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Title: INTERLOCKING JOINT WINE RACK

Abstract: A wine rack has no fasteners or adhesives at the three-dimensional joints, but rather the joints are all formed so that the three intersecting cross pieces interlock in such a way that a tight joint construction occurs strictly by virtue of the way the members are cut in the joint region, and the way in which the members are interlocked. The interlocking and connecting of cubic cells provides a rigid structure capable of accepting loads in any direction and allowing the rack to be mounted in any orientation, with single point wall mounting possible wherein the rack can withstand full loading with no distortion. The modular cell configuration is adapted to the construction of lattice beams and other arrangements besides wine racks.

Classifications:

International (IPC 8-9): A47B47/04 A47B73/00 B29C70/52 B65D6/08 E01D1/00 E04B1/19 E04B1/24 E04B1/58 E04C3/12 E04C3/28 E04C3/42 E04C3/46 E04G1/04 E04H12/02 E04H12/10 E04H12/24 E04H17/14 E06C7/08 F16B12/12 F16B7/04 (Advanced/Invention); E04B1/19 E04B1/24 E04B1/58 E04H12/24 (Advanced/Non-invention); A47B47/00 A47B73/00 B29C70/04 B65D6/00 E01D1/00 E04B1/19 E04B1/24 E04B1/58 E04C3/02 E04C3/12 E04C3/38 E04G1/00 E04H12/00 E04H17/14 E06C7/00 F16B7/04 (Core/Invention); E04B1/19 E04B1/58 (Core/Non-invention)

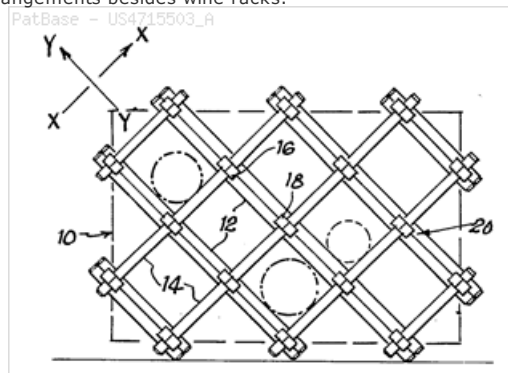
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CPC: Y10S52/10 Y10T403/34 Y10T403/342 Y10T403/347 Y10T403/44 Y10T403/46 Y10T403/4602 Y10T403/7001 Y10T403/7096 Y10T156/1008 Y10T156/101 Y10T156/1051 Y10T428/1362 Y10T428/24033 Y10T428/24446 Y10T428/24645 Y10T428/24686 Y10T428/24785

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European: A47B47/04 A47B73/00 A47B73/00E B29C70/52C E01D1/00 E04B1/19 E04C3/12 E04C3/28 E04C3/42 E04C3/46 E04G1/04 E04H12/02 E04H17/14E2 E06C7/08 F16B12/12M F16B7/04D2 P01D101/10 P01D101/26 P01D101/30 P01D101/40 P04B1/19C P04B1/19C1 P04B1/19C2 P04B1/19C6 P04B1/19C7 P04B1/19D P04B1/19D2 P04B1/19E P04B1/19G2 P04B1/19H P04B1/19K P04B1/58P P04H12/24

US: 156/166 156/200 156/201 156/227 156/242 156/245 174/45R 211/189 211/205 211/74 256/22 256/65 256/65.04 264/137 273/160 312/263 362/367 403/169 403/171 403/172 403/176 403/217 403/219 403/230 403/231 403/255 403/263 403/346 403/382 405/262 405/272 428/102 428/152 428/176 428/181 428/193 428/36.1 428/361 446/106 52/282.1 52/309.14 52/309.9 52/592.1 52/600 52/646 52/648 52/648.1 52/650.1 52/651.01 52/651.02 52/651.03 52/651.04 52/651.09 52/655.1 52/697 52/720 52/724 52/728 52/731.3 52/736.2 52/736.3 52/736.4 52/835 52/844 52/849 52/DIG.1 52/DIG.10 526/970 527/280



Family:

Publication number	Publication date	Application number	Application date
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Priority:

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Probable Assignee: EBERT COMPOSITES CORP

Assignee(s): (std): EBERT COMPOSITES CORP ; GEORGE KORZENIOWSKI ; GOLDSWORTHY W BRANDT ; KORZENIOWSKY GEORGE ; JOHNSON DAVID W ; KORZENIOWSKI GEORGE ; BRANDT GOLDSWORTHY W

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Agent(s): PATENT ATTORNEY SERVICES; BULL HOUSSER AND TUPPER LLP
Designated states: AT AU BB BE BF BG BJ BR CA CF CG CH CI CM CZ DE DK ES FI FR GA GB GN GR HU IE IT JP KP KR LK LU
MC MG ML MN MR MW NL NO NZ PL PT RO RU SD SE SK SN TD TG UA US

Title: METHOD AND APPARATUS FOR FORMING AND MOUNTING A PHOTOVOLTAIC ARRAY

Abstract: A photovoltaic (PV) module framing and coupling system enables the attachment of PV modules to a roof or other mounting surface without requiring the use of separate structural support members which attach directly to and span between multiple PV modules in a formed PV array. The inventive apparatus provides a one-piece coupling for interlocking the sides of PV modules together to form an array, resulting in a parallel beam support system. The inventive coupling member attaches to the frame at substantially any position along the length of the frame, and interlocks the photovoltaic module with adjacent photovoltaic modules. The inventive apparatus further includes a novel bracket member which attaches to a surface of the frame member and secures the frame member directly to a roof or other mounting surface.

Classifications:

International (IPC 8-9): E04B1/00 E04D1/12 E04D13/18 E04G21/00 E04H14/00 F16B1/00 F16B17/00 F16B5/00 F16B5/02 F16B5/10 F16B5/12 F16D1/12 F16L3/04 F16L3/10 F16M13/00 F16M13/02 F24J2/46 F24J2/52 F24S25/33 F24S25/613 F24S25/632 F24S25/636 F24S25/65 F24S25/70 H01L H01L23/12 H01L31/02 H01L31/0203 H01L31/04 H01L31/042 H01L31/046 H01L31/048 H01L31/05 H01L31/18 H01M10/44 H01R13/73 H02G3/32 H02S20/00 H02S20/10 H02S20/23 H02S20/24 H02S20/30 H02S30/10 H02S40/30 (Advanced/Invention); F24J2/46 F24S25/00 (Advanced/Non-invention); E04G21/00 F24J2/00 H01L31/042 H01L31/048 H01M10/42 (Core/Invention); H01L (Subclass/Invention)

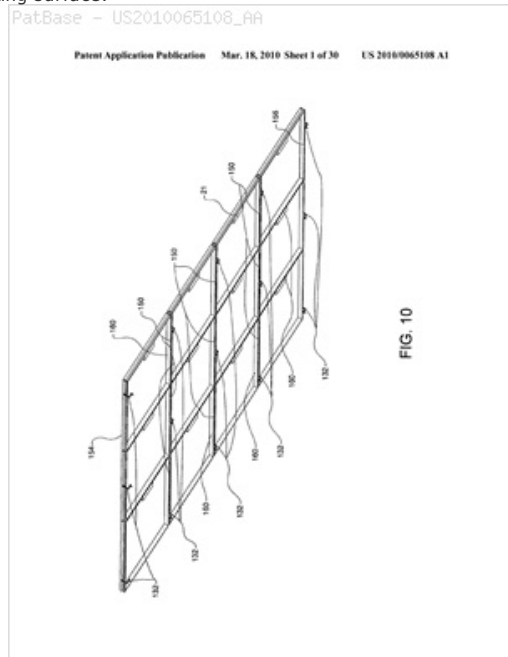
International (IPC 1-7): H01M10/44

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European: F24J2/52A20B F24J2/52A20B4 F24J2/52A20C2 F24J2/52A20C4B F24J2/52A20D F24J2/52A20E F24J2/52A30 F24J2/52A4E F24J2/52A8 F24J2/52A8F H01L31/042B H01L31/048B H01L31/048B3 R16B7/04C R24J2/46P12 R24J2/46P16 Y02B10/12 Y02B10/20 Y02E10/47 Y02E10/50

US: 1/1 126/623 136/244 136/251 136/252 136/259 211/41.1 24/531 248/188.4 248/201 248/205.1 248/222.11 248/222.41 248/231.81 248/309.1 248/316.7 248/346.04 248/346.05 248/617 248/74.2 29/428 29/453 29/825 361/679.01 403/119 403/164 403/164S 403/186 403/186S 403/217 403/294 403/345 52/173.3 52/555 52/582.2 52/586.2 52/745.21 52/745.210S 52/747.1 D8/349

Locarno class: 08/08

**Family:**

Publication number	Publication date	Application number	Application date
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Assignee(s): SOLARCITY CORP SAN MATEO ; MANANSALA CHRISTINA C ; HAENLEIN HANS CHRISTOPH ; HIGH SUN TECHNOLOGY INC

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Inventor(s): MANANSALA CHRISTINA ; WEST JOHN ; WEST JOHN R SAN RAFAEL ; JOHN RWEST

Agent(s): CHRISTIANSEN JOHN; JOHN CHRISTIANSEN; FREEHILLS PATENT ATTORNEYS; FPA PATENT ATTORNEYS PTY LTD; MARKS AND CLERK; GOWLING WLG CANADA LLP; CHAILLOT GENEVIEVE; HOWSON RICHARD GB; HOWSON RICHARD GILES BENTHAM; INABA YOSHIYUKI; LARRY D JOHNSON; VIERRA MAGEN MARCUS AND DENIRO LLP; LARRY D; KILPATRICK TOWNSEND AND STOCKTON LLP; KILPATRICK TOWNSEND AND STOCKTON LLP; KILPATRICK TOSENSEND AND STOCKTON LLP; STERNE KESSLER GOLDSTEIN AND FOX PLLC; JOHNSON LARRY D; MARCUS BRIAN I

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

Title: METAL FRAME FOR PARTITIONS AND SIMILAR CONSTRUCTIONS

Abstract: ABSTRACT OF THE DISCLOSURE

A metal frame for partitions has tubular uprights with hooking profiles. Gross beams are connected to the uprights by the turning of connecting members having a body, a head and a groove between the body and the head. Then the connecting members and the cross beams are locked by pins or the like.

Classifications:

International (IPC 8-9): A47B96/14 E04B1/58 E04B2/76 E04B2/78

E04C3/06 E06B3/968 (Advanced/Invention);

E04C3/04 (Advanced/Non-invention);

A47B96/00 E04B1/58 E04B2/76 E04C3/04 E06B3/96 (Core/Invention);

E04C3/04 (Core/Non-invention)

International (IPC 1-7): A47B57/26 A47B96/14 E04B1/18 E04B1/24
E04B1/58 E04B2/62 E04B2/72 E04B2/78 E04B3/22 E04C3/32 E06B3/68
F16B1/00 F16B7/04 F16S3/00 H02B1/02

CPC: A47B96/1416 E04B1/58 E04B2/76 E04C3/06 Y10T403/46

E04C3/065 A47B2230/07 E04B2/766 E04B2/78 E04C2003/0421

E04C2003/0439 E04C2003/0465 E04C2003/0478 E06B3/968

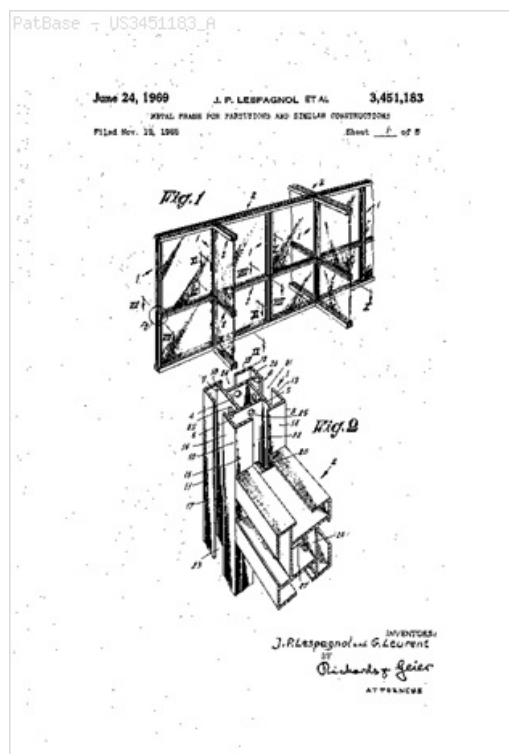
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P04C3/04S2C P04C3/04S3S P04C3/04S3X

US: 403/230 52/241 52/282.2 52/456 52/656 52/656.1 526/560 D25/061

D25/119 D25/61



Family:

Publication number	Publication date	Application number	Application date
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CH435639 A	19670515	CH19660002971	19660302
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ES319975 A1	19660416	ES19650319975	19651124
FR1415386 A	19651022	FR19641320780	19641125
FR1435227 A	19660415	FR19650009421	19650316
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NL6515087 A	19660526	NL19650015087	19651119
US3451183 A	19690624	US19650508737	19651119

Priority:

FR19650009421 19650316 FR19650020780 19650615

Probable Assignee: TRANSFORMATION DES PLASTIQUES

Assignee(s): (std): IND DE TRANSF DES PLASTIQUES SOC ; IND DE TRANSFORMATION DES PLAS ; TRANSFORMATION DES PLASTIQUES

Assignee(s): SOCIETE INDUSTRIELLE DE TRANSFORMATION DES PLASTIQUES SOCIETE A RESPONSABILITE LIMITEE ; IND DE TRANSFORMATION DES PLASTIQUES SOC A RESPONS ; SOCIETE INDUSTRIELLE DE TRANSFORMATION DES PLASTIQUES ; SOCIETE INDUSTRIELLE DE TRANSFORMATION DES PLASTIQUES ; IND DE TRANSFORMATION DES PLASTIQUES SOC A RESPONSABILITE LTD SOC ; INDUSTRIELLE DE TRANSFORMATION DES PLASTIQUES SOC ; INDUSTRIELLE DE TRANSFORMATION DES PLASTIQUES A RESPONSABILITE LIMITEE SOC ; INDUSTRIELLE DE TRANSFORMACION DES PLASTIQUES SOC

Inventor(s): (std): LESPAGNOL JEAN PIERRE ; LEURENT CHISLAIN ; PIERRE LESPAGNOL JEAN ; LEURENT GHISLAIN ; LESPAGNOL JEAN P ; GHISLAIN LEURENT

Inventor(s): JEAN P LESPAGNOL

Title: METHOD OF CONNECTING COMPONENTS

Abstract: A method of connecting two building components using a resilient elongate interconnector. One edge of the interconnector is brought into engagement with a part of the first component and the other edge is brought into engagement with a part of the second component. The interconnector is deflected between the two elongate edges, thereby creating a transverse compression force which acts between the two components to bring them together.

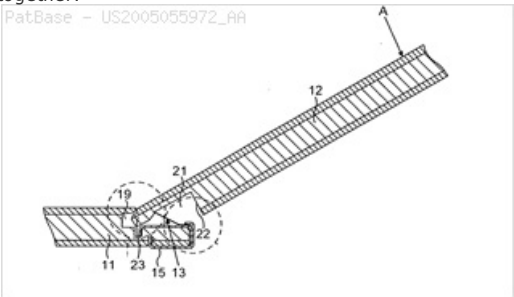
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International (IPC 1-7): E04B1/00 E04B1/61 E04B9/26 E04C2/16 E04C3/10 F16B5/00 H05K1/00

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European: E04B1/61D3B4 E04B1/61D3C E04B9/06E E04B9/06F E04B9/26 E04C3/10 E04C3/28 E04C3/29 E04H9/02B F16B5/00A1B F16B5/00A1C F16B5/00A3C F16B5/00A4 F16F3/02 P04B1/61D3E P04B1/61E P04F201/01A1 P04F201/01C P04F201/01D P04F201/02D P04F201/05 P04F201/05C
US: 52/741.1



Family:

Publication number	Publication date	Application number	Application date
EP1475485 A2	20041110	EP20040252703	20040510
EP1475485 A3	20050209	EP20040252703	20040510
GB200310634 A0	20030611	GB20030010634	20030508
US2005055972 AA	20050317	US20040840973	20040507

Priority:

GB20030010634 20030508

Probable Assignee: SUPERO MARKETING LTD

Assignee(s): (std): SUPERO MARKETING LTD ; SUPERO RES LTD

Assignee(s): SUPERO RESEARCH LTD ; SUPERO MARKETING LIMITED

Inventor(s): (std): LUTY MARK ; LUTY MARK DR

Agent(s): GREENBERG TRAUIG LLP

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

Title: INTERLOCKING SHAPE FOR USE IN CONSTRUCTION MEMBERS

Abstract: Interlocking support **posts** form an interlocking rack system which may have a single mold which provides both a male and a female joinder member. Between the support **posts** can be mounted panels such as solar panels. Under the support **posts** can be installed a roof stand off assembly which prevents water from weakening the roof. Various combinations of construction members offer a cost effective building block array of mounting panels, wind turbines, and any appliance on a roof and/or anywhere in a building. A two recess mounting bracket is ideally suited to mount solar panels on a roof. A lower recess can be fastened to a bolt anchor on the roof. The opposing recess can secure a mounting clip which attaches directly to the solar panel. Identical support **posts** can interlock. Various embodiments include conduit clamps, slider tracks, mounts for cabinets, sign **posts**, and thru roof screwed anchors.

Classifications:

International (IPC 8-9): A47B96/14 A47F5/08 E04B1/19 E04B1/38 E04B1/41 E04B1/58 E04B1/66 E04B7/18 E04C3/04 E04C3/06 E04D1/34 E04D13/00 E04D13/04 E04D13/14 E04D13/147 E04D13/155 E04D13/18 E04H12/22 F16B1/00 F16B9/02 F16M13/02 F24J2/52 H01Q1/12 (Advanced/Invention); E04B2/74 E04C3/04 E04H12/22 F24J2/00 F24J2/46 (Advanced/Non-invention);

A47B96/00 A47F5/08 E04B1/38 E04B1/58 E04D13/15 E04D13/18 E04H12/22 (Core/Invention)

CPC: E04D13/0404 F16M13/02 E04B2/7407 E04D1/34 E04H12/2276 E04B1/66 E04B1/19 F16M13/022 F16B9/026 E04D13/1407 E04D13/1476 H01Q1/1221 E04D13/00 E04D13/0459 E04D2013/0468 E04B7/18 E04B1/38 A47B96/14 E04C3/06 E04C2003/0421 E04C2003/0439 E04C2003/0465 E04C2003/0473 E04C2003/0478 Y02B10/20 Y02B10/30 Y02E10/47 E04B1/40 F24S25/20 F24S25/30 F24S25/61 F24S25/632 F24S25/65 F24S25/70 F24S2020/17 F24S2025/021 F24S2025/6006 F24S2025/801 F24S2025/807 E04D13/002 F16B5/0233 F16B9/054 F16B37/145 F16B43/001

European: A47B96/14 E04C3/06 E04D13/147D2 E04D13/14A F24J2/52A20B F24J2/52A20C2 F24J2/52A20D F24J2/52A30 F24J2/52A4 F24J2/52A4E P04C3/04S1U P04C3/04S2C P04C3/04S3S P04C3/04S3U P04C3/04S3X R24J2/00P30 R24J2/46P16 R24J2/52A4P16 R24J2/52A4P4 R24J2/52P24 Y02B10/20 Y02B10/30 Y02E10/47

US: 1/1 248/200 248/220.21 248/220.210S 248/231.91 248/231.910S 248/237 248/237S 52/239 52/302.6 52/58 52/58P 52/60 52/653.2 52/653.200P 52/655.1 52/655.100S 52/698 52/698S 52/704 52/705 52/705S 52/710 52/741.1

PatBase - US2010192505_AA

Patent Application Publication Aug. 5, 2010 Sheet 1 of 32 US 2010/0192505 A1

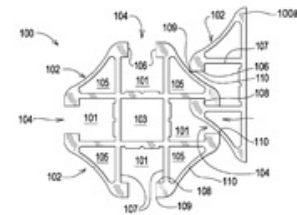


FIG.1

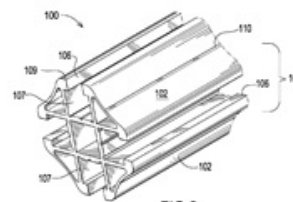


FIG.2

Family:

Publication number	Publication date	Application number	Application date
CA2751568 AA	20110804	CA20102751568	20100205
CA2751568 C	20180508	CA20102751568	20100205
US2010192505 AA	20100805	US20100700667	20100204
US2012144760 AA	20120614	US20120368332	20120208
US2013292531 AA	20131107	US20130799359	20130313
US2014007532 AA	20140109	US20130018137	20130904
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US2014190090 AA	20140710	US20140196867	20140304
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US2014208680 AA	20140731	US20140227240	20140327
US2015013237 AA	20150115	US20140504663	20141002
US2015218824 AA	20150806	US20140461117	20140815
US8448405 BB	20130528	US20120368332	20120208
US8661765 BB	20140304	US20100700667	20100204
US8689517 BB	20140408	US20130018137	20130904
US8707654 BB	20140429	US20130799359	20130313
US8707655 BB	20140429	US20130018143	20130904
US8833032 BB	20140916	US20140227218	20140327
US8833033 BB	20140916	US20140227240	20140327
US8869490 BB	20141028	US20140196867	20140304
US9068339 BB	20150630	US20140504663	20141002
WO10091225 A2	20100812	WO2010US23282	20100205
WO10091225 A3	20101202	WO2010US23282	20100205

Priority:

US20090150301P	20090205	US20090255082P	20091026	US20100700667	20100204
WO2010US23282	20100205	US20110440847P	20110208	US20120368332	20120208
US20130799359	20130313	US20130018137	20130904	US20130018143	20130904
US20140196867	20140304	US20140227218	20140327	US20140227240	20140327
US20140461117	20140815	US20140504663	20141002		

Probable Assignee: D THREE ENTERPRISES LLC

Assignee(s): (std): D THREE ENTPR LLC ; KREUTZMAN DAVID ; SCHAEFER RICHARD F ; THREE ENTPR LLC D ; TAMM DON N

Assignee(s): SK HYNIX INC ; D THREE ENTERPRISES LLC

Inventor(s): (std): TAMM DON N ; SCHAEFER RICHARD F ; KREUTZMAN DAVID

Agent(s): CASSAN MACLEAN; CASSAN MACLEAN IP AGENCY INC; PATENT LAW OFFICES OF RICK MARTIN PC;
MARGARET; OPPEDAHN PATENT LAW FIRM LLC; RUSSELL T; MARSH FISCHMANN AND BREYFOGLE LLP;
SIGMOND BENNETT ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY
CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS
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NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH
TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: Modular storage system, components, accessories, and applications to structural systems and toy construction sets and the like

Abstract: The invention is concerned with the formation of modular units from individual plate-like elements and other elements with special interlocking joints at their ends that allow them to form cubes that can be grouped together to form storage "cubbies" and modular structural systems and toy construction sets and the like, wherein, in one embodiment, the plates are formed with one end having studs on a 45 degree angled surface, and the other end having receptacles or openings such as sockets on a 45 degree angled surface for interlocking with a second mating plate like the first, but in which the studs and sockets are interchanged, allowing a cube to be formed by two of each type of plate, with the use of studs and sockets on the surfaces allowing two or more such cubes to stick together; and wherein, in another embodiment, the cube is made from four identical plates, as by an extrusion process, where one end of a plate contains double male features, such as barb arrows, and the other end contains double corresponding female features that mate with the male features from other plates, whereby the male and female features allow the ends of the plates to slide into each other like a dovetail to form a cube, and with adjoining cubes sharing surfaces. Other variations are also disclosed, as well as novel extruded truss sections.

Classifications:

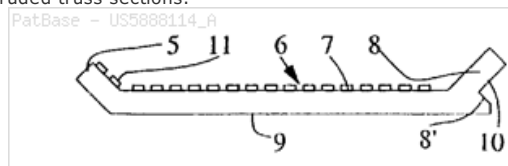
International (IPC 8-9): A63H33/04 A63H33/08 B65D21/08 E04B1/61 E04C2/20 E04C2/34 F16B5/00 F16B5/06 (Advanced/Invention); E04B1/61 (Advanced/Non-invention); A63H33/04 B65D21/00 E04C2/10 E04C2/34 F16B5/00 F16B5/06 (Core/Invention); E04B1/61 (Core/Non-invention)

International (IPC 1-7): A63H33/08 B65D1/38 F16B7/04

CPC: A47B47/0075 A63H33/04 A63H33/08 B65D21/083 E04B1/6137 E04B1/6179 E04B2001/6195 E04C2/20 E04C2/34 F16B5/0052 F16B5/0614

European: A47B47/00Q A63H33/04 A63H33/08 B65D21/08B E04C2/20 E04C2/34 F16B5/00A2E F16B5/06B2 P04B1/61D3B3 P04B1/61D3E P04B1/61E

US: 446/118 446/128 52/591.1



Family:

Publication number	Publication date	Application number	Application date
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US5888114 A	19990330	US19960601283	19960216
WO9835880 A1	19980820	WO1997IB00133	19970217

Priority:

US19960601283 19960216 US19970601283 19970216 WO1997IB00133 19970217

Probable Assignee: AESOP INC

Assignee(s): (std): AESOP INC ; SLOCUM ALEXANDER H

Inventor(s): (std): HO CHRISTOPHER M ; SLOCUM ALEXANDER H

Inventor(s): ALEXANDER H SLOCUM

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

Title: SYSTEM WALL OR SYSTEM CEILING

Abstract: A system wall or system ceiling comprising a number of supporting girders suspended from the structure of the building and to which slabs are mounted substantially extending perpendicular to the girders, the girders being provided with outwardly or downwardly protruding clamping feet engaging into one or more slits, cut into the upper or back side of the slabs.

Classifications:

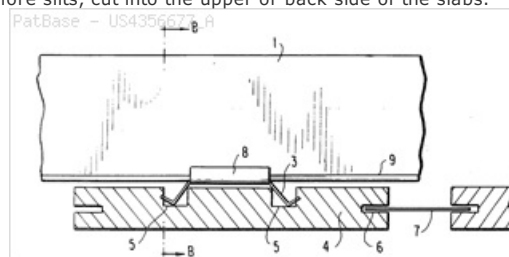
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A61B17/12 E04B9/22 E04F13/08 F16B2/02 (Core/Invention);
A61B (Subclass/Invention)

International (IPC 1-7): A61B17/00 A61B17/08 A61B17/12 A61B17/28 E04B5/52 E04B5/57 E04B5/58 E04B9/26 E04F13/08 F16B2/10

CPC: A61B17/122 E04B9/22 E04B9/26 F16B2/10 E04B9/24

European: A61B17/122 E04B9/22 E04B9/24 E04B9/26 F16B2/10

US: 128/303R 128/325 128/326 128/346 52/489 52/506.08 52/506.09 52/775 606/142 606/158



Family:

Publication number	Publication date	Application number	Application date
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CA1157334 A1	19831122	CA19800354029	19800616
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DK156757 B	19891002	DK19800001171	19800318
DK156757 C	19900219	DK19800001171	19800318
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EP0017278 B1	19830518	EP19800200246	19800318
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ES265656 U	19830201	ES19800265656U	19800612
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FR2459038 A1	19810109	FR19800008422	19800415
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GB2054026 A1	19810211	GB19800019818	19800617
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HK44783 A	19831028	HK19830000447	19831020
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IN152006 A	19830924	IN1982CA00716	19820619
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PH21076 A	19870710	PH19800024161	19800618
SE449295 B	19870427	SE19800004484	19800617
SE449295 C	19870806	SE19800004484	19800617
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SU1113004 D	19840907	SU19802942251	19800617
US4356677 A	19821102	US19800134810	19800328
US4434795 A	19840306	US19810248180	19810330
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US4546587 A	19851015	US19820438567	19821102
ZA8003597 A	19820127	ZA19800003597	19800617

Priority:

NL19790002166	19790320	NL19797902166	19790320	US19790049379	19790618
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CA19830420645	19830131	US19830468518	19830405		

Probable Assignee: ETHICON INC**Assignee(s):** (std): MOSCH THEODORUS W ; MOSCH T W ; JOANES WILLIBRORDUS MOSCH ; JOANNES WILLIBRORDUS MOSCH ; JOHNSON AND JOHNSON ; MOSCH WILLIBRORDUS ; MOSCH THEODORUS WILLIBRORDUS ; JOANNES WILLIBRORDUS MOSCH TE WIERINGERWAARD THEOD ; MOSCH JOANNES WILLIBRORDUS ; JOANES WILLIBRORDUS MOSCH TE WIERINGERWAARD ; ETHICON INC TE SOMERVILLE NEW JERSEY VER ST V AM ; ETHIEEN INC ; ETIKON INK FA ; ETHICON INC**Assignee(s):** ETHICON INC SOMERVILLE N J US ; ETHICON INC SOMERVILLE N J V ST A ; ETIKON INK FIRMA ; JOANNES WILLIBRORDUS MOSCH TE WIERINGERWAARD THEODORUS WILLIBRORDUS MOSCH TE ST MAARTENSZEE EN WILLIBRORDUS MOSCH TE BREEZAND ; MERICLE ROBERT W**Inventor(s):** (std): MERICLE R ; MERICLE R W ; MERIKL ROBERT V ; MOSCH JOANNES WILLIBRORDUS ; MOSCH T W ; MOSCH THEODORUS W ; ROBAATO DABURIYUU MERIKURU ; ROBERT W MERICLE ; ROBERT WMERICLE ; ROBERT VMERIKL US ; R W MERICLE ; MERIELE ROBERT W ; MERICLE ROBERT W**Inventor(s):** ROBERT V MERIKL US ; MERICLE ROBERT W BRIDGEWATER N J V ST A ; MERICLE ROBERT W BRIDGEWATER N J US ; MOSCH WILLIBRORDUS ; MOSCH THEODORUS WILLIBRORDUS**Agent(s):** FETHERSTONHAUGH AND CO; SWABEY OGILVY RENAULT**Designated states:** AT BE CH DE FR GB SE

Title: METHOD OF MANUFACTURING CONNECTING DEVICES

Abstract: The invention relates to a method of manufacturing a connecting device having common axial core material and a plurality of helical fins, flanges or ridges that extend outwards from the core. The method uses an elongate preform member, and comprises forcing the preform member in the axial direction of its core through a helical deformation arrangement (22) in order to deform the preform member helically.

Classifications:

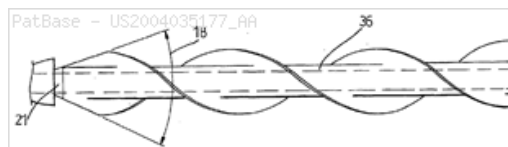
International (IPC 8-9): B21D11/14 B21F45/16 B21F7/00 B21G3/20 B21H3/02 E04B1/38 E04B1/41 E04B2/02 E04C5/03 E04C5/16 E04F13/04 E04G23/02 F16B15/00 (Advanced/Invention)

International (IPC 1-7): B21D11/14 B21F7/00 E04B1/41 E04C5/03

CPC: Y10T403/75 E04B1/7629 B21F7/00 B21F45/16 B21G3/20 E04B1/4178 E04C5/03 E04C5/163 E04F13/04 E04G23/0218

European: B21F45/16 B21F7/00 B21G3/20 E04B1/41M E04B1/76D2 E04C5/03 E04C5/16B1 E04F13/04 E04G23/02C

US: 403/408.1 403/408.100P 411/453 411/487 411/487S 470/8 470/8P 52/745.21 72/371 72/371P 72/64



Family:

Publication number	Publication date	Application number	Application date
AT365594 E	20070715	AT20010955457T	20010810
AT429295 E	20090515	AT20010015877T	20010810
DE60129140 D1	20070809	DE20016029140	20010810
DE60129140 D1	20070809	DE20016029140T	20010810
DE60129140 T2	20080228	DE20016029140T	20010810
DE60138498 D1	20090604	DE20016038498	20010810
EP1307303 A1	20030507	EP20010955457	20010810
EP1307303 B1	20070627	EP20010955457	20010810
EP1710372 A2	20061011	EP20060015877	20010810
EP1710372 A3	20080102	EP20060015877	20010810
EP1710372 B1	20090422	EP20060015877	20010810
GB200019786 A0	20000927	GB20000019786	20000812
US2004035177 AA	20040226	US20030344387	20030506
US2007197303 AA	20070823	US20070786216	20070411
US2009226251 AA	20090910	US20090422608	20090413
US7269987 BB	20070918	US20010344387	20010810
US7866116 BB	20110111	US20090422608	20090413
WO0213990 A1	20020221	WO2001GB03586	20010810

Priority:

GB20000019786 20000812 EP20010955457 20010810 US20010344387 20010810
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 US20090422608 20090413

Probable Assignee: OLLIS WILLIAM HENRY

Assignee(s): (std): OLLIS WILLIAM H ; OLLIS WILLIAM HENRY

Inventor(s): (std): OLLIS WILLIAM HENRY ; OLLIS WILLIAM H

Inventor(s): OLLIS WILLIAM

Agent(s): RAYNOR SIMON MARK ET AL; FAY SHARPE LLP

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR US

Title: DISMOUNTABLE PARTITIONS,PANELS AND SPECIAL SECTIONS APPLIED TO THIS END

Abstract: 1,042,107. Room partitions; door jambs. J. VERVLOET. Sept. 21, 1964 [Sept. 24, 1963; Aug. 18, 1964], No. 38398/64. Headings E1J and E1V. A partition comprises members 1 each formed by a rigid framework in which two uprights 2 are connected by cross-members (not shown in Fig. 28), adjacent uprights 2 of adjacent members 1 being interconnected at points spaced along their length by pairs of clamp members 36 which are drawn towards each other by nuts and bolts 48, 49, the clamp members 36 and the uprights 2 having interlocking formations. The nuts and bolts 48, 49 may be shaped to retain joint cover strips 50. The connection between the members 1 may be adapted to the formation of T-shaped and cross-shaped structures. The frameworks forming the members 1 may be filled by fixed opaque or transparent panels, in a single layer as shown at 26, or in two layers each of which is located by recess shown along the edges of the uprights 2, Fig. 5 (not shown). Alternatively the framework forming a member 1 may be filled by an openable member such as a single or double door 89 which is secured within the framework by L-shaped sections 69 which serve to carry door hinge components, Fig. 29 (not shown) or door catch component 86 and door seals 83. The door 89 comprises on four sides peripheral box framing members 91 interconnected by corner members guided by ribs 105-110 and secured by screws. The crossmembers 3, Fig. 14 (not shown) connecting uprights 1 of each member are of box section and slidably receive members 23 of H-section which are screwed to the cross-members 3 and to the ends of the uprights 2, Fig. 9 (not shown).

Classifications:

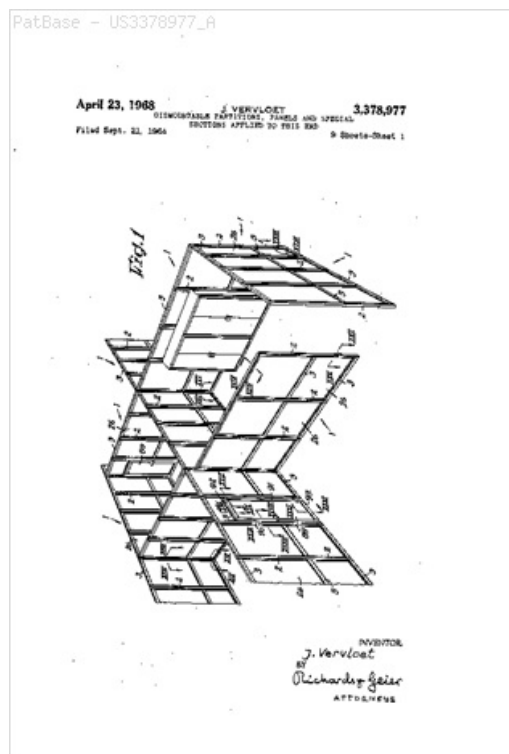
International (IPC 8-9): E02F3/30 E04B2/74 E04B2/78 E05D5/02 E06B1/12 E06B3/12 E06B3/34 F16B12/02 (Advanced/Invention); E02F3/42 (Advanced/Non-invention); E02F3/28 E04B2/74 E04B2/76 E05D5/00 E06B1/12 E06B3/04 E06B3/32 F16B12/00 (Core/Invention); E02F3/42 (Core/Non-invention)

International (IPC 1-7): A47B96/14 E02F3/30 E04B2/74 E04B2/78 E04B3/22 E06B3/04 E06B3/72 F16B12/46

CPC: E02F3/30 E02F3/308 E05Y2900/132 E06B3/34 E04B2/74 E04B2/78 E05D5/0215 E06B1/12 E06B3/12 F16B12/02 E05Y2900/60

European: E02F3/30 E02F3/30P E04B2/74 E04B2/78 E05D5/02B E06B1/12 E06B3/12 E06B3/34 F16B12/02

US: 52/238.1 52/282.4 52/470 52/481.2 52/584 52/656.1 525/840 D25/58



Family:

Publication number	Publication date	Application number	Application date
BE637777 A	00000000		00000000
BE651937 A	19641216	BE19640651937	19641216
CH456098 A	19680515	CH19640012331	19640923
DE1484078 A1	19681128	DE1964V026814	19640922
DE1634928 A1	19700723	DE19651634928	19650916
FR1413237 A	19651008	FR19640989116	19640924
GB1042107 A	19660907	GB19640038398	19640921
LU46977 A	19641118	LU19640046977	19640918
NL6411107 A	19650325	NL19640011107	19640923
US3378977 A	19680423	US19640397920	19640921

Priority:

BE19630043889 19630924 BE19640511184 19640818 BE19642043889 19640818
FR19640989116 19640924

Probable Assignee: POCLAIN SA

Assignee(s): (std): JEAN VERVLOET ; POCLAIN SA ; VERVLOET JEAN

Assignee(s): POCLAIN S A

Inventor(s): (std): VERVLOET JEAN ; JEAN VERVLOET ; GUINOT GABRIEL

Title: PARTITION WALL SYSTEM FOR OFFICES AND THE LIKE

Abstract: Partition wall system for offices and the like based on laterally closable partition wall elements, each of which is formed from two uprights and cross-beams that interconnect them, which are formed of hollow profiles, particularly formed by multi-chamber profiles, whereby at least a part of the cross-beams of the system is connectable on both sides of its end-faces to lateral connecting rods to form a self-contained assembly unit (so-called fence), which may be releasably fastened to adjacent uprights via said lateral connecting rods and has at least one ribbon defined by two adjacent cross-beams and that the uprights are provided with slots continuous over the length for accommodating connecting rods, into which slots the connecting rods are insertable.

Classifications:

International (IPC 8-9): E04B2/74 E04B2/78

F16B7/18 (Advanced/Invention);

E04B2/74 (Core/Invention)

International (IPC 1-7): E04B2/74

CPC: E04B2/7818 E04B2/7854 E04C2/22 E04B2/7427 E04B2/7433

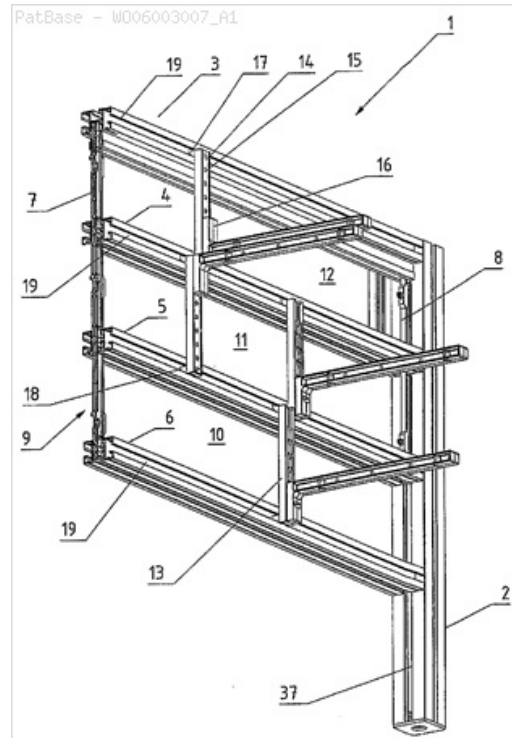
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European: E04B2/74C3D3 E04B2/74C3E E04B2/78B E04B2/78B2

E04B2/78C E04C2/22 F16B7/18N P04B2/74F P04B2/74F2 P04B2/74P

P04B2/74R P04B2/74S



Family:

Publication number	Publication date	Application number	Application date
AT431468 E	20090515	AT20040024321T	20041012
AU2005259324 AA	20060112	AU20050259324	20050706
AU2005259324 BB	20100610	AU20050259324	20050706
CN1981101 A	20070613	CN200580022881	20050706
CN1981101 B	20130116	CN200580022881	20050706
DE602004021106 D1	20090625	DE200460021106T	20041012
EP1614820 A1	20060111	EP20040024319	20041012
EP1614821 A1	20060111	EP20040024321	20041012
EP1614821 B1	20090513	EP20040024321	20041012
ES2324034 T3	20090729	ES20040024321T	20041012
JP2008505269 T2	20080221	JP20070519716T	20050706
JP4799555 B2	20111026	JP20070519716	20050706
WO06003007 A1	20060112	WO2005EP07303	20050706
WO06003008 A1	20060112	WO2005EP07304	20050706

Priority:

DE200410032866 20040707 EP20040024319 20041012 EP20040024321 20041012
WO2005EP07303 20050706

Probable Assignee: STEELCASE SA

Assignee(s): (std): FIEGEL YANNIK ; OBERLE JEAN MARC ; STEELCASE S A ; STEELCASE SA ; VIEGAS LUIS

Assignee(s): STEELCASE INC

Inventor(s): (std): FIEGEL YANNICK ; OBERLE JEAN MARC ; VIEGAS LUIS ; YANNIK OBERLE JEAN MARC FIEGEL ; FIEGEL YANNIK

Inventor(s): LUIS VIEGAS ; JEAN MARC OBERLE ; OBERLE JEAN MARC FIEGEL YANNIK

Agent(s): FB RICE PTY LTD; FB RICE; BOCKHORN AND KOLLEGEN

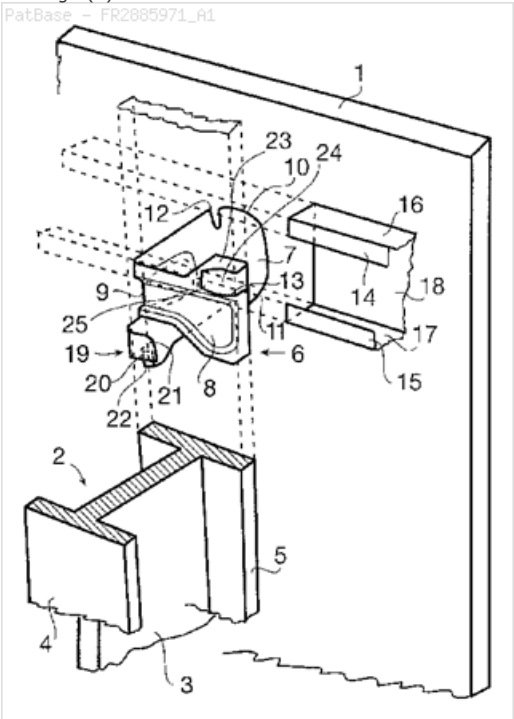
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Title: PLASTER PANEL ANCHORING DEVICE FOR METALLIC **POST**, HAS ANGLE SHAPED ANCHORING PART WITH FLANGES, AND CLAMPS IN WHICH EDGES OF LATERAL FLANGES OF **POST** ARE ENGAGED, WHERE ONE FLANGE HAS DETENT PROFILE AT ITS FREE END TO ENSURE FIXATION OF RAIL

Abstract: The device has an angle shaped anchoring part with two flanges (7, 8), where one flange (7) has a detent profile at its free end to ensure the fixation of a sectional rail (18) and is extended above a folding zone by two tabs. One of the tabs has a support section extending parallel to a plane of the flange (8) to form an **elastic** clamp with the other tab and flange (8). A tab extends the flange (8) to constitute another clamp with the flange (8). The clamps, in which edges of lateral flanges (4, 5) of a metallic **post** (2) are engaged, are arranged in two opposite locations of the flange (8).

Classifications:

International (IPC 8-9): E04B1/58 E04B2/96
F16B2/24 (Advanced/Invention);
E04B1/58 E04B2/88 F16B2/20 (Core/Invention)
CPC: E04B9/183 E04B2002/7464 E04F13/0803 F16B5/0685 F16B7/0493
European: E04B9/18A F16B5/06C F16B7/04D4L P04B2/74F2A
P04F13/08B2



Family:

Publication number	Publication date	Application number	Application date
FR2885921 A1	20061124	FR20050008401	20050804
FR2885921 B1	20090508	FR20050008401	20050804
FR2885971 A1	20061124	FR20050005115	20050520

Priority:

FR20050005115 20050520 FR20050008401 20050804

Probable Assignee: LAVY BONNOT SOC PAR ACTIONS SI

Assignee(s): (std): LAVY BONNOT SOC PAR ACTIONS SI ; LAVY BONNOT SA

Assignee(s): LAVY BONNOT SOC ANONYME ; LAVY BONNOT SOC PAR ACTIONS SIMPLIFIEE ; LAVY BONNOT SOCIETE ANONYME ; LAVY BONNOT SOCIETE PAR ACTIONS SIMPLIFIEE

Inventor(s): (std): DEUMIE PIERRE

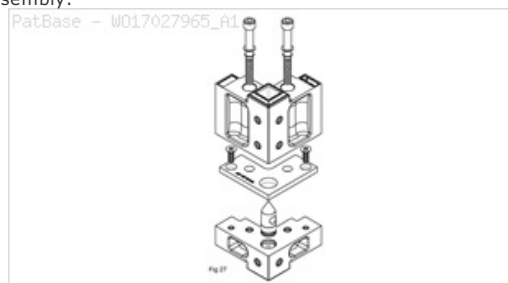
Title: CONNECTOR FOR A MODULAR BUILDING

Abstract: 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.

Classifications:

International (IPC 8-9): E04B1/24 E04B1/343 E04B1/348 E04B1/38 E04B1/41 E04B1/58 F16B7/00 F16B7/20 (Advanced/Invention)

CPC: E04B1/3483 E04G21/142 E04B1/40 E04B1/343 E04B1/348 E04H2001/1283 E04H1/005



Family:

Publication number	Publication date	Application number	Application date
AU2016308775 AA	20180412	AU20160308775	20160812
CA2995397 AA	20180212	CA20162995397	20160812
CN108291397 A	20180717	CN201680052645	20160812
EP3334868 A1	20180620	EP20160836312	20160812
ID201807964 A	20180727	ID2018P0001120	20160812
IN201817005845 A	20180615	IN201817005845	20180215
JP2018529913 T2	20181011	JP20180526978T	20160812
KR20180040609 A	20180420	KR20187006810	20160812
MX2018001821 A1	20180611	MX20180001821	20160812
WO17027965 A1	20170223	WO2016CA50954	20160812

Priority:

US20150205366P 20150814 WO2016CA50954 20160812

Probable Assignee: VECTORBLOC CORP

Assignee(s): (std): VECTORBLOC CORP

Assignee(s): Z MODULAR HOLDING INC ; BOWRON JULIAN

Inventor(s): (std): BOWRON JULIAN ; JULIAN BOWRON

Agent(s): PHILLIPS ORMONDE FITZPATRICK; RIDOUT AND MAYBEE LLP; POTTER CLARKSON LLP; PARDOMUAN OLOAN LUBIS ST

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

Title: SPRING CLIP FOR ASSEMBLING PANELS TO FORM PARTITIONS - COMPRISES U=SHAPED STEEL OR PLASTICS ELEMENT WITH LEGS FITTING INSIDE RECTANGULAR SECTION TUBES

Abstract: The spring clip (16) is U shaped with the legs (18, 20) of the U curving inwards. The clips may be made of any suitable resilient material such as steel or plastic. Three panels are attached to a common **post** formed from a square section tube. The panels are formed from frames of tubes of rectangular cross-section with the side members having open ends. The clip is pressed over the abutting surfaces so that the legs enter the bores of tubes. The assembly is then completed by covering the top of the panels with channel sections which conceal the clips. A similar channel section along the lower edges of the panels is used to fix them to the floor.

Classifications:

International (IPC 8-9): E04B2/74 F16B5/06 (Advanced/Invention);

E04B1/61 (Advanced/Non-invention);

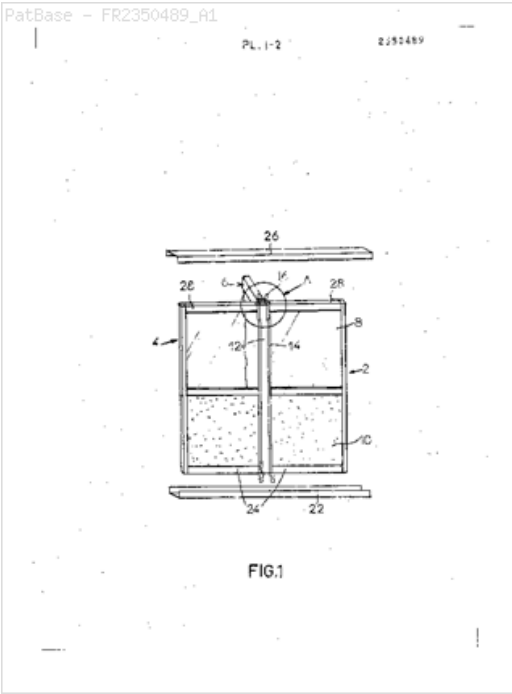
E04B2/74 F16B5/06 (Core/Invention);

E04B1/61 (Core/Non-invention)

International (IPC 1-7): E04B2/72 F16B2/24 F16B5/06

CPC: E04B1/6187 E04B2/7425 F16B5/0607

European: E04B2/74C3D2 F16B5/06B P04B1/61D4



Family:

Publication number	Publication date	Application number	Application date
FR2350489 A1	19771202	FR19760013817	19760507
FR2350489 B1	19790817	FR19760013817	19760507

Priority:

FR19760013817 19760507

Probable Assignee:

MAIGNE CHARLES

Assignee(s): (std):

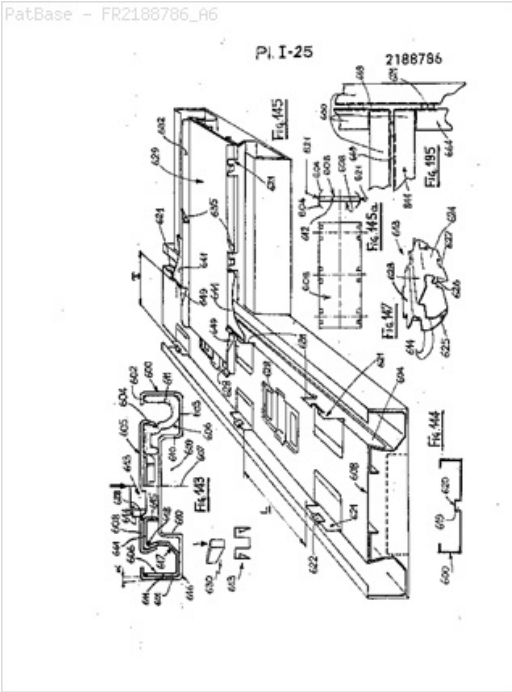
MAIGNE CHARLES

Title: PERFECCIONAMIENTOS EN LA CONSTRUCCION DE JOYAS.

Abstract: Source: FR2188786A [FR] (Claim 1) REVENDICATIONS 1 - Profile composite leger, metallique et/ou plastique, destine a constituer la structure standardisee portante et/ou reliante d'elements de construction pour le btiment et ses agence- ments internes, cloisons et meubles, comprenant deux gaines externes paralleles a section droite en U, disposees face a face et reunies par une entretoise longitudinale interne de liaison et de renfort determinant entre lesdites gaines externes un espacement lon- gitudinal regulier, chaque aile laterale d'un U comportant en outre au moins une saillie interne de retenue, ladite entretoise interne se composant d'un corps central a section droite polygonale defini nissant, d'une part au moins deux faces pleines laterales et, d'autre part, deux corps d'appui frontaux paralleles au plan median separant les deux gaines externes et en contact chacun avec la partie mediane de l'intrados de l'ame d'une gaine externe, chaque face laterale au niveau du corps appui frontal etant prolongee vers l'exterieur du corps central d'une premiere aile intermediaire et d'une deuxieme aile extreme disposee a angle droit par rapport a la precedente, en contact respectivement avec la partie marginale de l'intrados de l'ame et avec la totalite de la face inme terne de l'aile laterale d'une/gaine externe de maniere que lten- semble des deux ailes constitue l'une des deux mschoires de l'une des deux pinces fixes laterales reliant les deux gaines externes et les ecartant l'une de l'autre d'un espacement longitudinal regulier, caracterise par le fait que l'entretoise interne du profile composite se compose de deux ensembles 608-606-606 symetriques par rapport au plan longitudinal de symetrie du profile parallele aux armes 603 des gaines externes 60o, et en ce que le noyau de ladite entretoise delimite une enceinte 612 a section droite reguliere quadrangulaire, les deux faces 608 de l'enceinte paralleles au plan des smes des gaines externes etant separees dlune distance egale a la largeur de l'espacement longitudinal regulier 669 et les deux faces 621 perpendiculaires au plan des amers desdites gaines externes etant discontinues afin de permettre l'integration de pieces auxiliaires de liaison, depuis l'exterieur du profile dans l'enceinte quadrangulaire, au moins l'une des faces de ladite enceinte comportant en outre une cremailiere interne pour la retenue desdites pieces de liaison. **Machine translation:** (Claim 1) Claims 1 - Profile lightweight composite, metal and / or plastic intended to constitute the supporting standardized structure and / or Connecting to construction elements for bttiment and internal agency- ments, walls and furniture, including two a right outer sheaths parallel U-section, arranged opposite and joined together by an inner longitudinal brace and defining between said reinforcing outer sheaths a regular longitudinal spacing, each lateral flange of a U further comprising at least one internal retaining projection, said inner spacer is composed of a central body has polygonal cross-section defined ning one hand at least two lateral faces, and solid, on the other hand, two parallel to the frontal support body median plane separating the two outer sheaths and in contact with each median part of the underside of the soul of an outer sheath, each lateral face at the front body support being prolonged to outside the central body of the first intermediate wing and a second wing extreme arranged at right angles to the previous one, respectively in contact with the marginal portion of the underside of the soul and the totality of the inme dull surface of the wing of a lateral / outer sheath so that the two seems lten- wings is one of two mschoires of one of two fixed side clamps connecting the two outer sheaths and away from one another by a regular longitudinal spacing, CHARACTERIZED in that the inner web of the composite profile consists of two sets 608-606-606 symmetrical in relation to the longitudinal plane of symmetry of the profile parallel to the arms 603 of the outer sheaths 60 degrees, and in that the core delimits the said spacer 612 right speaker has a regular quadrangular section, both sides of the enclosure 608 parallel to the plane of the outer sheaths sms being separated dlune distance equal to the width of the regular longitudinal spacing 669 and 621 both sides perpendicular to the plane of bitter said outer sheath being discontinued to allow the integration of auxiliary parts connecting from outside the profile in the quadrangular enclosure, at least one side of said housing further comprising an internal steering rack for holding said parts binding.

Classifications:

International (IPC 8-9): A47B96/00 E04B2/76 E04C3/00 F16S3/00 F16S5/00 (Advanced/Invention); A47B96/00 E04B2/76 E04C3/00 F16S3/00 F16S5/00 (Core/Invention) **International (IPC 1-7):** A47B96/00 E04C3/00 F16B F16S3/00 F16S3/06 F16S5/00 **CPC:** E04B2/76 **European:** E04B2/76



Family:

Publication number	Publication date	Application number	Application date
AR198206 A1	19740607	AR19730246955	19730308
AR198500 A1	19740628	AR19730246931	19730307
BE794890 A	19730529		00000000
BE794890 A1	19730529	BE19730127174	19730202
BE795024 A	19730529		00000000
BE795024 A1	19730529	BE19730127300	19730206
CA989573 A1	19760525	CA19730162810	19730202
ES411319 A1	19760416	ES19730411319	19730205
FR2188786 A6	19740118	FR19720021412	19720614

Priority:

FR19720021412 19720614

Probable Assignee: VINCENS RENE FR

Assignee(s): (std): ENTREPRISES ; ESTUDE ET LA PROMOTION DES ENT ; ETUDE ET LA PROMOTION DES ENTR ; ETUDE ET LA PROMOTION DES SA ; VINCENS RENE

Assignee(s): VINCENS RENE FR ; SA ETUDE ET LA PROMOTION DES ENTREPRISES ; SA POUR ESTUDE ET LA PROMOTION DES ENTEPRISES ; POUR L ETUDE ET LA PROMOTION DES ENTREPRISES 7 AVENUE DE LONGEMALE 1020 RENENS SUISSE SA ; POUR L ETUDE ET LA PROMOTION DES SA ; S A POUR L ETUDE ET LA PROMOTION DES ; S A POUR L ETUDE ET LA PROMOTION DES ENTREPRISES ; S A POUR L ETUDE ET LA PROMOTION DES ENTREPRISES 7 AVENUE DE LONGEMALE 1020 RENENS SUISSE

Inventor(s): (std): VINCENS R ; VINCENS RENE

Inventor(s): R VINCENS

Title: SOLAR TROUGH FRAME, PART AND METHOD

Abstract: A solar trough frame for holding solar mirrors includes a plurality of chords. The frame includes a plurality of extruded profiles, including chords, chord sleeves, struts, strut end pieces and mirror support pieces, each chord sleeve having at least one chord sleeve fin, each chord sleeve positioned about one of the chords. The frame includes a plurality of struts, at least one of the struts having a strut end piece having at least one strut fin that connects with a chord sleeve fin to connect the plurality of chords. The frame includes a platform supported by the chords and struts on which the solar mirrors are disposed. A chord sleeve for connecting a chord of a solar frame which supports solar mirrors to a strut end piece extending from a strut of the solar frame. A strut end piece for connecting the strut of a solar frame which supports solar mirrors to a chord sleeve of the solar frame. A method for linking a strut of a solar frame which supports solar mirrors to a chord of the solar frame. A method for supporting solar mirrors.

Classifications:

International (IPC 8-9): B08B3/04 B21C23/00 B23P11/00 E04B7/08 E04C3/02 E04D13/18 E04H12/00 E04H12/18 F16B F16B1/00 F16B17/00 F16B7/00 F16B9/02 F16C13/00 F16M1/00 F16M11/00 F16M11/18 F16M11/22 F16M13/02 F24J F24J2/10 F24J2/14 F24J2/46 F24J2/52 F24J2/54 F24S23/70 F24S23/74 F24S25/00 F24S25/12 F24S25/13 F24S25/30 F24S25/65 F24S30/40 F24S30/42 F24S30/425 F24S80/60 G02B19/00 G02B27/00 G02B7/182 G02B7/183 H01L31/042 H01L31/052 H02N6/00 H02S20/00 (Advanced/Invention); E04B1/19 F24J2/10 F24J2/46 F24J2/52 F24J2/54 F24S23/70 F24S30/00 (Advanced/Non-invention); B08B3/04 E04C3/02 E04H12/00 F16C13/00 F24J2/06 H02N6/00 (Core/Invention); F16B F24J (Subclass/Invention)

International (IPC 1-7): F24J2/10

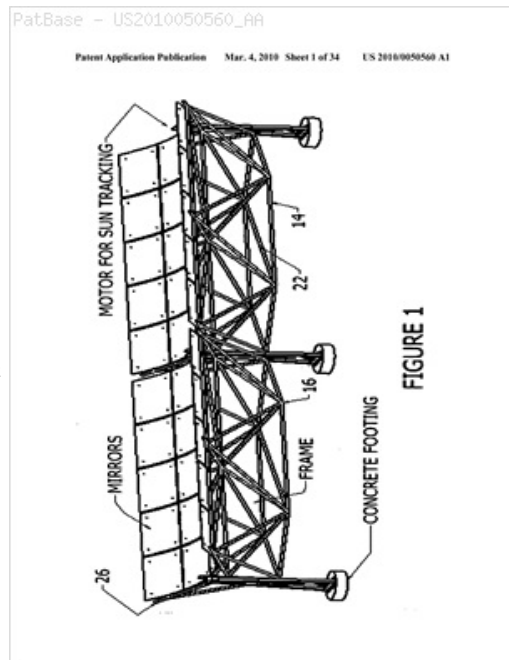
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European: F16B7/18C F16C13/04 F24J2/10B F24J2/14 F24J2/16 F24J2/46 F24J2/46B10 F24J2/52A20D F24J2/52A8B F24J2/52A8C F24J2/54B4 H01L31/052B3 R24J2/10P6 R24J2/46B18B R24J2/52A4P6 R24J2/52A8C R24J2/52P10 R24J2/54P10 R24J2/54P14 R24J2/54P8D Y02E10/45 Y02E10/47 Y02E10/50

US: 1/1 126/600 134/10 134/104.2 134/104.200S 134/10S 211/1.51 211/13.1 211/182 211/41.1 248/200 248/200S 248/469 248/469P 29/428 29/428S 29/525.01 29/525.010S 29/700 29/700S 359/853 359/871 359/871P 359/872 359/872P 359/876 403/157 403/169 403/170 403/205 403/217 403/217S 403/24 403/24S 403/345 403/345S 492/57 492/57S 52/633 52/645 52/645P 52/648.1 52/653.1 52/653.2 52/655.1 52/693 52/693P 52/741.1 52/741.100S 52/81.3 72/253.1 72/253.100S

Family:

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US2018245820 AA	20180830	US20180957486	20180419
US2019018217 AA	20190117	US20180134608	20180918
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Priority:

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Probable Assignee: WERNER EXTRUSION SOLUTIONS LLC

Assignee(s): (std): FUNAI JOHN ; PALLADINO NICHOLAS ; WERNER CRAIG ROY ; WERNER EXTRUSION SOLUTIONS LLC ; WERNER KURT JAMES

Assignee(s): WERNER EXTRUSION SOLUTIONS LLC LAKE FOREST

Inventor(s): (std): WERNER CRAIG ROY ; FUNAI JOHN ; WERNER KURT JAMES ; WERNER CRAIG ; JAMES WERNER KURT ; JOHN FUNAI ; ROY WERNER CRAIG ; PALLADINO NICHOLAS

Inventor(s): WERNER KURT ; WERNER CRAIG ROY LAKE FOREST ; FUNAI JOHN LAKE FOREST ; KURT JAMES WERNER ; CRAIG ROY WERNER

Agent(s): GRIFFITH HACK; BORDEN LADNER GERVAIS LLP; GILES ASHLEY SIMON; HASELTINE LAKE LLP; CARVAJAL Y ISABEL; S HOROWITZ AND CO; ANSEL M SCHWARTZ SUITE 304; ANSEL M SCHWARTZ ATTORNEY AT LAW; ANSEL; ANSEL M; SCHWARTZ ANGEL M; SCHWARTZ ANSEL M

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

Title: SUPPORT SPACER APPARATUS

Abstract: A support spacer apparatus relating to a paneling system for providing improved insulating qualities to pre-engineered buildings and the like in which stresses imparted to a supported structure are transferred through compressible insulation without diminishing the thermal character of the insulation, the support spacer apparatus comprising a spacer member having a plurality of fastener assemblies connected thereto and extendable through the insulation; the fastener assemblies attachable to an underlying substrate by the application of energy to the fastener assemblies for supporting the spacer member at a predetermined distance from the substrate such that the insulation is disposed substantially in its prepenetration state after attachment of the fastener assemblies to the substrate.

Classifications:

International (IPC 8-9): E04B1/00 E04B1/14 E04B1/346 E04B1/62 E04B2/00 E04B7/00 E04B7/02 E04B7/04 E04C3/08 E04D1/00 E04D13/15 E04D13/16 E04D15/04 E04D3/16 E04D3/36 E04D3/362 E04D3/363 E04D3/367 E04D3/38 F16B35/04 F16B35/06 G11B15/087 G11B21/10 G11B5/596 (Advanced/Invention); E04C3/04 E04D3/361 F16B5/02 (Advanced/Non-invention); E04B7/00 E04C3/04 E04D1/00 E04D13/16 E04D3/36 F16B35/04 G11B15/087 G11B21/10 G11B5/596 (Core/Invention); E04C3/04 E04D3/36 F16B5/02 (Core/Non-invention)

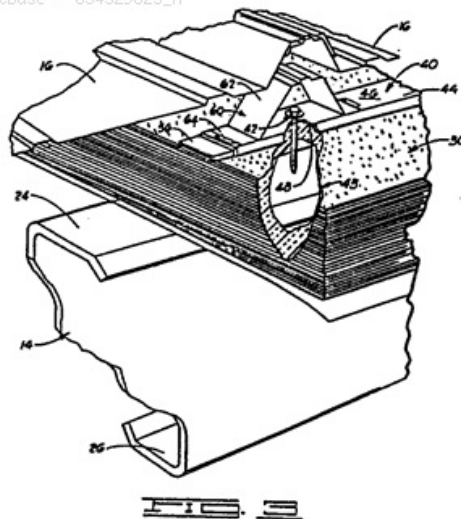
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European: E04B1/14 E04B7/00 E04B7/02A2 E04C3/08 E04D13/15 E04D13/16A1B E04D13/16A5 E04D15/04 E04D3/362 E04D3/363 E04D3/364 E04D3/36A1 E04D3/36D E04D3/36E E04D3/38 F16B35/04B2 F16B35/06 G11B5/596E P04C3/02B P04C3/04S1S P04C3/04S1U P04C3/04S2A P04C3/04S2B P04C3/04S3C P04C3/04S3H P04C3/04S3L P04C3/04S3S P04C3/04S3U P04C3/04S3Z P04C3/04T1 P04C3/04T2 P04D3/361P R16B5/02R

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PatBase - US4329823_A

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Priority:

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Probable Assignee: HAROLD SIMPSON INC

Assignee(s): (std): COMMERCIAL HYDRAULICS AG ; ENCON PRODUCTS INC ; IBM ; HAROLD SIMPSON INC ; NUCOR CORP ; SIMPSON INC HAROLD

Assignee(s): TULSA INNOVATION CENTER VENTURE PARTNERS II LTD ; TULSA INNOVATION CENTER VENTURE PARTNERS II PARTNE ; SIMPSON HAROLD G ; NEYER LEO E ; JEN SHEN ; KABELAC WILLIAM J ; SANDERS IAN L ; FABTEC INC ; ENCON PRODUCTS INC 2737 WEST CALIFORNIA OKLAHOMA ; ENCON PRODUCTS INC 2737 WEST CALIFORNIA OKLAHOMA C ; INTERNATL BUSINESS MACH CORP ; ENCON PRODUCTS INC A CORP OF OK ; ENCON PRODUCTS INC A CORP OF OKLA ; FABTEC INC AN OKLAHOMA CORP ; ENCON PRODUCTS INC 210 S W 89TH STREET OKLAHOMA CITY OKLAHO ; ENCON PRODUCTS INC 2737 WEST CALIFORNIA OKLAHOMA CITY OKLAHOM ; HOLLMAN BERT D ; INT BUSINESS MACHINES CORP ; ENCON PRODUCTS INC 210 S W 89TH STREET OKLAHOMA ; ENCON PRODUCTS INC 210 S W 89TH STREET OKLAHOMA CI ; COMMERCIAL HYDRAULICS S A ; COMMERCIAL HYDRAULICS SA ; ECON PRODUCTS INC

Inventor(s): (std): HOLLMAN BERT D ; JEN SHEN ; KABELAC WILLIAM J ; KABELAC WILLIAM JOHN ; NEYER LEO E ; SALISBURY C STEPHEN ; SANDERS IAN L ; SIMPSON HAROLD G ; SIMPSON HAROLD S ; BINDRA CHARANJIT S ; SIMPSON H

Inventor(s): SHIEN JIEN ; IAN ERU SANDAASU ; HAROLD G SIMPSON ; UIRIAMU JIYON KABERATSUKU ; LEO E NEYER

Agent(s): RIDOUT AND MAYBEE LLP; MACRAE AND CO; KERR ALEXANDER; MCCARTHY BILL D; FELLERS SNIDER ET AL; BILL D

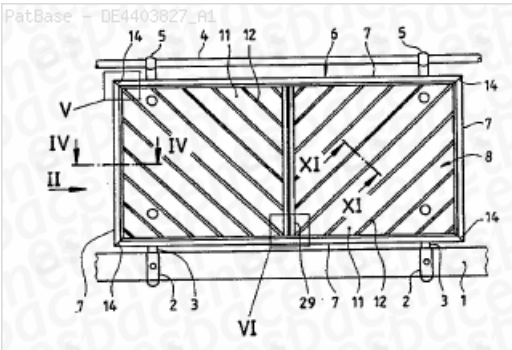
Designated states: AT BE CH DE FR GB IT LI LU NL SE

Title: CONSTRUCTION KIT FOR FENCING, SCREENING, PANNELLING AND ENCLOSURES

Abstract: The kit comprises a closure part (8) retaining profiles which can form a frame element (6) secured via coupling fittings. The closure part, inserted in the frame element via sealing profiles (10), consists of hollow (11) and rod-shaped profiles (12). Pref. the frame element is composed of a profiled tube (7), held by screwed coupling and contg. a screw and a holding duct, with mitred abutments. The screw duct in the profiled tube(s) may have a round cross-section with a longitudinal aperture, with a concentric screw retaining bore with straight side walls.

Classifications:

International (ipc 8-9): A01G9/02 E04B2/74 E04F11/18 E04H1/12 G09F15/00 (Advanced/Invention);
A01G9/02 E04B2/74 E04F11/18 E04H1/12 G09F15/00 (Core/Invention)
International (ipc 1-7): E01F13/00 E04B1/61 E04C2/38 E04F11/18 E04H17/16 E06B3/58 E06B3/62 E06B3/96 F16B7/04 F16S1/14
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European: A01G9/02 E04B2/74C3D E04F11/18F6 E04H1/12B G09F15/00C



Family:

Publication number	Publication date	Application number	Application date
DE4403827 A1	19950810	DE19944403827	19940208

Priority:

DE19944403827 19940208

Probable Assignee: KREUSEL MAGDA
Assignee(s): (std): KREUSEL MAGDA
Assignee(s): KREUSEL MAGDA 55457 GENSINGEN DE
Inventor(s): (std): KREUSEL ULRICH
Inventor(s): KREUSEL ULRICH 55457 GENSINGEN DE

Title: SEISMIC BRACING CONNECTOR

Abstract: A connector for connecting a seismic brace to a support rod, such as for a cable tray, to inhibit movement of the rod during seismic activity. The connector comprises a metal connecting member having an upper portion and a lower portion joined at a juncture. Openings in the juncture, upper portion and lower portion define a slot for entry of the support rod into the slot. The connector further comprises a retainer inserted in a gap between the upper and lower portions. The retainer bridges the slot to retain the support rod in the slot. The connector permits bracing to be added without removal of the support rod from the tray and ensures that the brace remains attached during seismic activity, even where a retaining nut holding the connector to the support has become loosened.

Classifications:

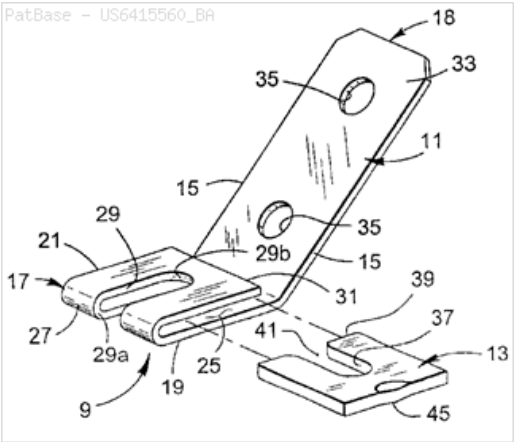
International (IPC 8-9): F16B7/18 F16L55/02 (Advanced/Invention);
F16B43/00 (Advanced/Non-invention);
F16B7/18 (Core/Invention);
F16B43/00 (Core/Non-invention)

International (IPC 1-7): E04B1/38 E04B1/93 E04B1/98 E04H9/02 E21B E21B0/0 E21B0/00 F16L55/02

CPC: Y10T403/32155 Y10T403/32606 Y10T403/45 F16B7/18 F16B43/00 F16B2200/403

European: F16B7/18 R16B43/00

US: 248/351 248/59 248/638 403/119 403/220 403/260 403/71 52/167.1 52/167.4 52/713 52/714



Family:

Publication number	Publication date	Application number	Application date
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■ MXPA03000151 A1	20040913	MX2003PA00151	20020424
■ TW531623 B	20030511	TW20020108835	20020429
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■ WO02090705 A2	20021114	WO2002US12893	20020424
■ WO02090705 A3	20030410	WO2002US12893	20020424

Priority:

US20010847773 20010502 WO2002US12893 20020424

Probable Assignee: COOPER TECHNOLOGIES CO

Assignee(s): (std): COOPER TECHNOLOGIES CO

Assignee(s): COOPER TECHNOLOGIES COMPANY ; EATON INTELLIGENT POWER LTD

Inventor(s): (std): RINDERER ERIC R

Inventor(s): ERIC R RINDERER

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

Title: MECHANICAL CONNECTING DEVICE FOR A SYSTEM THAT IS USED TO ATTACH ELEMENTS TO A STRUCTURE

Abstract: A system for fastening an element, particularly made of fragile material such as glass, to a bearing structure or a framework at least at one point. At least at one fastening point, the system includes a mechanical connection device for fixing the element to a framework or bearing structure or connecting to an adjacent similar element. At least one arm at a first end is connected to a fastener mechanically connected to the element, and at a second end is connected to a joining piece. The joining piece includes a tubular envelope that contains a mechanism for adjusting degrees of freedom of the fixing or of the connection. A wall including at least one fixed or opening element can be fixed to a structure or a framework by such a mechanical connection device.

Classifications:

International (IPC 8-9): E04B2/72 E04B2/88 E04H1/00 E06B3/02 E06B3/54 (Advanced/Invention);

E04B2/88 (Advanced/Non-invention);

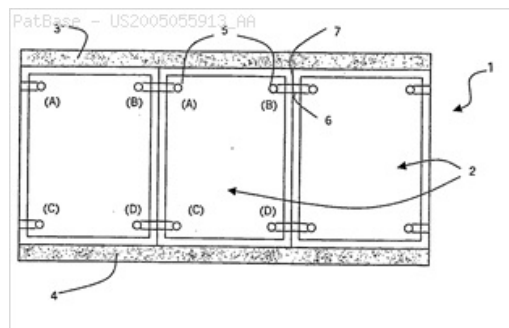
E04B2/72 E06B3/02 E06B3/54 (Core/Invention)

International (IPC 1-7): E04B1/00 E04B1/38 E04B2/72 E04B2/84 E04B2/88 E06B3/54 E06B3/64 F16B5/06

CPC: E06B3/5445 E06B3/02 E06B3/5436

European: E06B3/02 E06B3/54D E06B3/54D2

US: 52/235 52/272 52/272P 52/578



Family:

Publication number	Publication date	Application number	Application date
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■ CN1582362 A	20050216	CN20028021831	20021023
■ DE60243770 D1	20121122	DE20026043770	20021023
■ EP1440219 A1	20040728	EP20020802235	20021023
■ EP1440219 B1	20120926	EP20020802235	20021023
■ ES2396055 T3	20130218	ES20020802235T	20021023
■ ES2396055 T8	20130307	ES20020802235T	20021023
■ FR2831932 A1	20030509	FR20010014700	20011102
■ FR2831932 B1	20041015	FR20010014700	20011102
■ JP2005507473 T2	20050317	JP20030540473T	20021023
■ JP4464134 B2	20100519	JP20030540473T	20021023
■ KR101006408 B1	20110110	KR20047006578	20040430
■ KR20050039721 A	20050429	KR20047006578	20021023
■ PL208793 B1	20110630	PL20020368720	20021023
■ PL368720 A1	20050404	PL20020368720	20021023
■ PT1440219 T	20130115	PT20020802235T	20021023
■ US2005055913 AA	20050317	US20040492543	20040930
■ US7987643 BB	20110802	US20040492543	20040930
■ WO03038222 A1	20030508	WO2002FR03626	20021023

Priority:

FR20010014700 20011102 EP20020802235 20021023 WO2002FR03626 20021023

Probable Assignee: SAINT GOBAIN GLASS FRANCE

Assignee(s): (std): MAUBLANC GEORGES ; NUGUE JEAN CLEMENT ; SAINT GOBAIN ; SAINT GOBAIN GLASS FRANCE ; SAINT GOBAIN SA

Inventor(s): (std): GEORGES MAUBLANC ; JEAN CLEMENT NUGUE ; MAUBLANC GEORGES ; GEORGES NUGUE JEAN CLEMENT MAU ; NUGUE JEAN CLEMENT

Inventor(s): NUGUE JEAN CLEMENT MAUBLANC GEORGES

Agent(s): BOCKHORN AND KOLLEGEN PATENT U RECHTSANWALTE; COLOMBIER CHRISTIAN; DE ELZABURU ALBERTO; SAINT GOBAIN RECHERCHE; OBLON SPIVAK MCCLELLAND MAIER AND NEUSTADT PC; OBLON SPIVAK MCCLELLAND MAIER AND NEUSTADT LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE 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 LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

Title: Connecting device for coupling releasable construction parts, in particular laminated components

Abstract: The invention proposes a connecting device for the releasable coupling of construction parts, in particular laminated components, e.g. walls, panels, claddings, etc. to **posts**, crossmembers, frames or the like. The connecting device is composed of a retaining cam 5 which can be fixed in a rotationally fixed manner on a construction part, and of a connecting pin 6 which can be inserted rotatably into the other construction part, the connecting pin 6 exhibiting a supporting head or collar 12 which is provided with a tool-engagement means, e.g. a transverse slot, and is adjoined by a shaft 13 which is provided, at or near its free end, with radial anchorage protrusions 14, whereas the retaining cam 5 contains an engagement through-passage with a profile which is adapted to the shaft cross-section and the anchorage protrusions 14 and at whose rear end there are located, as abutments for the anchorage protrusions 14, anchorage shoulders which are offset laterally at an angle. By virtue of the fact that the retaining cam 5 contains, at its front end, run-in ramps 24 which extend in a steeply helical manner and, at its rear end, bracing ramps 25 which extend in a steeply helical manner, it is possible for the connecting pin 6 to be aligned automatically and satisfactorily with the engagement through-passage of the appertaining retaining cam 5.

Classifications:

International (IPC 8-9): E04B1/343 F16B21/02

F16B5/10 (Advanced/Invention);

E04B2/74 (Advanced/Non-invention);

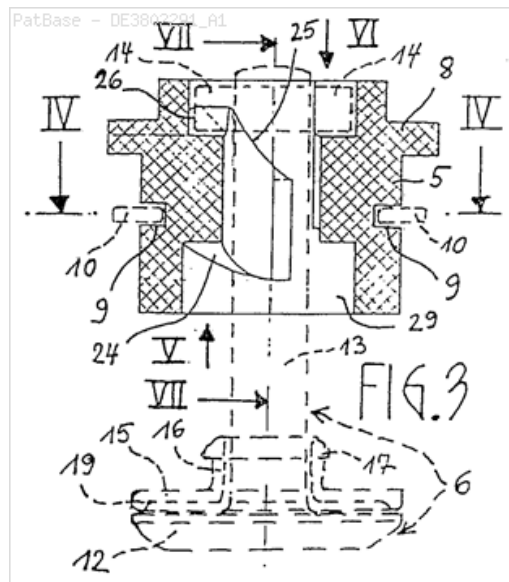
E04B1/343 F16B21/00 F16B5/00 (Core/Invention);

E04B2/74 (Core/Non-invention)

International (IPC 1-7): A47B47/00 E04B1/60 F16B21/02 F16B5/06 F16M7/00

CPC: E04B1/34315 E04B1/34384 E04B2002/7461 F16B5/10 F16B21/02

European: E04B1/343C E04B1/343G F16B21/02 F16B5/10 P04B2/74F



Family:

Publication number	Publication date	Application number	Application date
DE3802291 A1	19880818	DE19883802291	19880127
DE3802291 C2	19940901	DE19883802291	19880127
DE8701626 U1	19870507	DE19870001626U	19870204

Priority:

DE19870001626U 19870204 DE19883802291 19880127

Probable Assignee: SCHAEFER GMBH FRITZ

Assignee(s): (std): LOH KG RITTAL WERK ; SCHAEFER GMBH FRITZ

Assignee(s): FRITZ SCHAEFER GMBH 5908 NEUNKIRCHEN DE ; RITTAL WERK RUDOLF LOH GMBH AND CO KG 35745 HERBOR ; RITTAL WERK RUDOLF LOH GMBH AND CO KG 35745 HERBORN DE

Inventor(s): VERZICHT DES ERFINDERS AUF NENNUNG

Title: FLOORING MATERIAL, COMPRISING BOARD SHAPED FLOOR ELEMENTS WHICH ARE INTENDED TO BE JOINED VERTICALLY

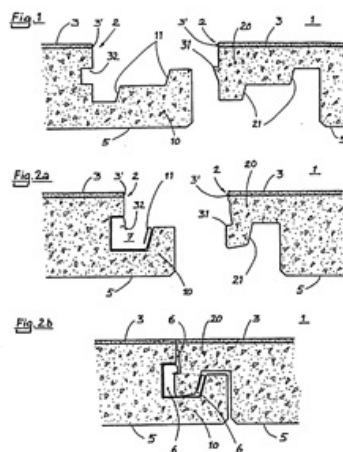
Abstract: Flooring material including floor boards (1) with an essentially square, rectangular or rhomboidal shape. The floor boards (1) are provided with edges (2), a horizontal lower side (5) and a horizontal decorative upper surface (3). The floor boards (1) are provided with lower joining lips (10) at two adjacent edges (2) while the two remaining edges (2) are provided with upper joining lips (20). The lower joining lips (10) are provided essentially vertical lower lip surfaces (11) arranged parallel to the closest edge (2). The lower lip surfaces (11) are intended to interact with mainly vertical upper lip surfaces (21) arranged on the upper joining lips (20). Two joined adjacent floor boards (1) are hereby locked together in a horizontal direction. The joining lips (10 and 20 respectively) are furthermore provided with one or more heels (31) intended to snap join with recesses (32) adapted thereto which, by being provided with essentially horizontal locking surfaces, limits vertical movement between two joined adjacent floor boards (1).

Classifications:

International (IPC 8-9): E04B5/02 E04B5/43 E04C2/40 E04F13/08 E04F15/02 E04F15/04 E04F15/10 E04F15/16 (Advanced/Invention); E04F15/024 E04F15/16 (Advanced/Non-invention); E04F15/02 E04F15/04 E04F15/16 (Core/Invention)
International (IPC 1-7): E04B2/00 E04B2/08 E04B2/18 E04B2/32 E04C1/10 E04F13/08 E04F15/02 E04F15/024 E04F15/04 E04F15/14 E04F15/16 F16B5/00
CPC: E04F2201/025 E04F2201/027 E04F2201/0523 E04F15/02038 E04F15/102 E04F15/04 E04F2201/028 E04F15/02016 E04F15/02022 E04F15/02 E04F2201/01 E04F2201/0115 E04F2201/0138 E04F2201/026 E04F2201/05 E04F2201/0517 E04F2201/0529 E04F15/02005
European: E04F15/02 E04F15/02A E04F15/04 P04F15/04 P04F201/01 P04F201/01A1 P04F201/01C P04F201/02C P04F201/02D P04F201/02E P04F201/02F P04F201/05 P04F201/05C P04F201/05D P04F201/05D1
US: 1/1 52/309.1 52/309.13 52/384 52/384P 52/385 52/385S 52/403.1 52/489.1 52/506.06 52/578 52/582.1 52/585.1 52/586.1 52/586.2 52/588.1 52/591.1 52/592.1 52/592.100P 52/601

PatBase - US2004068954_AA

Patent Application Publication Apr. 15, 2004 Sheet 1 of 3 US 2004/068954 A1



Family:

Publication number	Publication date	Application number	Application date
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Priority:

SE19980003379	19981006	SE19990000432	19990210	SE19990002883	19990812
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Probable Assignee: PERGO EUROPE AB

Assignee(s): (std): MAARTENSSON GOERAN ; PERGO EUROP AB ; PERSTORP FLOORING AB ; PERSTORY FLOORING AB ; OLOFSSON OLA ; PERSTORP FLOORING AB TRELLEBOR ; PERGO EUROP AB TRELLEBORG ; PERGO EUROPE AB ; PERGO AG

Assignee(s): PERGO EUROPE AB TRELLEBORG ; PERGO (EUROPE) AB ; PERGO AB ; PERSTORP FLOORING AB TRELLEBORG ; MARTENSSON GORAN ; FERNANDA ESPOSITO TORP FLOORING ABS ; FERNANDA EUROPE ABS

Inventor(s): (std): MAARTENSSON GOERAN ; MARTENSSON GOELAN ; MARTENSSON GOERAN ; MARTENSSON GORAN ; MATENSSON GOELAN ; MORTENSSON GOERAN ; OLOFSSON OLA ; RTENSSON GORAN M ; MORTENSSON JERAN ; MORTENSSON G RAN ; GOERAN MARTENSSON

Inventor(s): G 247 RAN MORTENSSON ; GORAN M RTENSSON ; G AND 247 RAN MORTENSSON ; GOELAN MARTENSSON ; GOELAN MATENSSON ; GOERAN MAARTENSSON ; GOERAN MORTENSSON ; GORAN MARTENSSON ; OLA OLOFSSON

Agent(s): FETHERSTONHAUGH AND CO; WAGNER ALBIGER AND PARTNER PATENTANWAELTE MBB; MUELLER GERBES WAGNER ALBIGER PATENTANWAELTE; WAGNER ALBIGER AND PARTNER PATENTANWAELTE MBB; SCHACHT BENNY MARCEL CORNEEL; DE ELZABURU ALBERTO; STEVENS DAVIS MILLER AND MOSHER LLP; NOVAK DRUCE QUIGG LLP; JENKINS WILSON TAYLOR AND HUNT PA

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

Title: TRANSPORTABLE CLIMBING FRAME AND TOY - HAS VERTICAL SIDE WALL AND ROOF ELEMENTS WITH ASSEMBLY PLUG-IN CONNECTORS

Abstract: The side walls are formed by four vertical element which are permanently hinged together as two pairs of linked flat frames, joined together by slide sockets and plug-in connecting pegs. Sockets at the eaves level corners admit the corner pegs of the roof, which is formed by two frame elements and held down by clips to complete a toy house skeleton or a climbing frame. Coloured plastics shingles, clipped to the horizontal elements to cover the pitched roof and the main part of the walls, while leaving open the gable ends, door and windows, or a tent cover dropped over the assembled frame, with due regard to the windows and doors complete the toy house on this climbing frame skeleton.

Classifications:

International (IPC 8-9): A63B9/00 A63G31/00

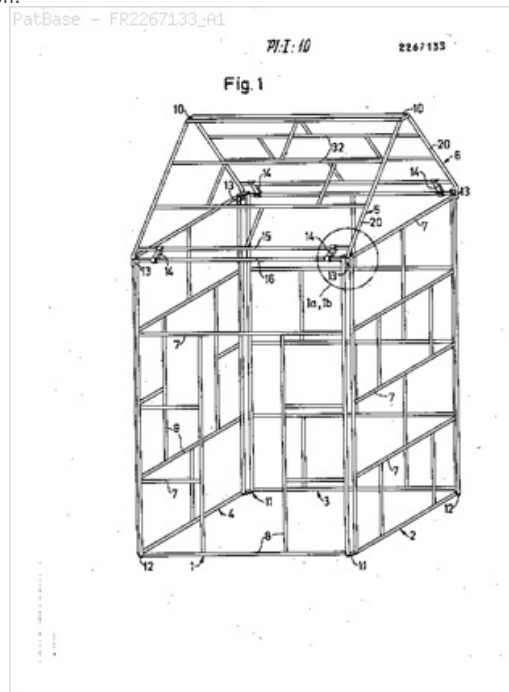
E04B1/343 (Advanced/Invention);

A63B9/00 A63G31/00 E04B1/343 (Core/Invention)

International (IPC 1-7): A47D13/00 A63B9/00 A63H33/10 E04H1/00 F16B7/00

CPC: A63B9/00 A63B2208/12 A63G31/00 E04B1/34326

European: A63B9/00 A63G31/00 E04B1/343C2 K63B208/12



Family:

Publication number	Publication date	Application number	Application date
CH582007 A	19761130	CH19750004330	19750403
DE2418059 A1	19751023	DE19742418059	19740413
FR2267133 A1	19751107	FR19750011509	19750414
FR2267133 B1	19770415	FR19750011509	19750414
IT1035269 A	19791020	IT19750049048	19750411

Priority:

DE19742418059 19740413

Probable Assignee: FISCHER ARTUR

Assignee(s): (std): FISCHER ALBERT ; FISCHER ARTUR

Assignee(s): FISCHER A ; FISCHER ALBERT 8077 REICHERTSHOFEN ; FISCHER ALBERT DT

Inventor(s): (std): FISCHER ALBERT

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Title: MODULAR BUILDING UNITS, AND METHODS OF CONSTRUCTING AND TRANSPORTING SAME

Abstract: 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.

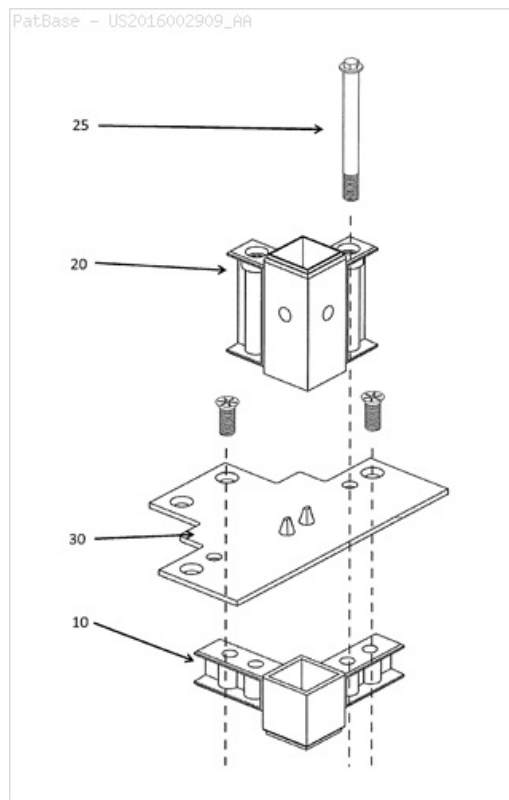
Classifications:

International (IPC 8-9): B66C1/16 B66C1/66 E04B1/19 E04B1/24 E04B1/343 E04B1/348 E04B1/41 E04B1/58 E04G21/00 E04G21/14 F16B1/00 F16B12/44 F16B7/04 F16B7/18 (Advanced/Invention);

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CPC: B66C1/16 E04B1/40 E04B1/24 E04B2001/1978 E04B1/3483 Y10T403/42 Y10T403/555 Y10T403/75 B66C1/66 E04B2001/2406 E04B2001/2418 E04B2001/2451 E04B2001/2472 E04B2001/2496 E04B2001/34892 F16B7/0486 F16B7/185 E04B1/2403 E04B2001/1957 E04B2001/2421 E04G21/142 E04B1/1903

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US20160229880 20160805	AU20180204197 20180613	

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