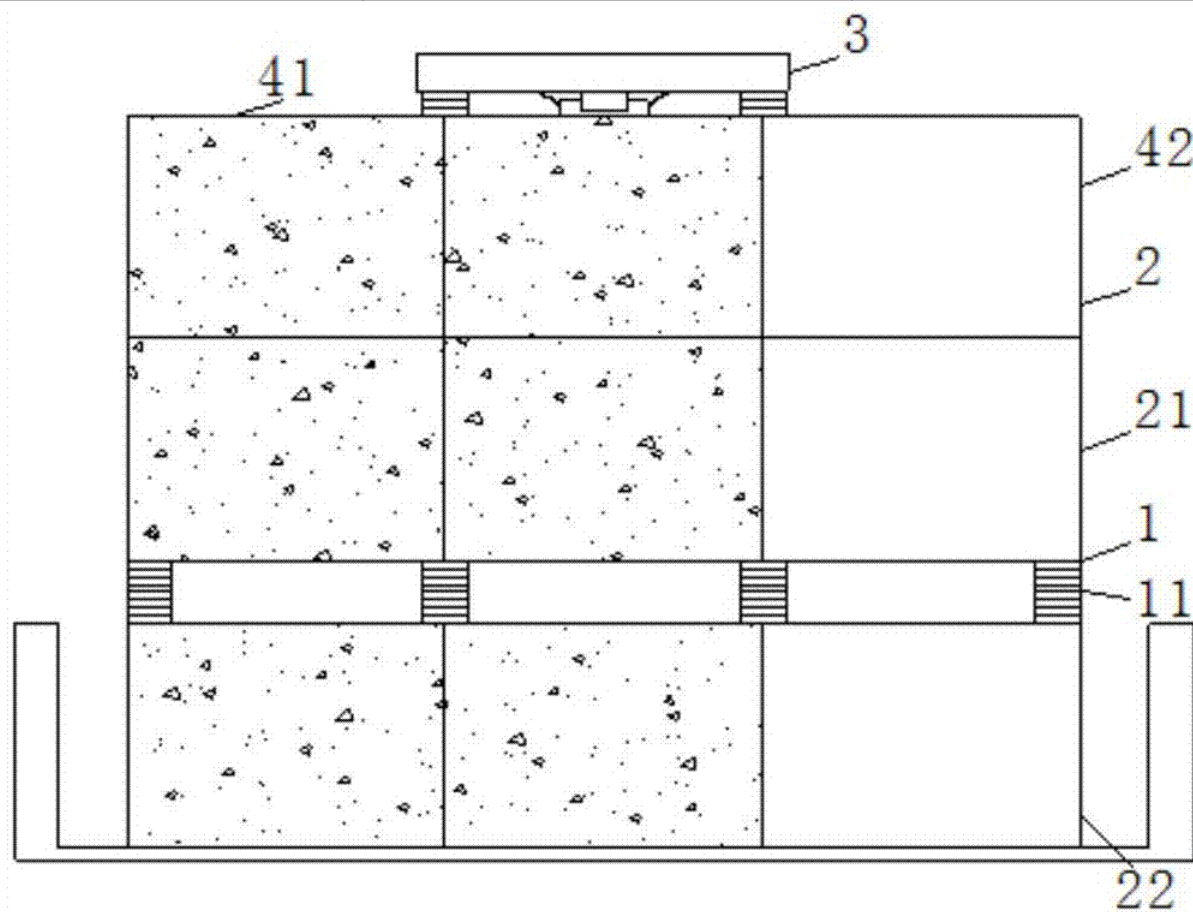
Family 86/100 - FAMPAT - ©Questel

Title

(CN208251764U)

Modular assembly formula hybrid control building structure system

Images



Publication data including kind & date

[CN208251764](#)

U

2018-12-18

CN208251764U



Abstract

(CN208251764U)

The utility model discloses a modular assembly formula hybrid control building structure system has assembly structure main part, shock insulation layer and harmonious quality damping device, the shock insulation layer sets up between the superstructure and lower part bearing structure of assembly structure main part, and harmonious quality damping device sets up on the structure top layer of assembly structure main part, the assembly structure main part comprises the modularization unit, and the modularization unit is precast shear wall unit and/or prefabricated frame unit. The utility model discloses effectively improve assembly structure's wholeness and anti -seismic performance, enlarged assembly structure's operating range, improved prefabricated assembly building structure assemblyization rate and dry mass.

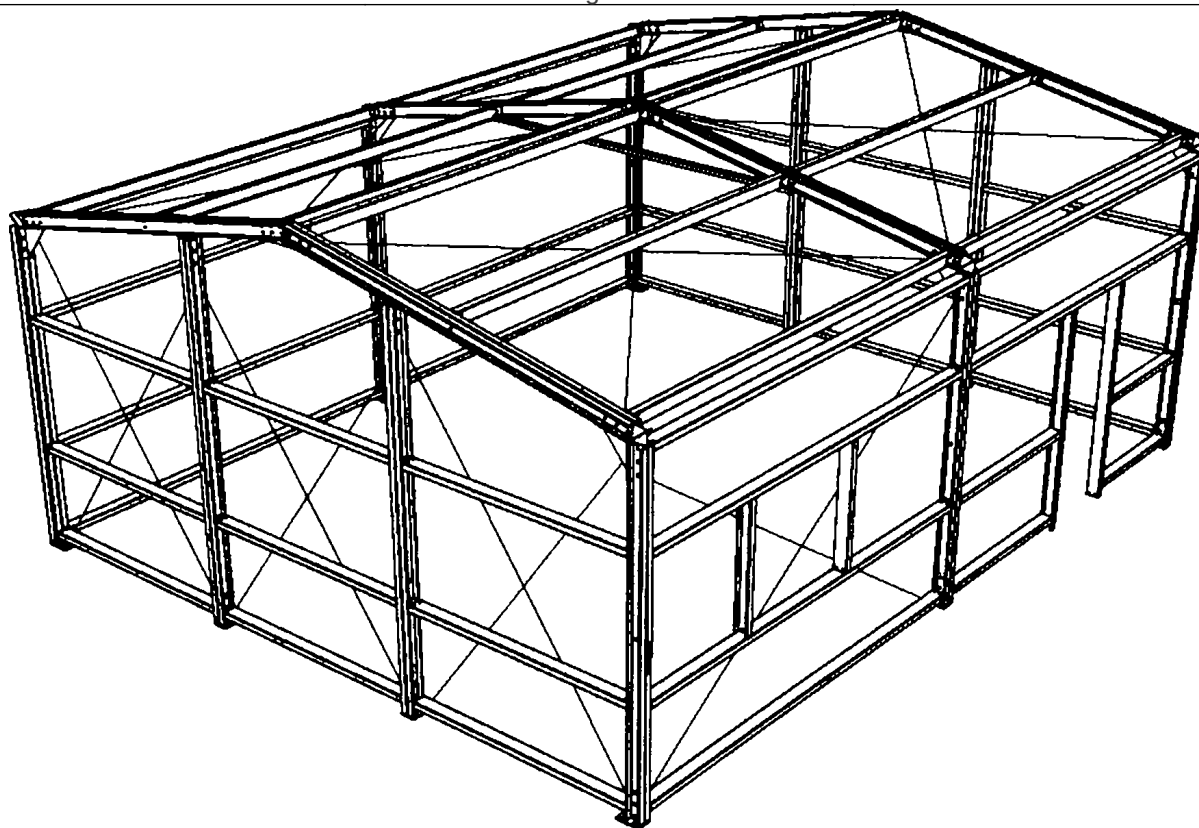
Family 87/100 - FAMPAT - ©Questel

Title

(CN202416560U)

Assembled lightweight steel construction building framework connected by bolts completely

Images

**Publication data including kind & date**

CN202416560

U

2012-09-05

CN202416560U

**Abstract**

(CN202416560U)

The utility model discloses an assembled lightweight steel construction building framework connected by bolts completely. The assembled lightweight steel construction building framework comprises a framework structural member consisting of vertical columns, front roof beams, rear roof beams, wall surface purlines and roof purlines, a framework accessory consisting of plinth connection pieces, beam column connection pieces, beam ridge connection pieces, purline connection pieces, pull line connection pieces and pull rod connection pieces and a framework stabilization piece consisting of vertical column pull lines, beam pull lines and beam pull rods, and is characterized in that the vertical columns, the front roof beams, the rear roof beams, the wall surface purlines and the roof purlines of the framework structural member are made of C-shaped steel; the section of the C-shaped steel comprises a long edge part and a wide edge part which form a right angle; the wide edge part is provided with a hooked elbow; bolt holes are formed on the long edges or the wide edges of the sections of the C-shaped steel; bolts pass through the bolt holes and connect the vertical columns and the front roof beams or the rear roof beams, the front roof beams and the rear roof beams, the vertical columns and the foundation, the vertical columns and the wall surface purlines as well as the front roof beams or the rear roof beams and the roof purlines through the framework accessories serving as connection pieces; and bolt holes are formed in the plinth connection pieces, the beam column connection pieces, the beam ridge connection pieces, the purline connection pieces, the pull line connection pieces and the pull rod connection pieces of the framework accessory. The framework has the advantages of short manufacturing period, relatively light structural weight, firm structure, high weather resistance, high field mounting speed, long service life, relatively low cost and the like.

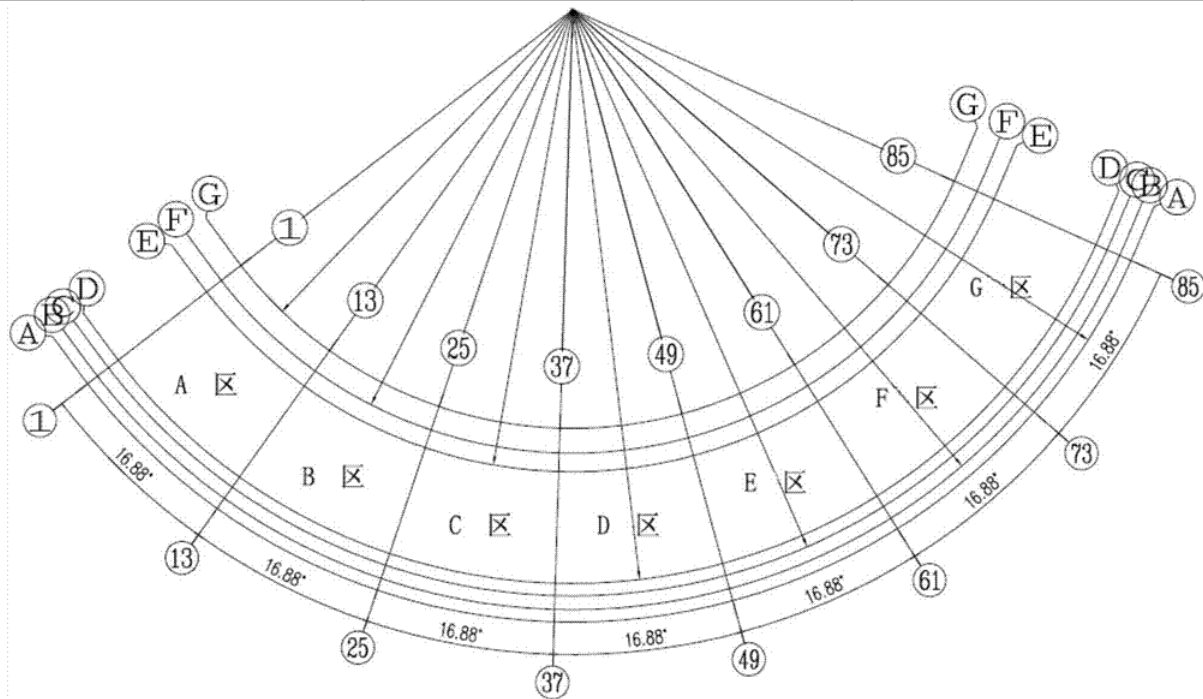
Family 88/100 - FAMPAT - ©Questel

Title

(CN105003080)

Construction technique of sector steel-structured building

Images



Publication data including kind & date

CN105003080	A	2015-10-28	CN105003080
CN105003080	B	2017-09-08	CN105003080B



Abstract

(CN105003080B)

The invention relates to the technical field of building construction, in particular to a construction technique of a sector steel-structured building. The sector steel-structured building comprises a roof truss system, a roof shaped steel structure, floor trusses, a cantilever platform steel structure, a hanging platform, partial cross stiffened steel-reinforced poles and V-shaped support poles. The construction technique includes: dividing axes of a sector steel structure along an arc structure, processing linear segments through steel box girders, performing jointing to obtain approximately arced fold lines, and mounting the roof truss structure by means of aerial assembling, incremental launching and supports jacking and **removing**; hoisting the roof truss, and finally hoisting the floor trusses and otherness. The construction technique provides an effective guarantee on stability and high speed of the construction progress and reasonability and orderliness of construction steps, subdivision control is performed through a series of scientific calculations along with constructional practical conditions, scientific management and advanced technologies are combined, engineering department process can be quickened, and construction safety can be guaranteed.

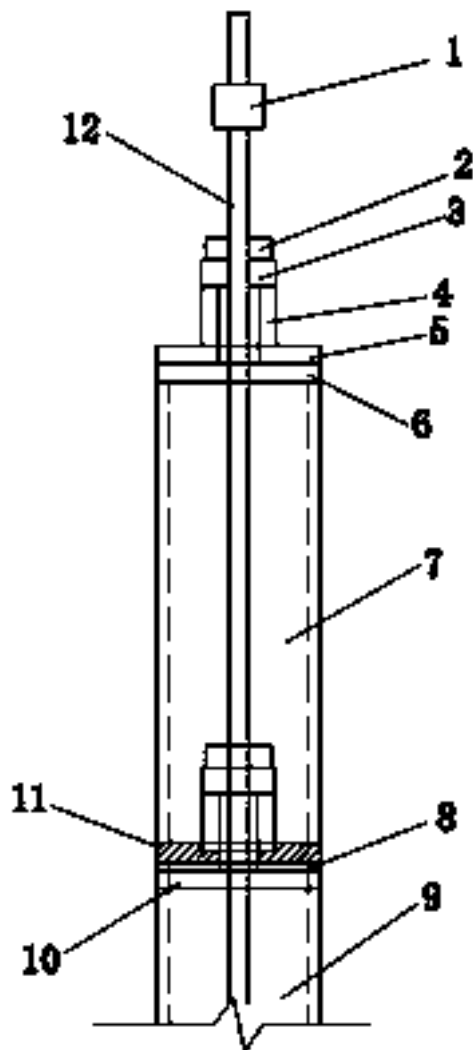
Family 89/100 - FAMPAT - ©Questel

Title

(CN204920241U)

Quick construction structures of building modularization

Images



Publication data including kind & date

[CN204920241](#)

U

2015-12-30

CN204920241U



Abstract

(CN204920241U)

The utility model discloses a quick construction structures of building modularization, it includes steel frame attach spare, steel frame attach spare includes the unit frame post, and this unit frame post is including stacking upper portion unit frame post, lower part unit frame post, and both connect fixedly through the connecting piece, and the core housing has the screw rod in upper portion unit frame post, lower part unit frame post are vertical together, the screw rod upper portion of placing upper portion unit frame post in the ware of plugging into, and the screw rod from top to bottom overlaps in proper order has nut, gasket, connection steel pipe, it has set gradually upper junction plate, the frame post board that binds to connect the steel pipe below, frame post board closing cap in the upper portion unit frame post upper end of binding is provided with upper portion unit bottom plate in the bottom of upper portion unit frame post, lower part unit frame capital portion is provided with down the connecting plate, and the time connecting plate and the laminating of upper portion unit bottom plate are provided with the lower part unit board that binds below connecting plate down. The utility model discloses can be under construction, improve work efficiency fast.

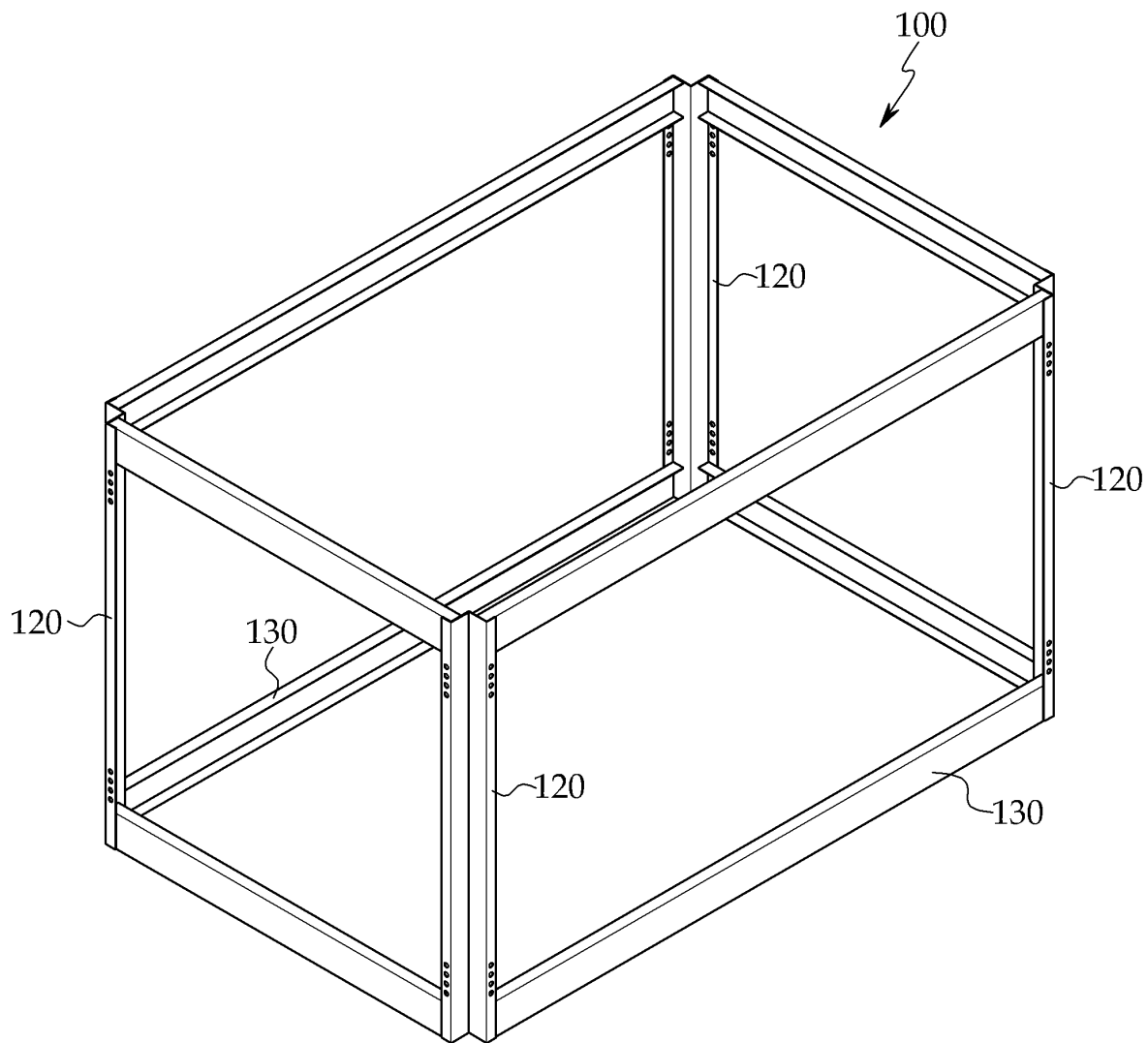
Family 90/100 - FAMPAT - ©Questel

Title

(KR101363739)

Connection structure of modular unit for entire behavior of modular structure

Images

**Publication data including kind & date**[KR101363739](#)

B1 2014-02-18 KR101363739

**Abstract**

(KR101363739)

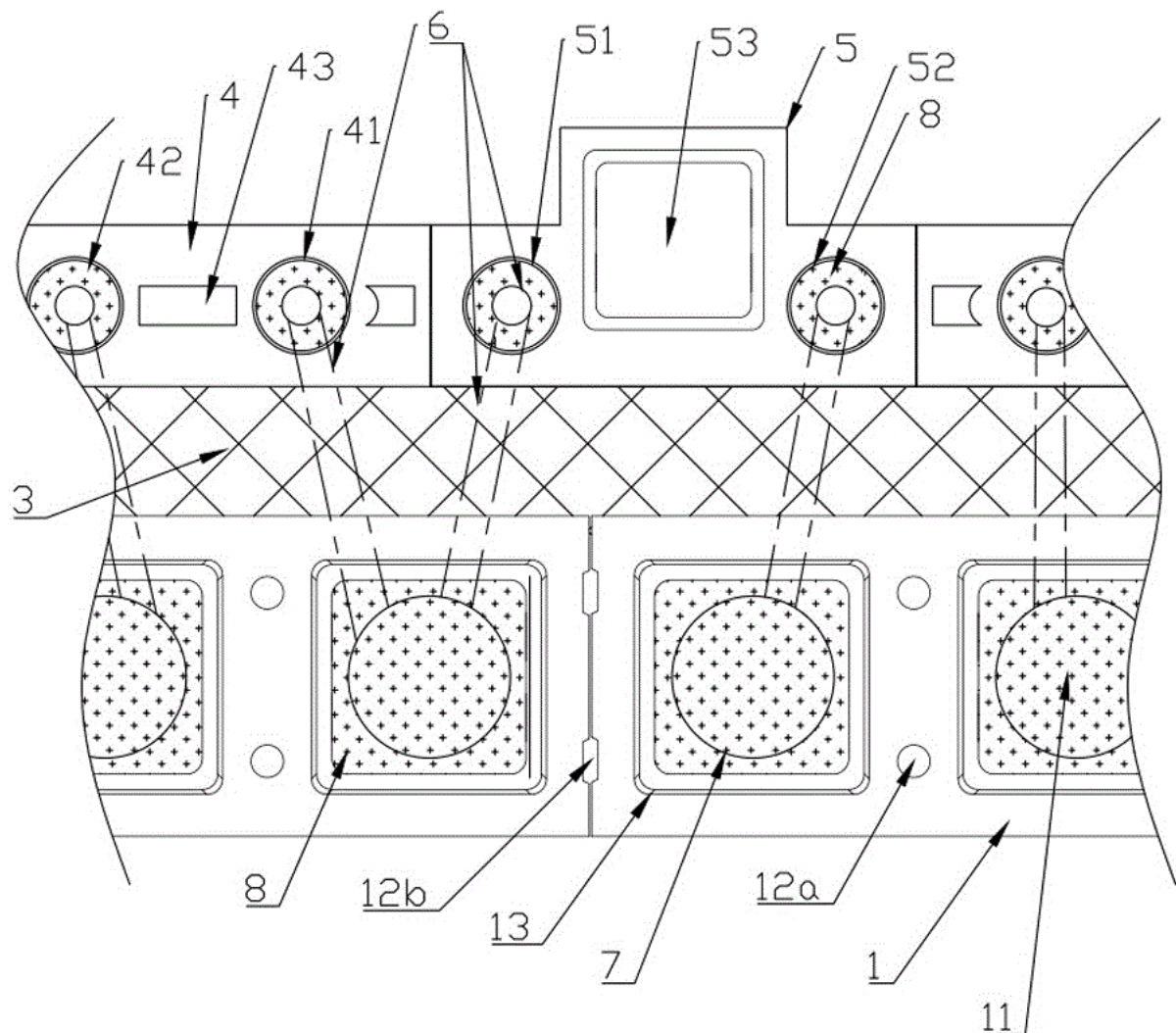
The present invention relates to a connecting structure for integrated behaviors of modular units which are vertically or horizontally connected and arranged on top of each other so as to construct a modular building, wherein the modular unit is manufactured by assembling columns and beams which are formed into channels or square pipes. The column of the modular unit having a W-shaped cross section of which the respective edges are formed to be rectangular includes end portion coupling parts and side portion coupling parts, which are respectively and sequentially formed at both sides of the central edge of the edges and coupled to the end portion and the side portion of the beam so that the beam is coupled to the column. When the modular units are vertically or horizontally connected and arranged on top of each other, a connecting unit having a cross section of which the shape is formed into + or T by integrally coupling multiple shear connecting plates inserted and coupled between the respective horizontal coupling parts to which the shear coupling plates are horizontally adjacent, wherein the shear connecting plates are extended to the lower side of the upper modular unit and the upper side of the lower modular unit so that the modular units vertically or horizontally arranged on top of each other are fastened to each other. Therefore, inefficiency in the cross sections of the columns is prevented from being generated by the overlap of the cross sections when the modular units are horizontally coupled to each other; the amount of steel materials can be remarkably reduced depending on the efficient use of the columns; constructability can be improved by easily constructing a joint in which the side portion coupling parts of the columns of the modular units adjacent to each other are overlapped with each other; and the integrated behaviors of the coupled modular units can be secured by horizontally and vertically coupling the modular units at the same time using the coupling units having the shear connecting plates.

Family 91/100 - FAMPAT - ©Questel

Title

(CN104532983)

Steel pipe concrete composite system of building and masonry construction method thereof

Images**Publication data including kind & date**

CN104532983	A	2015-04-22	CN104532983
CN104532983	B	2017-03-29	CN104532983B

**Abstract**

(CN104532983B)

The invention provides a steel pipe concrete composite system of a building and a masonry construction method thereof. An inner side wall body of the building is formed by building blocks, ring beam casings and steel pipes through masonry construction; concrete is poured in every steep pipe which is inserted and connected into the corresponding building block and ring beam casing in a penetrating mode to achieve the curing forming to form a main body frame and a bearing structure of the building; a heat insulation plate is arranged on the outer wall of the inner side wall body in a pasting mode and then an outer side wall body which is formed by narrow building blocks and thread steel bars through masonry construction is constructed on the outer side of the heat insulation plate in a masonry mode and the thread steel bars are connected into a through hole of every narrow building block in an insertion mode and the concrete is poured to be shaped; the number that the steel pipes are in insertion joint with a bottom layer of the building is in proportional to the design height of the building and is gradually reduced along with the increase of the layer height of a building layer and every steel pipe is integrally connected with the corresponding thread steel bars which are arranged on the outer side. According to the steel pipe concrete composite system of the building and the masonry construction method thereof, the seismic performance of

various design heights of buildings, the flexibility of the outer wall beautification and the degree of convenience of the masonry construction are improved, the labor intensity is small, the use of the steel pipes and the concrete is saved, and the conveying and construction cost of building materials is reduced.

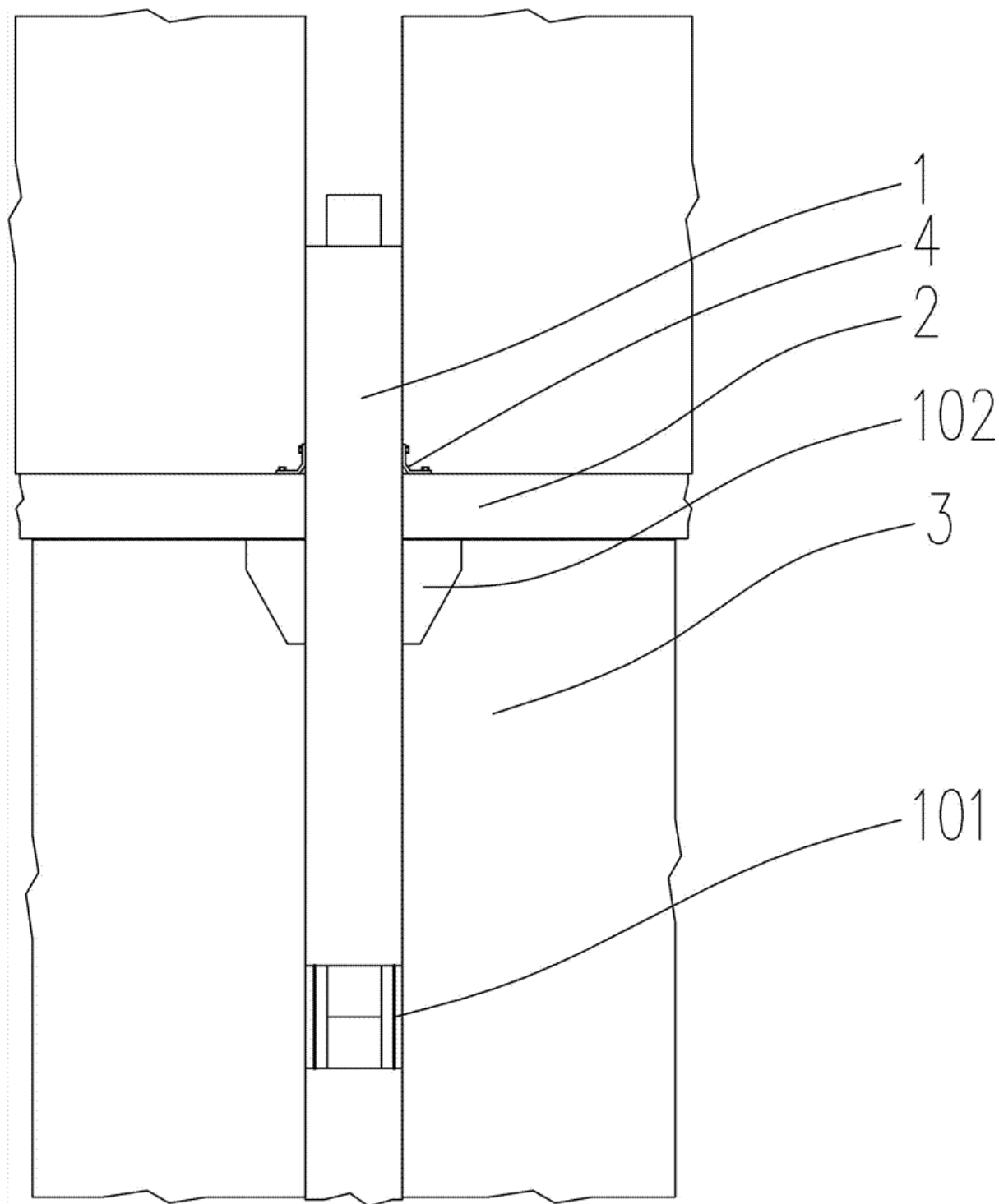
Family 92/100 - FAMPAT - ©Questel

Title

(CN108755926)

Construction method for dry and wet type composite connecting assembly-type building

Images



Publication data including kind & date

[CN108755926](#)

A

2018-11-06

CN108755926



Abstract

(CN108755926)

The invention provides a construction method for a dry and wet type composite connecting assembly-type building. The

construction method comprises the following steps that components are prefabricated in a workshop, wherein the components include vertical columns, crossbeams, floor slabs, shear wall inner layers and shear wall outer layers; joints of the vertical columns are located between the floors, sleeving-connection steel pipes are arranged in the vertical columns, vertical column reinforcements are arranged on the peripheries of the sleeving-connection steel pipes, and the vertical columns are adjusted to be perpendicular and coaxial; the ends of the sleeving-connection steel pipes are positioned in a mutual sleeving-connection mode and are fixedly connected, the vertical column reinforcements are connected in a welded mode or connected through sleeves, and transverse reinforcements are bound; the shear wall inner layers and the shear wall outer layer are hoisted, and the transverse reinforcements of shear walls and the transverse reinforcements of the vertical columns are connected in a welded mode or connected through sleeves; formworks are erected at the joints, the joints of the vertical columns and inner cavities of the shear walls are poured into a whole; meanwhile, the crossbeams are hoisted to be placed on bracket supports, and corner connecting pieces are mounted; the floor slabs are hoisted on the crossbeams; and the steps are sequentially **circulated**, and composite construction of the assembly-type building is completed. According to the construction method for the dry and wet type composite connecting assembly-type building, compressive strength can be improved, and the anti-seismic property is improved.

Family 93/100 - FAMPAT - ©Questel

Title

(WO201221080)

The procedure of building a metallic modular construction

Images

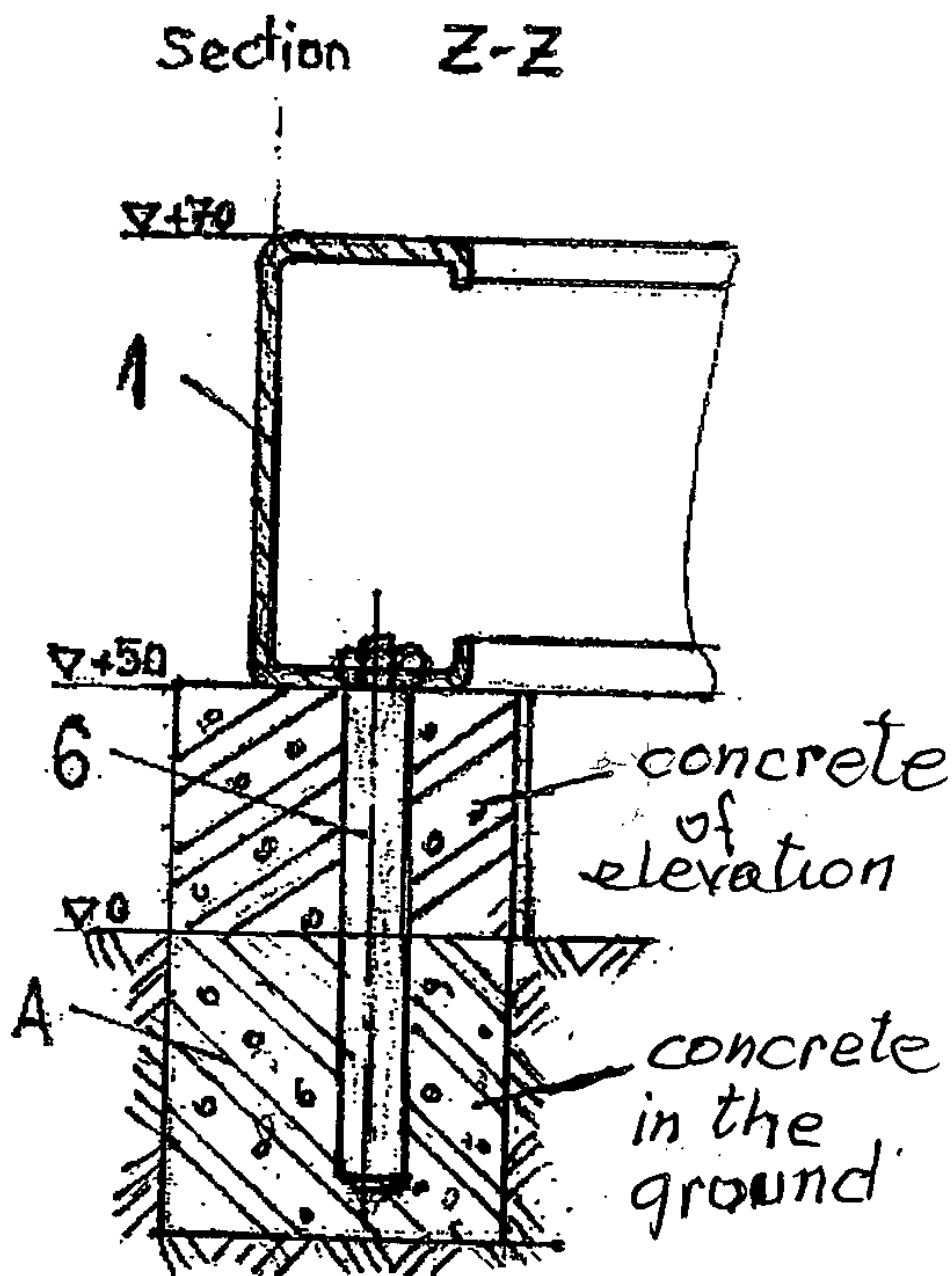
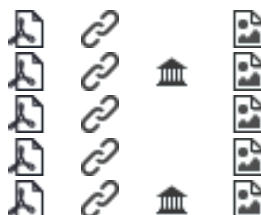


Fig 4

Publication data including kind & date

RO126214	A2	2011-04-29	RO-126214
WO2012021080	A2	2012-02-16	WO201221080
RO126214	A8	2012-04-30	RO-126214
RO126214	B1	2012-04-30	RO-126214
WO2012021080	A3	2012-11-22	WO201221080



Abstract

(WO201221080)

This invention refers to the procedure of building a metal modular construction in order to obtain residence houses or multifunctional constructions. The procedure conformable to the invention implies the montage of a basic polygonal frame on a reinforced concrete foundation, delimitating the exterior of the construction. The frame is fixed using one of the two ways: whether in the foundation with metal rods and chemical ampoules; or it is mounted on 4 collar poles fixed in the foundation placed in the ground and then the metal rods are fastened to the metal frame and the concrete of elevation is moulded for their fixation. After fixing the basic frame (1) using one of the two ways, the vertical resistance poles are fixed in the basic frame using screws and nuts, in the cuttings (d, d1) special provided for the basic frame. The resistance beams are mounted at the height of +3 and +6 m between the vertical poles. The vertical poles are mechanically fastened to the exterior beams by means of screws and nuts, fastening assured by carbon fibre rings whose rigidity was provided by the metal structure using special resin. The montage of structural elements at the corners of the building is made using various carbon fibre interpenetrated rings. Next the beams are mounted on the ceiling at the height of +3 and +6 m, 2 pieces back to back. Outside the metal structure the sandwich type panels with both metal sides and polyurethane core are vertically mounted and they are fastened to the structure by means of self-drilling metal screws; then the resistance pleated plate is mounted over the ceiling beams; outside the construction sandwich panels are placed and they are covered with polystyrene, polyester mesh and ornamental plaster; the framework is built of zinc metal structure and metal purlins are mounted over it along the water, fastened to a layer of pleated plate and tile plate over it or directly on the metallic structure of the roof framework are mounted sandwich panels with a type tile face; the direction of the electric, plumbing, and heating plants is mounted inside the construction, along the contour inside the metal structure. A coat of mineral wool is fixed over it and phonic-acoustic sandwich type panels or gypsum cardboards are mounted over it on the rigips type metal structure.

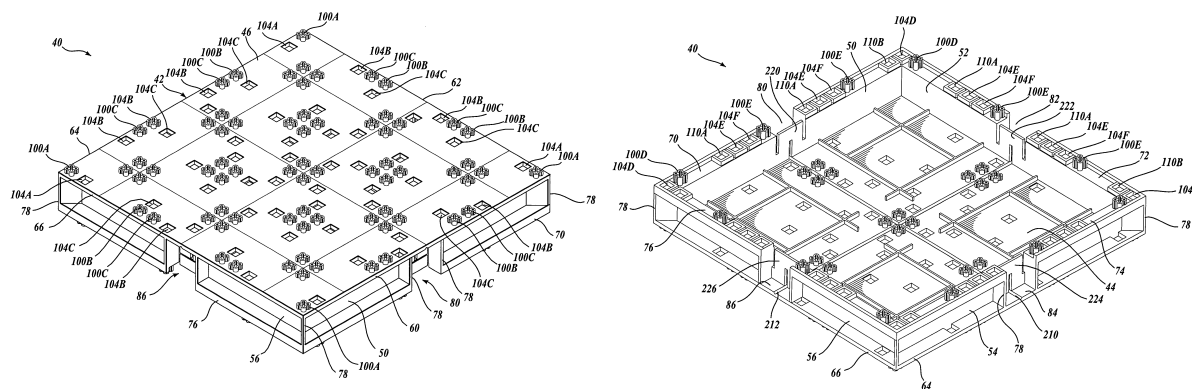
Family 94/100 - FAMPAT - ©Questel

Title

(EP1654045)

Building element for constructing a modular substructure

Images



JP4537397

B2 2010-06-25 JP4537397

Abstract

(EP1654045)

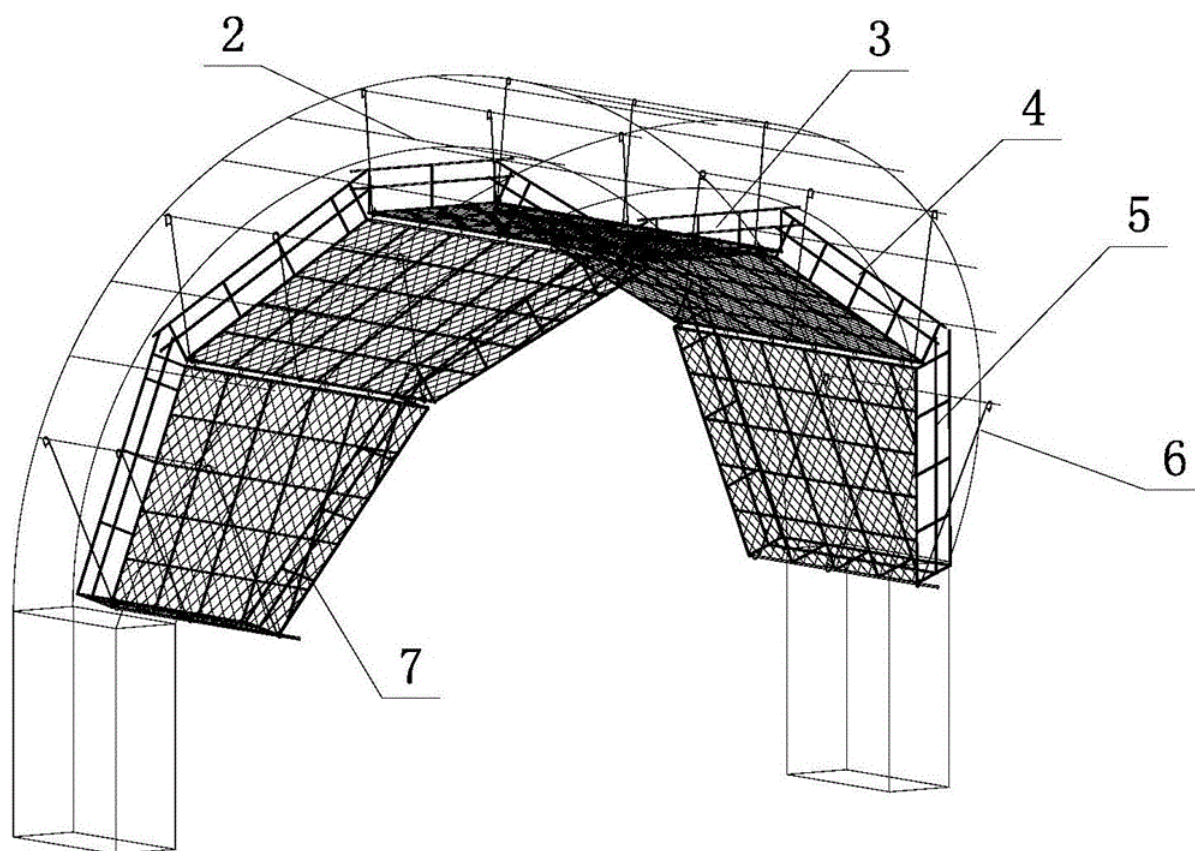
A building element suitable for use in supporting model building sets. The building element is configured to be **removably** secured to a plurality of like or similar building elements to form a modular substructure for supporting model building sets. To that end, the building element may include a plurality of connector fitting arrangements **disposed** on the surfaces of the building element. In one embodiment, the building element is configured to be separable into half-sections and quarter-sections.

Family 95/100 - FAMPAT - ©Questel

Title

(CN205875666U)

A platform suspends in midair that is used for building eaves oral area position to be under construction

Images**Publication data including kind & date**

CN205875666

U 2017-01-11 CN205875666U

**Abstract**

(CN205875666U)

The utility model relates to a construction field is decorated to the outer eaves of housing construction engineering, discloses a platform suspends in midair that is used for building eaves oral area position to be under construction, should suspend the platform in midair and **move** towards to constitute the zigzag shaped platform by a plurality of platform units along eaves mouth pitch arc, and each platform unit is linked to be whole through the connecting piece to hang on eaves mouth steel structure framework through the jib, suspend the platform in midair and be located eaves mouth below, keep the space that 1.5~1.8m is high between each platform unit and eaves mouth structure, platform unit lin bianchu is provided with the guardrail, and platform unit bottom and guardrail inboard are provided with the safety net. The utility model provides a building high altitude eaves oral area position decorate a construction difficult problem, utilize the building structure bearing, can ensure stably, safe, reliable, be applicable to the high altitude eaves oral area position of various shapes, span, lightly nimble, installation, dismantlement convenience improve work efficiency fast for the construction

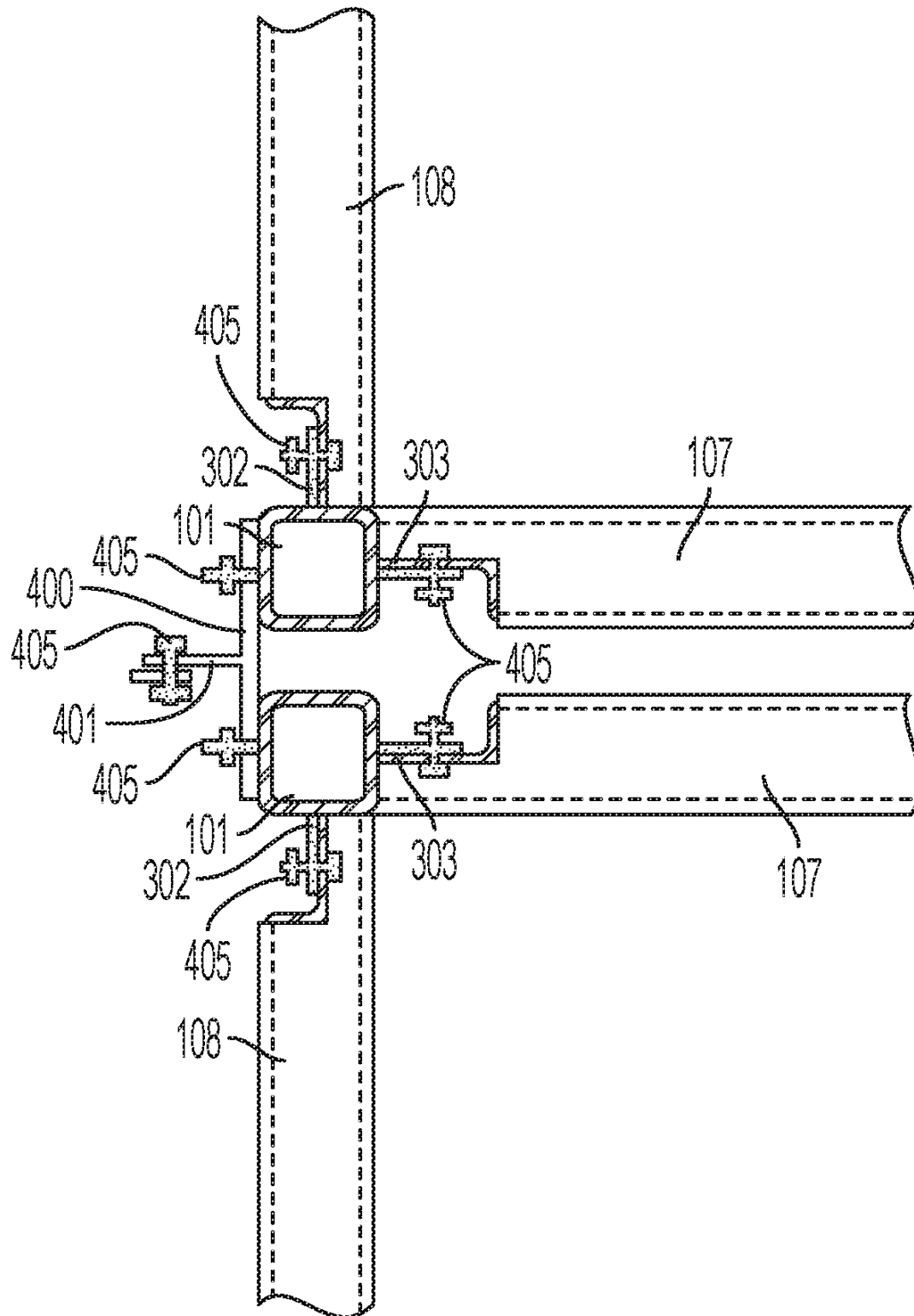
progress, and reduce intensity of labour.

Family 96/100 - FAMPAT - ©Questel

Title

(US20190136504)

Apparatus and systems related to modular construction

Images

Publication data including kind & date

[US20190136504](#)

A1 2019-05-09

US20190136504



Abstract

(US20190136504)

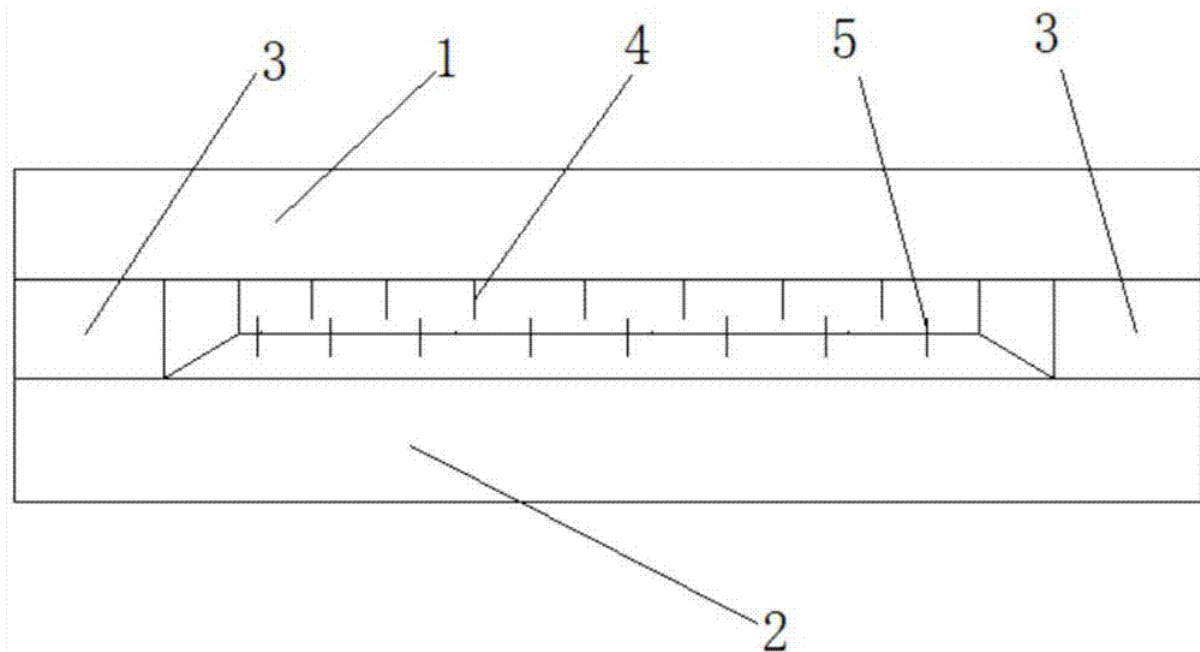
Systems and apparatuses related to modular construction of various structures are provided herein. The systems and apparatuses described can include a plurality of frame members, insert tube members, and fastening plates to join a plurality of modular structures.

Family 97/100 - FAMPAT - ©Questel

Title

(CN108661235)

Integrally-formed type modular wall of fabricated integrated house and construction method thereof

Images**Publication data including kind & date**[CN108661235](#)

A 2018-10-16 CN108661235

**Abstract**

(CN108661235)

The invention discloses an integrally-formed type modular wall of a fabricated integrated house and a construction method thereof. The integrally-formed type modular wall comprises an externally-installed plate, an internally-installed plate, two wall body frames and a filling layer. The externally-installed plate includes an exterior finish coat, an insulating fire-retardant coating and a first connecting piece, and the first connecting piece is arranged on the exterior finish coat and the insulating fire-retardant coating in an inserting mode. The internally-installed plate comprises an inner finish coat, a structure layer and a second connecting piece, and the second connecting piece is arranged on the inner finish coat and the structure layer in an inserting mode. The two wall body frames are separately arranged between two side edges of the externally-installed plate and the internally-installed plate. The filling layer is arranged between the two wall body frames, an inner wall decorative layer and an outer wall decorative layer are arranged on two side faces of the filling later, the inner wall decorative layer is composed of an insulation layer, a waterproof layer and a decorative layer, and the outer wall decorative layer is composed of an insulation layer, a waterproof layer and a self-adhered reflecting layer.

Family 98/100 - FAMPAT - ©Questel

Title

(EP3137695)

Structural modular building connector

Images

JP2017515027	A	2017-06-08	JP2017515027				
BR112016025375	A2	2017-08-15	BR112016025375				
US9845595	B2	2017-12-19	US9845595				
EP3137695	A4	2017-12-20	EP3137695				
US20180127967	A1	2018-05-10	US20180127967				
SG10201900884S	A	2019-02-27	SG10201900884S				

Abstract

(EP3137695)

A connector assembly, having an upper connector coupled to a lower connector and a gusset plate sandwiched between the upper and lower connectors. Also, disclosed is a hoistable connector assembly, a lifting frame assembly, a coupling system for modular frame units, a method for assembling a module unit using the connector assembly, and a modular frame unit and building having the connector assembly.

Family 99/100 - FAMPAT - ©Questel

Title

(WO2018111195)

Modular building unit, modular building and method of assembling thereof

Images

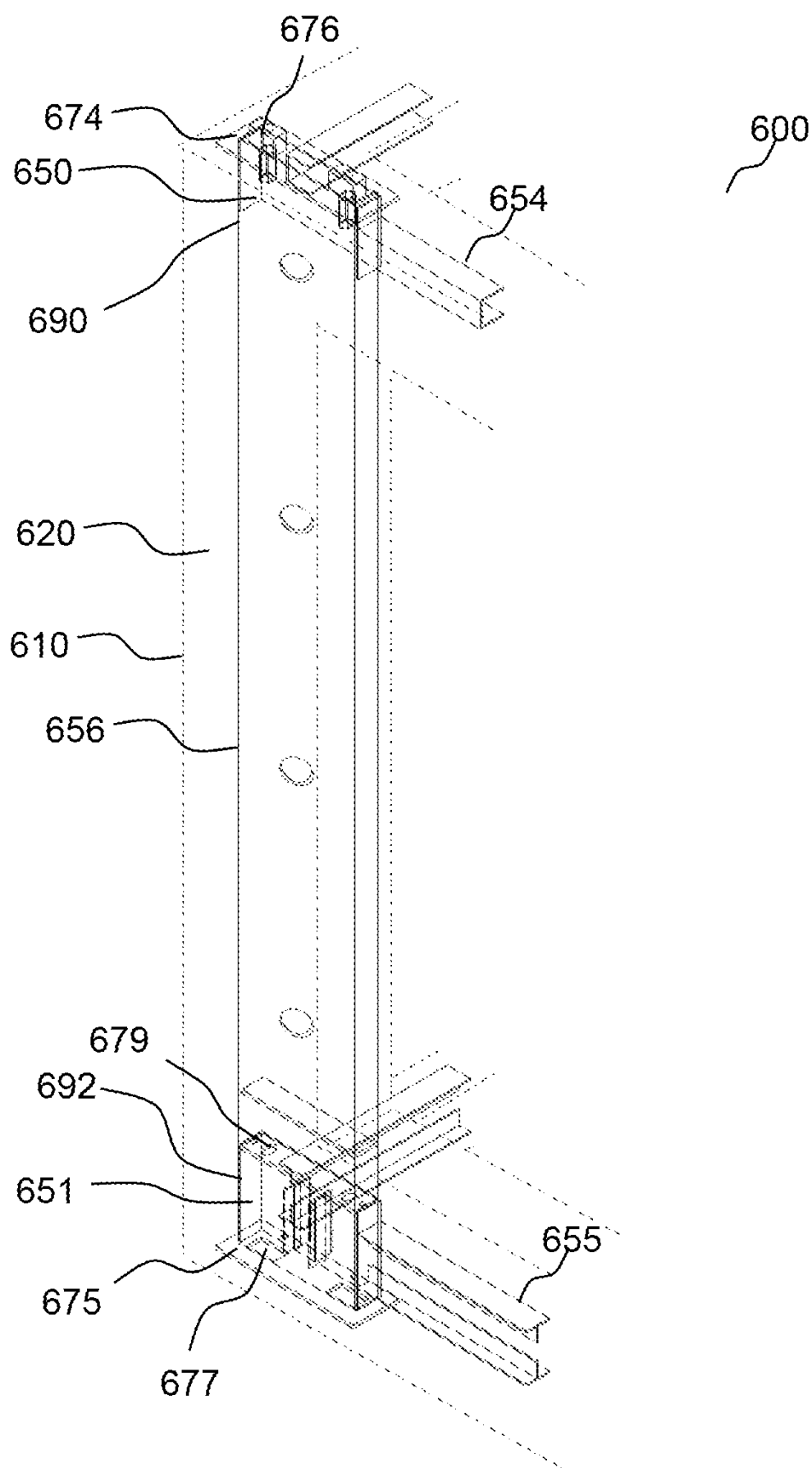


FIG. 6

Publication data including kind & date

WO2018111195	A1	2018-06-21	WO2018111195
SG10201610522W	A	2018-07-30	SG10201610522W

**Abstract**

(WO2018111195)

A modular building unit including a concrete structure and a support framework embedded in the concrete structure to reinforce the concrete structure. A joint of the support framework may be configured to rigidly couple at least two frame members of the support framework together. The joint of the support frame work may further be configured to connect the modular building unit with another modular building unit. A modular building including the modular building unit. A method of assembling the modular building unit and a method of assembling the modular building.

Family 100/100 - FAMPAT - ©Questel

Title

(FR2232417)

Prefabrication of moulded building panels contg. fittings - to standardise modular assembly and servicing

Publication data including kind & date

FR2232417	A1	1975-01-03	FR2232417
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**Abstract**

(FR2232417)

Panels made by lining a mould with a dense polymeric material which is heated prior to loading the residual cavity with a solid foam, either as a prefabricated block or by introduction of an exothermic foam generating reaction mix. Mfrs. of such panels on a prod. line basis using hinged split moulds which may be opened out horizontally for lining and progressively closed to a vertical parting line to develop or bond the foam. When open, the moulds are loaded before and/or after applying the lining resin with inserts such as door or window frames, service conduits, etc. The lining resins is cured sufficiently to hold the inserts in placed before the foam is added and the mould is closed. Panels moulded with surfaces of polyester resin, with or without (glass) reinforcement and expanded polyurethane cores. Resin compsns. may include fire retardants bactericides, etc. Suitable for mfr. of prefabricated walls 3. 35-6. 09 m long X 50-100 mm thick.