

Search history

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2:

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Search (CPC = E04B1/22 OR E04B1/3483 OR E04H1/04) AND (PD<20141224) (Results 158)

4:

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5:

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6:

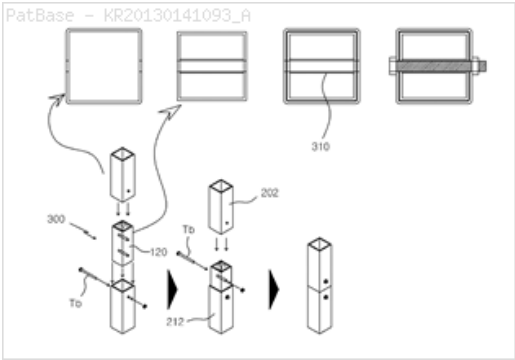
Title: MODULAR UNIT JOINT AND MODULAR STRUCTURE USING THE SAME

Abstract: The present invention relates to a **modular** unit column **connection device** and a **modular** structure using the same, and provides a **modular** unit column **connection device** comprising: connection columns that are inserted into both sides of the lower column of a lower module and of the upper side of an upper column which are mutually faced; and connection tie bolts having the connection columns fixated on the upper and lower columns respectively. Each of the connection columns has multiple connection tie holes formed for the connection tie bolts to be inserted in; a connection guide pipe, which guides the insertion of the connection tie bolts by being communicated with the connection tie bolt holes, mounted therein; and a **modular** unit column **connection device** filled with concrete or cement mortar therein. The modular structure according to the present invention has the effects in reducing construction period and in facilitating the separation and disassembly thereof since the modular structure is easy to assemble and disassemble by using the **modular** unit column **connection device** for **assembling** the columns.

Classifications:

International (IPC 8-9): E04B1/30 E04B1/348 E04B1/58 (Advanced/Invention)

CPC: E04B1/3483 E04B1/34853 E04B1/40



Family:

Publication number	Publication date	Application number	Application date
KR101425941 B1	20140801	KR20120064206	20120615
KR20130141093 A	20131226	KR20120064206	20120615

Priority:

KR20120064206 20120615

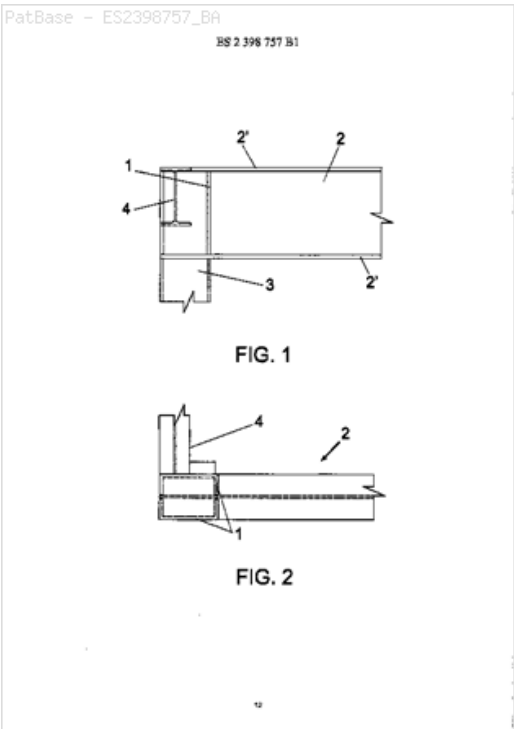
Probable Assignee: POSCO CO LTD
Assignee(s): (std): POSCO A AND C CO LTD ; POSCO CO LTD
Assignee(s): POSCO A AND C CO
Inventor(s): (std): KIM ILL SOO ; LYU GYEONG GU

Title: SISTEMA DE UNION DE MODULOS ENTRE PLANTAS PARA EDIFICIOS DE CONSTRUCCION MODULAR. MODULES SYSTEM OF UNION BETWEEN PLANT CONSTRUCTION OF MODULAR CONSTRUCTION. (Machine translation)

Abstract: Source: ES2398757A [ES] Sistema de conexion de modulos entre plantas para edificios de construccion modular. El sistema esta previsto para unir o conectar modulos tridimensionales utilizados en la construccion de edificios de baja altura, cuyos modulos tridimensionales son industrializados e incluyen una estructura de forjado inferior y una estructura superior de techo, asi como unos pilares y soportes de union de dichas estructuras, incluyendo ademas dichos modulos tridimensionales todos los elementos necesarios para formar la zona habitable del edificio, ademas de sus instalaciones. El sistema de conexion entre modulos se basa en utilizar unos rigidizadores (9) previstos en la estructura (7) del modulo superior, que mediante corte del ala de la correspondiente viga, se establecen alojamientos (10) para ubicacion y posicionado de elementos (11) previstos en la estructura de techo (8) del modulo inferior, quedando materializada la union mediante un pasador alojado en orificios pasantes (12) enfrenados y previstos en los elementos de posicionado (11). En dicha union colaboran tambien otros elementos rigidizadores, coincidiendo con la posicion de los soportes o pilares correspondientes.

Machine translation: System module connection between plants for modular buildings. The system is expected to join or connect dimensional modules used in the construction of low-rise buildings, which are three-dimensional modules industrialized and include a forged bottom structure and dome structure, pillars and also supports joining of these structures including three-dimensional modules also said all the elements needed to make the building habitable zone, in addition to its facilities. The system of connection between modules is based on using stiffeners (9) provided on the structure (7) of the upper module, which wing cutting through the corresponding beam down housings (10) for location and positioning elements (11) under the roof structure (8) of the lower module, the union being materialized by a pin housed in holes (12) and bridled under the positioning elements (11). Also collaborate in such a union other stiffening elements coincide with the position of the supports or pillars for.

Classifications:
International (IPC 8-9): E04B1/24 E04B1/348 E04H1/12 (Advanced/Invention)
CPC: E04B1/2403 E04B1/3483 E04H1/12



Family:

Publication number	Publication date	Application number	Application date
ES2398757 AA	20130321	ES20110000177	20110218
ES2398757 BA	20140121	ES20110000177	20110218

Priority:

ES20110000177 20110218

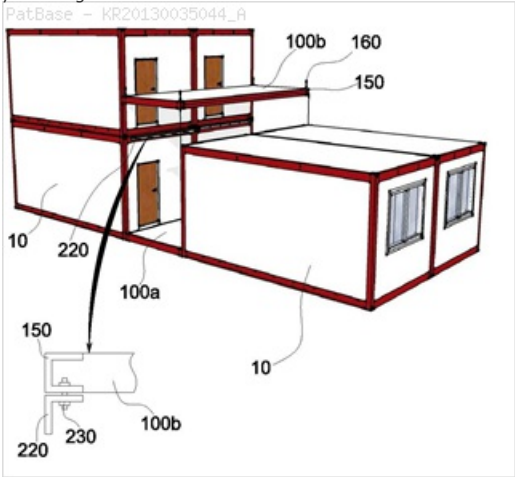
Probable Assignee: MODULTEC S L
Assignee(s): (std): MODULTEC S L
Assignee(s): MODULTEC SL
Inventor(s): (std): FERNANDEZ RODRIGUEZ JUAN JOSE
Inventor(s): JUAN JOSE FERNANDEZ RODRIGUEZ

Title: A **CONNECTING DEVICE** OF **MODULAR** UNIT CORRIDOR

Abstract: PURPOSE: A connecting device for the corridor of a modular unit is provided to facilitate to install a corridor unit into multi floors in a construction site. CONSTITUTION: A connecting device for the corridor of a modular unit comprises a corridor support stand, concrete, a second finishing material, a first finishing material, a reinforcing member(150), an opened groove, a base plate, and a corridor fixing device(220). The corridor support stand is made of a steel beam and is poured with the concrete in the inner lower side. The second finishing material is made of mortar and is laminated in the upper side of the concrete. The first finishing material is made of tiles, is installed in the upper side of the second finishing material, and maintains horizontal position by the second finishing material. The reinforcing member is integrated at each edge of the corridor support stand and comprises a first floor corridor part(100a), a second floor corridor part(100b), and multi floors corridor parts. The opened groove is formed inside the reinforcing member and is equipped with a coupling piece insertion hole. The base plate is positioned in the upper side of a concrete foundation in which a modular unit(10) is installed and is equipped with a coupling piece. The corridor fixing device is installed in the upper edge of the left and right modular units in which the second floor corridor part is laterally installed and is fixed by a fixing bolt.

Classifications:

International (IPC 8-9): E04B1/02 E04B1/348
E04B1/38 (Advanced/Invention)
CPC: E04B1/34815 E04B1/34331 E04B1/34384 E04B1/34853
E04B1/40 E04H1/04



Family:

Publication number	Publication date	Application number	Application date
KR101279139 B1	20130626	KR20110099269	20110929
KR20130035044 A	20130408	KR20110099269	20110929

Priority:

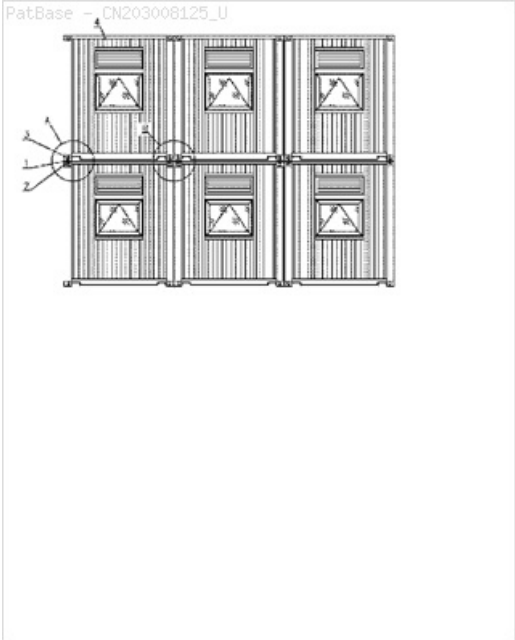
KR20110099269 20110929

Probable Assignee: KUM KANG IND CO LTD
Assignee(s): (std): KUM KANG IND CO LTD ; KUM KANG INDUSTRY CO LTD
Assignee(s): KUM KANG IND CO
Inventor(s): (std): LEE BUM HO

Title: MULTILAYER MODULARIZED HOUSE SYSTEM AND CONNECTION STRUCTURE COMPONENT SPECIAL FOR MULTILAYER MODULARIZED HOUSE SYSTEM

Abstract: A multilayer modularized house system is characterized by using a special modularized house connection structural component and working by aid of a hoisting clamp for containers; and integrating at least two adjacent modularized houses (4). The modularized house connection structure component is particularly form by a connection board (1) and a connection protrusion (2), wherein the connection protrusion (2) is fixedly distributed on the surface of the connection board (1), and the connection protrusion (2) is integrated with the connection board. The utility model further relates to a connection structure component special for the multilayer modularized house system. The multilayer modularized house system and the connection structure component have the advantages of overcoming the shortcomings in the prior art. The connection structural component of the multilayer modularized house system is easy to manufacture and convenient to connect, can achieve the effect of positioning while achieving connection, reduces work load of field installation, saves production time and reduces cost.

Classifications:
International (IPC 8-9): E04B1/348 (Advanced/Invention)
CPC: E04B1/3483



Family:

Publication number	Publication date	Application number	Application date
CN203008125 U	20130619	CN201220706996U	20121217

Priority:
CN201220706996U 20121217

Probable Assignee: SHENYANG THRIVE INDUSTRIALIZED HOUSING CO LTD
Assignee(s): (std): SHENYANG THRIVE INDUSTRIALIZED HOUSING CO LTD
Assignee(s): SHENYANG THRIVE INDUSTRIALIZED HOUSING CO
Inventor(s): (std): SHAO FENG ; SU QIUJU ; WANG JIANZHONG ; ZHANG LIANGLIANG ; ZHAO HONGRUI

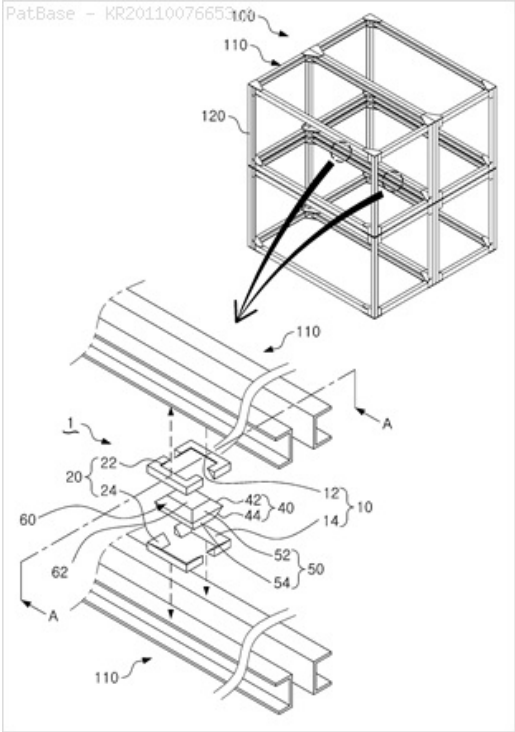
Title: STRUCTURE CONNECTION APPARATUS AND MODULAR HAVING THE SAME

Abstract: PURPOSE: A structure **connection device** and a **modular** having the same are provided to improve the strength of a modular structure by integrally connecting beams of a modular part. CONSTITUTION: A structure connection device comprises a structure fixture and a fixture substrate(60). The structure fixture is offered to one or more structures. The structure fixture comprises a first inclination contact side(10). The first inclination contact side is composed of first downstream and upstream slope contact surfaces(12,14) of different direction. The structure fixture is composed of a first contact surface. The fixture substrate comprises a second slope contact surface which contacts the first slope

Classifications:

International (IPC 8-9): E04B1/348 E04B1/58 (Advanced/Invention)

CPC: E04B1/3483 E04B1/2403 E04B1/34331 E04B1/40 E04B2001/2409



Family:

Publication number	Publication date	Application number	Application date
KR101125967 B1	20120319	KR20090133406	20091229
KR20110076653 A	20110706	KR20090133406	20091229

Priority:

KR20090133406 20091229

Probable Assignee: RES INST IND SCIENCE AND TECH

Assignee(s): (std): POHANG IRON AND STEEL CO ; POSCO ; RES INST IND SCIENCE AND TECH ; RESEARCH INST OF INDUSTRIAL SCIENCE AND TECHNOLOGY

Assignee(s): RESEARCH INSTITUTE OF INDUSTRIAL SCIENCE AND TECHNOLOGY

Inventor(s): (std): CHO BONG HO

Title: STACKABLE MID-RISE STRUCTURES

Abstract: A system of structural steel modular units useful in constructing mid-rise building between 3-8 stories high. Modular units are in the shape of rectangular boxes and the height of the units define a single story of the mid-rise building. Modular units are configured to be stackable onto each other such that they can couple to both modular units positioned directly above and below and also to couple to laterally adjoining modular units. The modular units can include cantilevered extensions to define hallways or other desirable features such as balconies. The systems can also utilize a post tension system that includes a plurality of post tension members anchored to a foundation and are coupled to a damper system positioned on the roof of the building.

Classifications:

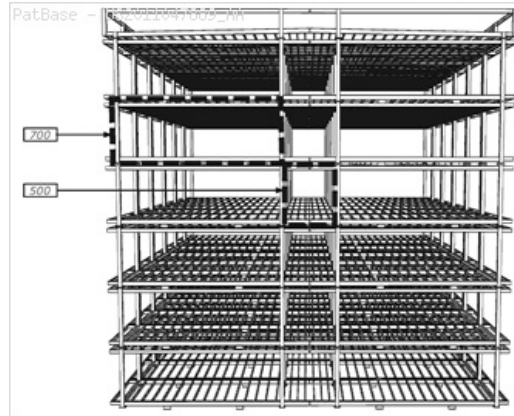
International (IPC 8-9): E04B1/98 E04C3/00

E04H1/00 (Advanced/Invention)

CPC: E04B1/3483 E04B5/10 E04B9/064 E04B9/127 E04H1/005

European: E04B1/348C3 E04B5/10 E04B9/06E E04B9/12D E04H1/00B

US: 52/167.1 52/167.100S 52/650.1 52/650.100S 52/79.1 52/79.100P

**Family:**

Publication number	Publication date	Application number	Application date
US2011047889 AA	20110303	US20100869609	20100826

Priority:

US20090238958P 20090901

US20100869609 20100826

Probable Assignee:

GAD HOWARD

Assignee(s): (std):

GAD HOWARD ; GAD RYAN

Inventor(s): (std):

GAD HOWARD ; GAD RYAN

Title: HORIZONTAL UNIT EQUIPPED WITH **CONNECTING DEVICE** AND **MODULAR** STRUCTURE USING THE SAME

Abstract: The present invention provides a horizontal unit equipped with **connecting devices** and a **modular** structure using the horizontal unit. The horizontal unit constituting a box-shaped unit module in a modular structure, includes: beams mounted at four sides of the horizontal unit; and connecting devices joined to end portions of the beams for connecting adjacent beams with each other, wherein each of the connecting devices comprises horizontal stiffeners welded along the inner periphery thereof from the inside of portions of the connecting device, which is joined with flanges of the beams, and is higher than the beams. Furthermore, in the modular structure constructed by stacking box-shaped unit modules, each of the unit module includes: horizontal units constituting an upper horizontal member and a lower horizontal member of the unit module! and columns vertically mounted between the upper horizontal member and the lower horizontal member, wherein ends of the columns are joined to the connecting devices mounted on the upper and lower horizontal members.

Classifications:

International (IPC 8-9): E04B1/348 (Advanced/Invention);

E04B1/348 (Advanced/Non-Invention);

E04B1/348 (Core/Invention)

CPC: E04B1/3483

European: E04B1/348C3

PatBase - WO08153279_A1

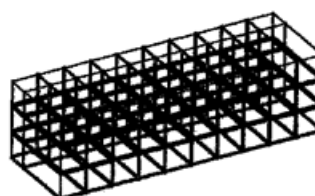
WO 2008/153279

1 / 5

PCT/KR2008/004004

[DRAWINGS]

[Figure 1]



Family:

Publication number	Publication date	Application number	Application date
KR100764025 B1	20071005	KR20070057365	20070612
WO08153279 A1	20081218	WO2008KR02894	20080523

Priority:

KR20070057365 20070612

Probable Assignee: ENGINEERING SYSTEM AND SOFTWARE

Assignee(s): (std): ENGINEERING SYSTEM AND SOFTWARE ; ENGINEERING SYSTEM SOFTWARE LA ; SONG TAE HERN ; HUR SUNG YUN

Assignee(s): ENGINEERING SYSTEM SOFTWARE LABORATORY CO ; ENGINEERING SYSTEM SOFTWARE LABORATORY CO LTD ; ENGINEERING SYSTEM AND SOFTWARE LABORATORY CO ; ENGINEERING SYSTEM AND SOFTWARE LABORATORY CO LTD

Inventor(s): (std): HUR SUNG YUN ; SONG TAE HERN

Agent(s): KOH YOUNG HOE

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

Title: MODULAR BUILDING CONNECTOR

Abstract: A building construction is provided, including a plurality of connectors. Each of the connectors has an upper portion, a lower portion, a flange extending outwardly between the upper portion and the lower portion, and an axial bore extending through the connector from the upper portion to the lower portion. The upper portion and the lower portion define sloped bearing surfaces. The connectors are positioned between a plurality of building structural members. The upper and lower portions of the connectors extend into recesses in the structural members having sloped walls corresponding to the sloped bearing surfaces of the connectors. A tensioner extends through the bores of the connectors to connect the structural members. The bearing surfaces of at least two of the connectors have different slopes.

Classifications:

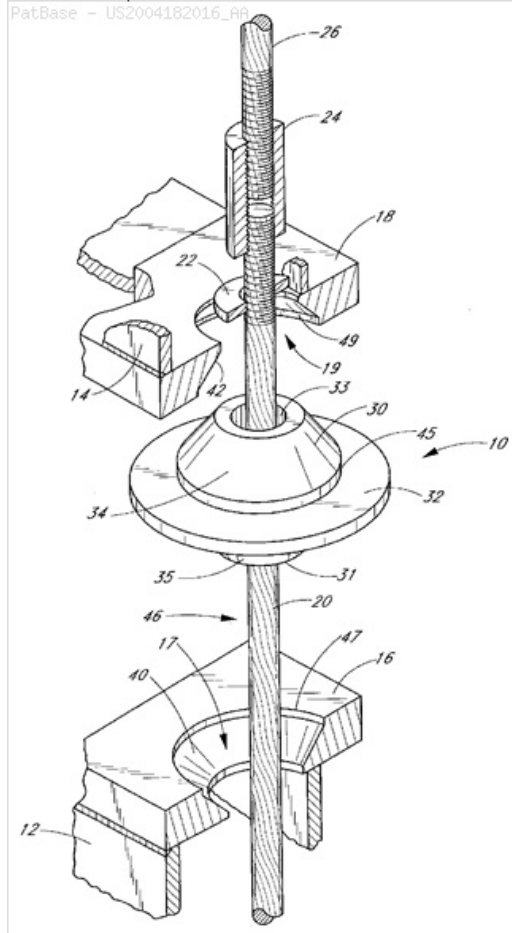
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International (IPC 1-7): E04B1/38 E04B1/41 E04H1/00 E04H5/00 E04H6/00 E04H9/00

CPC: Y02A50/14 E04B1/38 E04H1/00 E04B1/22 E04B1/3483 E04B2001/3583 E04H9/14

European: E04B1/22 E04B1/348C3 E04B1/38 E04H1/00 E04H9/14 P04B1/35T

US: 52/125.6 52/223.13 52/726.1 52/79.13 52/791.3

**Family:**

Publication number	Publication date	Application number	Application date
GB200520684 A0	20051116	GB20050020684	20040225
GB2415207 A1	20051221	GB20050020684	20040225
GB2415207 B2	20070207	GB20050020684	20040225
US2004182016 AA	20040923	US20030394891	20030319
US6871453 BB	20050329	US20030394891	20030319
WO04094752 A1	20041104	WO2004US05509	20040225

Priority:

US20030394891 20030319 WO2004US05509 20040225

Probable Assignee: LOCKE REGINALD A J

Assignee(s): (std): LOCKE REGINALD A J

Assignee(s): REGINALD A J LOCKE ; LOCKE REGINALD A

Inventor(s): (std): LOCKE REGINALD A J

Inventor(s): REGINALD A J LOCKE ; LOCKE REGINALD A

Agent(s): KNOBBE MARTENS OLSON AND BEAR LLP

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

Title: MODULAR BUILDING CONNECTING MEANS

Abstract: A system for constructing buildings utilizing a conical connector to fasten rods connecting structural members of a building. The conical connector is a rigid, solid device, circular in section, with an axial bore. The connector has a flat top surface and bottom surface perpendicular to the bore, a ring-shaped flange midway between the top surface and the bottom surface, and a sloping surface between the top surface and the flange and between the bottom surface and the flange wherein the circumference of the connector as defined by the sloping surface increases as the flange is approached, forming a cone. The sloped surface of the connector engages a recess in a structural member of the building. A tensioning mechanism passing through the bore in the connector applies a coupling force to hold the connector against the structural member. A multiple cone connector for joining adjacent modules of a building may be formed by joining the flanges of at least two connectors to form a single continuous flange.

Classifications:

International (IPC 8-9): E04B1/22 E04B1/348 E04B1/35

E04B1/58 (Advanced/Invention);

E04B1/35 (Advanced/Non-invention);

E04B1/20 E04B1/348 E04B1/58 (Core/Invention);

E04B1/35 (Core/Non-invention)

International (IPC 1-7): E04B1/18 E04B1/24 E04B1/348 E04B1/38

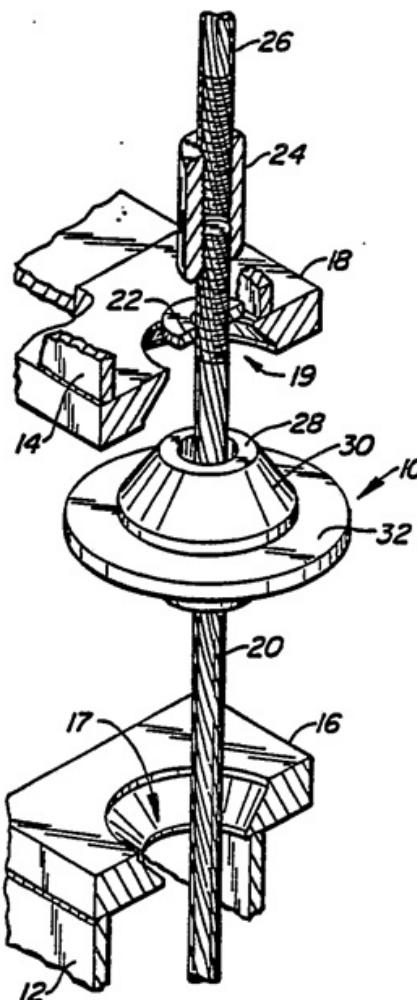
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CPC: Y10T403/32836 E04B1/22 E04B2001/3583

European: E04B1/22 P04B1/35T

US: 403/147 52/125.6 52/223.13 52/227 52/726 52/726.1 52/79.13 52/848

PatBase - US4694621_A

**Family:**

Publication number	Publication date	Application number	Application date
AU198780315 A1	19890331	AU19870080315	19870831
AU609066 B2	19910426	AU19870080315	19870831
EP0378523 A1	19900725	EP19870906334	19870831
EP0378523 A4	19901024	EP19870906334	19870831
EP0378523 B1	19930303	EP19870906334	19870831
JP3501984 T2	19910509	JP19870505781T	19870831
US4694621 A	19870922	US19840669154	19841107
WO8902013 A1	19890309	WO1987US02178	19870831

Priority:

US19840669154 19841107 JP19870505781 19870831 WO1987US02178 19870831

Probable Assignee: REGINALD AJ LOCKE

Assignee(s): (std): LOCKE REGINALD A J ; REGINALD A J LOCKE

Assignee(s): REGINALD AJ LOCKE ; LOCKE REGINALD AJ ; LOCKE REGINALD A

Inventor(s): (std): LOCKE REGINALD A J

Inventor(s): REGINALD AJ LOCKE ; REGINALD A J LOCKE ; LOCKE REGINALD AJ ; LOCKE REGINALD A

Agent(s): MADDENNS; MADDENNS PATENT AND TRADE MARK ATTORNEYS

Designated states: AT AU BB BE BG BJ BR CF CG CH CM DE DK FI FR GA GB HU IT JP KP KR LI LK LU MC MG ML MR MW NL NO RO SD SE SN SU TD TG US