

Search strategy

Query
(FRICTION AND GROOVE AND BEAM AND CONNECT+)/AB/CLMS/DESC/ODES AND (E04G AND F16B)/IPC

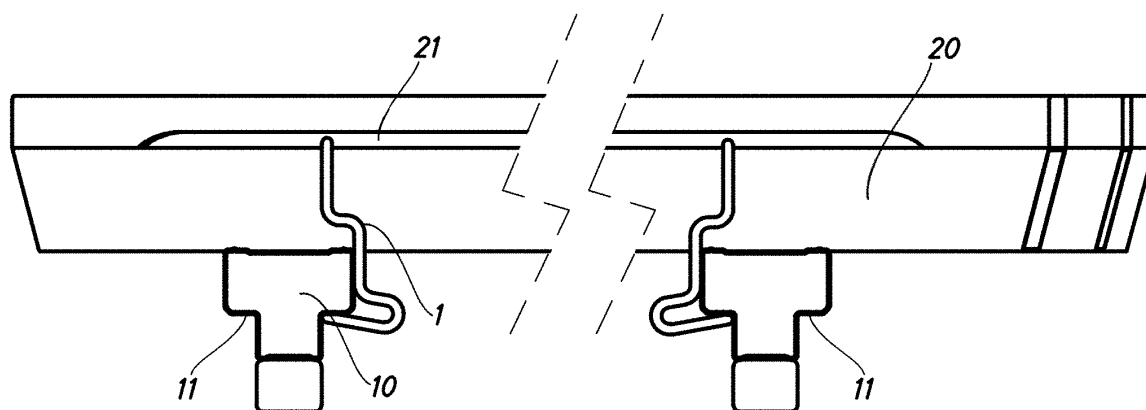
61 Documents

Publication numbers	Title	Current assignees
EP3513017 A1	Detachable fastening system for two intersecting formwork beams	SISTEMAS TECNICOS DE ENCOFRADOS
EP2959067 A1	Modular building units, and methods of constructing and transporting same	Z MODULAR HOLDING
EP-769090 A1	Connection hook	KRAUSE WERK
EP-412338 A2	Frame consisting of detachable profiled rods interconnected by a connector	VIELER INTERNATIONAL
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EP2924301 A1	Fastener	HEBEI LIXIN TECHNOLOGY
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EP2013425 A1	Structural connectors	CHRISTOPOULOS, CONSTANTIN, ...
EP2029946 A2	Mounting system, in particular for solar modules	MOUNTING SYSTEMS
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EP-674068 A1	Clamps for connecting form elements clamping arms engaging the border sections	PASCHAL WERK G MAIER
EP3202996 A1	Scaffolding post for a building scaffold	MJ GERÜST
EP3207300 A2	Securing element for a stand device and components designed in correspondence therewith	ONDAL MEDICAL SYSTEMS
EP-595490 A1	Connecting pin	ONO TATSUO
EP1291533 A2	Fastener clip assembly and joint structure using same	MODULAR SYSTEM
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EP2875192 A1	Assembly of formwork, and graduated anchoring system	HUENNEBECK
EP3262250 A1	Assembly of a platform assembly and support structure and method of assembly	SPANSET INTER
EP1848894 A1	Fastener	TOOMBS MARCUS
WO201797735 A1	Nut, release device, spindle support, and method for supporting an object	ISCHEBECK FRIEDRICH

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EP-914530 A1	Clamp with clamping jaws and a carrier connecting the latter	PASCHAL WERK G MAIER
EP-369197 A1	Clamp for connecting form work panels together	MAIER JOSEF
EP3545201 A1	Fastener assembly, mesh panel and barrier system	MRM
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US4576500 A	Scaffolding system	WAH, WONG, ...
DE102009043967 A1	Clamping device for clamp coupling of carrier e.g. formwork beams, in carrier component system, has clamping jaws and clamping screw that is screwed into thread in nut, where jaws are arranged parallel to each other	ISCHEBECK FRIEDRICH
FR1350283 A	Coupling device for connecting at least three bars in a detachable manner under the given angles	JANSON KARL GUSTAV
WO2012142617 A1	Fabricating the locking steps in the groove element of spring-loaded split-tongue locking connector system	BAKER GEOFFREY ALAN, ...
JP2003090316 A	L-shaped double-end bolt manufacturing method, I-shaped double-end bolt, and formwork structure	KONDO TEC
EP2350466 A2	Quick threaded rod locking devices and method	ERICO INTERNATIONAL
KR20200025341 A	Reinforcement method of reinforced concrete column using steel plate	KOREA NATIONAL UNIVERSITY OF TRANSPORTATION, ...
DE4205990 C1	Clamp used in concrete shuttering - is tightened by wedge and has projections engaging groves in frame members	PASCHAL WERK G MAIER
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DE10225403 A1	Framework for shelving etc comprises stays and uprights fitting together by wedges passing through wedge openings and securing with clamping elements	RUX SALES & SERVICES 58135 HAGEN

Publication numbers	Title	Current assignees
EP1723294 A2	Rapidly deployable temporary modular structures and component elements thereof	INTERNATIONAL PROPERTY RIGHTS
EP-979905 A1	Device for connecting two longitudinal profiles	FRIATEC
US4030266 A	Invertable, multi-purpose structural clamp	GENERAL ELECTRIC CREDIT
JP2000283133 A	Fastener and connection tool for fastener	MISAWA HOMES
EP-462737 A2	Expansion anchor.	YOSHINO SEIKI
US20090188187 A1	Composite wall and floor system	NUCOR
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EP1300596 A1	Flush panel spacer and method and apparatus of installing the same	SPS TECHNOLOGIES
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US4597687 A	Device for connecting a tube and a sheet metal element	CEGEDUR
US5279084 A	Movement mechanism of telescopic column	THK

Family 1/61 - FAMPAT - ©Questel

Images**Publication numbers**

US20190226513
EP3513017
MX2019002676
CN109689993
PE20190530
WO2018/050935
IN201947008773
CO2019001647
ES2660224
CA3035142
WO2018/050935
ES2660224

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A1
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A1
A1

Publication dates

2019-07-25
2019-07-24
2019-05-20
2019-04-26
2019-04-11
2019-03-21
2019-03-15
2019-03-08

2018-10-05

2018-03-22

2018-03-22

2018-03-21

Earliest priority date

2016-09-16

Title

(EP3513017)

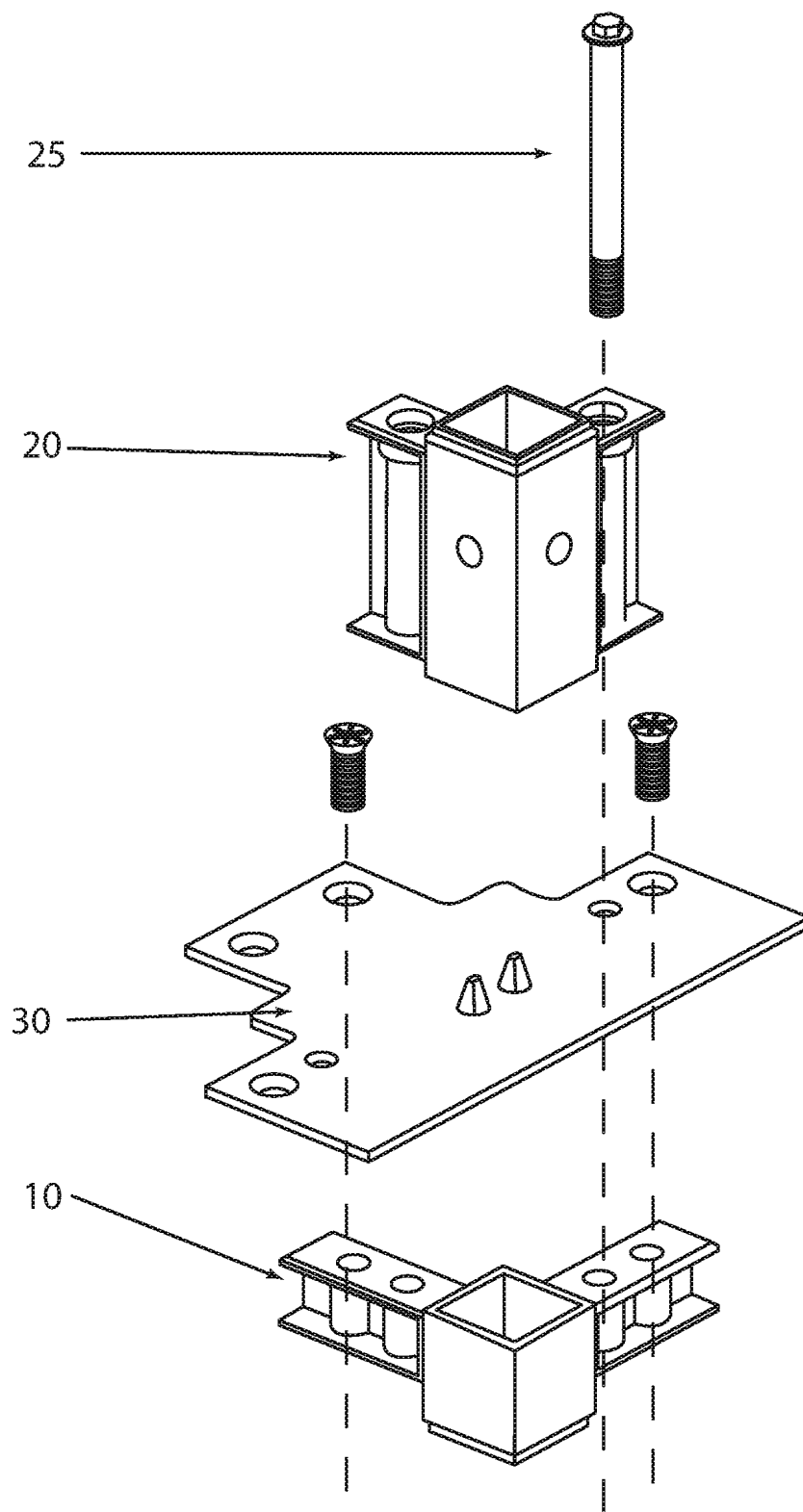
Detachable fastening system for two intersecting formwork beams

Abstract

(EP3513017)

Detachable fastening system for two formwork beams, an upper beam, a lower beam, a device for connecting the upper beam to the lower beam. Said device comprises a resilient one-piece structure having two curved arms which connect zones intended to press one of said beams in support zones and zones intended to be fastened to the other beam, the system having connection means which connect the device to said beam such that it cannot be lost, and said device having the ability to slide relative to the beam to which it is fastened, the system having means for increasing the friction between the lower beam and the upper beam.

Family 2/61 - FAMPAT - ©Questel

Images**Publication numbers**

AU2018204197

JP6728309

BR112015020099

JP2019052534

JP6441240

CN108360683

AU2018204197

CN105283609

AU2014221181

SG10201610543Q

EP2959067

BR112015020099

US20170002559

US9458619

IN8541/DELNP/2015

MX2015010800

JP2016513192

CN105283609

US20160002909

EP2959067

KR20150121134

AU2014221181

SG11201506504W

CA2901755

WO2014/127472

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Publication dates

2020-07-30

2020-07-22

2020-02-27

2019-04-04
2018-12-26
2018-08-03
2018-07-05
2018-06-12
2018-03-15
2017-02-27
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2015-10-28
2015-10-15
2015-09-29
2014-08-28
2014-08-28

Earliest priority date

2013-02-22

Title

(EP2959067)

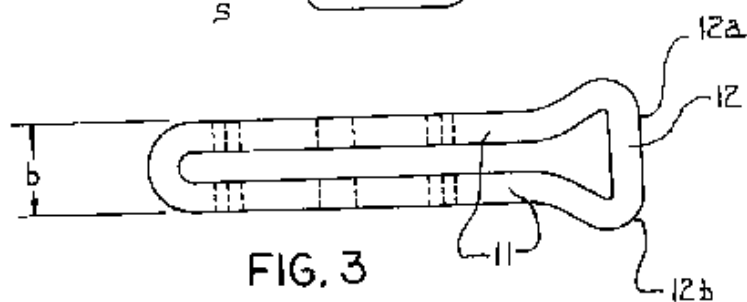
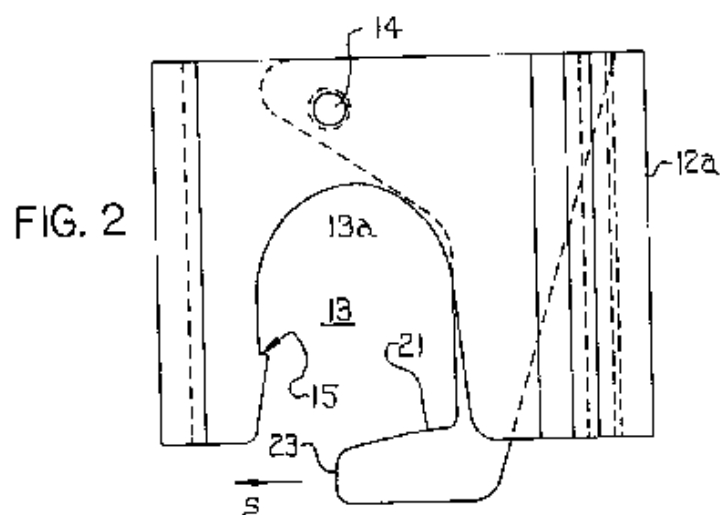
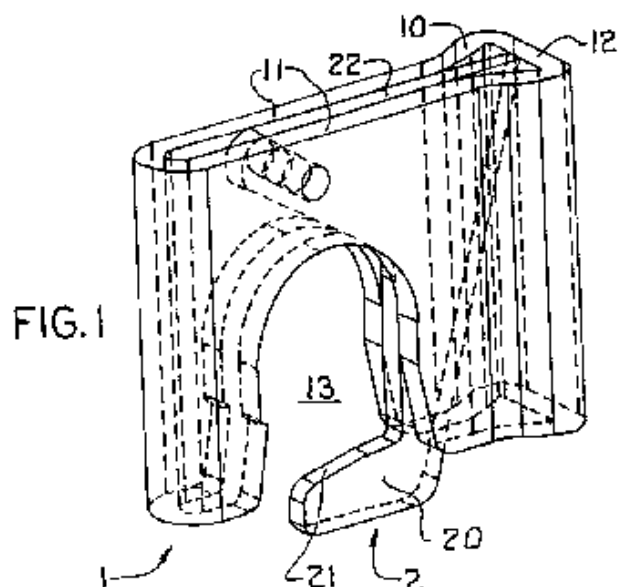
Modular building units, and methods of constructing and transporting same

Abstract

(EP2959067)

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.

Images



Publication numbers

RO118465

HU219115

CZ287003

PL177418

US5988318

RU2140507

ES2112064

DE59501132

AT161308
EP0769090
HUT76565
CN1151780
PL317857
EP0769090
CZ356396
HU9603576
CA2194233
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DE9410465

Publication kind codes

B1
B
B6
B1
A
C1
T3
D1
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B1
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A1
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A1
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Publication dates

2003-05-30
2001-02-28
2000-08-16
1999-11-30
1999-11-23
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1997-04-28
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1997-02-28
1996-01-18

1996-01-18

1995-01-12

Earliest priority date

1994-07-01

Title

(EP-769090)

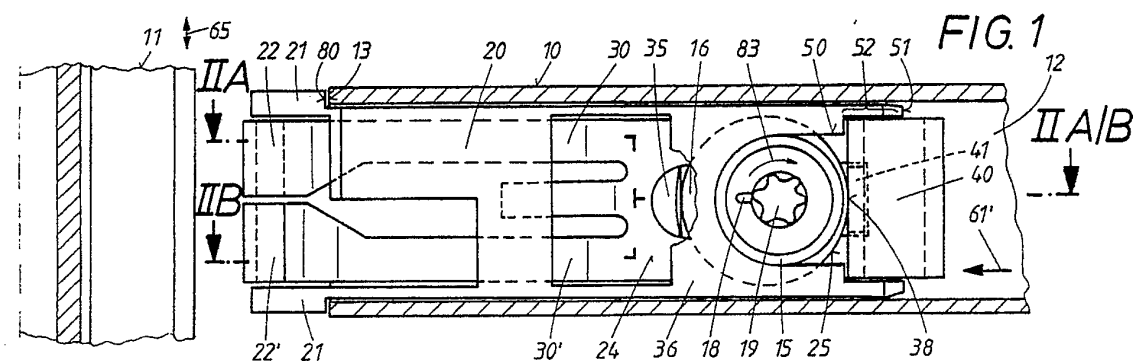
Connection hook

Abstract

(EP0769090)

Connection hooks for scaffolding must not only make it possible to **connect** two scaffolding elements to each other rapidly and securely but should also be durable and cheap to manufacture, as well as **connectable** to scaffolding elements of very different designs. To this end, the **connection** hook proposed is designed as an extruded part (1) which acts in conjunction with a component designed to fit very different scaffolding elements to retain the scaffolding element in the hook opening (13), the physically interlocked parts being secured in place by a releasable frictional interlock.

Images



Publication numbers

DE3927979
DE59001351
CA2022105
JP2691793
TR28501
YU47747
LV10805
KR950011944
HU210939
LV10805
IE64167
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NO175751
YU151690
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FI90901
ES2040006
AU639470
DE59001351
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EP0412338
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JP03084205
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EP0412338
CA2022105

NO903530

HU904968

DE3927979

NO903530

FI903946

Publication kind codes

C5

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2008-05-21

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1991-02-20

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1991-02-13

1991-02-12

1991-02-12

1991-01-28

1991-01-03

1990-08-10

1990-08-09

Earliest priority date

1989-08-11

Title

(EP-412338)

Frame consisting of detachable profiled rods interconnected by a **connector**

Abstract

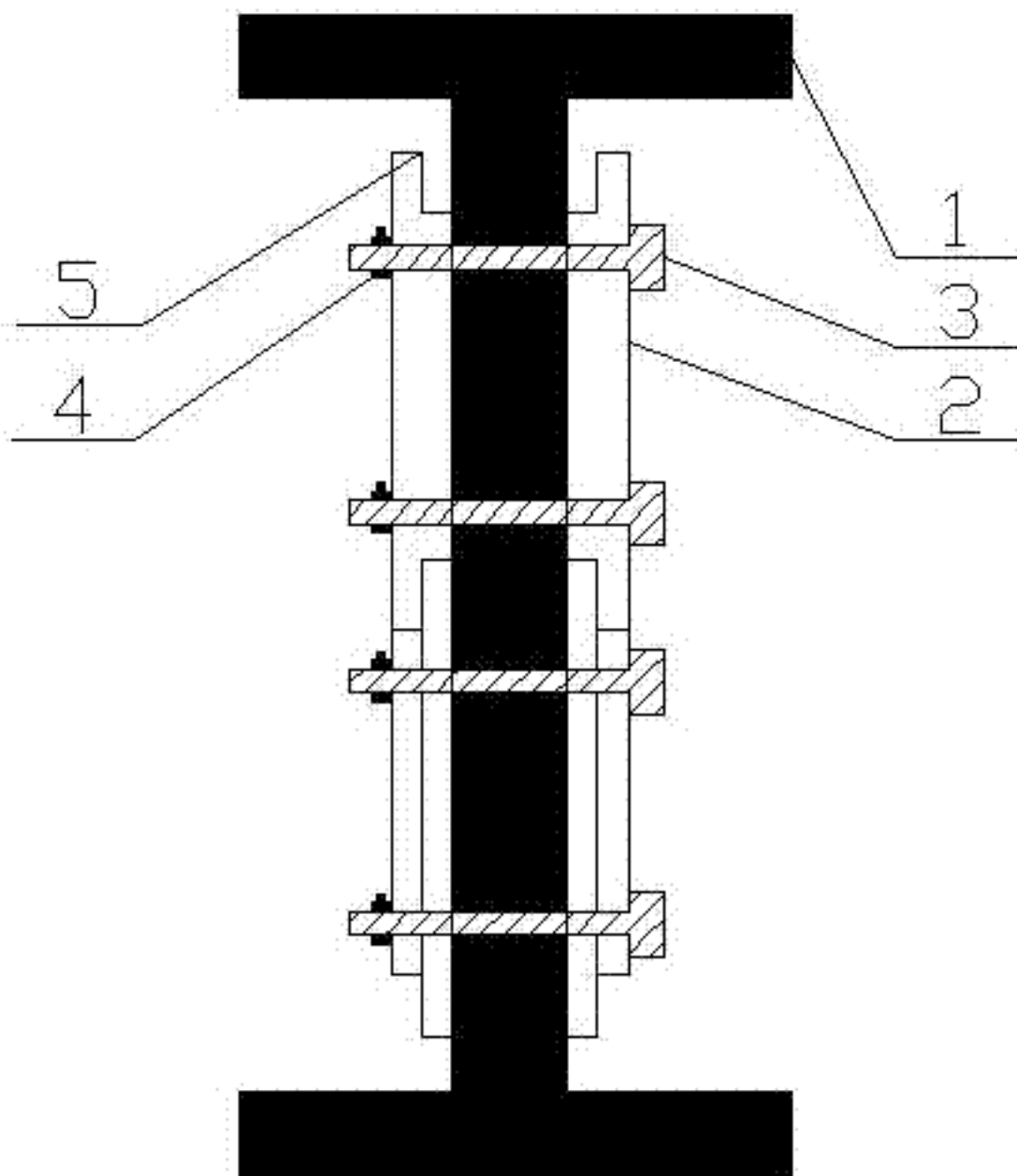
(EP0412338)

A **connector** which can couple a first profiled member having an internal compartment behind a slotted wall with a tubular second profiled member has an open-ended housing which is installed in the second profiled member and a one-piece

profiled plate-like coupling member in the housing. The coupling member has two integral prongs with mirror symmetrical claws at their free ends, and followers adjacent the claws. The housing has integral cams which can stagger the claws by way of the followers in response to longitudinal displacement of the coupling member in the housing as a result of rotation of an eccentric which normally extends into a window of but is depressible into the second profiled member to permit insertion or removal of the **connector**. The claws can be introduced through the slot in the wall of the first profiled member to be thereupon staggered by the followers in cooperation with the cams in response to rotation of the eccentric in a direction to move the claws toward the housing. The coupling member has an integral spring which biases the eccentric into the window of the second profiled member.

(From US5127761 A)

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Images**Publication numbers**

CN207989506

Publication kind codes

U

Publication dates

2018-10-19

Earliest priority date

2018-03-20

Title

(CN207989506U)

Nursing worker dress is protected to bolted connection friction surface of circulated use

Abstract

(CN207989506)

The utility model provides a nursing worker dress is protected to bolted connection friction surface of circulated use, including protector and fixing device two parts, protector adopts the silica-gel plate, and the pinhole has been seted up with the position department that the girder steel bolt hole corresponds to the silica-gel plate, fixing device comprises round pin

axle and lockpin, and fixing device is used for silica -gel plate and girder steel fixedly, the utility model discloses select flexible silica -gel plate as protector, the silica -gel plate can be followed folding grooves and is folded, is convenient for deposit, carry, and simultaneously, the cost of silica -gel plate is also far below protector such as galvanized sheets, the utility model discloses still select round pin axle and lockpin and can follow the fixed silica -gel plate of bolt hole of girder steel as fixing device, round pin axle, utilize lockpin fixed pin axle simultaneously, prevent that the silica -gel plate from removing, influences the girder steel application.



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2017-11-29

2016-09-28

2016-08-10

2016-05-27

2015-09-30

2015-06-30

2014-05-30

2014-01-15

Earliest priority date

2012-11-22

Title

(EP2924301)

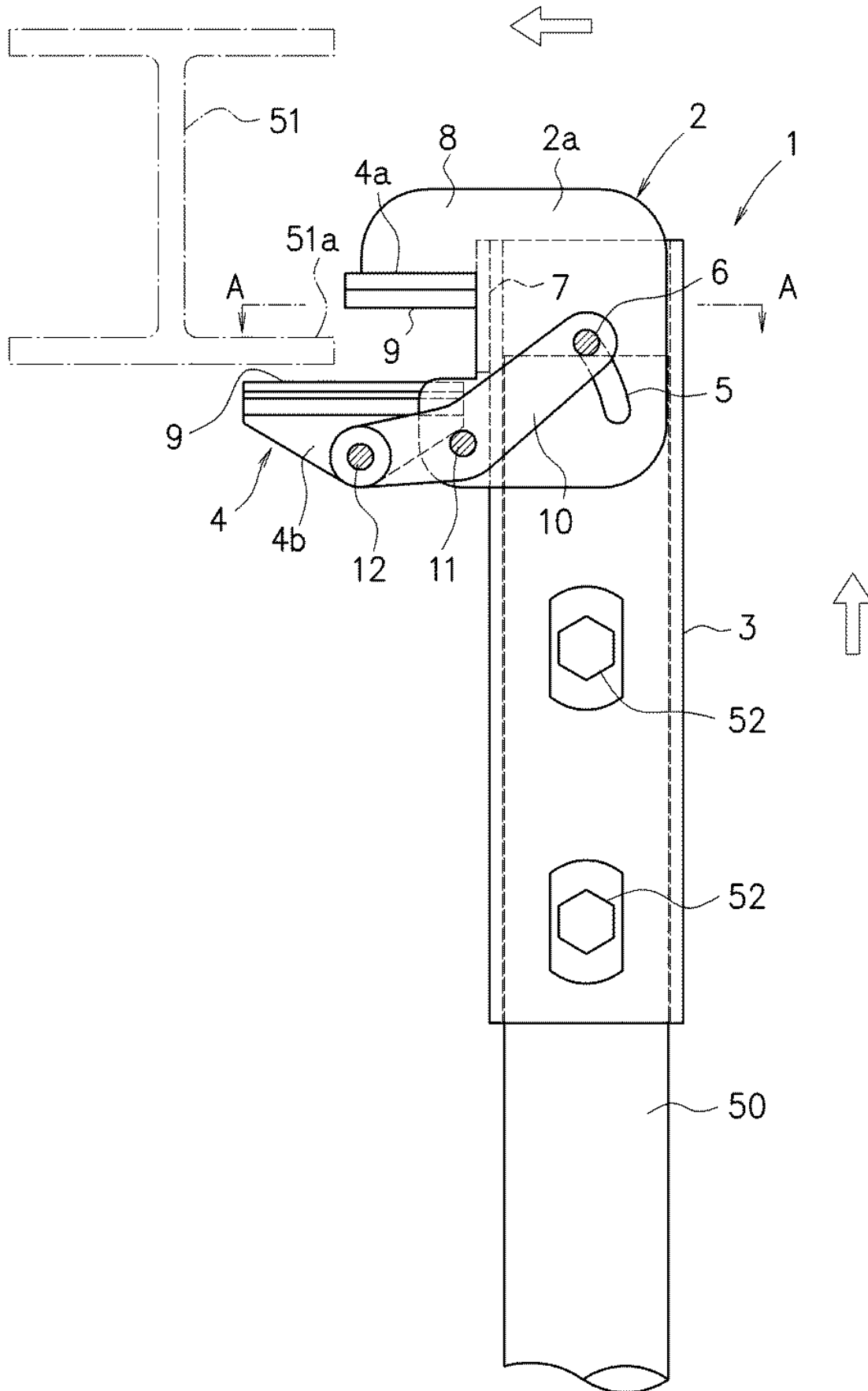
Fastener

Abstract

(EP2924301)

A fastener for clamping an object comprises a first clamp arm (1301) and a second clamp arm (1305), the first end (1303) of the first clamp arm (1301) is rotatably **connected** to the first end (1306) of the second clamp arm (1305), when clamping the object, a cavity for holding the object is defined between the first clamp arm and the second clamp arm, a first hasp (1310) is **connected** to the second end (1302) of the first clamp arm (1301), and the first hasp (1310) is used to **connect** with a locking device (1308), and the locking device (1308) is also used to **connect** with the second end (1307) of the second clamp arm (1305).

Images



Publication numbers

JP6403499

JP2016050422

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B2

A

Publication dates

2018-10-10

2016-04-11

Earliest priority date

2014-08-29

Title

(JP2016050422)

Fixture and erection device for support column

Abstract

(JP2016050422)

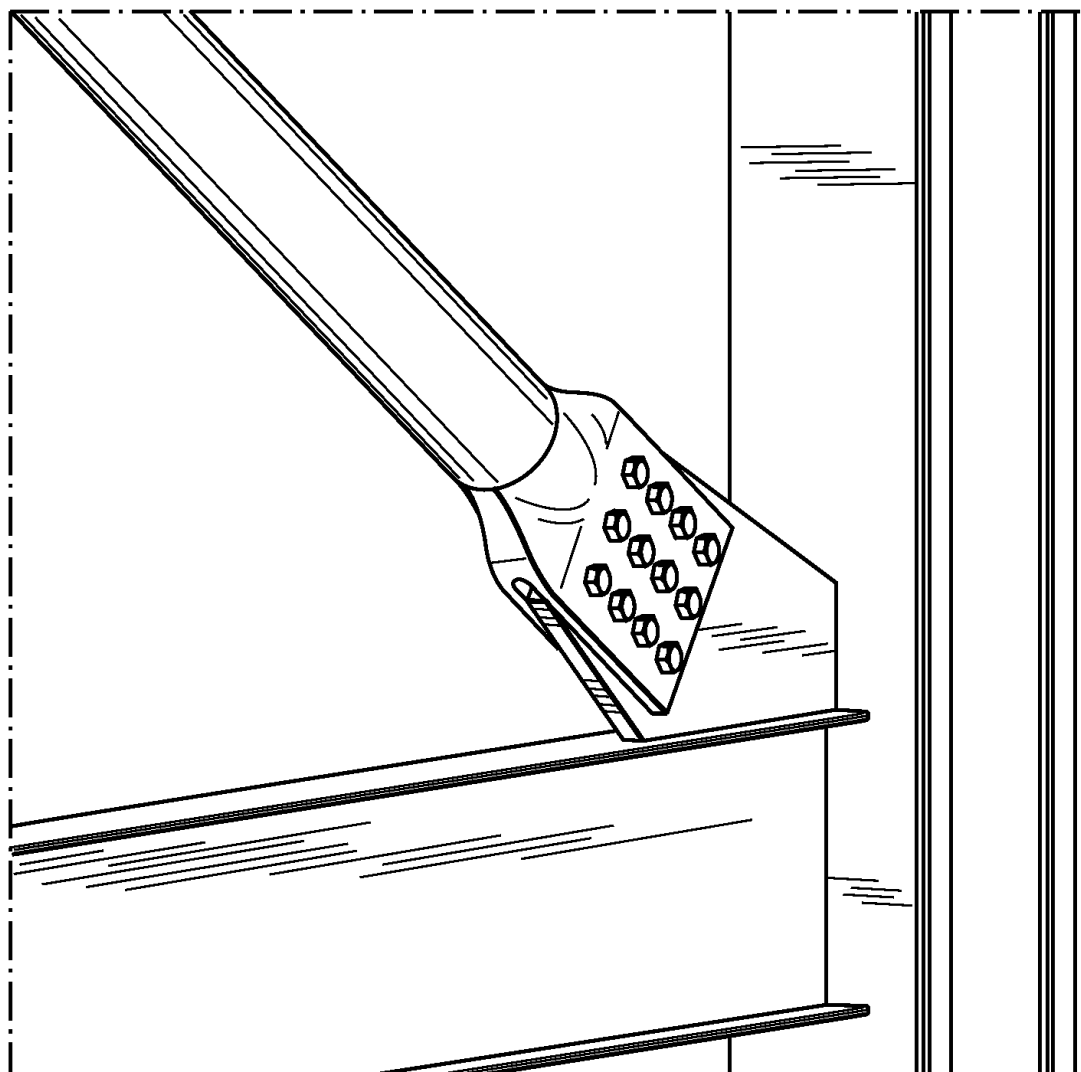
PROBLEM TO BE SOLVED: To provide a fixture that enables a support column to be easily and safely attached to/detached from a **beam** of a structure in a short period of time, without high place work.

SOLUTION: A fixture 1 for attaching a support column 50 to a **beam** 51 of a structure includes: a body 2; a **connection** pipe part 3, the upper end of which is attached in a vertically movable manner to the body 2 and to which an upper end of the support column 50 is fitted and fixed; a holding part 4 which is provided in the front part of the body 2 facing the **beam** 51 and which holds the **beam** 51; and means 5, 6, 10, 11 and 12 for making the holding part 4 hold the **beam** 51 when the **connection** pipe part 3 moves downward with respect to the body 2.

SELECTED DRAWING: Figure 1

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Images**Publication numbers**

CA2649585

HK1126834

CN104278746

EP2013425

KR101399055

US8701359

EP2013425

JP5071916

JP2009534565

CN101432490

KR20090045887

WO2007/124580

IN2225/MUMNP/2008

EP2013425

CA2649585

WO2007/124580

US20070253766

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A1
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B1
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Publication dates

2015-07-14
2015-03-06
2015-01-14
2014-06-04
2014-05-27
2014-04-22
2013-01-16
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2009-05-13
2009-05-08
2009-04-09
2009-02-27
2009-01-14
2007-11-08
2007-11-08
2007-11-01

Earliest priority date

2006-04-27

Title

(EP2013425)

Structural connectors

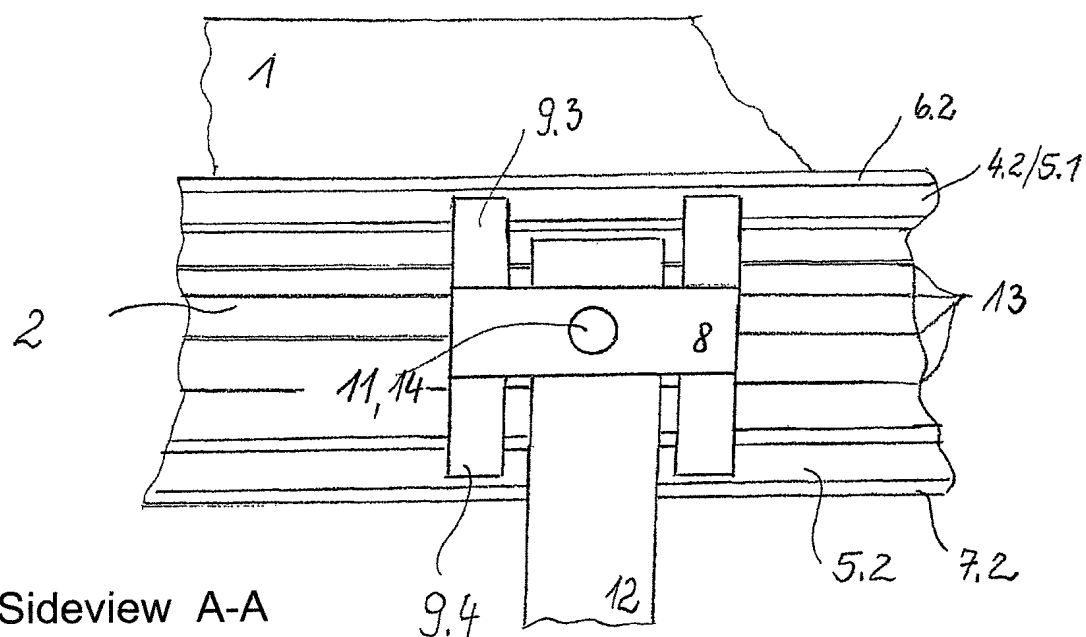
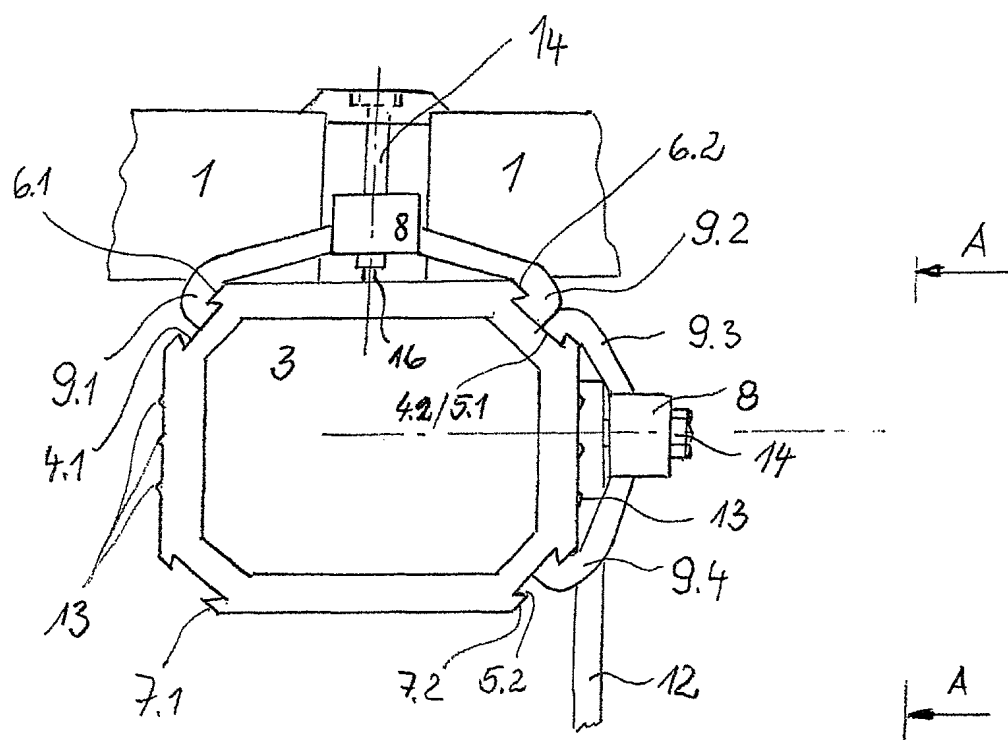
Abstract

(EP2013425)

A cast structural connector connects a structural member, such as a hollow structural section (HSS) or wide flange (W) section member, to a structural frame. The connector is particularly suited for lateral bracing and includes a first end configured to receive the structural member and be welded to the structural member, a second end for connecting to the structural frame, and an intermediate portion. The first end includes bevelling allowing compatibility with structural members of varying sizes and enabling complete joint penetration welding thereby developing the full axial strength of the structural member. The intermediate portion provides for transmission of forces as the frame deforms, for example, under severe seismic conditions, and can include a flexural plastic hinge portion. The connector can be welded to the structural frame or

connected by a standard fabricated end connection, such as a gusset plate. Casting manufacturing allows for mass production of the connector.

Images



Sideview A-A

Section

Publication numbers

EP2029946

CY1113017

US8936224

JP5485689

CA2655027

KR101238389

PL2029946

SI2029946

DK2029946

ES2386078

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EP2029946

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2017-09-20

2016-04-13

2015-01-20

2014-02-28

2013-04-23

2013-02-28

2012-10-31

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2012-08-13

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2007-12-21

Earliest priority date

2006-06-15

Title

(EP2029946)

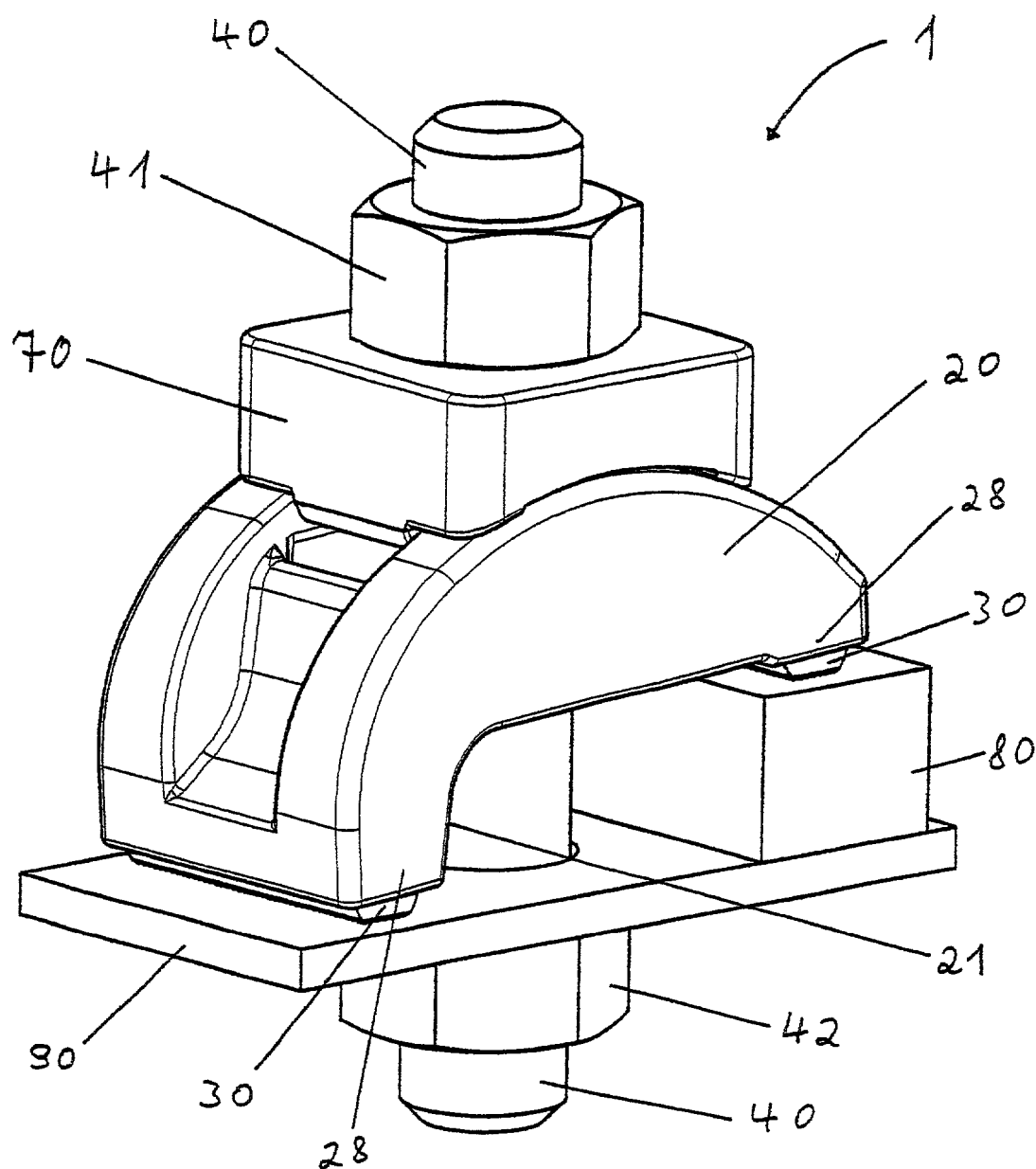
Mounting system, in particular for solar modules

Abstract

(EP2029946)

The invention relates to a mounting system, in particular for solar modules (1), consisting of brackets (2) with a closed hollow box bracket profile (3), with **connectors** (4) for solar module fastening means, and **connectors** (5) for cover fastening means. At least the **connectors** (4) for the solar module fastening means are formed from longitudinal **groove**- or longitudinal flange pairs in or on the hollow box bracket profile (3) that are arranged at a distance from each other. The fastening means for the solar module (1) or solar modules (1) in the area of the bracket consist of a tensioning piece with a molded component (8), with each molded component (8) having at least two flanges (9.1, 9.2), arranged opposite each other on the molded part (8) by means of the distant ends from the molded piece (8), of which at least one positive click **connection** with one of the **groove**- or flange pairs can be made, and the molded piece (8) has at least one bore hole (11) for the insertion of a fastening bolt (14). The fastening can be carried out as an in- and/or out-click system.

Images



Publication numbers

JP4242601

KR100772949

ES2280445

DE50209120

AT350589

EP1249621

US7021855

CN1223737

DE10139226

EP1249621

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KR20020080276

EP1249621

DE20116015

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Publication dates

2009-01-09

2007-11-02

2007-09-16

2007-02-15

2007-01-15

2007-01-03

2006-04-04

2005-10-19

2004-04-15

2003-05-28

2003-01-29

2002-12-05

2002-11-20

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2002-10-23

2002-10-16

2002-03-07

Earliest priority date

2001-04-12

Title

(EP1249621)

Device for clamping supports

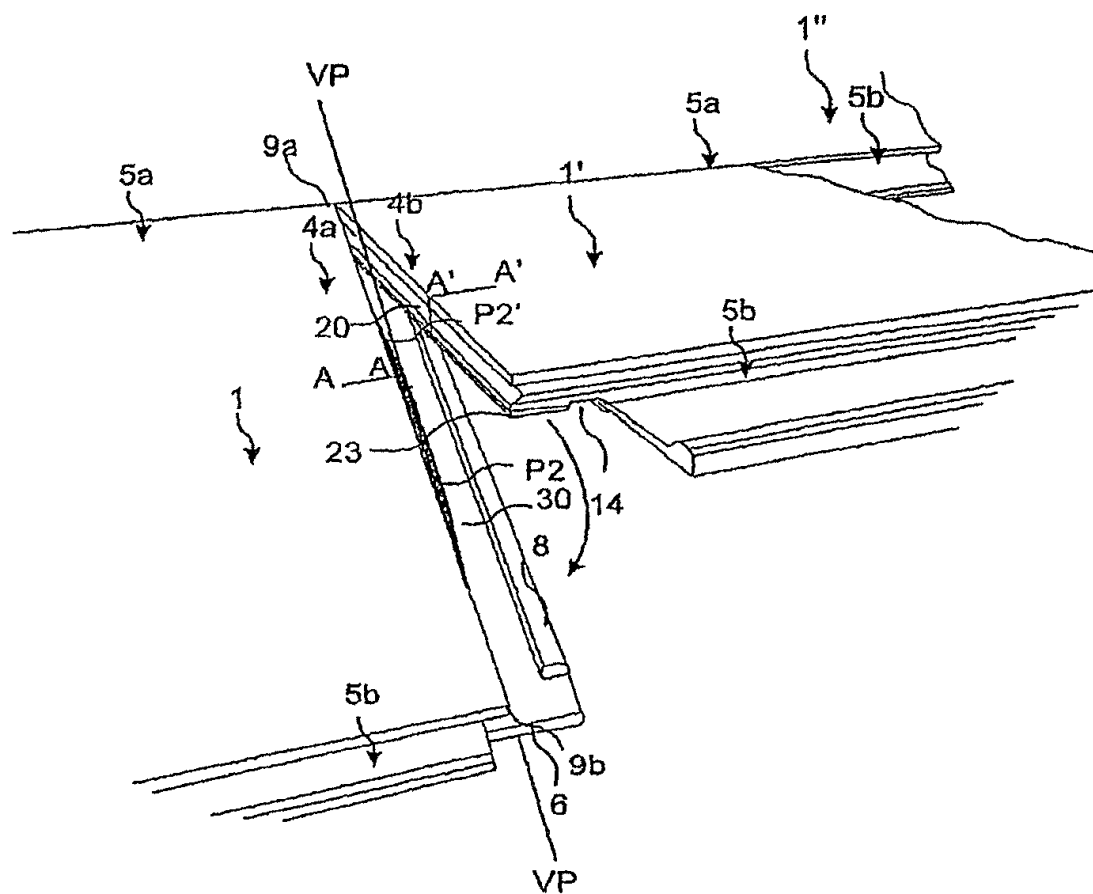
Abstract

(EP1249621)

The clamping device comprises a tensioning element (20) on which a force can be exerted. A contact element (30) co-acts

with the tensioning element. A contact surface (31) can be placed on the carrier (80) or a component (90). The device also consists of a mechanism for **connecting** the tensioning element with the contact element. Under the influence of a force through an independent rotation and/or tipping of the contact element relative to the tensioning element, the contact element can be installed with the contact surface parallel to the carrier or the component.

Images



Publication numbers

PL2388116
ES2751352
PL2281972
EP3608486
EP3608486
PL2388395
PL2388401
LT2388395
SI2388392
EP2281972
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EP1650375
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Publication kind codes

T3

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Publication dates

2020-04-30

2020-03-31

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2005-11-24

Earliest priority date

2004-10-22

Title

(EP2378027)

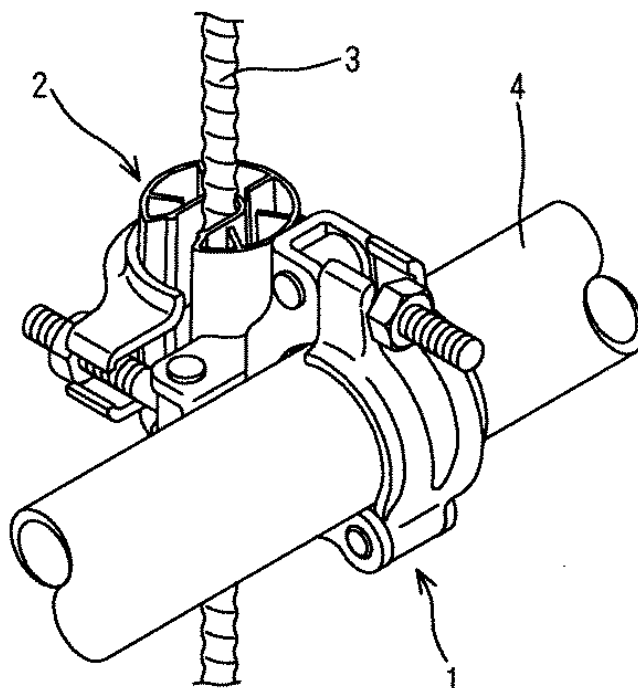
A set of mechanically joinable floor panels with a flexible tongue

Abstract

(EP2378027)

A set of two identical floor panels adapted to be joined by vertical folding, namely a fold panel (1') and a strip panel (1), each panel comprising **connectors** designed to **connect** the first panels horizontally and vertically, wherein one of the

connectors for making a vertical connection comprises a flexible tongue (30) in a displacement groove (40) in the strip panel (1), wherein the flexible tongue is an extruded V-or U-shaped section, wherein the flexible tongue is displaced twice in the displacement groove during the vertical folding, wherein a first displacement is effected by the vertical folding of the fold panel (1') whereby at least a part of the flexible tongue is bent in the horizontal direction, and wherein a second displacement of the flexible tongue towards its initial position is accomplished substantially by a spring effect caused by said sending of said flexible tongue (30).

Images**Publication numbers**

JP4387848

JP2005273672

Publication kind codes

B2

A

Publication dates

2009-10-09

2005-10-06

Earliest priority date

2004-03-22

Title

(JP2005273672)

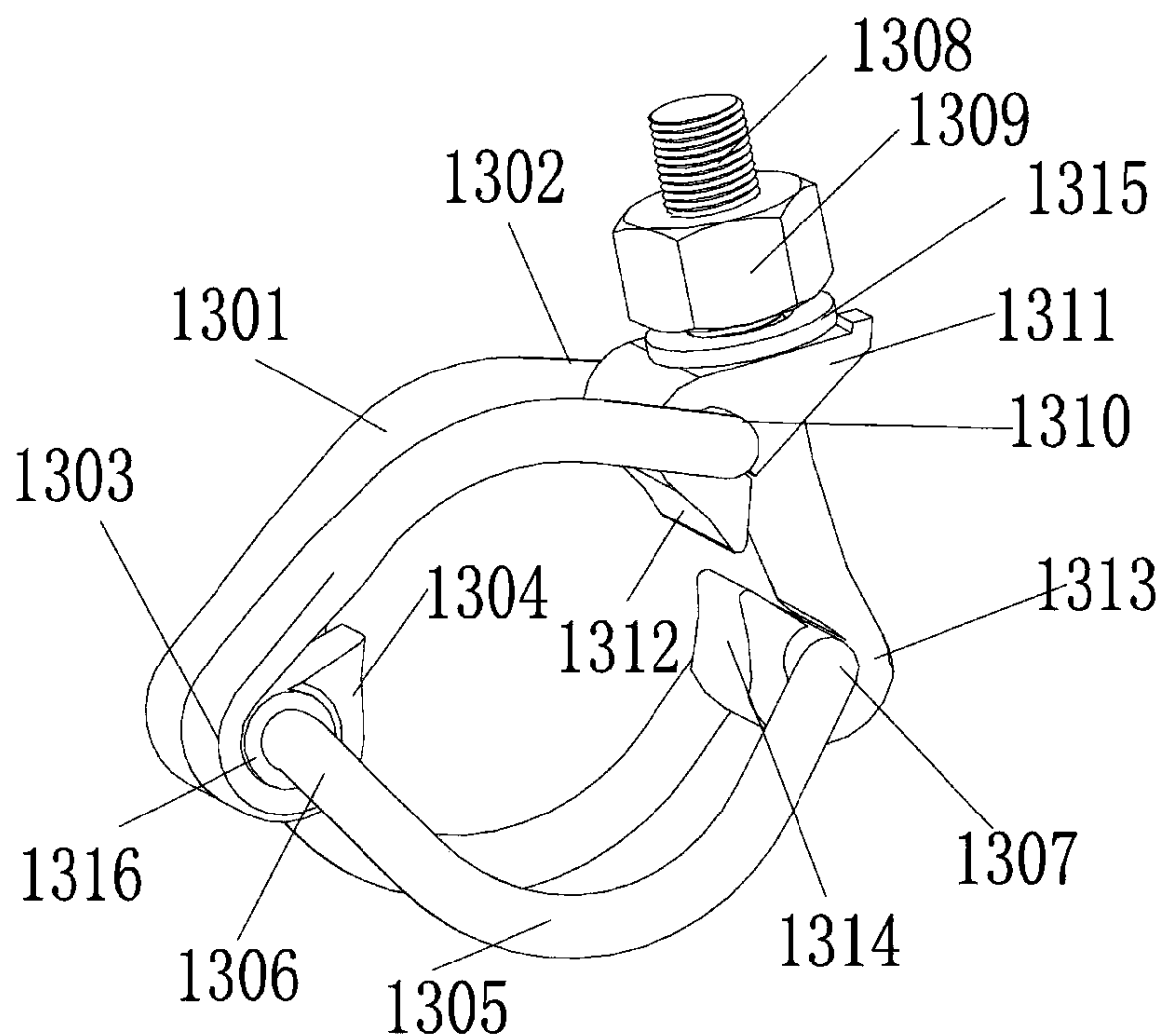
Spacer for **connector****Abstract**

(JP2005273672)

PROBLEM TO BE SOLVED: To provide a spacer for a **connector** enabling to use a **connector** for a long body of a predetermined size, generating even gripping force, light and low cost, and enabling to easily retain long bodies of different diameters.

SOLUTION: A spacer 2 for the **connector** used for different diameter handling of a pipe **connector** 1 for retaining pipes 4 of a predetermined diameter at a fixed crossing angle. A tube body formed as one piece and having a cavity inside by a C-shape section outer shell part and a recess shaped shell part is provided. When the spacer is fixed to the pipe **connector** 1 together with a reinforcing bar, diameter of the outer shell is reduced by fastening force of the pipe **connector** 1 and an opening part of the recess shaped shell part is narrowed to grip the reinforcing bar 3 inside.

Images



Publication numbers

CN103511410

CN103511410

CN203285043

Publication kind codes

B

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Publication dates

2015-12-30

2014-01-15

2013-11-13

Earliest priority date

2012-11-22

Title

(CN203285043U)

Fastener

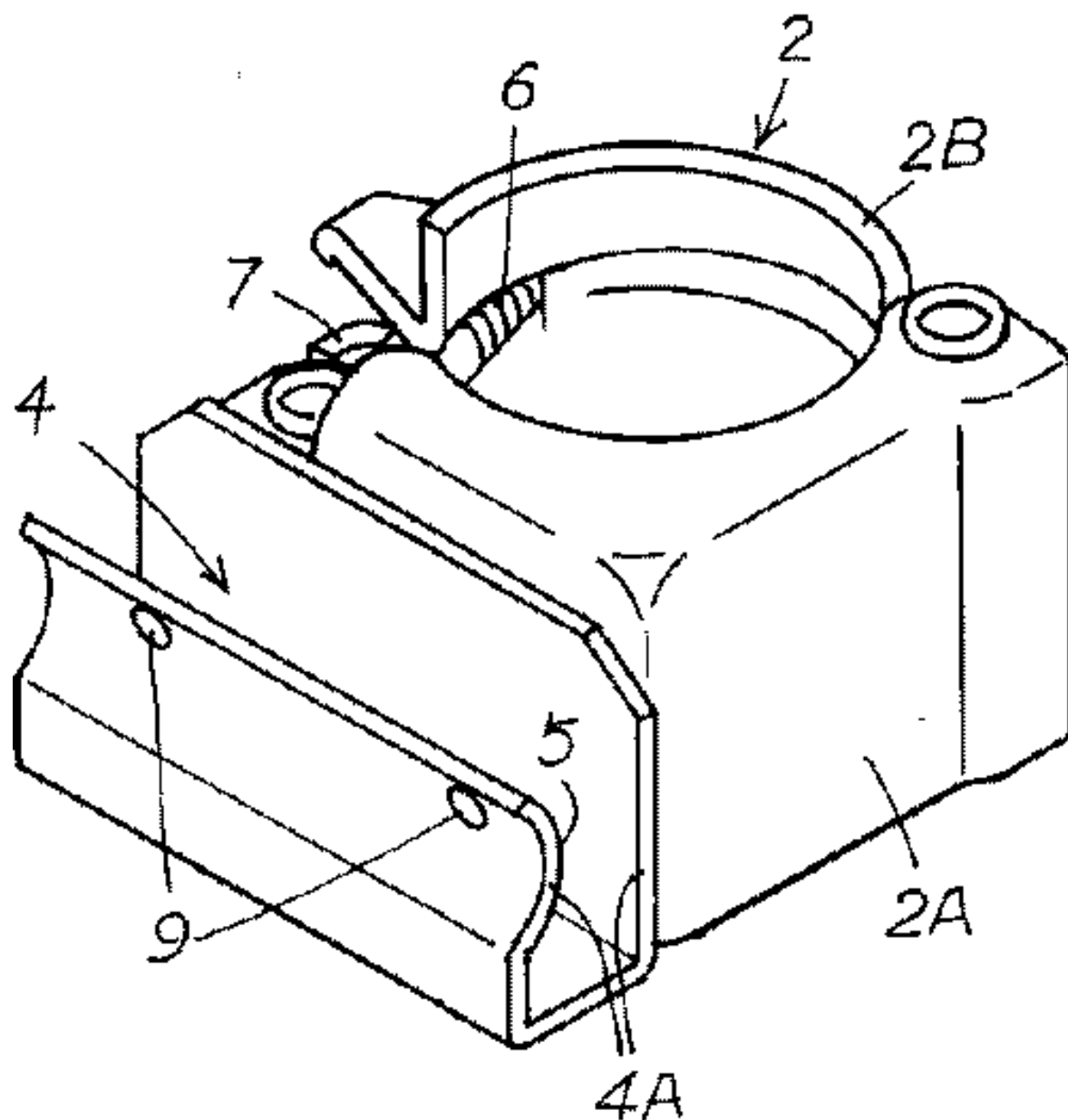
Abstract

(CN203285043)

The utility model discloses a fastener, and particularly relates to the fastener used for clamping objects. The fastener comprises a first clamping arm and a second clamping arm. The first end of the first clamping arm and the first end of the

second clamping arm are in mutually rotary **connection** through a rotary **connecting** mechanism, and a cavity used for containing an object when the object is clamped is formed between the first clamping arm and the second clamping arm. The rotary **connecting** mechanism comprises a hinge pin and a winding part which winds the hinge pin and can rotate around the hinge pin. The first end of the winding part is **connected** with one of the first clamping arm and the second clamping arm, or the winding part is used as a part of the first clamping arm and the second clamping arm. The hinge pin is **connected** with the other one of the first clamping arm and the second clamping arm, or the hinge pin is used as a part of the first clamping arm and the second clamping arm. The second end of the winding part is placed in the cavity and is in frictional contact with the object when the fastener clamps the object.

Family 14/61 - FAMPAT - ©Questel

Images**Publication numbers**

JP2003106314

Publication kind codes

A

Publication dates

2003-04-09

Earliest priority date

2001-09-28

Title

(JP2003106314)

Clamp for installing sheet material

Abstract

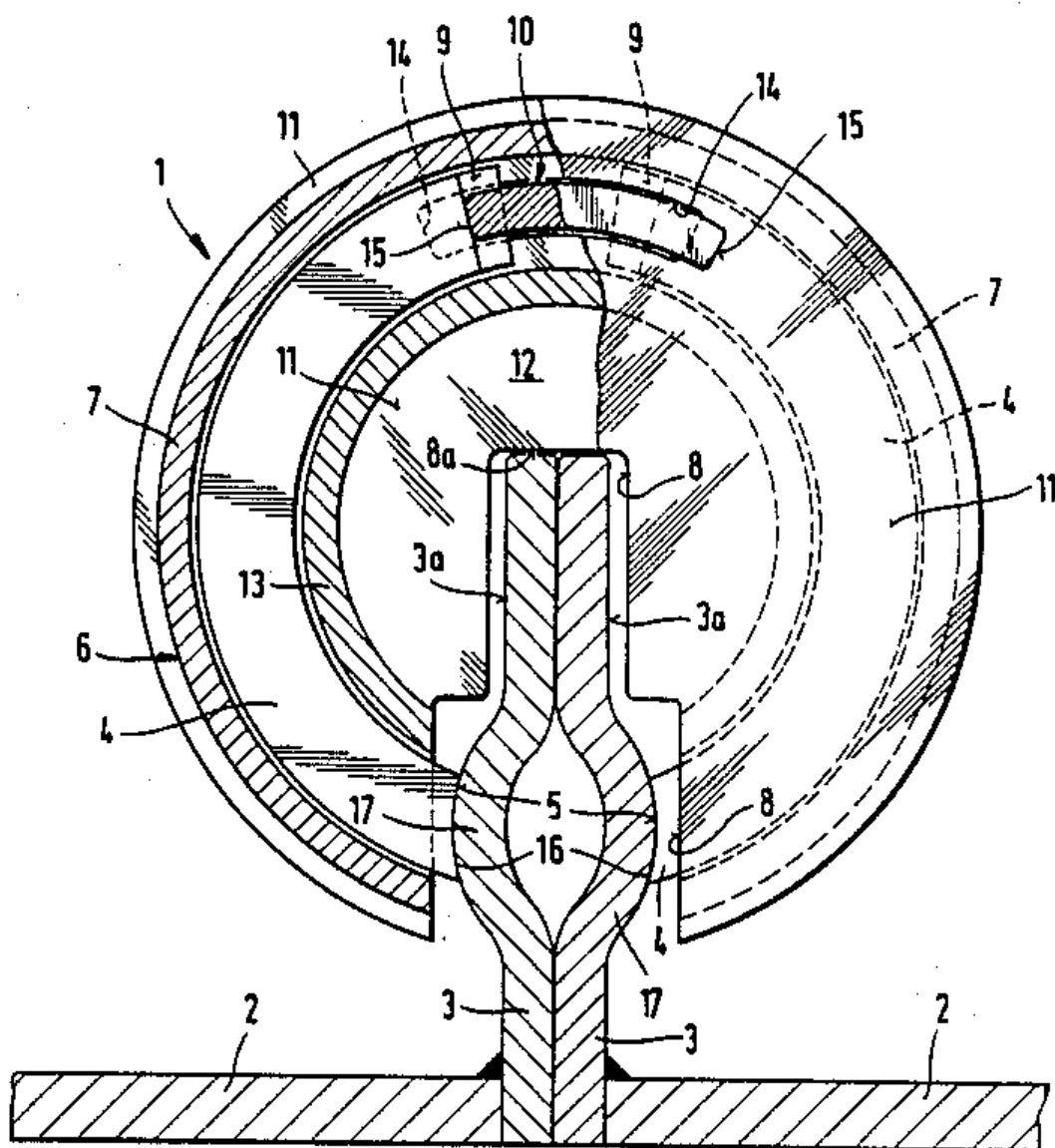
(JP2003106314)

PROBLEM TO BE SOLVED: To provide a clamp the installing a sheet material capable of simply and steadily fixing by press-fitting the sheet material to a sheet-material inserting portion.

SOLUTION: An approximately C-shaped sheet-material inserting portion 4 retaining the sheet material 3 in an inserted and grasped state is arranged at a side of a fastening clamp 2 for tightening and fixing which is **connected** with an installing **beam** portion 1 such as a temporary pipe or the like, a pressed contact portion 5 is kept in pressed contact with the sheet material 3 in the sheet-material inserting portion 4, and a sheet-material inserted width of the sheet-material inserting portion 4 is set slightly narrower than the width of the sheet material 3 by the pressed contact portion 5. Thus, the clamp installing the sheet material is constituted to press-fit and fix the sheet material 3 on the sheet-material inserting portion 4.

COPYRIGHT: (C)2003,JPO

Images



Publication numbers

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Publication dates

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1988-10-27
1988-07-27
1988-07-26

Earliest priority date

1987-07-28

Title

(EP-301340)

Fastening clamp to connect the flanges of form panels together

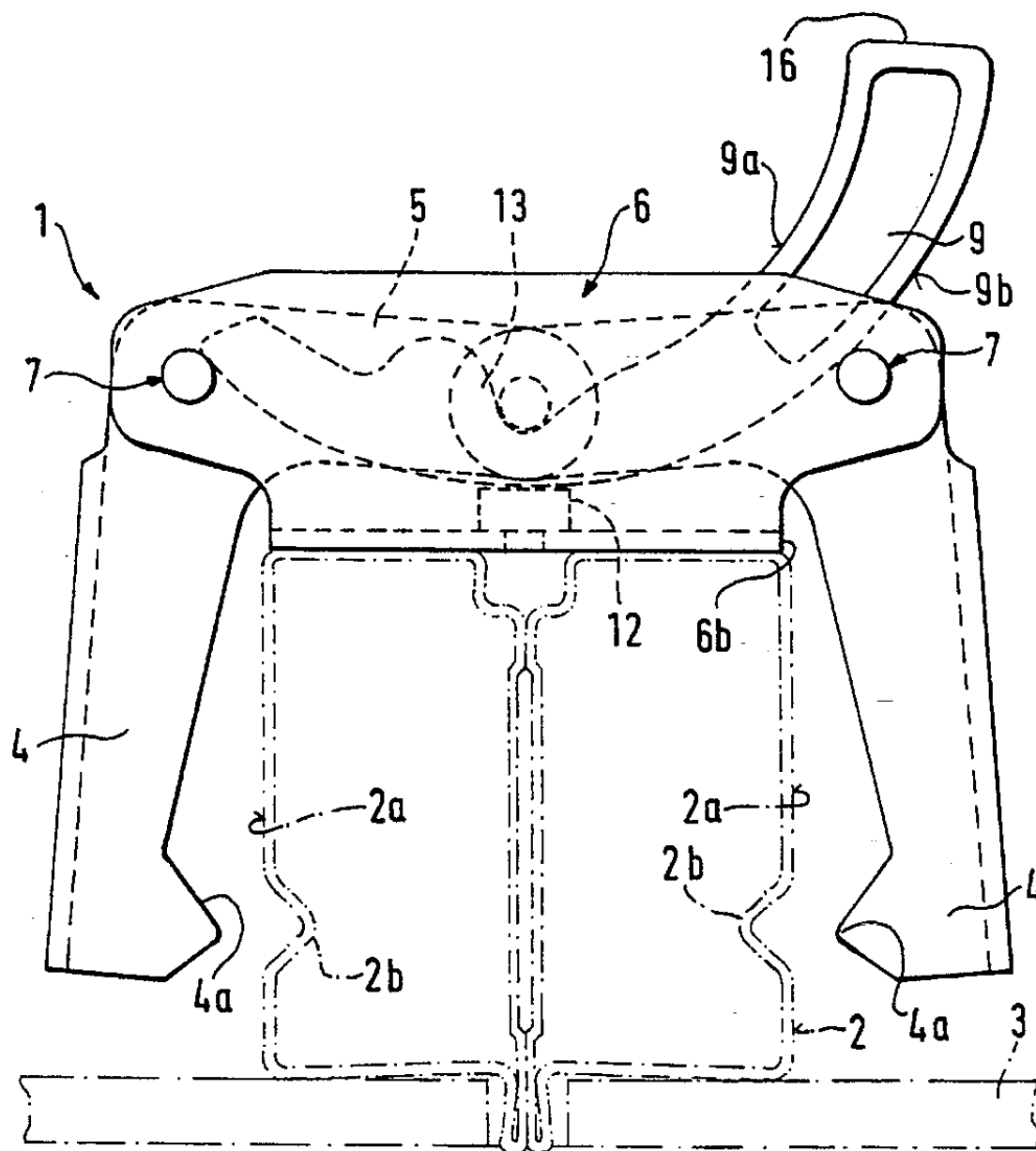
Abstract

(EP0301340)

A clip for abutting marginal flanges of forms for formworks which are used for the pouring of concrete has a cylindrical housing for two slidable arcuate clamping elements at opposite sides of a radially extending recess for the flanges. A wedge is movable between those end portions of the clamping elements which are remote from the recess to urge the elements against the exposed sides of the flanges. The wedge can be slidably coupled to the clamping elements so that it can urge the elements against or disengage the elements from the flanges in the recess.

(From US4821995 A)

Images



Publication numbers

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Publication kind codes

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Publication dates

2006-03-31
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1995-03-14

Earliest priority date

1994-01-22

Title

(EP-674068)

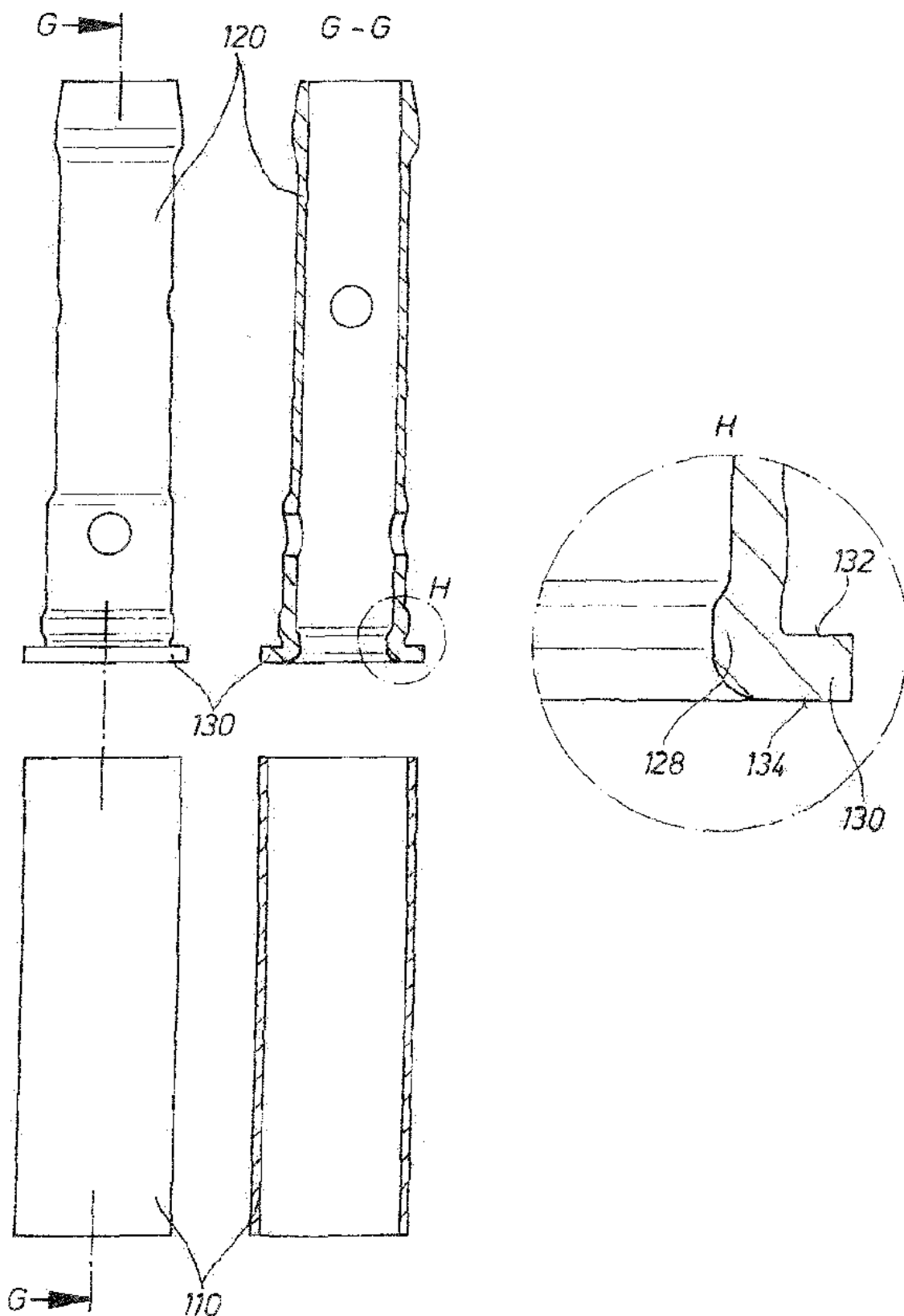
Clamps for **connecting** form elements clamping arms engaging the border sections

Abstract

(EP0674068)

A clamp (1) serves for **connecting** webs (2) at the edges of form panels disposed in coplanar, side-by-side relation and has for this purpose two clamping jaws (4) urging these edge webs (2) together, each clamping jaw (4) having an 10 adjusting arm (5) which is at an angle thereto and is located at the jaw-end remote from the clamping point (4a). The adjusting arms (5) in turn have points for applying an actuating or adjusting element in the form of a wedge (9), these points of application on the two adjusting arms (5) suitably being combined to form a single point for applying the wedge (9). The wedge (9) can slide along between this point of application and the edge webs (2), suitably on the abutment (12) belonging to the clamp (1), and thereby can move the point of application and accordingly the adjusting arms (5) away from the lining skin (3) and thereby close the clamping jaws (4). For reasons of space and for proper guidance a curved wedge may be provided which is movable in the plane in which the clamping jaws (4) close.

(From US5570500 A)

Fig. 1**Publication numbers**

DE102016201734

EP3202996

Publication kind codes

A1

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Publication dates

2017-08-10

2017-08-09

Earliest priority date

2016-02-04

Title

(EP3202996)

Scaffolding post for a building scaffold

Abstract

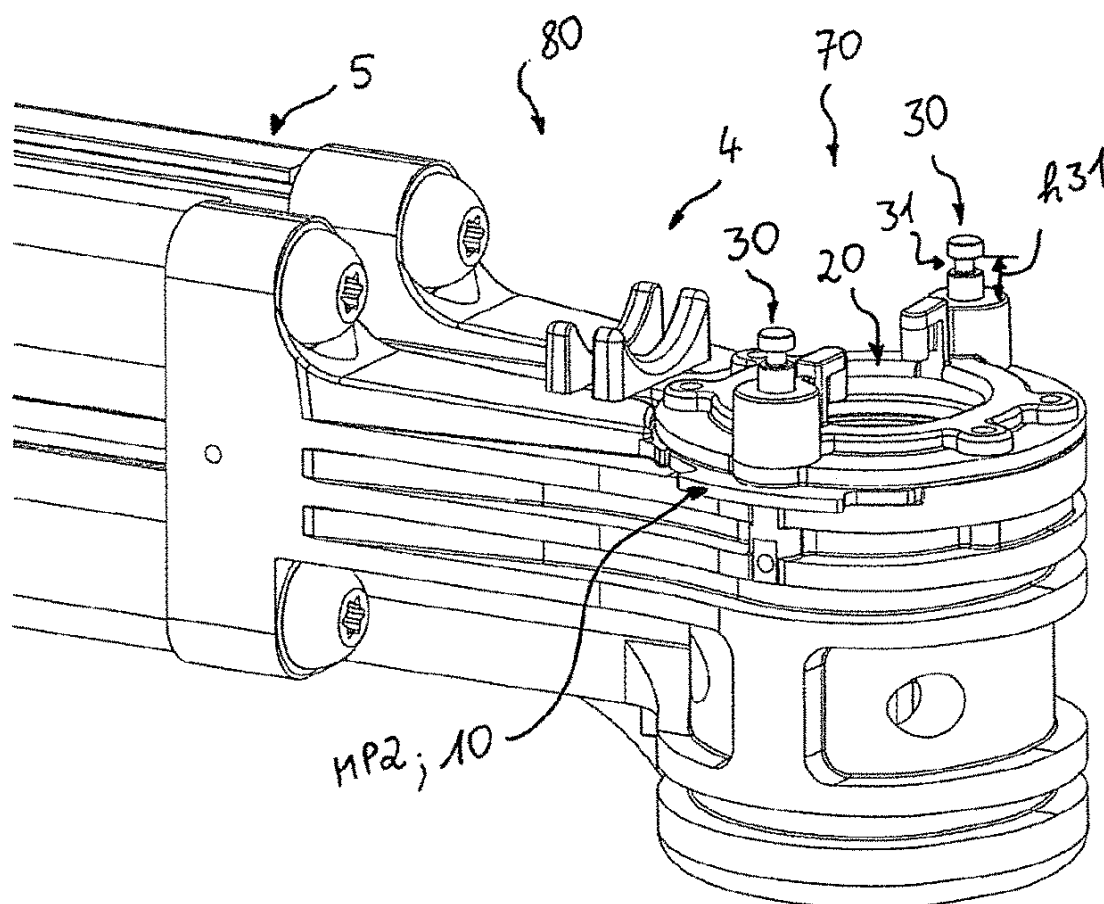
(EP3202996)

The invention relates to a scaffolding post for a scaffold

Scaffold poles for scaffolding are of sufficiently a generally known in the art to. They typically consist of a tube (110) and a tube welded pipe **connector** (120) for mounting another tube, the structure in the height be built.

The invention provides an alternative scaffolding post is provided, the scaffolding post is characterized in that, as the contact (132) surface is shaped; outer diameter of the flange (130) larger than the outer diameter of the (110) tube; the pipe **connector** (120) in the form of a sleeve construction; and the pipe (110) and the pipe **connector** (120) are made of different materials.

Family 18/61 - FAMPAT - ©Questel

Images**Publication numbers**

CN106999333

EP3009728

US10080696

US20170290725

EP3207300

CN106999333

WO2016/058705

WO2016/058705

EP3009728

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Publication dates

2020-01-03

2019-04-24

2018-09-25

2017-10-12

2017-08-23

2017-08-01

2016-06-09

2016-04-21

2016-04-20

Earliest priority date

2014-10-17

Title

(EP3207300)

Securing element for a stand device and components designed in correspondence therewith

Abstract

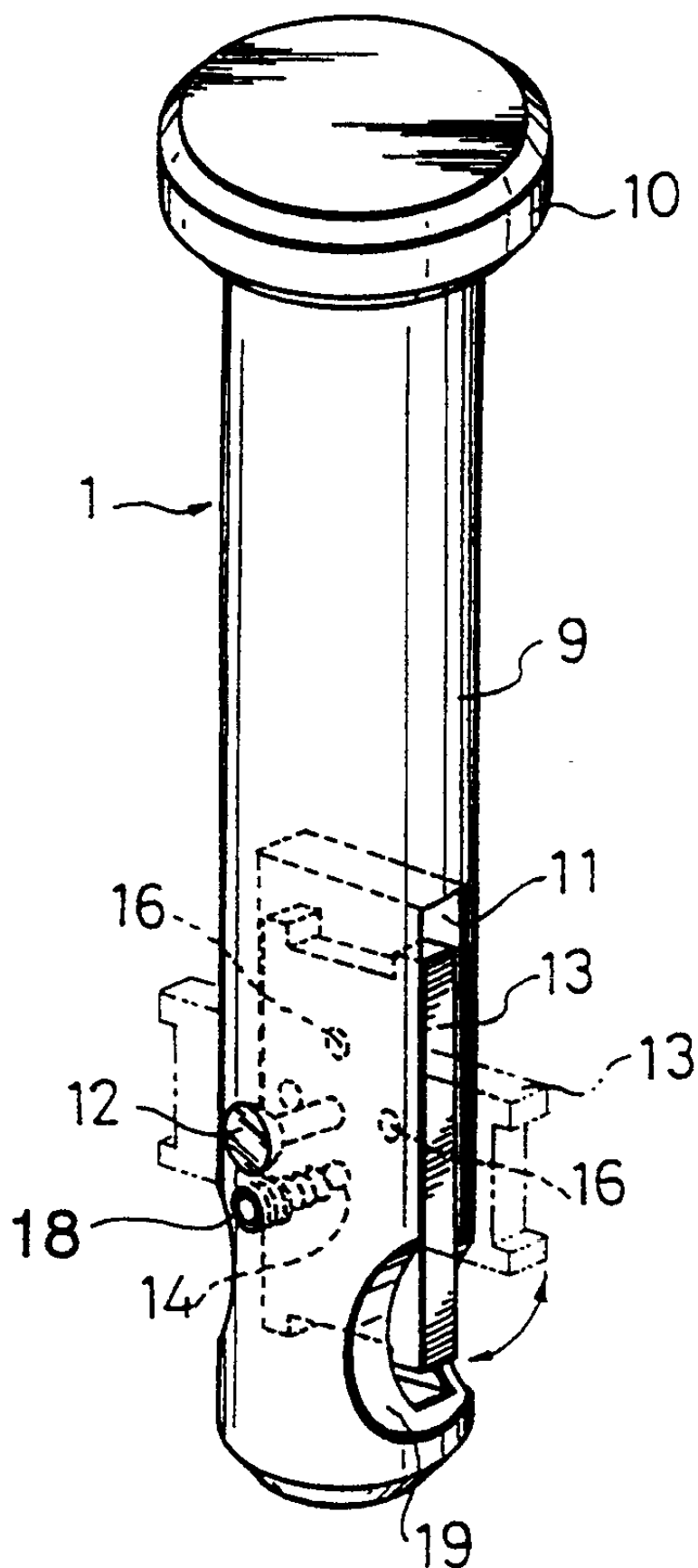
(EP3207300)

The invention relates to a securing element for securing a spindle to a bushing, in particular for a medical stand device (1), comprising a support segment (17; 117; 217) designed for arranging the securing element in a predefined axial position on a supporting apparatus (4) of the stand device; an engagement segment (15; 115; 215) designed for interacting with a spindle that can be rotationally supported about an axis of rotation (D) in the supporting apparatus or with a pin (3) of the stand device in order to secure the spindle or the pin in the predefined axial position in relation to the supporting apparatus rotatably within the supporting apparatus; wherein the securing element (10; 110; 210) is designed to be supported on the supporting apparatus in at least one radial position predefined by the securing element, in particular in a mounting preparation position (MP1) and/or in a securing position (MP2), wherein the engagement segment (15; 115; 215) is designed to interact with the spindle or the pin by engagement in the radial direction, in particular in the securing position. The securing element can also be secured in a plurality of radial positions and has accordingly designed coupling regions. The invention further relates to components designed to correspond to the securing element, in particular a supporting apparatus, a cover for the supporting apparatus, and a coupling element. The invention further relates not least to a securing system (70) or a securing mechanism or a mounting set (80), each comprising at least one securing element according to the invention.

Family 19/61 - FAMPAT - ©Questel

Images

Fig. 1



Publication numbers

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Publication kind codes

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1993-10-26
1993-10-25

Earliest priority date

1992-10-28

Title

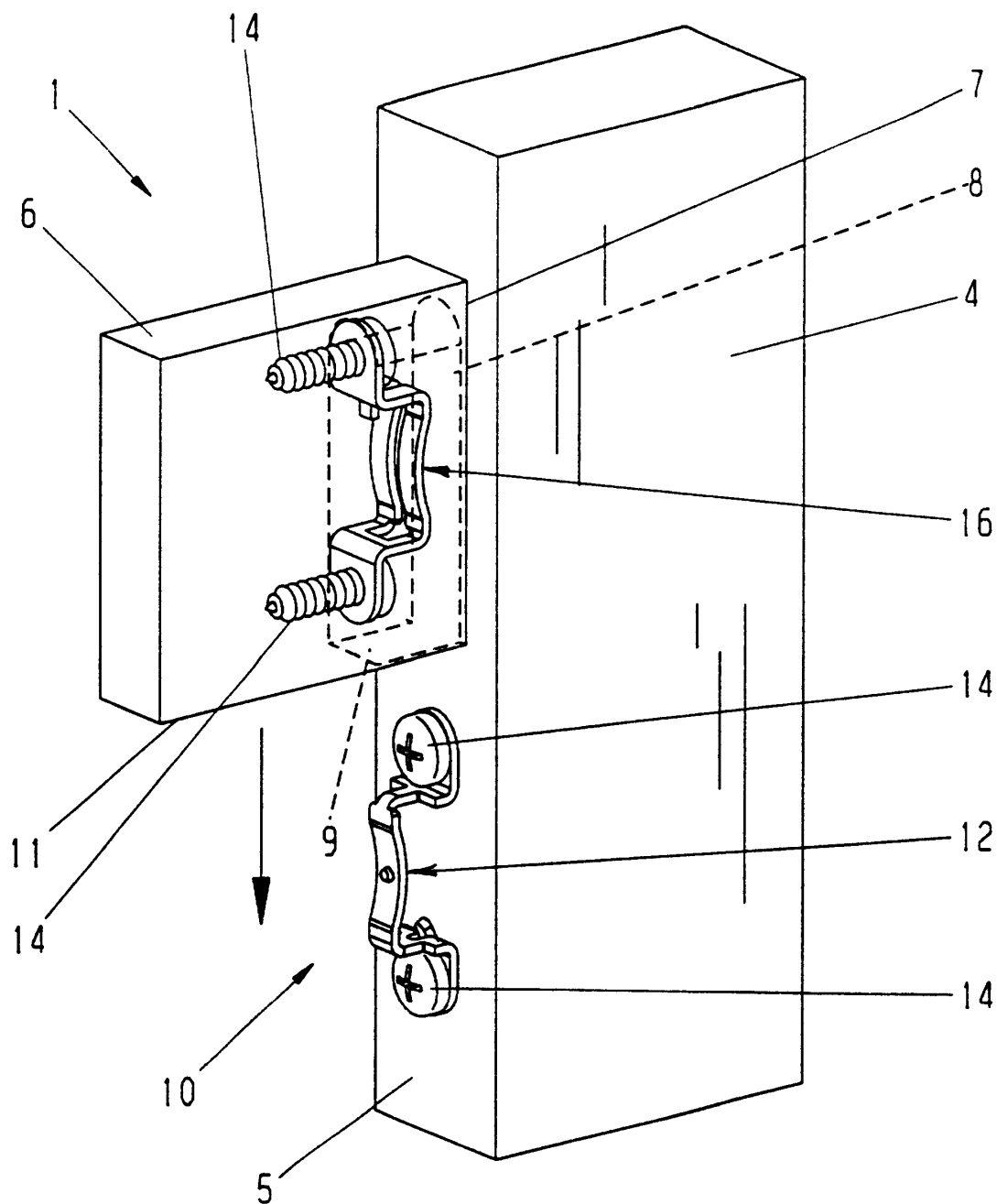
(EP-595490)

Connecting pin

Abstract

(EP0595490)

There is disclosed a connecting pin (1) having a body (9) of great strength which will not come out of position when locked and will not foul during insertion and removal. In the connecting pin, a flange (10) for locking is provided on the rear end of a column-like body (9); an elongate hole (11) is formed through the shank part on the forward end side of the body (9); a shaft (12) is inserted in the shank part on the forward end side of the body in a direction intersecting the elongate hole (11); two opposed holes (17) are formed parallel to this shaft; a lock piece (13) is rotatably supported on the aforesaid shaft at a midway point and having a plurality of recesses (16); and in the hole is inserted a positioning member which selectively engages in one of the recesses. <IMAGE>

Images**Publication numbers**

CA2384061

DE60217948

DE60217948

AT353120

CN1297755

EP1291533

EP1291533

US6588971

CN1407249

EP1291533

US20030044232

CA2384061

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Publication dates

2009-11-24
2007-11-08
2007-03-22
2007-02-15
2007-01-31
2007-01-31
2004-01-21
2003-07-08
2003-04-02
2003-03-12
2003-03-06
2003-03-04

Earliest priority date

2001-09-04

Title

(EP1291533)

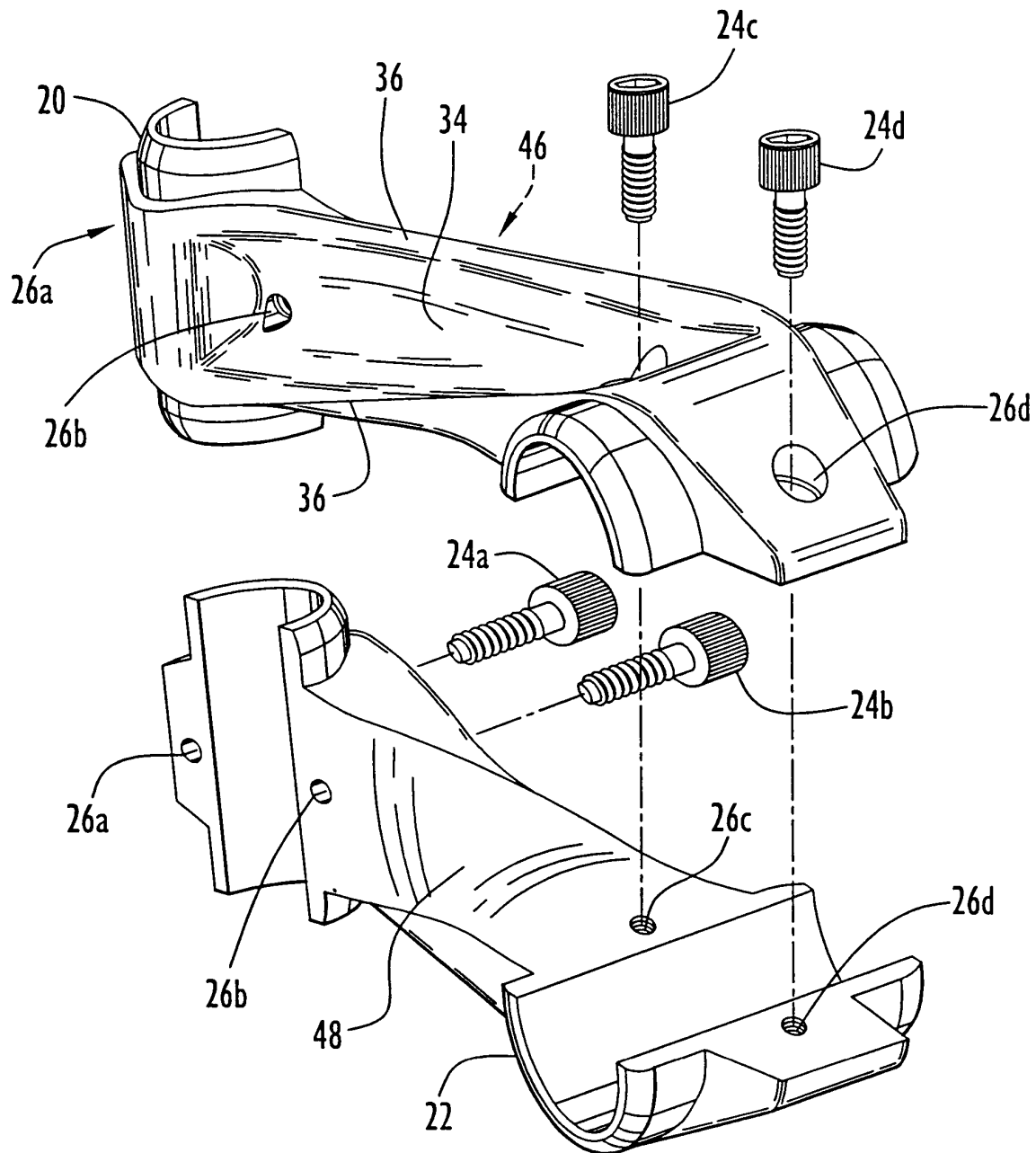
Fastener clip assembly and joint structure using same

Abstract

(EP1291533)

A fastener clip assembly for forming a substantially concealed joint (1) between panels of furniture, a shelf assembly or the like (6,4) includes a pair of clips (10) telescopically assembled with one another to form a joint which prevents rotation between the clips and joint members. The clips are secured to respective joint members and assembled with a portion of the second clip (16) received through the slot of the first clip (12) such that offset engagement sections overlap one another while a resilient, flexible inclined section on at least one, but preferably both, of the engagement sections draws the clips and joint members together. An engaging member which resists disassembly of the clips may be included. <IMAGE>

Family 21/61 - FAMPAT - ©Questel

Images**Publication numbers**

US6343891

Publication kind codes

B1

Publication dates

2002-02-05

Earliest priority date

1997-10-24

Title

(US6343891)

Cantilevered helically twisted bicycle stem clamp

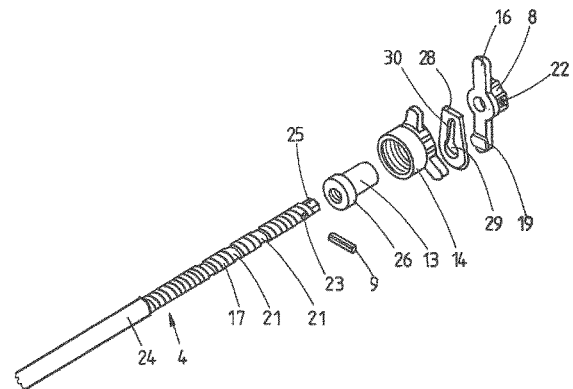
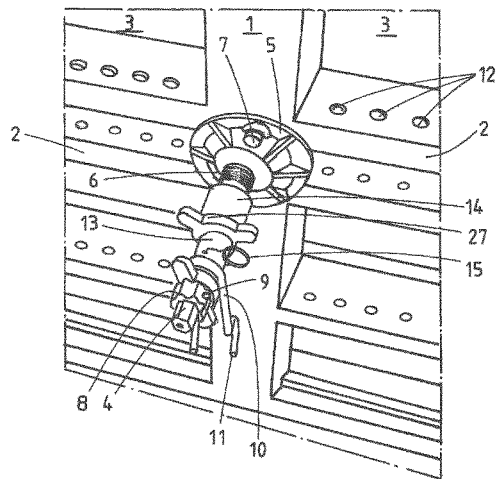
Abstract

(US6343891)

A twisted bicycle stem includes first and second substantially identical helically twisted clamping members fastened

together using four threaded fasteners received in four corresponding threaded apertures. The assembled twisted stem defines a vertical cylindrical receiving aperture and an opposing substantially horizontal cylindrical receiving aperture having a central axis offset by 90° with respect to the central axis of vertical receiving aperture. The two helically twisted clamping members each comprise one-half of the finished stem structure for receiving the substantially horizontal handlebar and the substantially vertical steerer tube. First and second helically twisted clamping members are preferably manufactured of an engineering plastic, preferably reinforced with a 50% glass fiber fill or carbon fiber fill using high tensile strength filaments. Each of the helically twisted clamping members preferably includes a twisted longitudinal external scoop or groove and functions as a twisted I-beam, thereby saving material and weight and providing a shape which permits the helically twisted clamping members to be molded in plastic and removed from the mold. A plurality of identical helically twisted clamping members are preferably fabricated in a single mold and two members are used to fabricate a twisted bicycle stem. The transverse extent of the scoop is bounded by first and second opposing ribs, also helically twisted in a 90° turn or quarter twist. In an alternative embodiment, the helically twisted clamping members are machined from titanium, aluminum, steel or the like.

Family 22/61 - FAMPAT - ©Questel

Images**Publication numbers**

PL3150779

EP3150779

PL2875192

ES2624437

US9677290

US9637938

EP3150779

EP2875192

EP2875193

US20150176634

US20150167330

EP2875192

EP2875193

DE102012212607

WO2014/012681

WO2014/012685

Publication kind codes

T3

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T3

B2

B2

A1

B1

B1

A1

A1

A1

A1

A1

A1

A1

Publication dates

2019-11-29
2019-07-03
2017-07-31
2017-07-14
2017-06-13
2017-05-02
2017-04-05
2017-03-29
2017-01-18
2015-06-25
2015-06-18
2015-05-27
2015-05-27
2014-02-06
2014-01-23
2014-01-23

Earliest priority date

2012-07-18

Title

(EP2875193)

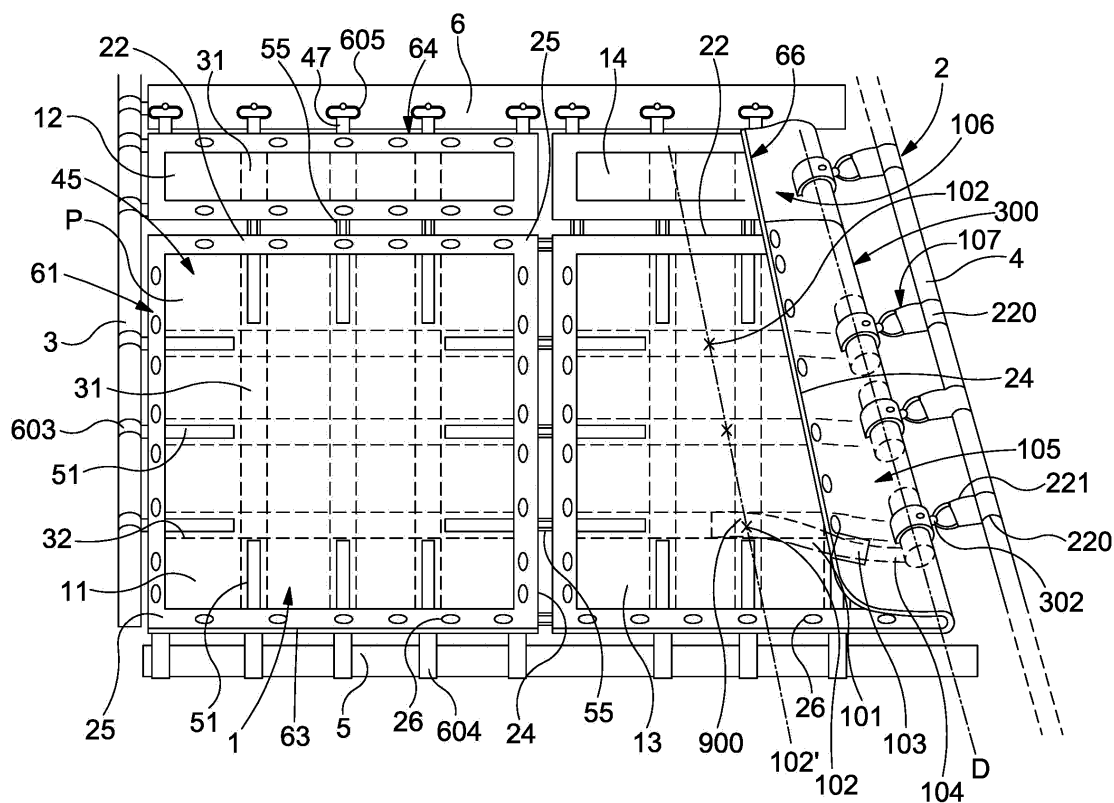
Assembly of formwork, and graduated anchoring system

Abstract

(EP2875193)

The invention relates to an anchoring system for wall formwork as well as to a method for assembling the anchoring system in which: - the two wall formwork parts (1, 2, 3, 40) are erected opposite each other; - an anchoring rod (4) having graduation marks (21) is inserted through anchoring rod bores in the two formwork parts (1, 2, 3, 40) in such a way that the non-inserted end of the anchoring rod (4) is provided with the graduation marks (21); - the inserted end of the anchoring rod (4) is **connected** to a locking device (41) on the rear side of one of the formwork parts (40); - the non-inserted end of the anchoring rod (4) is **connected** to the locking device (5, 6, 7, 8, 13, 14, 15) at said end in such a way that the **connection** is aligned with the selected graduation mark; - the locking device aligned with the graduation mark is **connected** to the adjacent wall formwork part (1, 2, 3).

Family 23/61 - FAMPAT - ©Questel

Images**Publication numbers**

US10465402

US20180044932

EP3262250

WO2016/135149

GB2535705

GB201503002

Publication kind codes

B2

A1

A1

A1

A

D0

Publication dates

2019-11-05

2018-02-15

2018-01-03

2016-09-01

2016-08-31

2015-04-08

Earliest priority date

2015-02-23

Title

(EP3262250)

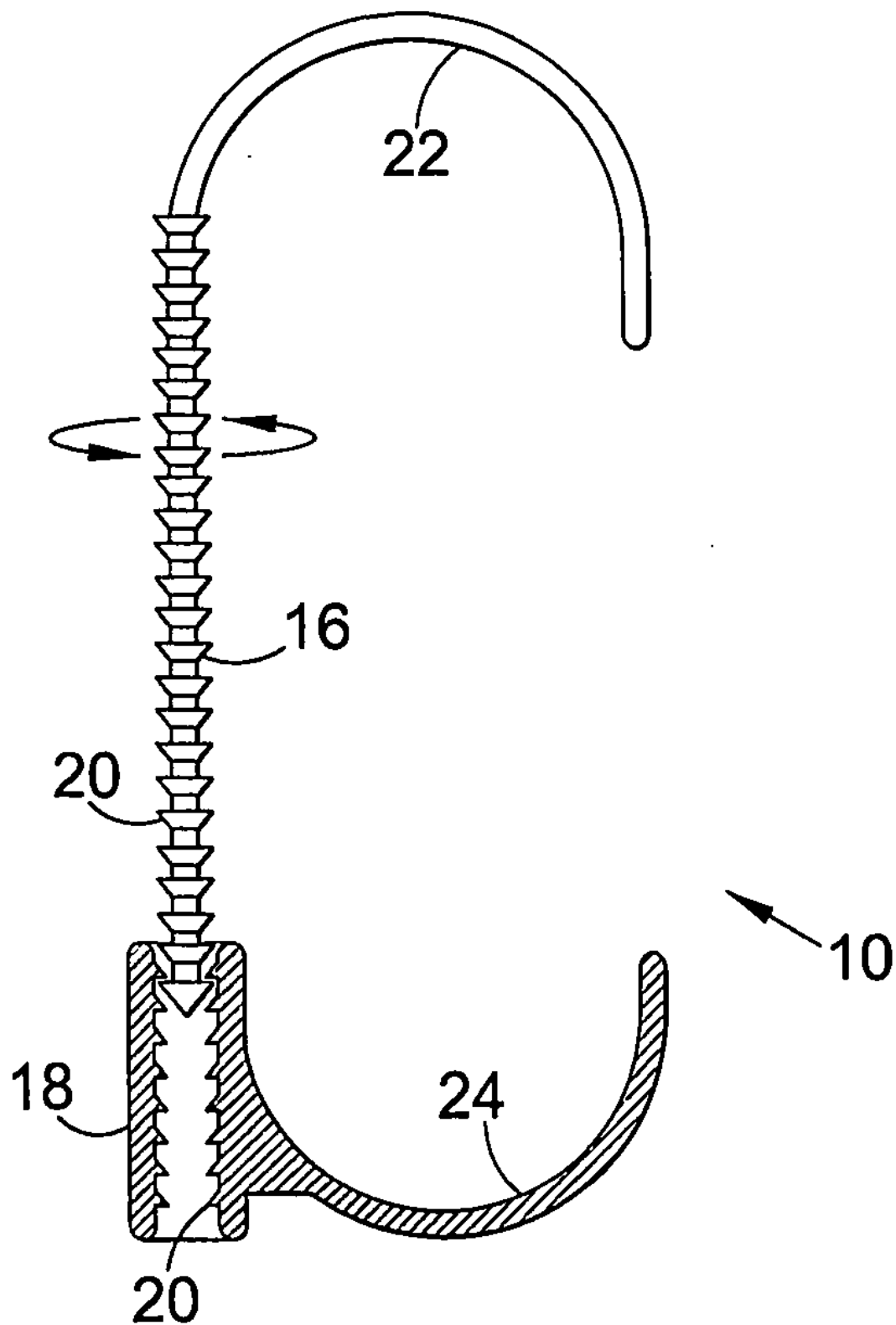
Assembly of a platform assembly and support structure and method of assembly

Abstract

(EP3262250)

An assembly of a platform assembly and a support structure, the platform assembly comprising a flexible platform, a plurality of support straps arranged to support the platform, a plurality of clamps supported by the support structure, the plurality of clamps provided along a side of the platform and clamping a side section of the platform, and a plurality of tensioning devices attached to the support straps at attachment locations and arranged to tension the support straps, wherein the attachment locations of the tensioning devices are positionable independently of the position of the clamps, and a method of assembly. A clamp having first and second clamping members having clamping surfaces, an actuation assembly comprising an actuation member coupled to at least one clamping member such that rotation of the actuation member, about a rotational axis, in a first rotational direction rotates the first and second clamping members relative to each other, wherein for a certain rotational position of the actuation member, the actuation member is moveable in a first axial direction relative to at least one clamping member and is coupled to the at least one clamping member such that said relative movement acts to urge the clamping surfaces closer together.

Images



Publication numbers

RU2007132501

US20080189920

JP2008530403

CN101155999

IN3079/KOLNP/2007

KR20070110083

EP1848894

AU2006212039

CA2597394

WO2006/085119

GB0502826

Publication kind codes

A

A1

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A

A

A1

A1

A1

A1

D0

Publication dates

2009-03-20

2008-08-14

2008-08-07

2008-04-02

2007-12-07

2007-11-15

2007-10-31

2006-08-17

2006-08-17

2006-08-17

2005-03-16

Earliest priority date

2005-02-11

Title

(EP1848894)

Fastener

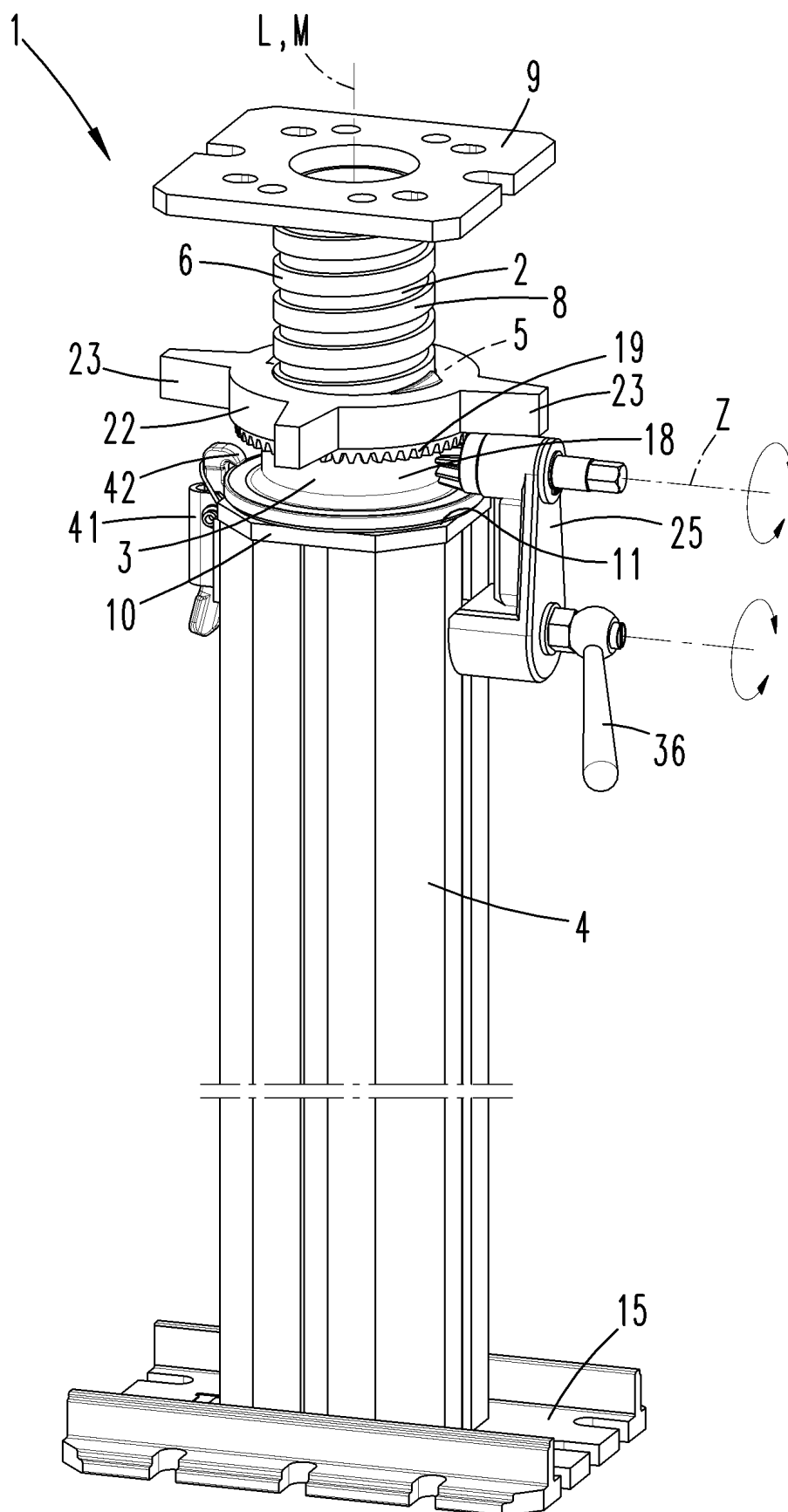
Abstract

(EP1848894)

A fastener (10) for fastening together elongate objects (26), such as scaffolding and other items used in the construction industry, is described. The fastener includes first and second portions (12, 14) which engage with one another by means of male (16) and female (18) members. The first and second portions are relatively rotatable, and may be aligned in a range of positions prior to fastening the device. The male and female members serve to retain the fastener in the closed position, and may use a ratchet arrangement, or may use a friction fastening. Also described is a tool (30) for securing the fastener.

Family 25/61 - FAMPAT - ©Questel

Images

Fig. 1

Publication numbers

WO2017/097735

DE102015121378

Publication kind codes

A1

A1

Publication dates

2017-06-15

2017-06-08

Earliest priority date

2015-12-08

Title

(WO201797735)

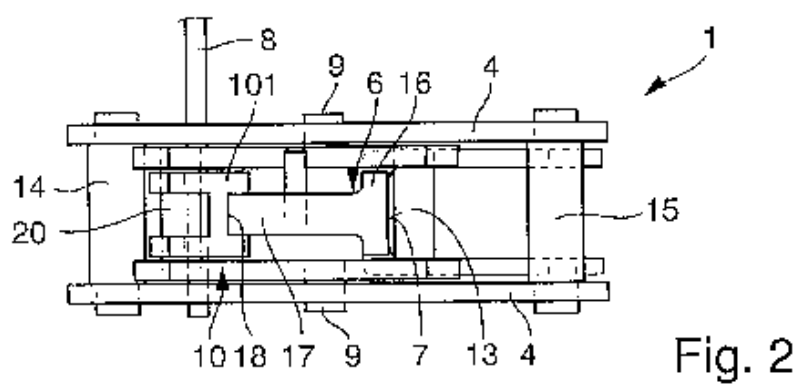
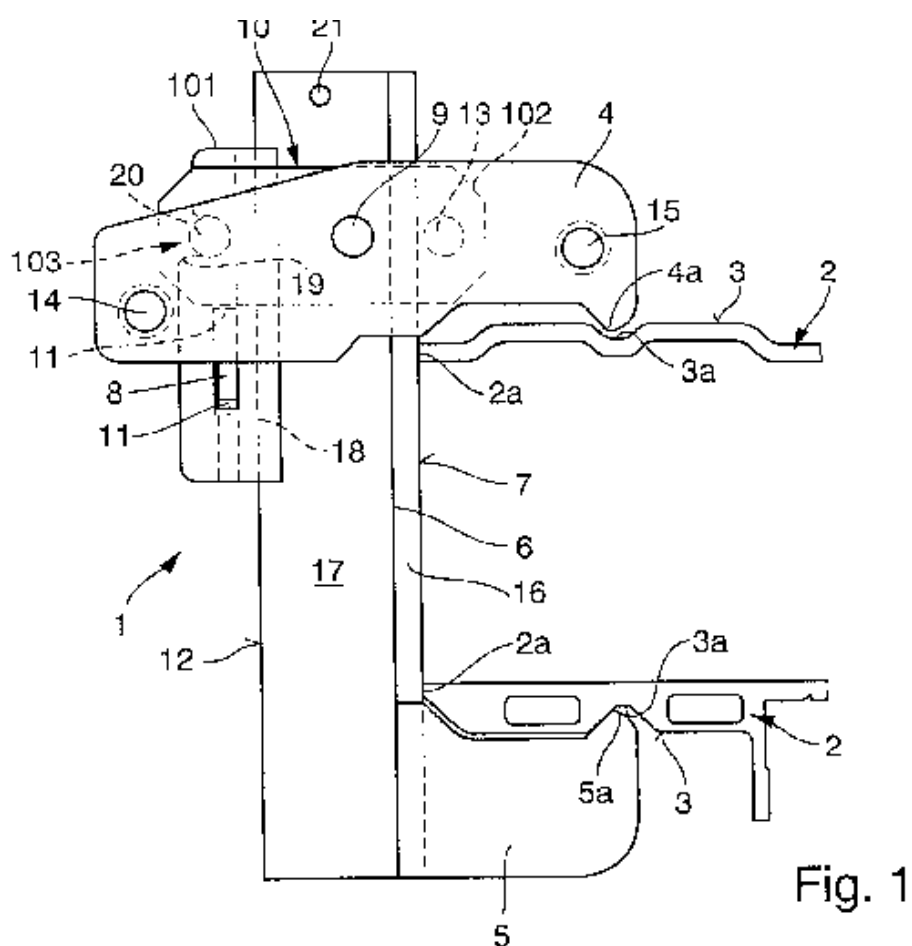
Nut, release device, spindle support, and method for supporting an object

Abstract

(WO2017/097735)

The invention relates to a nut (3) comprising a nut housing (16) through which a through opening (17) extends along a longitudinal center axis (M) and in which an internal thread is formed bordering the through opening (17). According to the invention, for advantageous development, the nut (3) has a toothing (19) along a circumferential direction leading about the longitudinal center axis (M). In addition, the invention relates to a release device (25), in particular for a spindle support. In order to provide an advantageous release device, it is proposed that the release device (25) comprises a gear (27) with a toothing (26), and a gear bearing device (28) by means of which the gear (27) of the release device (25) is rotatably mounted about a gear axis of rotation. Furthermore, the invention relates to a spindle support, at least comprising a spindle, an outer tube (4) and a nut (3), wherein the spindle is/can be inserted at least in longitudinal sections into the outer tube (4), wherein the nut (3) is/can be screwed onto the spindle, wherein the outer tube (4) or an end plate (10) arranged on a longitudinal end of the outer tube (4) has a bearing surface (11), and the nut (3) has a support surface (14) for supporting against the bearing surface (11). It is proposed that the nut (3) is a nut (3) according to the invention, wherein the spindle of the spindle support (1) has an external thread matching the internal thread of the nut (3), and that the spindle support has a release device (25) according to the invention.

Images



Publication numbers

SK285919

MY129805

CA2261608

KR100502107

CZ294876

HK1021397

CN1134578

PL185387

IL127997

KR20000065240

AU721439

DK914530

ES2139463

EA000610

DE59700670

IL127997

AT186365

EP0914530

US5975483

SK5799

EA199900151

TW367384

BR9710392

CN1225701

PL331207

CZ19499

EP0914530

TR199802738

AU3622197

CA2261608

WO98/03750

ID17603

DE19629660

Publication kind codes

B6

A

C

B1

B6

A1

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B1

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B2

T3

T3

B1

D1

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A3

A1

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A1
A3
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A1
A
C1

Publication dates

2007-11-02
2007-04-30
2006-05-23
2005-11-16
2005-04-13
2004-12-10
2004-01-14
2003-04-30
2001-08-26
2000-11-06
2000-07-06
2000-05-08
2000-02-01
1999-12-29
1999-12-09
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1999-11-15
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1999-08-26
1999-08-21
1999-08-17
1999-08-11
1999-07-05
1999-06-16
1999-05-12
1999-03-22
1998-02-10
1998-01-29
1998-01-29
1998-01-15
1997-11-20

Earliest priority date

1996-07-23

Title

(EP-914530)

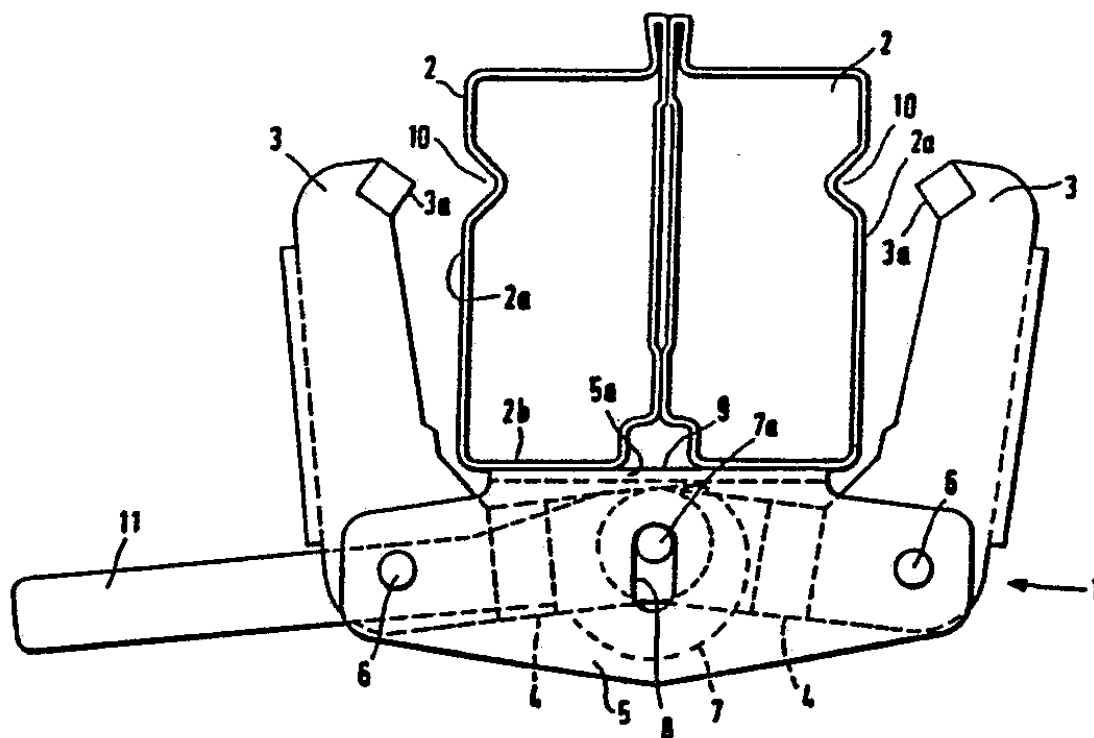
Clamp with clamping jaws and a carrier **connecting** the latter

Abstract

(EP0914530)

The invention concerns a clamp (1) which is used for **connecting** control panels disposed adjacent one another in a plane and to that end engages on edge web pieces (2) or edge profiles of these control panels. These edge web pieces (2) lie immediately adjacent one another or can have an intermediate part therebetween. For adaptation to spacings which consequently vary or to different dimensions of the edge web pieces (2) or edge profiles, a first pivotable clamping jaw (4) is continuously displaceable in its direction of longitudinal extension relative to a fixed clamping jaw (5), on a carrier comprising the two clamping jaws (4 and 5). To that end, the first clamping jaw is pivotably mounted on a slide (10) which can in turn be fixed in any position by clamping on the carrier (6), in particular by tilting or pivot movements in opposite senses. In this way the spacings between the clamping jaws (4 and 5) can be continuously adjusted without measures having to be taken on the carrier (6) itself in order to hold the pivot pin (9) of the pivotable clamping jaw (4), which would weaken the carrier (6).

Family 27/61 - FAMPAT - ©Questel

Images**Publication numbers**

ES2019058

NO178240

PT9189

LT3577

LV10753

NO178240

RU2042774

SU2042774

LV10753

KR950008100

LTIP1439

JP6056055

EG18762

HU208351

GR3003198

DK165016

CN1019221

AU631148

HK81692

DK165016

US5146816

SG57492

HUT60356

HU896109

DE58900477

AT69634

EP0369197

JPH03503557

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IL92263

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DK87791

NO911828

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KR900702161

IL92263

MA21676

CN1042751

PT92273

AU4416989

EP0369197

WO90/05225

CA2002724

DE8814208

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C

T

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B

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C1

C1

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B2

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T3

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B2

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U1

Publication dates

1997-08-01
1996-02-14
1996-01-31
1995-12-27
1995-12-20
1995-11-06
1995-08-27
1995-08-27
1995-08-20
1995-07-25
1995-05-25
1994-07-27
1994-01-30
1993-09-28
1993-02-17
1993-02-08
1992-11-25
1992-11-19
1992-10-30
1992-09-28
1992-09-15
1992-09-04
1992-08-28
1992-04-28
1992-01-02
1991-12-15
1991-11-21
1991-08-08
1991-06-26
1991-06-10

1991-06-01
1991-05-10
1991-05-10
1991-05-10
1991-02-28
1990-12-06
1990-12-06
1990-07-26
1990-07-01
1990-06-06
1990-05-31
1990-05-28
1990-05-23
1990-05-17
1990-05-12
1989-01-05

Earliest priority date

1988-11-12

Title

(EP-369197)

Clamp for **connecting** form work panels together

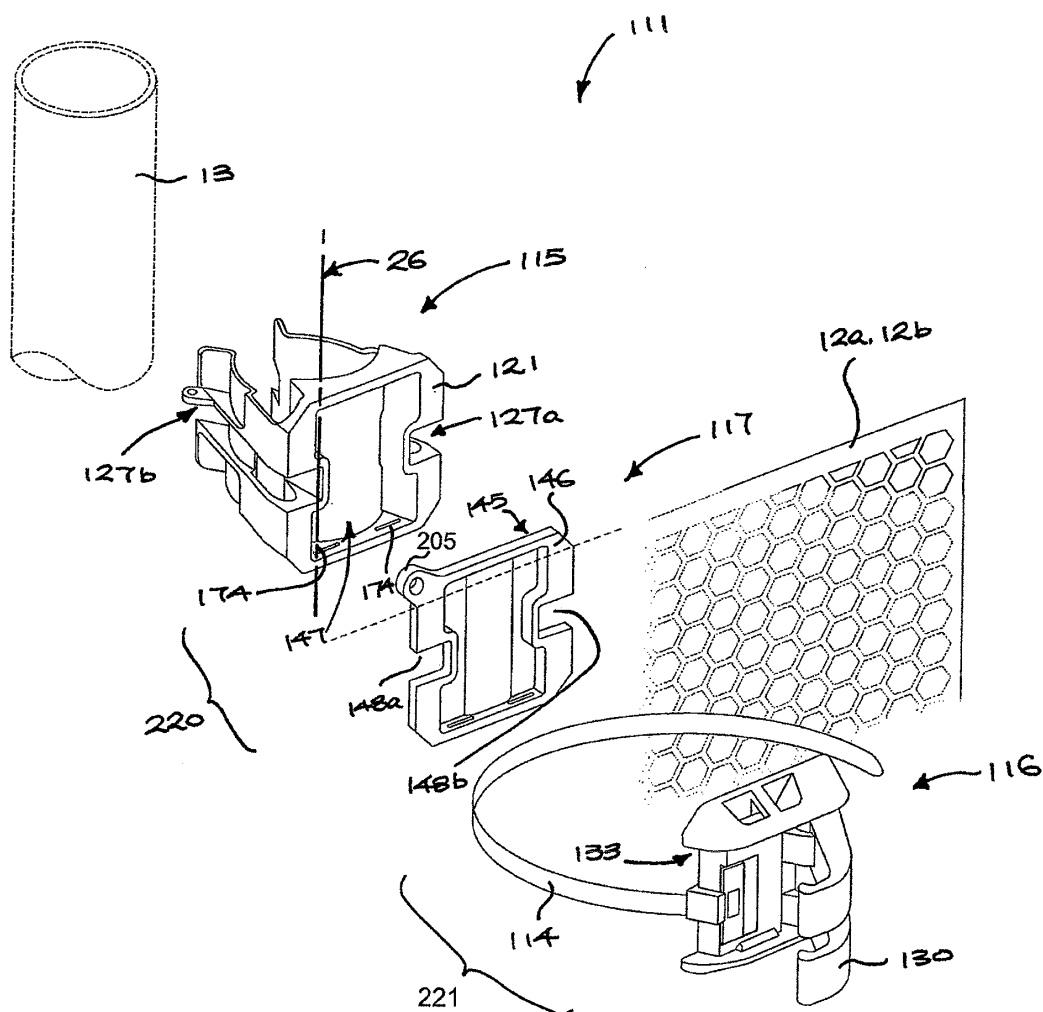
Abstract

(EP0369197)

PCT No. PCT/DE89/00658 Sec. 371 Date May 13, 1991 Sec. 102(e) Date May 13, 1991 PCT Filed Oct. 18, 1989 PCT Pub. No. WO90/05225 PCT Pub. Date May 17, 1990. A clamp for **connecting** a pair of formwork panels which are to be disposed side-by-side in a common plane has two clamping members. Each of the clamping members includes a clamping arm for urging the panels together and an adjusting arm which is approximately perpendicular to the respective clamping arm. The clamping members are pivotally mounted on a U-shaped support and the adjusting arms are disposed internally of the support with their free ends overlapping. The clamping arms project from the support and are located on the same side of the latter as the transverse web bridging the legs of the support. The legs are provided with registering openings which are elongated transversely of the adjusting arms. A pivot extends through the overlapping ends of the adjusting arms and into the openings. The pivot is guided by the openings for movement transversely of the adjusting arms and carries an eccentric disc which is arranged to bear against the transverse web of the support. An actuating lever for the clamping members is integral with the disc and projects from the support approximately perpendicular to the clamping arms.

(From US5146816 A)

Family 28/61 - FAMPAT - ©Questel

Images**Publication numbers**

EP3545201

JP2020518738

CN108086790

MX2019005876

EP3545201

US20190284815

BR112019010406

KR10-2019-0084118

AU2017366469

BR112019010406

CN207453650

CA3044591

WO2018/095371

CN108086790

Publication kind codes

A4

A

B

A
A1
A1
A2
A
A1
A1
U
A1
A1
A

Publication dates

2020-07-22
2020-06-25
2020-05-12
2019-10-24
2019-10-02
2019-09-19
2019-09-03
2019-07-15
2019-06-20
2019-06-04
2018-06-05
2018-05-31
2018-05-31
2018-05-29

Earliest priority date

2016-11-23

Title

(EP3545201)

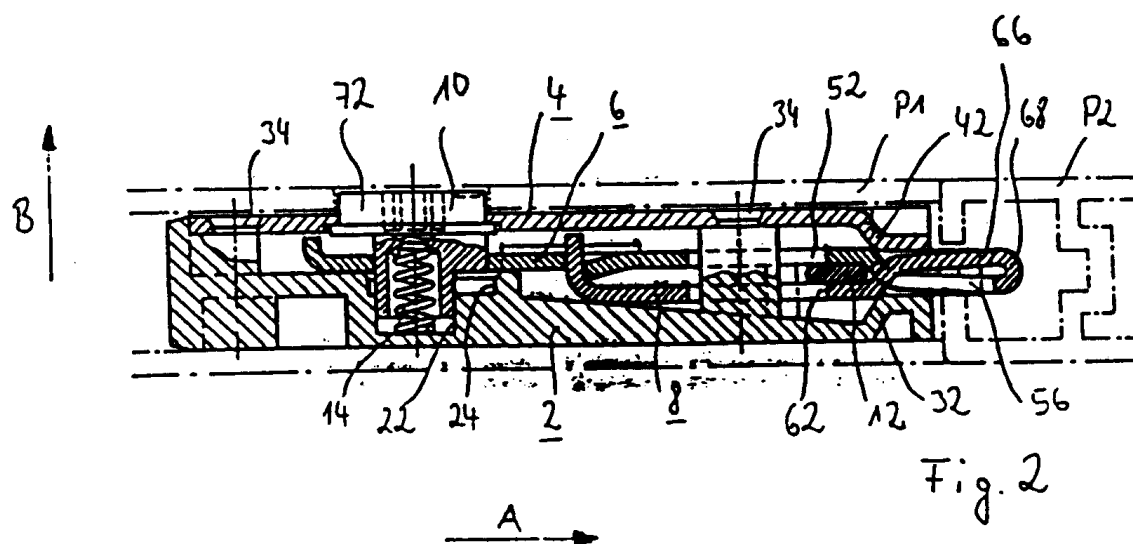
Fastener assembly, mesh panel and barrier system

Abstract

(EP3545201)

A fastener assembly (11, 111) for mounting a panel (12) to a framework (13) includes an elongate flexible tie (14, 114) having a proximal end and an opposing distal end and a clamping block (16, 116). The clamping block (16, 116) has a tie-receiving channel (32, 191, 192) extending between an inner and an opposing outer side, and gripping means in or adjacent the tie-receiving channel (32, 191, 192) for gripping the tie (14, 114). The proximal end is fixable to the clamping block (16, 116) and, in use, the inner side of the clamping block (16, 116) abuts the panel (12) and the gripping means grips the tie (14, 114) such that tension in the tie (14, 114) presses the inner side of the clamping block (16, 116) against the panel (12). A mesh panel (12) made of polymeric material and having a honeycomb shaped mesh and together with the fastener assembly (11, 111) forms a barrier system for erecting a drop-protection barrier on a safety railing, scaffolding, or like framework.

Images



Publication numbers

CZ287234
 RU2150617
 DE59307590
 AT159795
 EP0582258
 HUH3819
 LV11054
 LV11054
 LT3155
 LTIP823
 CZ157893
 DE4225926
 EP0582258
 HU9302232

Publication kind codes

B6
 C1
 D1
 T
 B1
 A
 B
 A
 B
 A
 A3
 A1
 A1
 D0

Publication dates

2000-10-11

2000-06-10

1997-12-04

1997-11-15

1997-10-29

1997-06-30

1996-04-20

1996-02-20

1995-01-31

1994-07-15

1994-04-13

1994-02-10

1994-02-09

1993-10-28

Earliest priority date

1992-08-05

Title

(EP-582258)

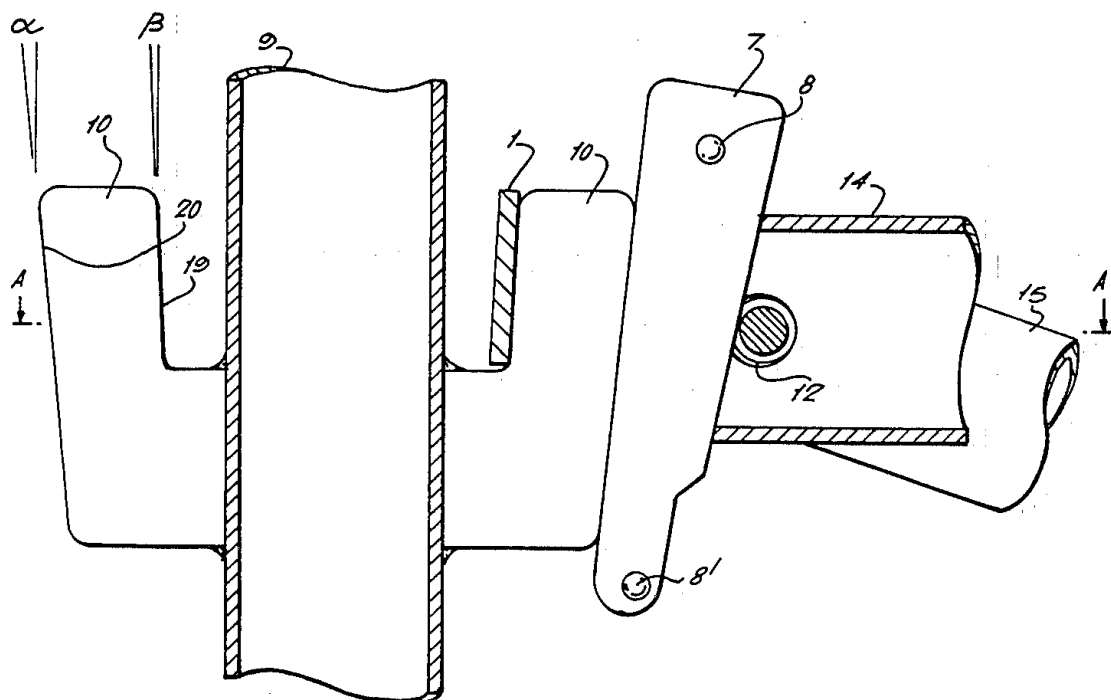
Fastening device

Abstract

(EP0582258)

Fastening device for **connecting** profile elements (P1, P2), of which some (P1) exhibit an end-side opening and others (P2) exhibit an undercut **groove**, having a housing (2, 4) which can be pushed into an end-side opening, having at least one retaining member (6; 6, 8) which is mounted in the housing (2, 4) such that it can move in a longitudinal direction, is non-sprung in the transverse direction and is provided with at least one hook (58; 58, 68) projecting out of the housing, having an actuating device (10) which can be actuated when the housing (2, 4) is pushed in and by means of which the retaining member (6; 6, 8) can move in the longitudinal direction, and having an expansion device (12) which acts on the retaining member (6; 6, 8) such that the hook (58; 58, 68), after insertion into the **groove**, engages behind the **groove** in a longitudinal movement counter to the insertion direction. <IMAGE>

Family 30/61 - FAMPAT - ©Questel

Images**Publication numbers**

CA1265830

CA1265830

HK6588

GB2132732

US4576500

JPS603359

DE3347325

GB2133106

GB2132732

GB8333876

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A

C

A

B

A

A

A1

A

A

D0

Publication dates

1990-02-13

1990-02-13

1988-01-29

1986-12-17

1986-03-18

1985-01-09

1984-08-23

1984-07-18

1984-07-11

1984-02-01

Earliest priority date

1982-12-24

Title

(US4576500)

Scaffolding system

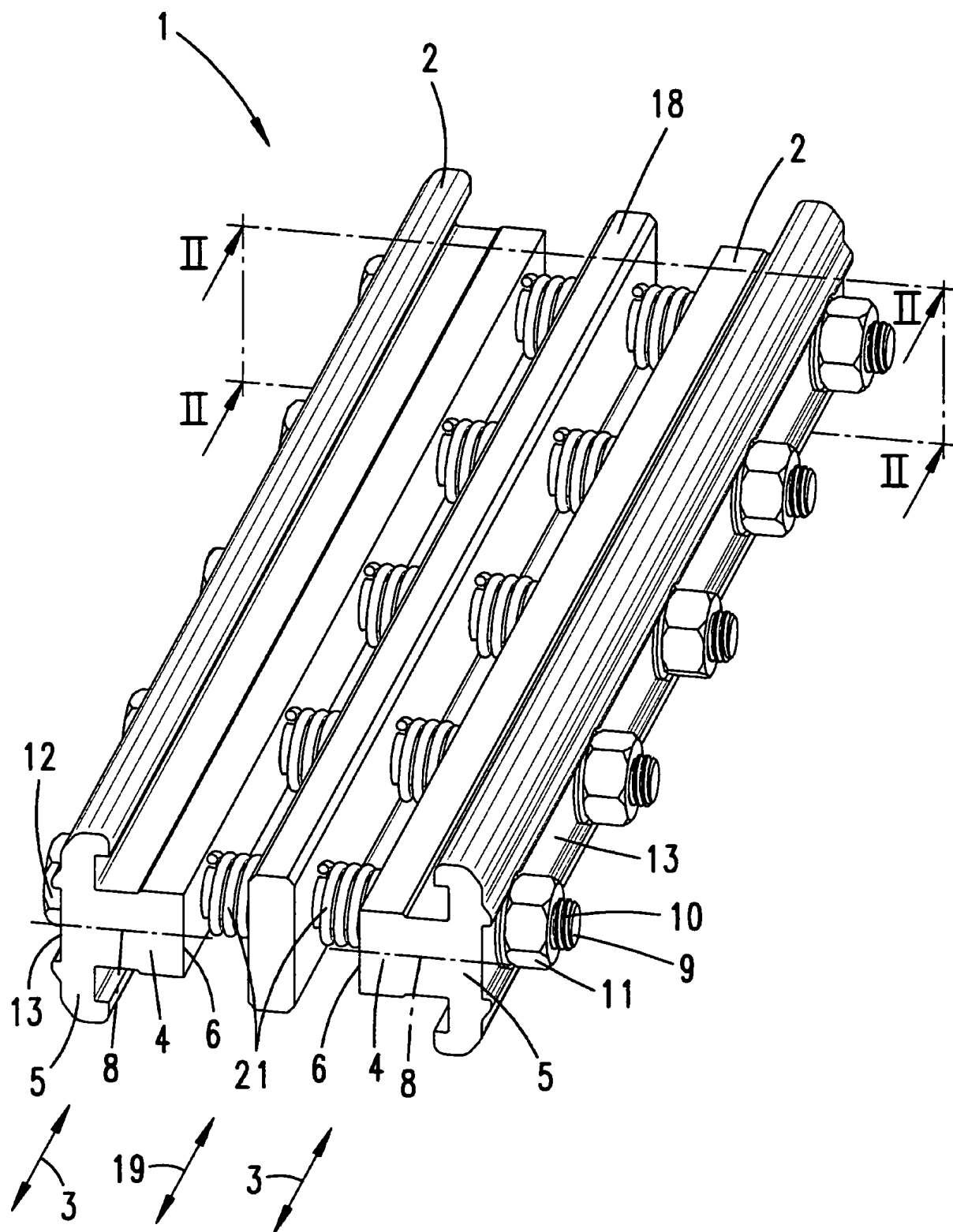
Abstract

(US4576500)

A ledger system for scaffolding which comprises a tubular ledger member having an end plate at one or both ends and being provided at one or both ends with a first slot extending from the end plate parallel with the axis of the tubular ledger member and a second slot also extending from the end plate parallel with the axis of the tubular ledger member and located 180 DEG round the circumference of the tubular ledger member from the first slot, the second slot having an enlarged inner end; and a wedge member for each pair of slots being arranged to pass through the first and second slots but being prevented from being removed from the first slot by first and second retaining means located adjacent the broader and narrower ends respectively of the wedge, the width of the enlarged inner end of the second slot being such as to permit the narrower end of the wedge with the second retaining means to pass freely therethrough. Such a ledger system can be used with a standard which has one or more hook members located around its circumference, the tubular ledger member being hooked onto a hook member by means of the first and second slots through which the member passes and the wedge member being tapped into place between the hook member and the inner ends of the first and second slots. Such a system affords quick and safe single-handed erection and prevents the ledger falling off the hook even if the wedge member is not engaged.

Family 31/61 - FAMPAT - ©Questel

Images



Publication numbers

DE102009043967

DE102009043967

Publication kind codes

B4

A1

Publication dates

2015-10-08

2011-03-17

Earliest priority date

2009-09-09

Title

(DE102009043967)

Clamping device for clamp coupling of carrier e.g. formwork beams, in carrier component system, has clamping jaws and clamping screw that is screwed into thread in nut, where jaws are arranged parallel to each other

Abstract

(DE102009043967)

The device (1) has two clamping jaws arranged parallel to each other and extending along a clamping jaw longitudinal direction in a profile-like manner. Each jaw includes a flange bar (4) and a cheek transverse bar (5), which form a T-profile-shaped flange bar cross-section perpendicular to the longitudinal direction. The jaws are axis-symmetrically arranged to each other in two directions perpendicular to each other. A clamping screw (9) is inserted into boreholes of the one of the clamping jaws and screwed into a thread in a nut (11) within an area of a screw end (10). An independent claim is also included for a carrier arrangement comprising two carriers.

(From DE102009043967 A1)

Family 32/61 - FAMPAT - ©Questel

Publication numbers

CH408381

FR1350283

ES285724

BE629269

Publication kind codes

A

A

A1

A

Publication dates

1966-02-28

1964-01-24

1963-08-01

0

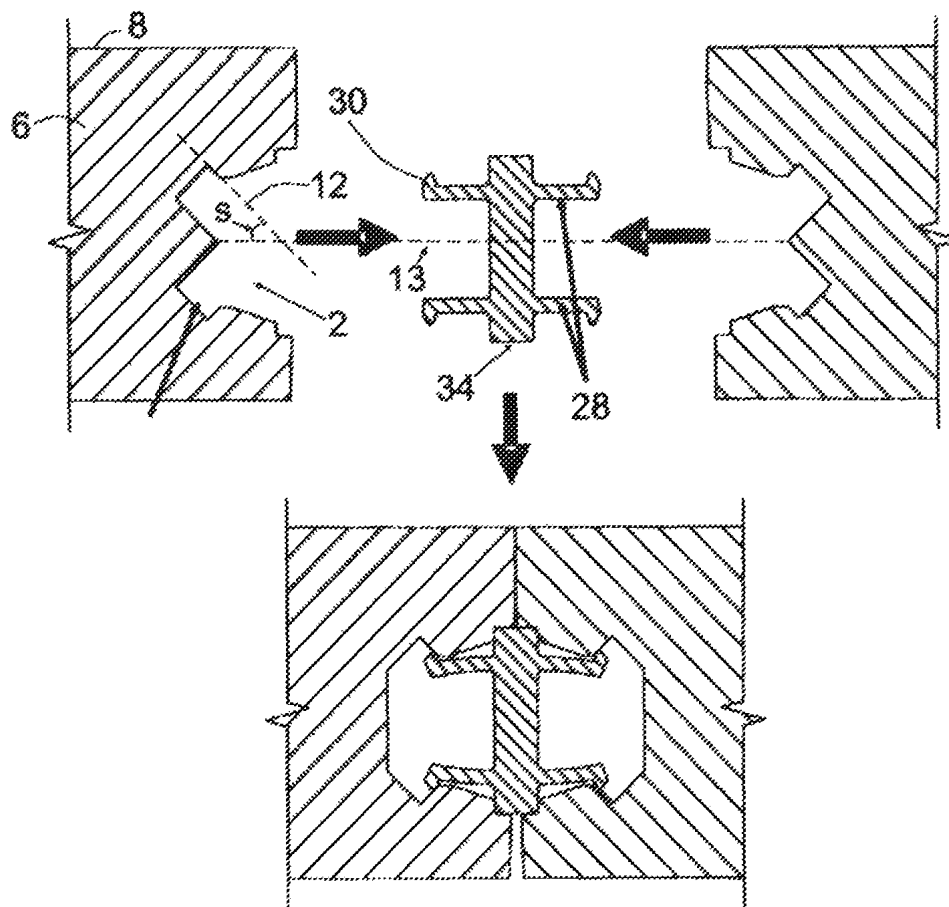
Earliest priority date

1962-03-06

Title

(FR1350283)

Coupling device for **connecting** at least three bars in a detachable manner under the given angles

Images**Publication numbers**

US9010067

US20120260602

WO2012/142617

Publication kind codes

B2

A1

A1

Publication dates

2015-04-21

2012-10-18

2012-10-18

Earliest priority date

2011-04-14

Title

(WO2012142617)

Fabricating the locking steps in the groove element of spring-loaded split-tongue locking connector system

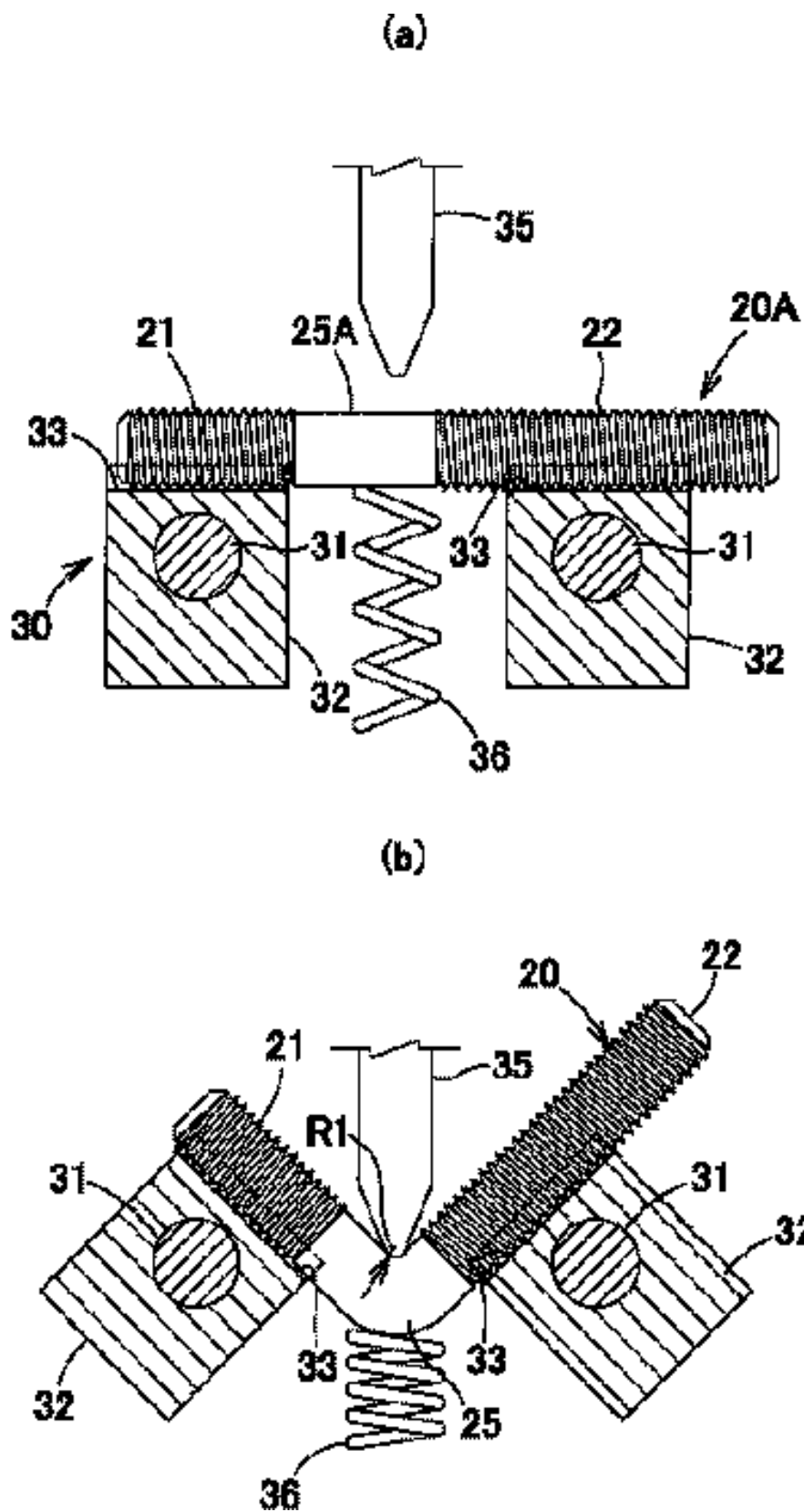
Abstract

(WO2012/142617)

A method of mechanically joining wood panels side edge to side edge by cutting grooves into the side edges of at least two

panels that are to be joined together with a connector with no loss of top or bottom panel surface, cutting a first step edge groove into the side edge of a panel at an angle "s" of between 10 degrees and 75 degrees, cutting a second step edge opposite the first step edge groove into the side edge of the panel at an angle "s" of between 10 degrees and 75 degrees, cutting an angle "e" of an entrance ramp along the first step edge groove at an angle of between 0 degrees and 45 degrees, cutting an angle "e" of the entrance ramp along the second step edge groove at an angle of between 0 degrees and 45 degrees.

Images



Publication numbers

JP2003090316

Publication kind codes

A

Publication dates

2003-03-28

Earliest priority date

2001-09-18

Title

(JP2003090316)

L-shaped double-end bolt manufacturing method, l-shaped double-end bolt, and formwork structure

Abstract

(JP2003090316)

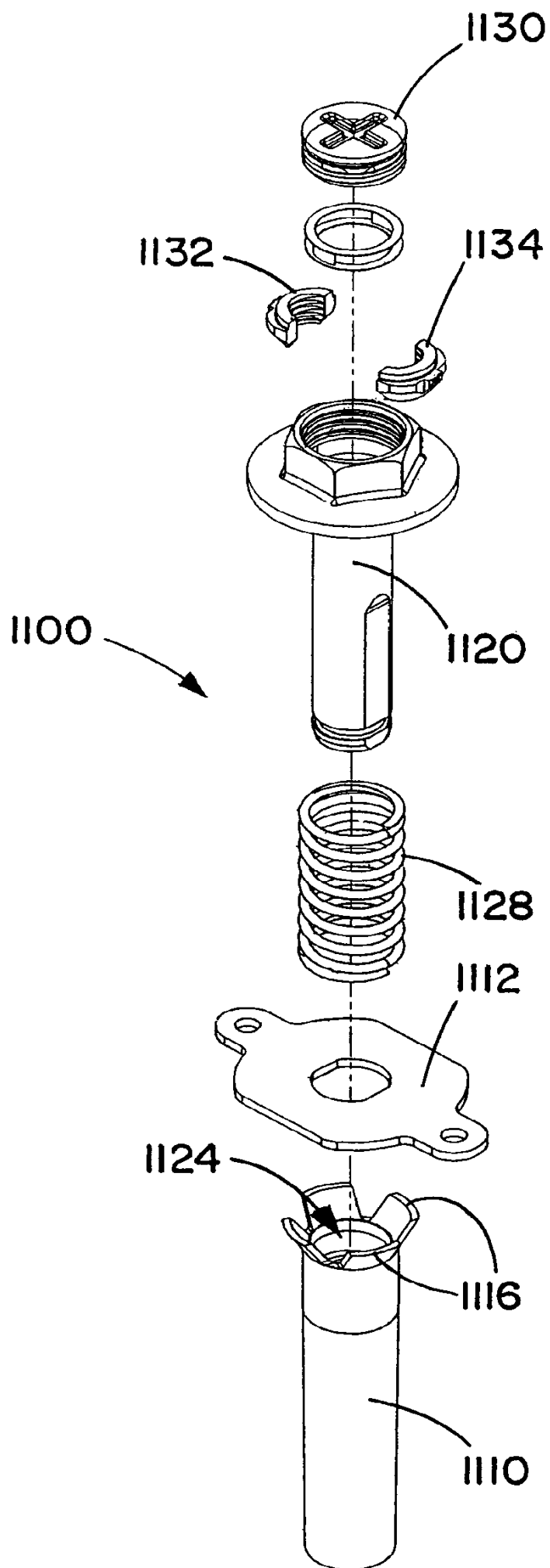
PROBLEM TO BE SOLVED: To provide an L-shaped double-end bolt manufacturing method in which the radius of curvature of a folded part can be set small, and a screw part can be formed to a root of the folded part of, an L-shaped double-end bolt, and a framework structure using the L-shaped double-end bolt.

SOLUTION: A bolt stock 20A having a pair of screw parts 21 and 22 on both ends of a metal bar with an interval therebetween is manufactured, and both screw parts 21 and 22 of the bolt stock 20A are placed on a supporting member 32 which is turnably supported to a pair of pivotably supported shafts 31 parallel to each other. A bending tool 35 is pressed from the top against the bolt stock 20A between the screw parts 21 and 22 to allow the screw parts 21 and 22 to slide in the axial direction to the supporting member 32, and a folded part 25 is formed between the screw parts 21 and 22 while turning the screw parts 21 and 22 respectively together with the supporting member 32 around the pivotably supported shafts 31.

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Family 35/61 - FAMPAT - ©Questel

Images



Publication numbers

US20200200200
US10578137
EP2992229
US20180187705
US9915277
EP2992229
EP2350466
US20160208834
CN105579717
US9303676
EP2992229
US20150192166
CN102272462
US8998155
WO2014/179791
EP2350466
US20130243545
US8434725
US20120167358
US8132767
CN102272462
EP2350466
WO2010/059403
WO2010/059403
US20100108840

Publication kind codes

A1
B2
B1
A1
B2
A4
B1
A1
A
B2
A1
A1
B
B2
A1
A4
A1
B2
A1
B2
A
A2

A3

A2

A1

Publication dates

2020-06-25

2020-03-03

2019-07-10

2018-07-05

2018-03-13

2017-03-08

2017-03-01

2016-07-21

2016-05-11

2016-04-05

2016-03-09

2015-07-09

2015-04-15

2015-04-07

2014-11-06

2014-02-26

2013-09-19

2013-05-07

2012-07-05

2012-03-13

2011-12-07

2011-08-03

2010-08-19

2010-05-27

2010-05-06

Earliest priority date

2008-10-30

Title

(EP2350466)

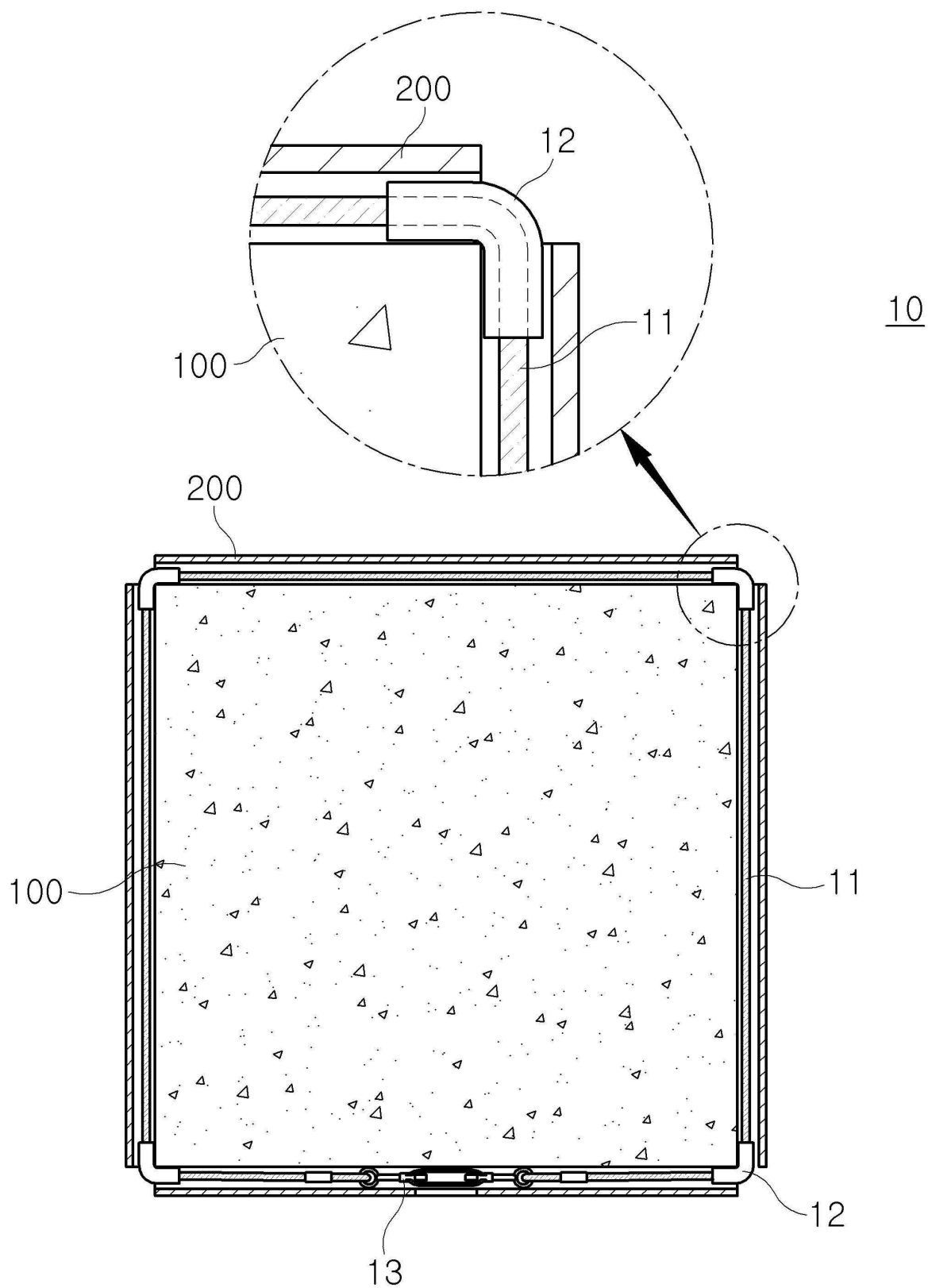
Quick threaded rod locking devices and method

Abstract

(EP2350466)

A threaded rod hanger has quick lock plunger mechanism that includes plunger pieces within a tapered bore in a housing. The plunger pieces have tapered outer surfaces. A spring within the housing presses the plunger pieces toward the narrow end of the bore, with the spring located between the plunger pieces and a back plate that closes off part of a wide end of the tapered bore. The plunger pieces have internally threaded surfaces that engage threads on a threaded rod that is inserted into the bore, between the plunger pieces. Once the threaded rod has been inserted between the plunger pieces and released, the plunger pieces are pushed toward the narrow bore end. This causes the plunger pieces to press inward, automatically causing the internal plunger half threads to engage the external threads on the threaded rod.

Images



Publication numbers

KR10-2020-0025341

Publication kind codes

A

Publication dates

2020-03-10

Earliest priority date

2018-08-30

Title

(KR20200025341)

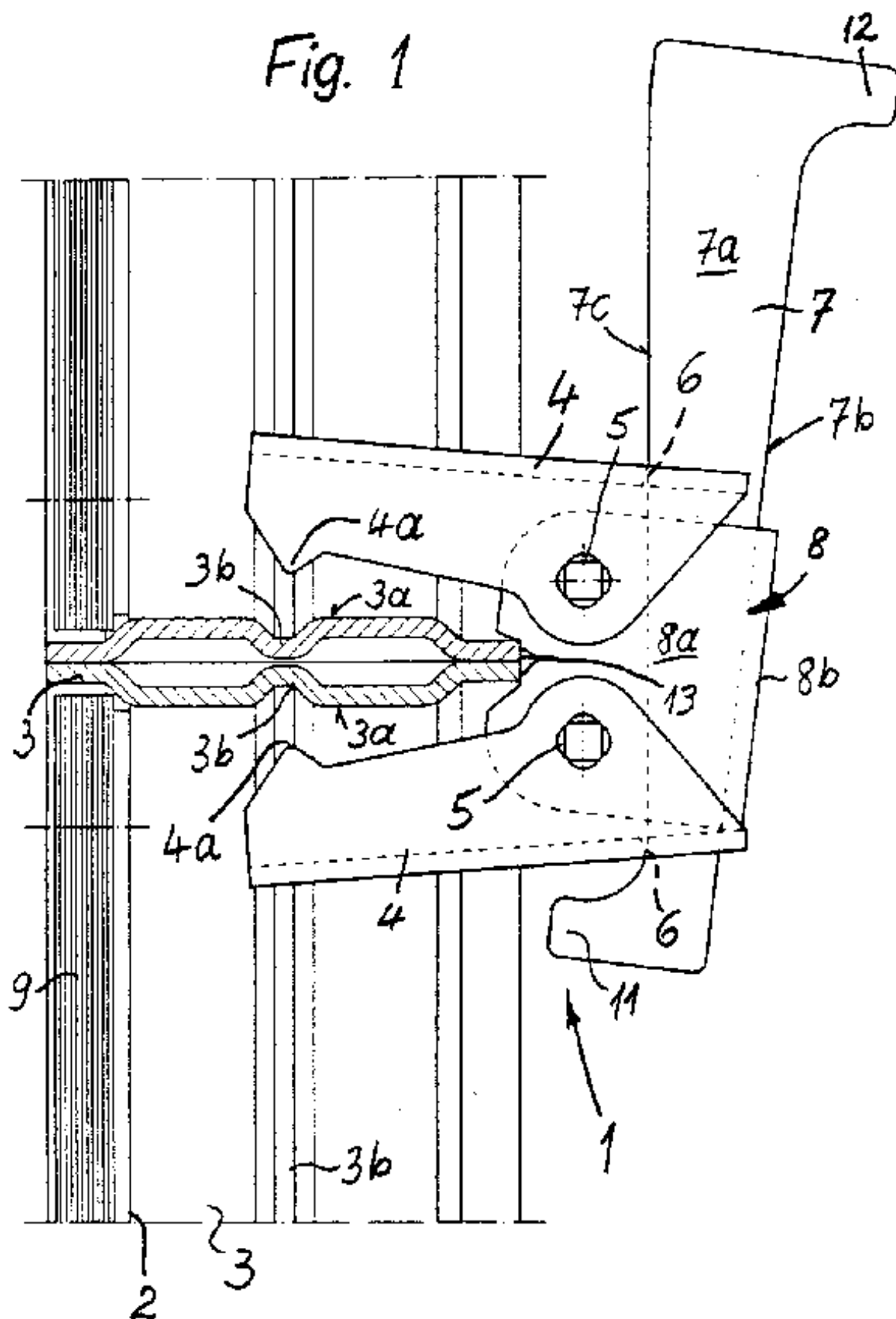
Reinforcement method of reinforced concrete column using steel plate

Abstract

(KR10-2020-0025341)

According to the present invention, a construction method of reinforcing a reinforced concrete column using a steel plate comprises the steps of: forming an anchor receiving part on the outer surface of a reinforced concrete member; forming a penetration hole in a position corresponding to the position of the anchor receiving part in a reinforcing plate; burying an anchor in the anchor receiving part; fastening a bolt to the anchor; and allowing the bolt to penetrate through the penetration hole of the reinforcing plate and fastening the first nut thereto to fix the reinforcing plate to the outer surface of the reinforced concrete member, thereby effectively implementing reinforcing effects by a reinforcing material without being influenced by the performance of epoxy, which is an adhesive, and a construction state.

Fig. 1



DE4236070

DE4205990

Publication kind codes

B1

A

C2

A1

C1

Publication dates

2000-12-15

1994-05-20

1994-02-17

1993-09-16

1993-02-11

Earliest priority date

1992-02-27

Title

(DE4205990)

Clamp used in concrete shuttering - is tightened by wedge and has projections engaging grooves in frame members

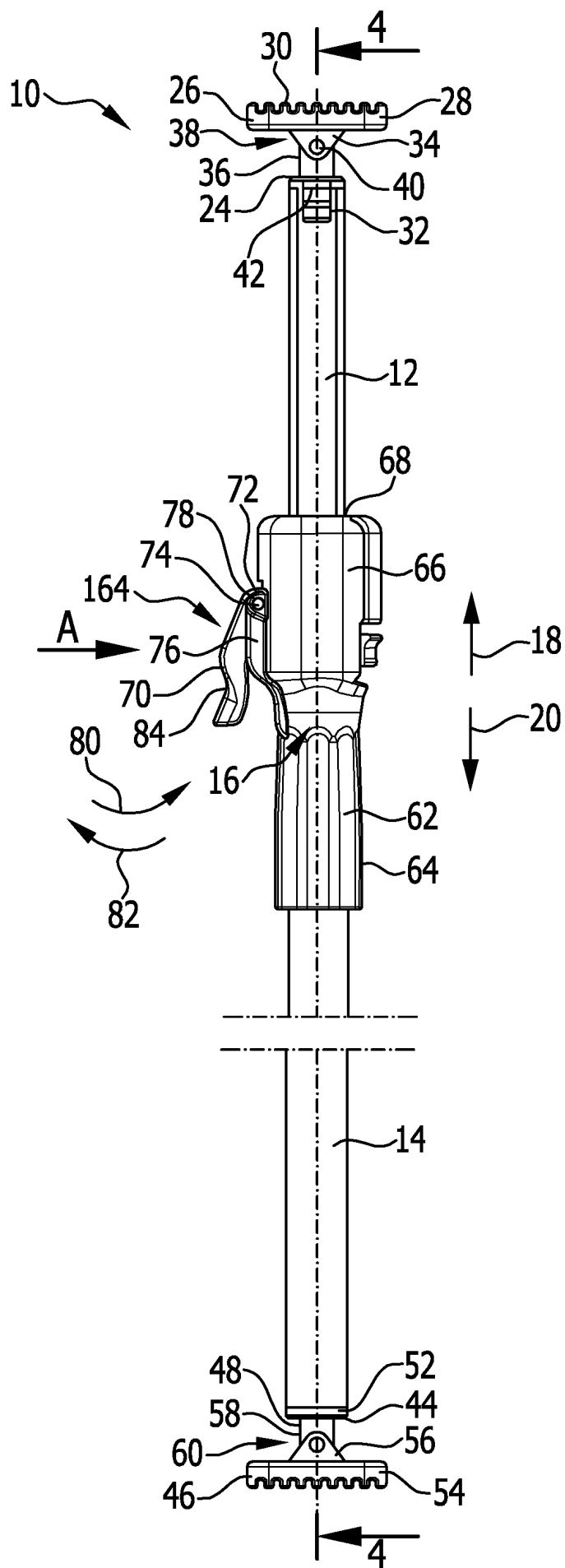
Abstract

(DE4205990)

The actuator should consist of a wedge (7) whose flat side (7a) lies in the pivot plane and whose one narrow side (7b) bears on the bearer side (8) facing the panel skin (9). The edging face of the wedge (7c) bears on the engagement points (6) which are spaced back from the jaw (4) pivot bearings (5) and lie on the side remote from the bearings on both the jaws. In both end settings the wedge projects beyond the jaws at the engagement points (6). USE/ADVANTAGE - Construction, shuttering. Actuating wedge engages clamp jaws without friction and wear in one-way driving effect for coordinated jaw movement to clamping.

Family 38/61 - FAMPAT - ©Questel

Images



Publication numbers

US20180371773

EP3402944

CN108463602

TW201730416

WO2017/121614

DE102016100487

Publication kind codes

A1

A1

A

A

A1

A1

Publication dates

2018-12-27

2018-11-21

2018-08-28

2017-09-01

2017-07-20

2017-07-13

Earliest priority date

2016-01-13

Title

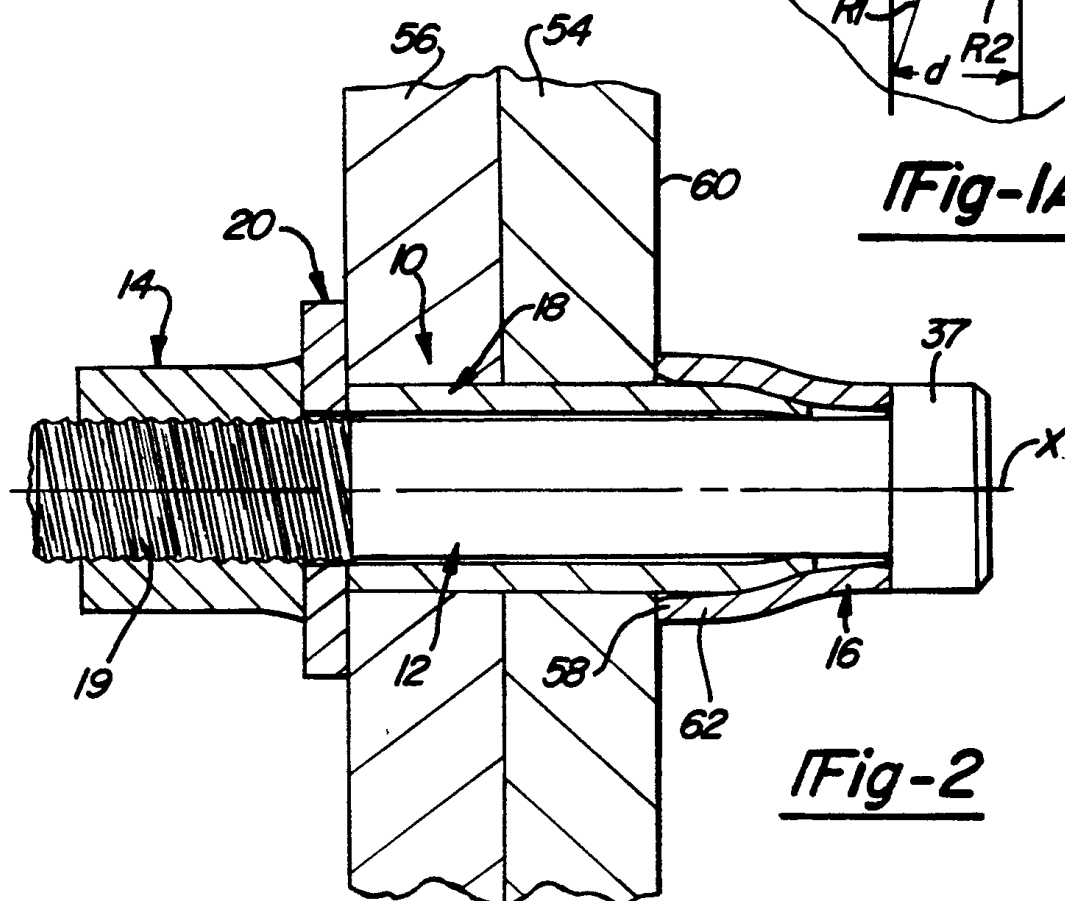
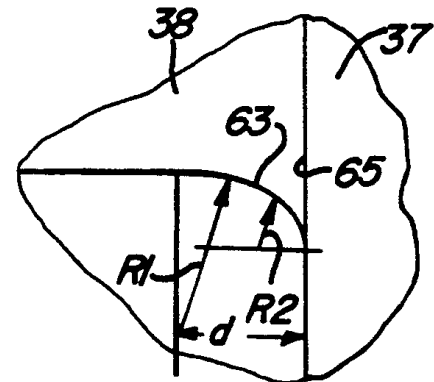
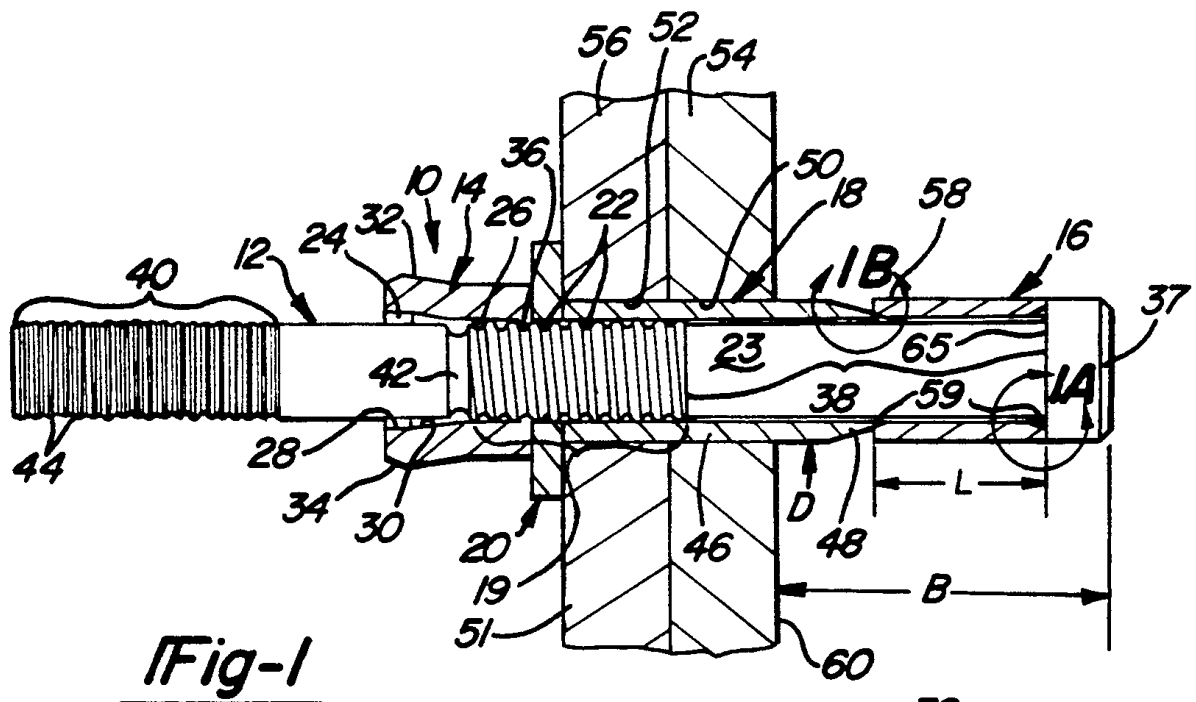
(EP3402944)

Support

Abstract

(EP3402944)

The invention relates to a support comprising a first bar (12), a first bearing element (26) which is held on the first bar (12) via a first thread (32) with a first thread direction, a second bar (14), a second bearing element (46) which is held on the second bar (14) via a second thread (48) with a second thread direction, wherein the first thread direction is opposite the second thread direction, and a guide device (16) through which the first bar (12) is movably guided on the second bar (14). An actuation device (164) is arranged on the second bar (14), said actuation device acting on the first bar (12) and comprising an actuation element (70). By actuating the actuation element (70), a movement of the first bar (12) in a first movement direction (18) can be driven, and the first movement direction (18) is a direction in which the distance between the first bearing element (26) and the second bearing element (46) increases. The actuation device (164) has a blocking device (114; 184) which blocks a movement of the first bar (12) relative to the second bar (14) in a second movement direction (20) opposite the first movement direction (18) at least when the blocking device (114; 184) has not been actively released.



JP05149313

CZ154292

HUT62381

ZA923433

PL294650

US5178502

KR19920021885

AU1620492

CA2068508

EP0515066

MX9202365

HU9201579

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B2

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A3

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A1

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A1

A1

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D0

Publication dates

1993-12-02

1993-06-15

1993-05-12

1993-04-28

1993-04-28

1993-02-08

1993-01-12

1992-12-18

1992-11-26

1992-11-25

1992-11-25

1992-11-01

1992-08-28

Earliest priority date

1991-05-24

Title

(EP-515066)

High strength blind bolt fastener.

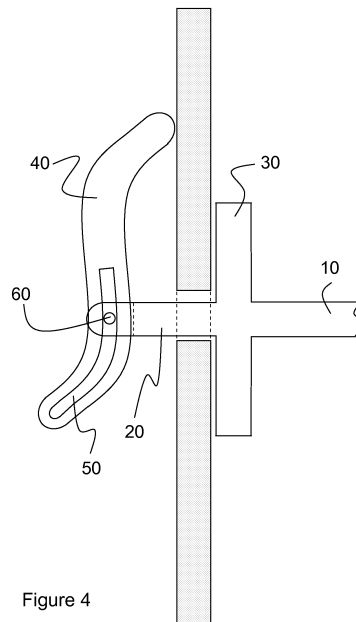
Abstract

(EP0515066)

A high strength blind bolt (10) for fastening structural workpieces (54,56) the blind bolt being of a swage type, pull type construction and having a pin member (12) with a plurality of locking grooves (22), a main sleeve (18), an expandable

sleeve (16) and a collar (14) adapted to be swaged into the lock grooves (22), the main sleeve (18) having a tapered nose portion (48) adapted to radially expand the expandable sleeve (16) in response to the application of a preselected relative axial force applied between the pin member (12) and the collar (14), the tapered nose portion (48) being defined by a preselected small angle to limit the radial expansion of the expandable sleeve (16) to provide a high strength blind head for engaging the adjacent, blind side of the structural workpieces and to initially clamp the structural workpieces (54,56) together at a high clamp load and to provide a final high, residual clamp load upon swaging of the collar (14) into the lock grooves (22) of the pin member (12). <IMAGE>

Family 40/61 - FAMPAT - ©Questel

Images**Publication numbers**

NZ588630
GB2458890
EP2279311
AU2009233525
WO2009/122204
GB2458890
GB0805777

Publication kind codes

A
B
A1
A1
A1
A
D0

Publication dates

2012-03-30
2011-10-19
2011-02-02
2009-10-08
2009-10-08
2009-10-07
2008-04-30

Earliest priority date

2008-03-31

Title

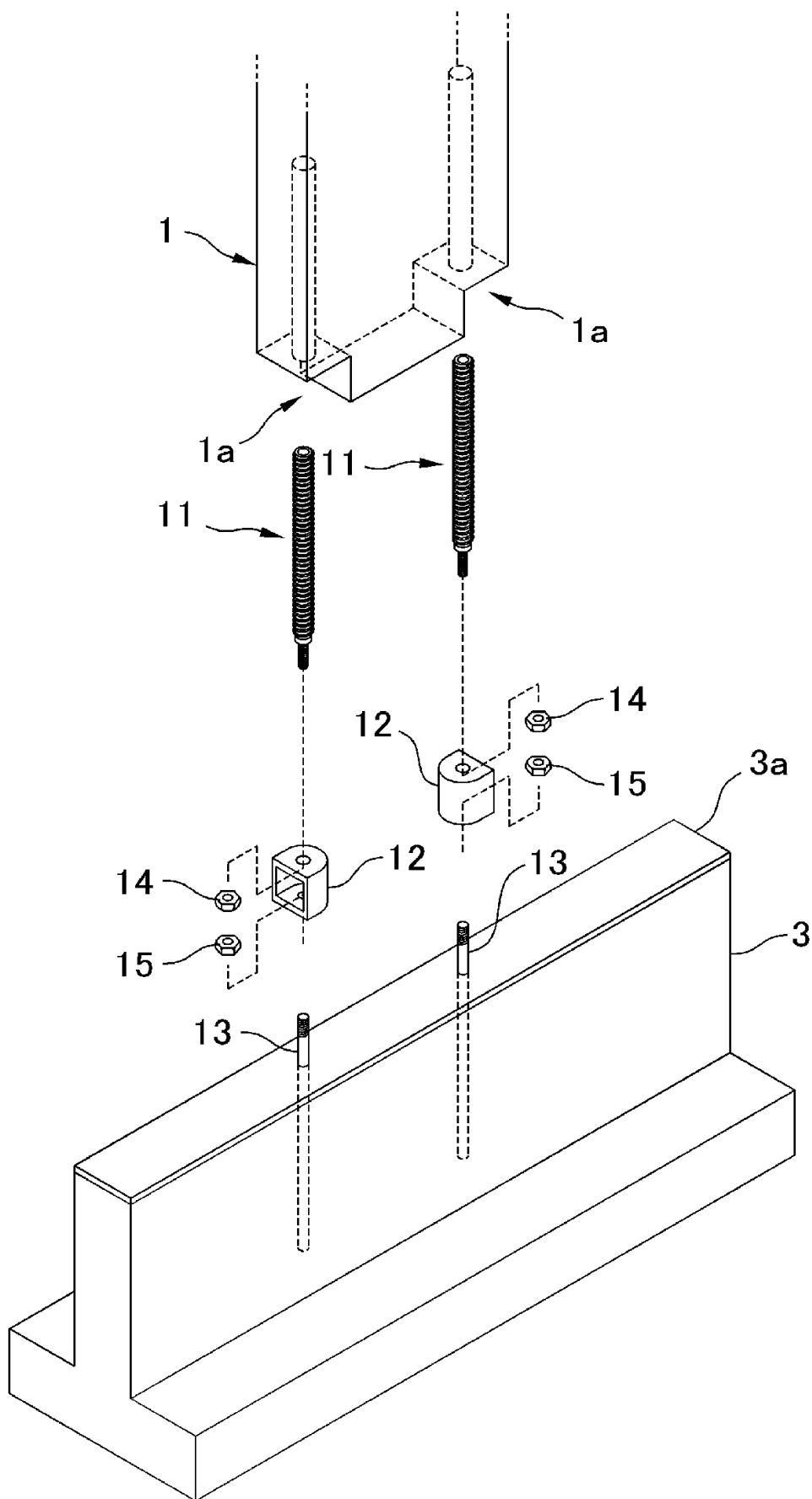
(EP2279311)
Support anchor

Abstract

(EP2279311)

A support anchor for temporary attachment to a substantially vertical structure, the structure having a hole, the anchor comprising: a shaft (10), comprising a first end portion (20) suitable for insertion through the hole, and restricting means (30) disposed along the shaft (10) at a predetermined distance from the first end, the distance being greater than a thickness of the structure, and the restricting means adapted to restrict insertion beyond that distance; and an elongate retaining member (40), movably **connected** to the first end of the shaft, having a first released configuration in which it may be threaded through the hole and a second locked configuration in which it may not; wherein the elongate retaining member (40) comprises a slot (50) and the first end (20) of the shaft comprises a pivot (60), the pivot **connected** to the slot such that the elongate member is operable to slide over the pivot and, in at least the released configuration, to be freely rotatable about it.

Images



JP6202931

AU2014208309

US9739299

AU2014208309

JP2015031129

US20150043966

CN104343187

Publication kind codes

B

B2

B2

B2

A1

A

A1

A

Publication dates

2018-11-20

2017-09-27

2017-09-07

2017-08-22

2015-02-26

2015-02-16

2015-02-12

2015-02-11

Earliest priority date

2013-08-06

Title

(US9739299)

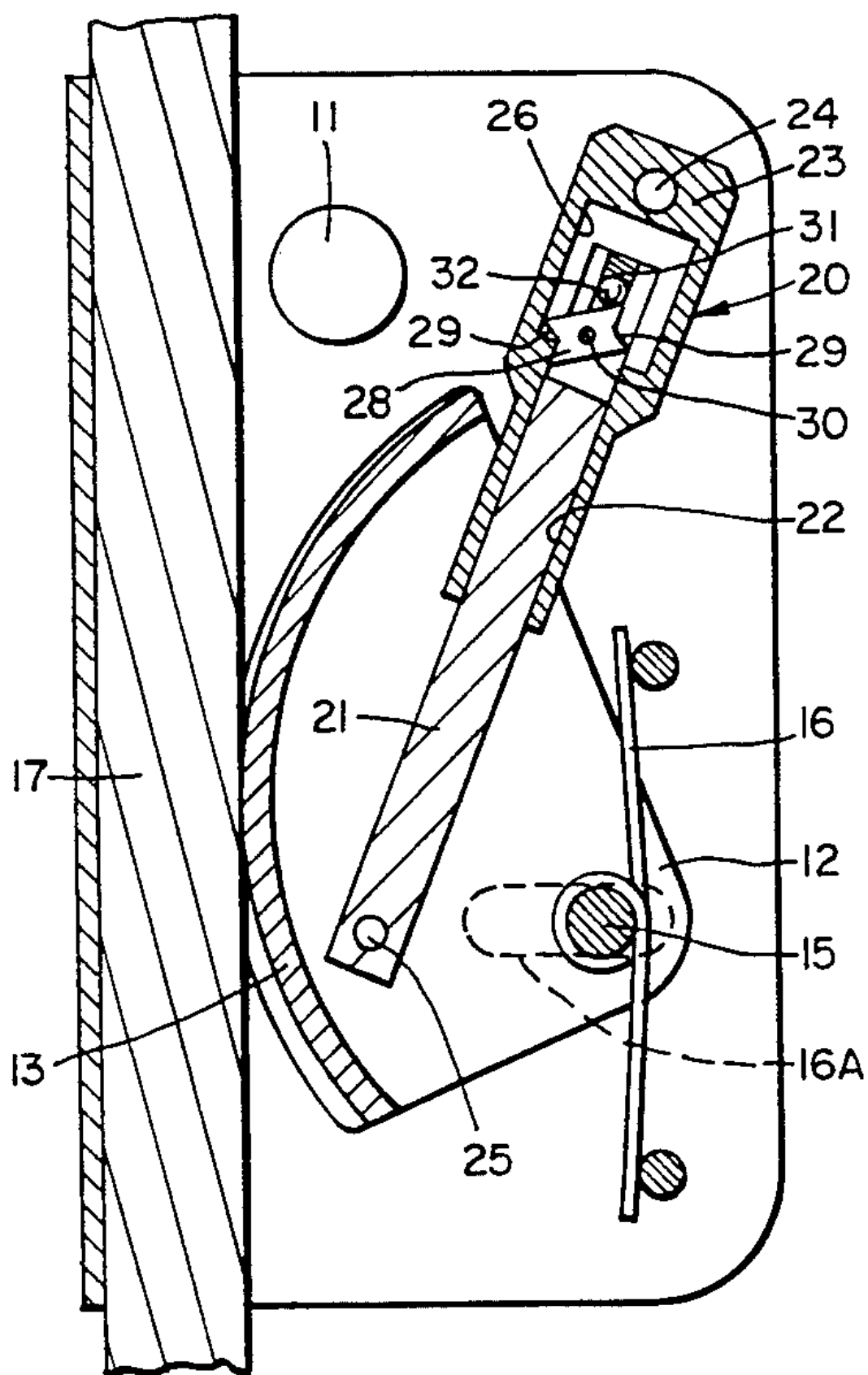
Coupling member, method for producing coupling member, and wooden member joint structure

Abstract

(US20150043966)

Disclosed is a coupling member that enables a joint between a wooden member and a mating member to absorb vibration energy, and a method for producing the same and a joint structure using the same. The metal coupling member is embedded in the wooden member. The wooden member is **connected** with a mating member by the coupling member. The coupling member includes a metal rod-like main body portion to be embedded in the wooden member, and an inner rod portion protruding from the main body portion. The inner rod portion axially extends from a protruding portion thereof to a predetermined depth in the main body portion, has a periphery separated from the main body portion to allow axial displacement of the inner rod portion relative to the main body portion, and is integrally **connected** to the main body portion at the deepest part thereof.

Images



Publication numbers

US5056954

Publication kind codes

A

Publication dates

1991-10-15

Earliest priority date

1988-08-23

Title

(US5056954)

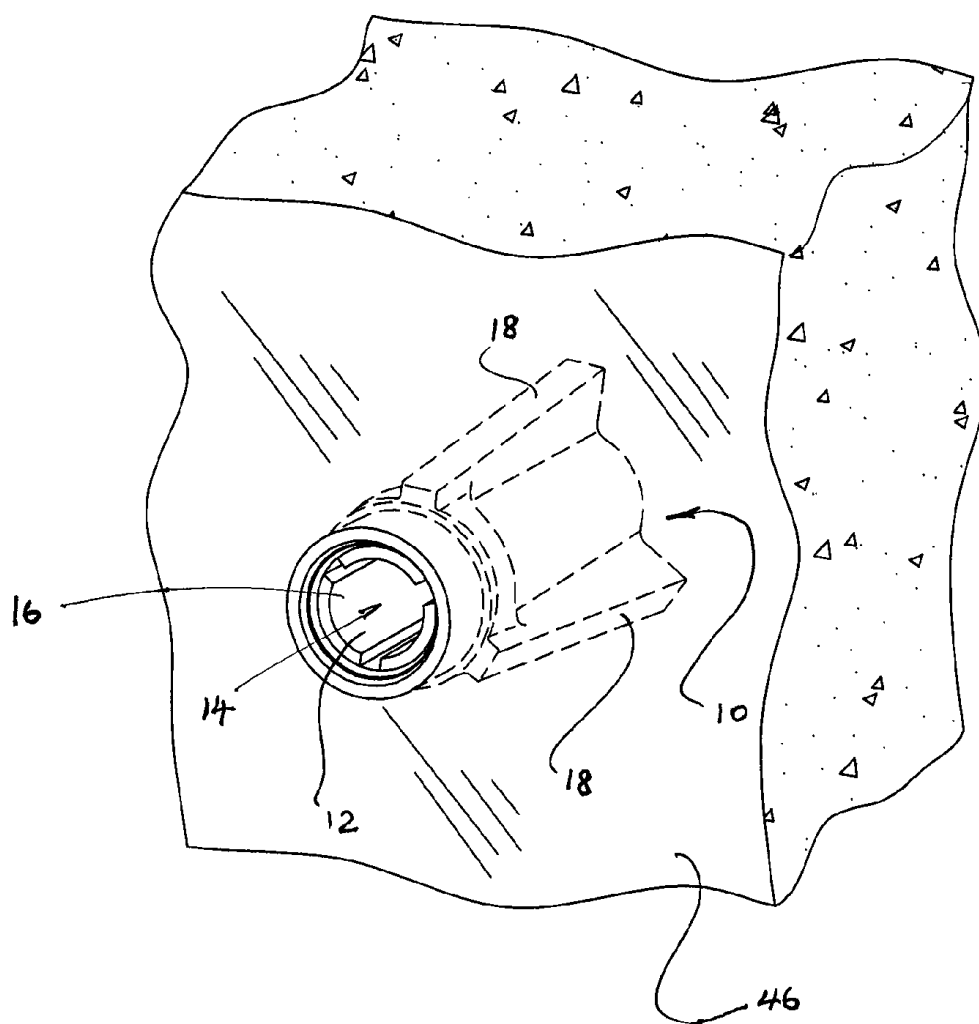
Releasable gripping, locking, coupling or support devices

Abstract

(US5056954)

A releasable gripping or locking device having a body part for sliding cooperation with a rope to be releasably gripped or locked with respect to the body part. A gripping or locking member is movably mounted on the body part for movement between a free condition and a gripping or locking condition in which loading applied to the device is borne by the gripping or locking member. A control member is provided for controlling movement of the gripping or locking position. The control member includes telescoping components having interengageable latching elements which are actuated by relative movement between the device and the rope. The latching elements are adapted to be automatically engaged in a latched condition when these parts are moved relative to one another in a first direction by a predetermined amount and are brought automatically into an unlatched condition on a predetermined amount of relative movement therebetween from the latched condition in the first direction, allowing subsequent free relative movement of the telescoping components. The free, and gripping or locking, conditions of the gripping or locking member correspond respectively with the latched and unlatched conditions of the control member.

Family 43/61 - FAMPAT - ©Questel

Images**Publication numbers**

US8813446

RU2523707

EP2238463

RU2010130303

NZ573681

AU2008255268

US20100293883

EP2238463

AU2008255268

CA2710243

WO2009/079697

Publication kind codes

B2

C2

A4

A

A

B2

A1

A1

A1

A1

A1

Publication dates

2014-08-26

2014-07-20

2014-02-19

2012-01-27

2010-11-26

2010-11-25

2010-11-25

2010-10-13

2009-07-09

2009-07-02

2009-07-02

Earliest priority date

2007-12-21

Title

(EP2238463)

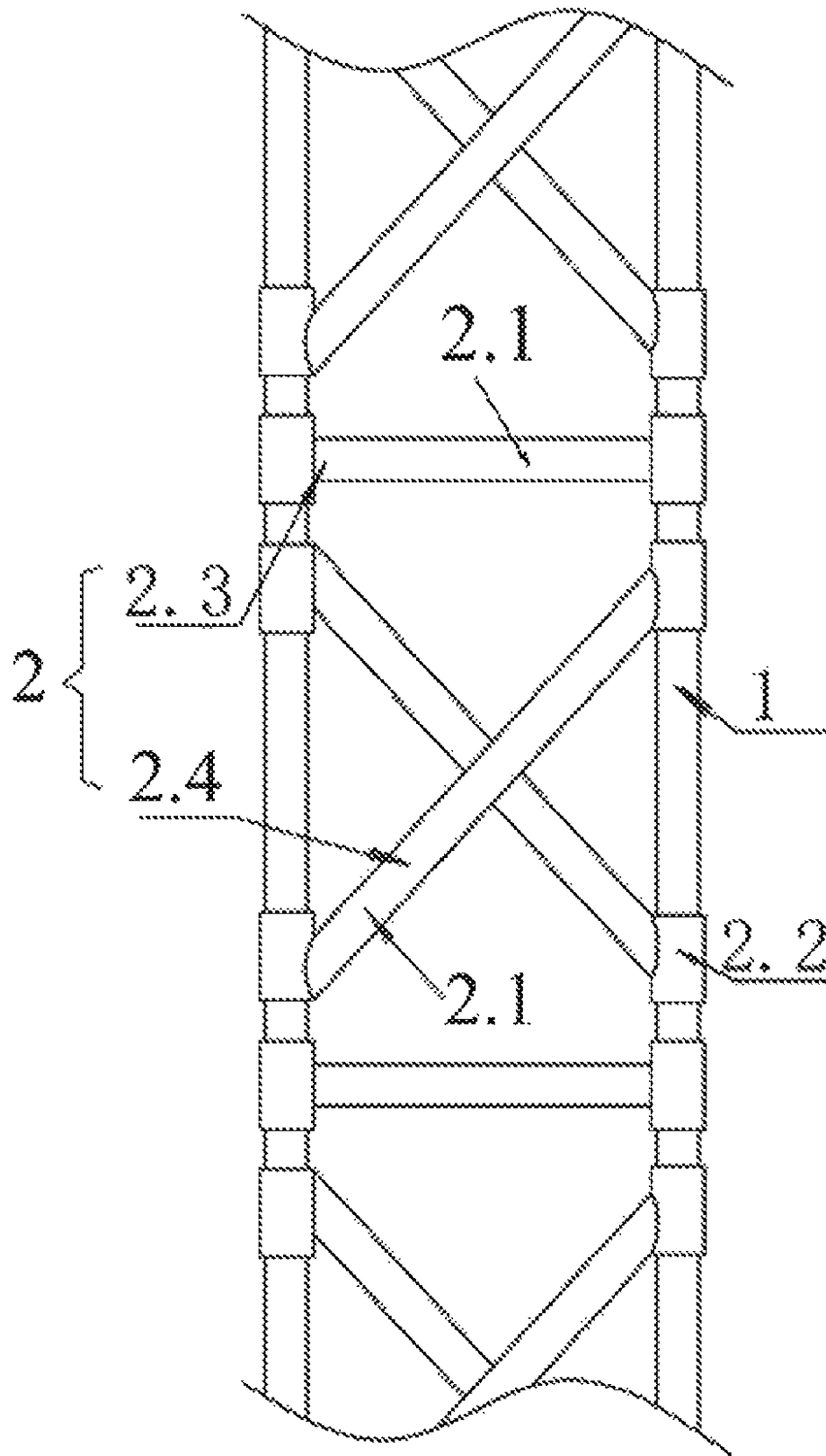
Cast-in insert

Abstract

(EP2238463)

An insert for embedment in a concrete component during casting, having a tubular cavity for receiving a threaded anchorage member, the tubular cavity having an opening arranged to face outward of the concrete component when cast for insertion of the threaded anchorage member, wherein the insert is externally tapered such that, when the insert is embedded in the concrete component and the anchorage member is threadedly engaged within the tubular cavity, axial loading applied to the anchorage member in a sense to withdraw the anchorage member from the insert causes reactional force from the surrounding concrete to be applied to the insert in a direction radially inwardly of the insert, and wherein the insert is formed of deformable plastic material such that said reactional force in turn causes the insert to exert force radially inwardly upon the anchorage member.

Images



Publication numbers

JP6418541

US10087614

US20170362810

US9797124

AU2014352376

JP2016539267

TWI561707

IN201617007063

US20160168841

PH12016500558

PH12016500558

AU2014352376

CN103643742

TW201522749

WO2015/074610

CN103643742

Publication kind codes

B2

B2

A1

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2018-11-07

2018-10-02

2017-12-21

2017-10-24

2017-01-19

2016-12-15

2016-12-11

2016-08-05

2016-06-16

2016-05-23

2016-05-23

2016-03-10

2015-12-02

2015-06-16

2015-05-28

2014-03-19

Earliest priority date

2013-11-22

Title

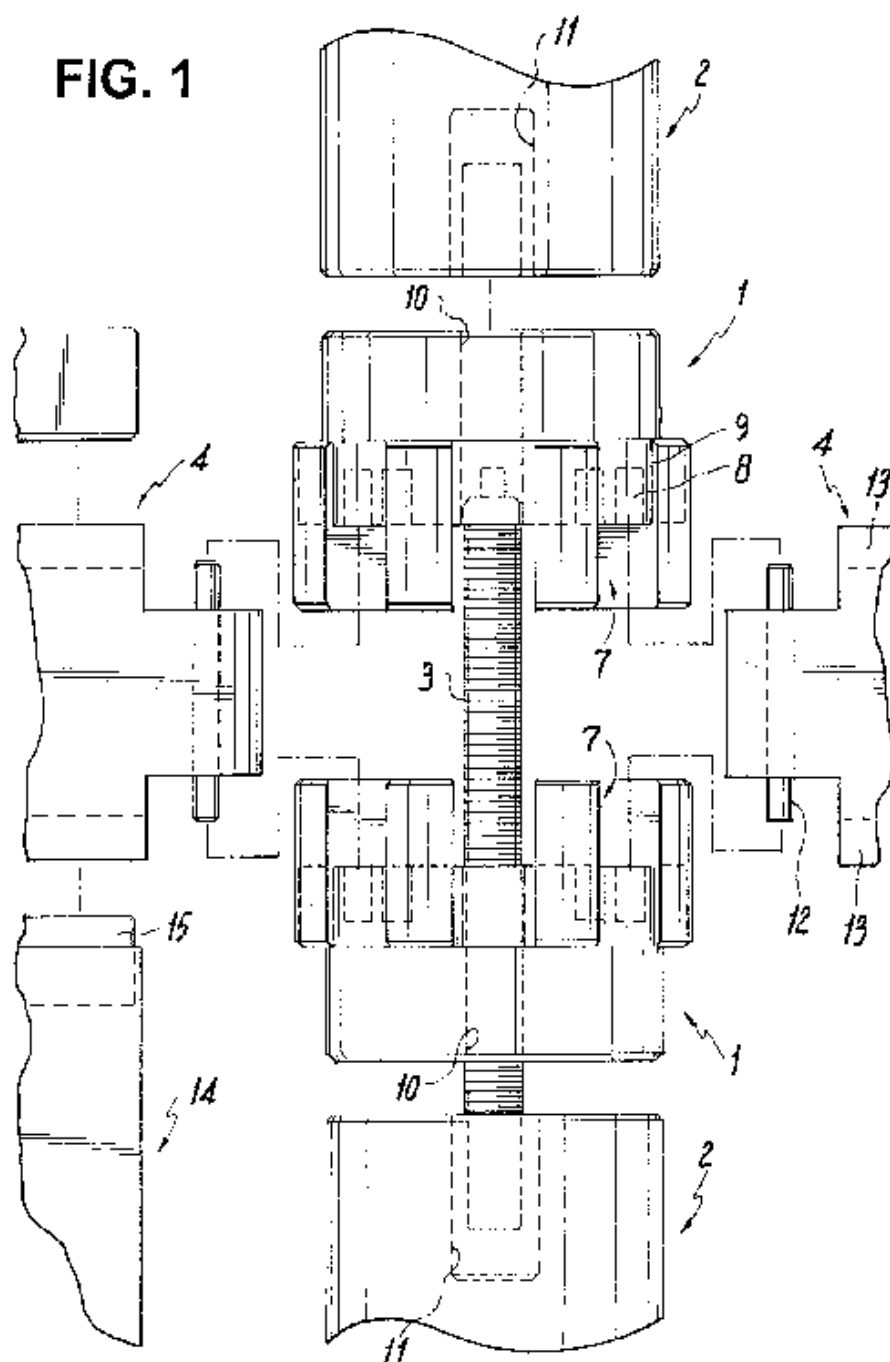
(WO201574610)

Modular member and stable support body constituted thereby

Abstract

(WO2015/074610)

A modular member, comprising an interconnecting bar member (1) and **connecting** bar members (2), a **connecting** bar member (2) comprising a bar body (2.1) and a **connector** (2.2), the **connector** (2.2) being a snap fitting (3) and a sleeved fitting (4), the body of the **connecting** bar member (2.1) and the body of the interconnecting bar member (1) being tubular in structure, the **connecting** bar member (2) being **connected** to the interconnecting bar member (1) by means of the snap fitting (3) or the sleeved fitting (4), and the **connecting** bar member (2) intersecting the axis of the interconnecting bar member (1) to which same is **connected**. The modular member has the advantages of strong load-bearing capacity and convenience in construction.



KR19970706440

KR970706440

PL320595

CZ65197

EP0782654

CA2200692

WO96/09451

WO96/09451

Publication kind codes

A

T3

D1

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B1

A3

A

A

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A1

A3

A2

A1

A3

A2

Publication dates

1999-09-28

1999-04-16

1999-01-28

1999-01-15

1998-12-16

1998-01-14

1997-11-11

1997-11-03

1997-11-03

1997-10-13

1997-07-16

1997-07-09

1997-03-21

1996-07-04

1996-03-28

Earliest priority date

1994-09-23

Title

(EP-782654)

Connection system, in particular for constructing accommodation units and assembled furniture

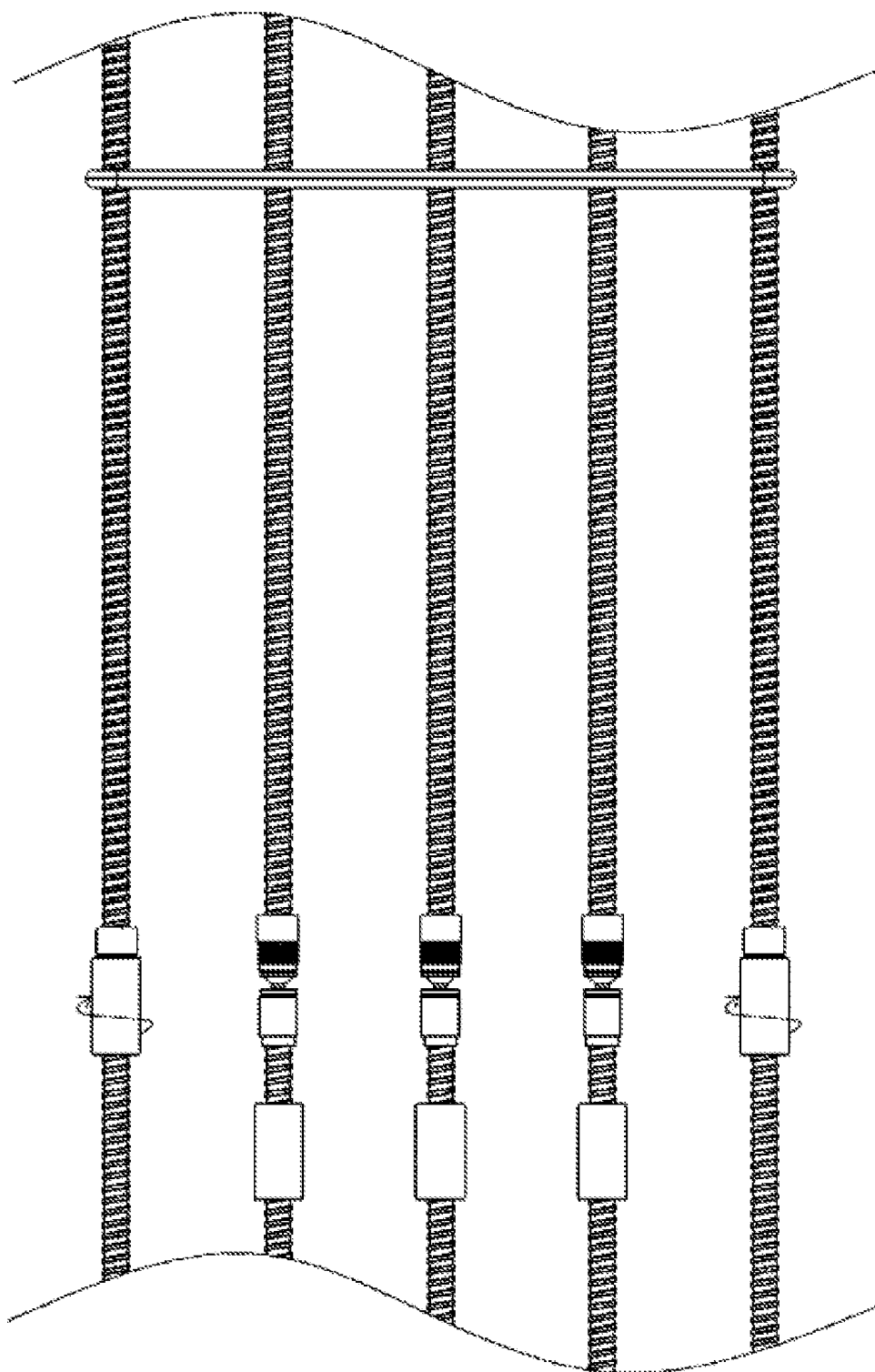
Abstract

(EP0782654)

The invention concerns a **connection** or assembly system whose separable components include **connectors** (1) with one to eight frame **connections**, supports (2, 16), **connection** screws (3), frame members (4), **connection** elements (5), vertically adjustable base elements (6) and mountings (19, 23, 26). These elements can also be made of wood. The **connection**

system is used in particular for constructing accommodation units and assembled furniture as well as for complex configurations for interior design plans (shop-in-shop systems) and exhibitions. The invention is characterized in that the skeleton structure of the **connection** system is stably **connected** since the pressure of the supports (2), (16) on the frame members (4) anchored in the **connector** (1) is brought about by **connection** screws (3). The **connectors** (1) according to the invention are characterized in that they are divided horizontally and up to eight notches (7) with bores (8) and longitudinal grooves (9) can be made in the opposite internal sides of the **connector** halves in order to accommodate and adjust the frame members (4). In order to fit therewith, each frame member (4) is notched on both sides of the resting end and is inserted in the associated bores (8) in the **connector** halves by means of a, for example, pin-like locking element (12) which extends through the part remaining after notching and projects on both sides of the latter.

Family 46/61 - FAMPAT - ©Questel

Images**Publication numbers**

JP2017516003

CN106795717

US20170081853

WO2015/178621

KR101456825

Publication kind codes

A

A

A1

A1

B1

Publication dates

2017-06-15

2017-05-31

2017-03-23

2015-11-26

2014-10-31

Earliest priority date

2014-05-21

Title

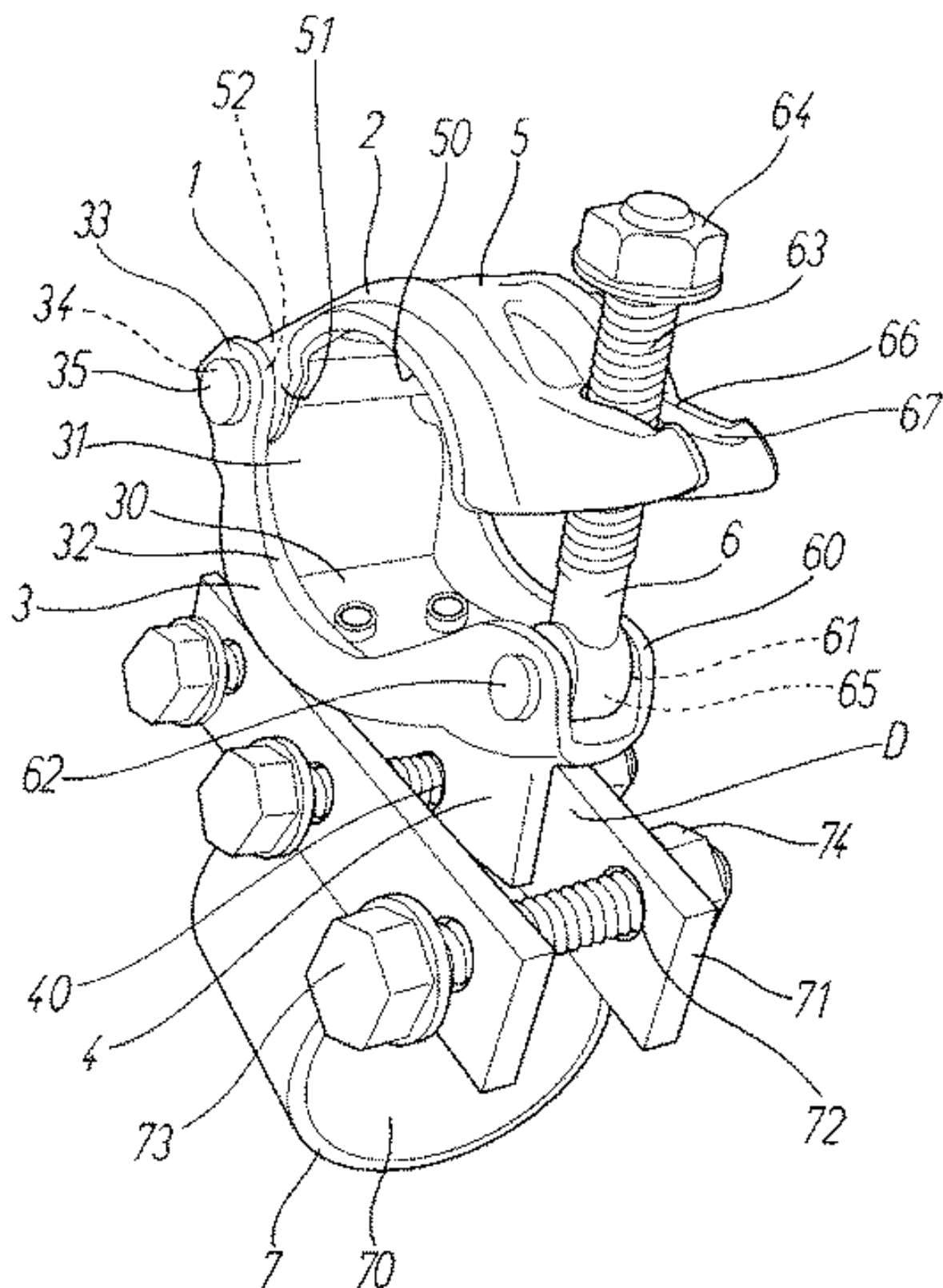
(WO2015178621)

Rebar **connector** having a pair of locking pieces and **connection** method for prefabricated rebar net using same**Abstract**

(WO2015/178621)

Disclosed is a rebar **connector** having a pair of locking pieces, comprising: a first rebar and a second rebar that are to be **connected** such that end portions thereof face each other; a first **connecting** member having an empty space formed therein, wherein the first rebar is coupled to the empty space through one side thereof, a first coupling hole is formed at an opposite side thereof, and an external fastening thread is formed on a predetermined section of the outer surface thereof; a second **connecting** member having an empty space formed therein, wherein the second rebar is coupled to the empty space thereof through one side thereof, and a second coupling hole is formed at an opposite side thereof; a first locking piece that is separately provided and is coupled to the first coupling hole; a second locking piece that is separately provided and is coupled to the second coupling hole; and a locking socket that is coupled to surround the outer surface of the second **connecting** member after being stopped by a predetermined location of the second **connecting** member and has an internal fastening thread that is formed on a predetermined section of the inner surface thereof and is fastened to the external fastening thread of the first **connecting** member, wherein the pair of first and second locking pieces are integrated by fastening the locking socket to form a **connection** part while making contact with each other.

Images



Publication numbers

JP6463281

JP2017127272

Publication kind codes

B2

A

Publication dates

2019-01-30

2017-07-27

Earliest priority date

2016-01-21

Title

(JP2017127272)

Clamping apparatus

Abstract

(JP2017127272)

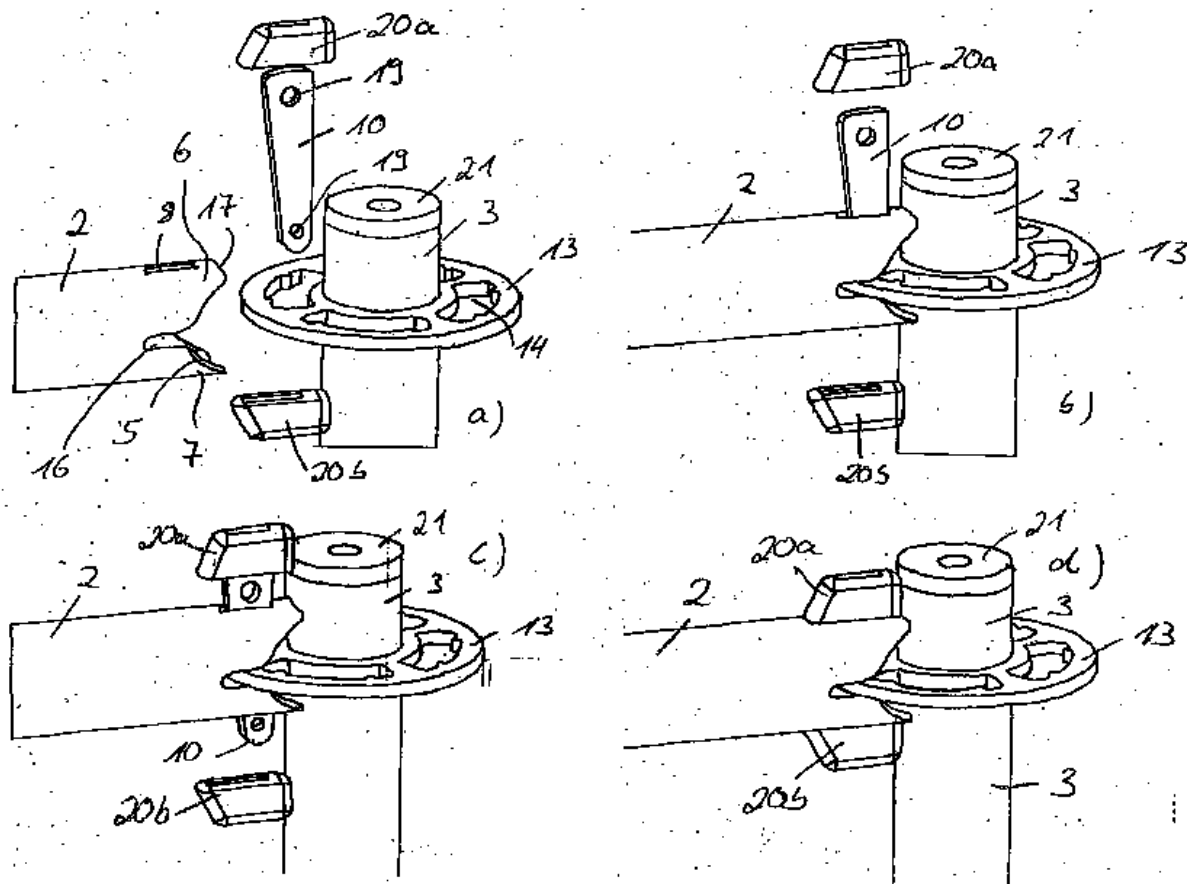
PROBLEM TO BE SOLVED: To provide a novel clamping technique that allows the protrusions of construction scaffoldings to be reduced and can simplify the arrangement of parts and the weights of the parts without stressing the exterior material of an agricultural pipe house.

SOLUTION: According to the present invention, a clamping apparatus 1 comprises: a main clamp 2 provided with a receiving frame 3 having a one-part-holding edge 32, integrally provided with an angle-regulating flange portion 4 having a **connecting** hole 40, and having one part of a tightening mechanism 6 at its tip end, and an opening/closing frame 5 having a pivotal end **connected** to the proximal end of a bottom wall 30 of the receiving frame 3 so as to be freely opened and closed, having an other-part-holding frame 50, and having the other part of the tightening mechanism 6 on its free end; and a **connecting** sleeve 7 integrally formed with a confronting flange portion 71 formed with a **connecting** hole 72 in a tubular frame 70. In the clamp apparatus 1, a **connecting** bolt 73 and a **connecting** nut 74 are attached to the **connecting** holes 40 and 72, which are aligned with each other by disposing the angle-regulating flange portion 4 between the opposing flange portions 71 to integrally combine the **connecting** sleeve 7 with the main clamp 2.

SELECTED DRAWING: Figure 1

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Images



Publication numbers

DE10225403

DE10225403

Publication kind codes

B4

A1

Publication dates

2007-06-06

2003-03-06

Earliest priority date

2001-06-07

Title

(DE10225403)

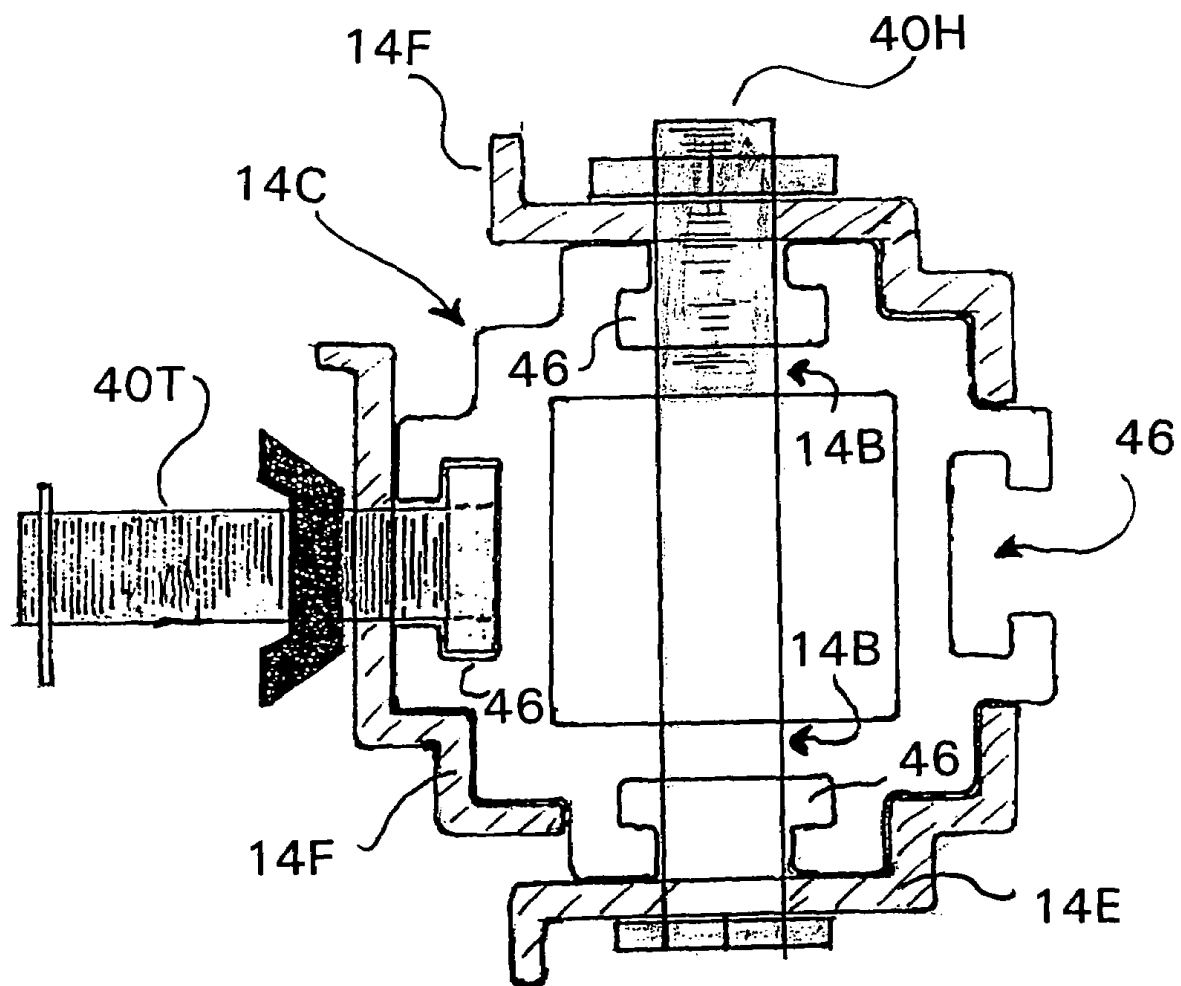
Framework for shelving etc comprises stays and uprights fitting together by wedges passing through wedge openings and securing with clamping elements

Abstract

(DE10225403)

The framework comprises stays and uprights . At least one of the stays (2) has at one of its ends a head (1) which has at least one and preferably two first wedge openings (8,9) and at least one and preferably two clamping areas (17) whereby the head can be attached with a wedge (10) and a clamping element (13) on another stay (3) so that the wedge (10) engages through the two wedge openings. Through the wedge and clamping element the head of one stay can be drawn towards the other stay whereby the clamping area (17) is held through **friction** and or force locking **connection** against the other stay (3). The clamping element (13) can e mounted loose or locally fixed on the stay.

Family 49/61 - FAMPAT - ©Questel

Images**Publication numbers**

CA2554320
JP4712729
EP1723294
US7765748
US20100007098
US7637070
US7578111
US20080313983
US20080245017
US7389621
WO2005/079146
JP2007531834
EP1723294
WO2005/079146
US20050210814
CA2554320
WO2005/079146

Publication kind codes

C
B2

A4
B2
A1
B2
B2
A1
A1
B2
A3
A
A2
A8
A1
A1
A2

Publication dates

2013-07-02
2011-04-01
2010-09-29
2010-08-03
2010-01-14
2009-12-29
2009-08-25
2008-12-25
2008-10-09
2008-06-24
2008-03-27
2007-11-08
2006-11-22
2006-10-12
2005-09-29
2005-09-01
2005-09-01

Earliest priority date

2004-02-11

Title

(EP1723294)

Rapidly deployable temporary modular structures and component elements thereof

Abstract

(EP1723294)

Modular structural components and structural **connections** including chords and forming strips. Each chord has a generally elongated square main body of four main walls surrounding a central bore and having a T-slot structure adapted to accept a bolt type fastener extending along each exterior main surface. Each forming strip is an elongated plate formed into strip segments oriented at right angles to each other and forming a W-shaped corner region, a face region with a bolt hole and an attachment region, each region forming a mating bearing surface with a surface of a chord.

Images

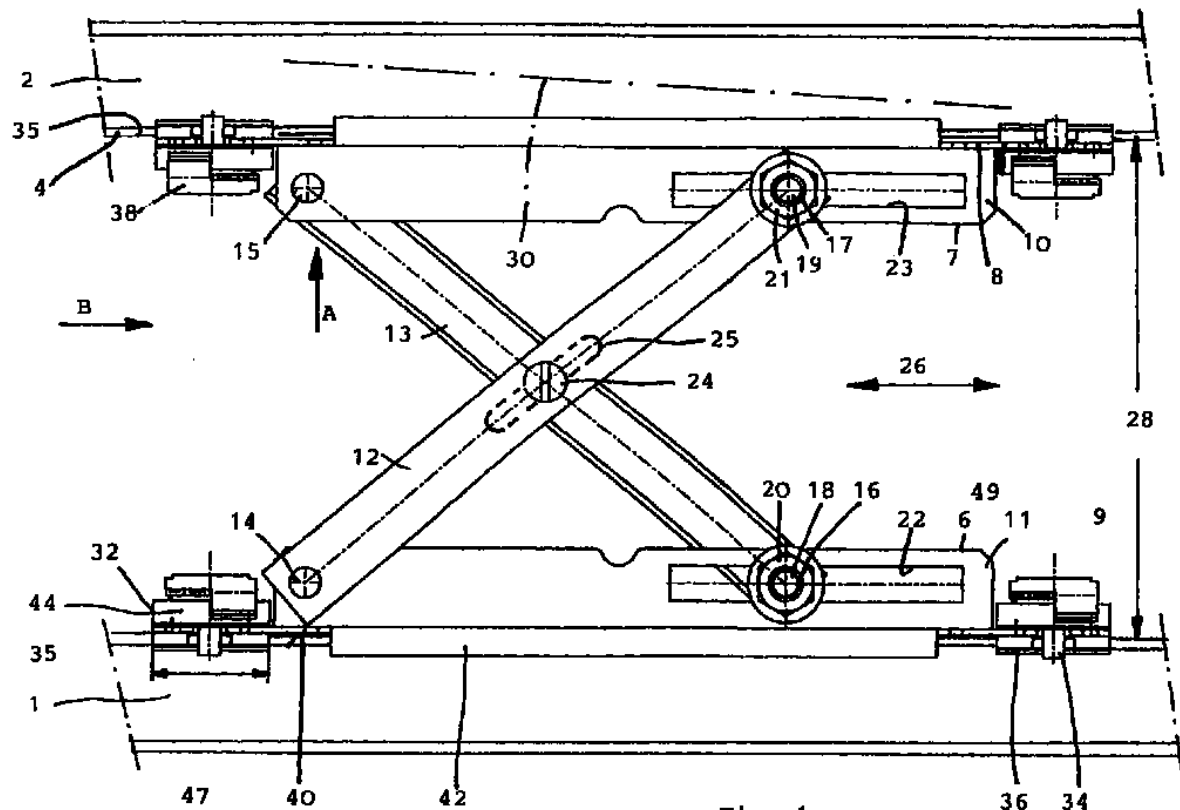


Fig. 1

Publication numbers

DE19836226

DE19836226

EP0979905

PL334845

Publication kind codes

C2

A1

A1

A1

Publication dates

2000-07-20

2000-02-24

2000-02-16

2000-02-14

Earliest priority date

1998-08-11

Title

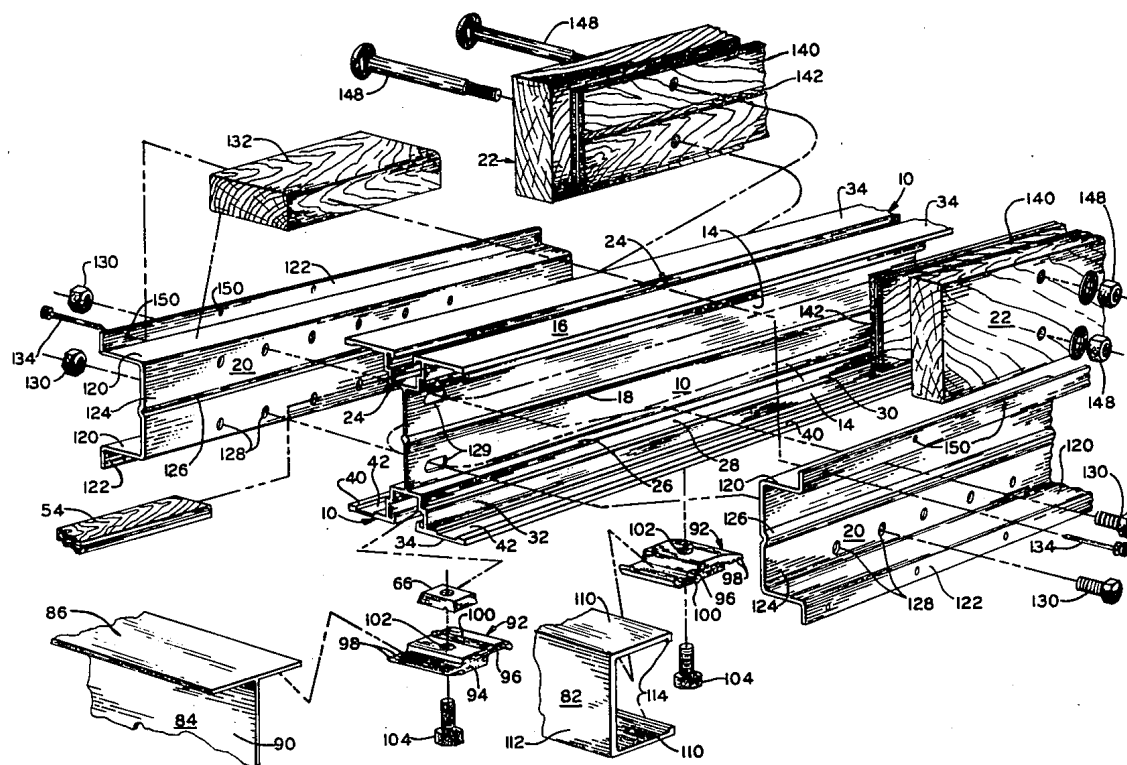
(EP-979905)

Device for **connecting** two longitudinal profiles

Abstract

(EP0979905)

The **connecting** profiles (6,7) have holding claws (34, 42) which engage in and are clamped and/or tensioned in a longitudinal **groove** (4) of the associated profiled rail (1, 2) and/or engage on its longitudinal edge. The two **connecting** profiles are **connected** to each other by the articulated joints (14, 16) of at least one **connecting** rail (12, 13) and are fixable in predetermined positions relative to each other by locking means.



US4030266

A

1977-06-21

1976-02-17

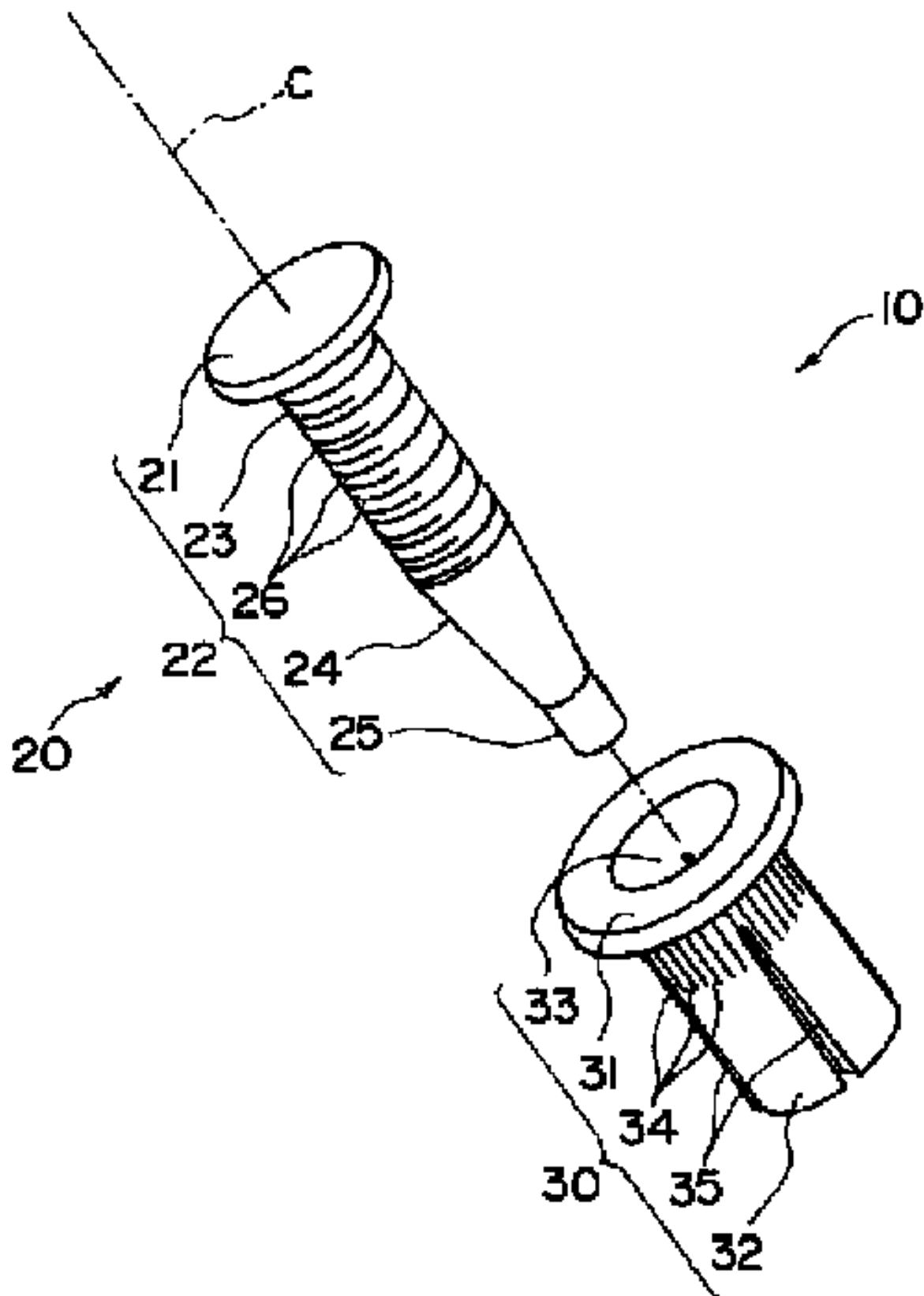
Invertable, multi-purpose structural clamp

(US4030266)

A multi-purpose, extruded metal, joist-like structural member which is designed for use in connection with concrete formwork, the member being generally of I-beam configuration and having associated therewith novel facilities whereby it may be clamped to various types of support members either in the form of lengths of channel members or lengths of I-beams to the end that it assumes a proper operative position within a concrete wall or slab form installation.

Family 52/61 - FAMPAT - ©Questel

Images



Publication numbers

JP2000283133

Publication kind codes

A

Publication dates

2000-10-13

Earliest priority date

1999-03-31

Title

(JP2000283133)

Fastener and **connection** tool for fastener

Abstract

(JP2000283133)

PROBLEM TO BE SOLVED: To provide a fastener including a pin which is hard to fall out from a fastener main body.

SOLUTION: A fastener 10 is furnished with a fastener main body 20 to **connect** a member to be **connected** and a pin 20 to be driven in this fastener main body 30. A **groove** 26 is formed along the peripheral direction of the pin at least on one part of its outer peripheral surface of the pin main body 22 of the pin 20. Additionally, it is possible to prevent falling out of the pin 20 as the pin 20 is locked to the fastener main body 30 while having sufficient frictional force by the **groove** 26 against an inner peripheral surface 33 of the fastener main body 30 at the time of temporarily locking the pin 20. Consequently, backing of driving work is eliminated, and as a result, it is possible to easily carry out the driving work of the fastener 10.

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FIG. 1

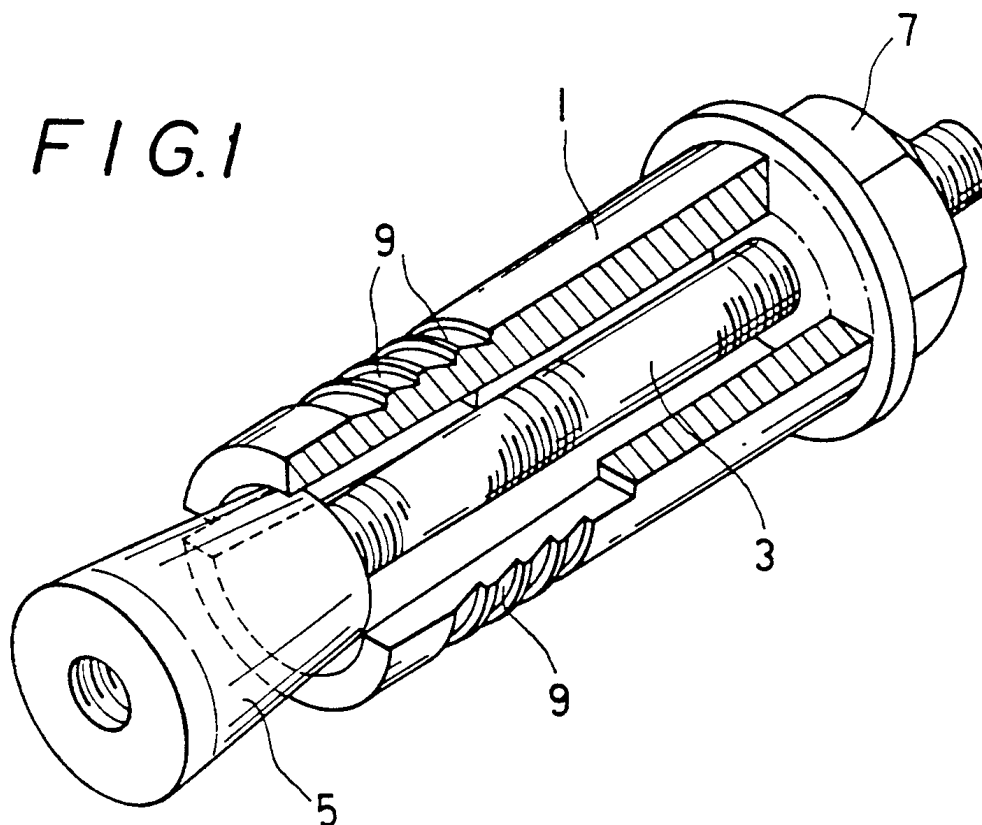
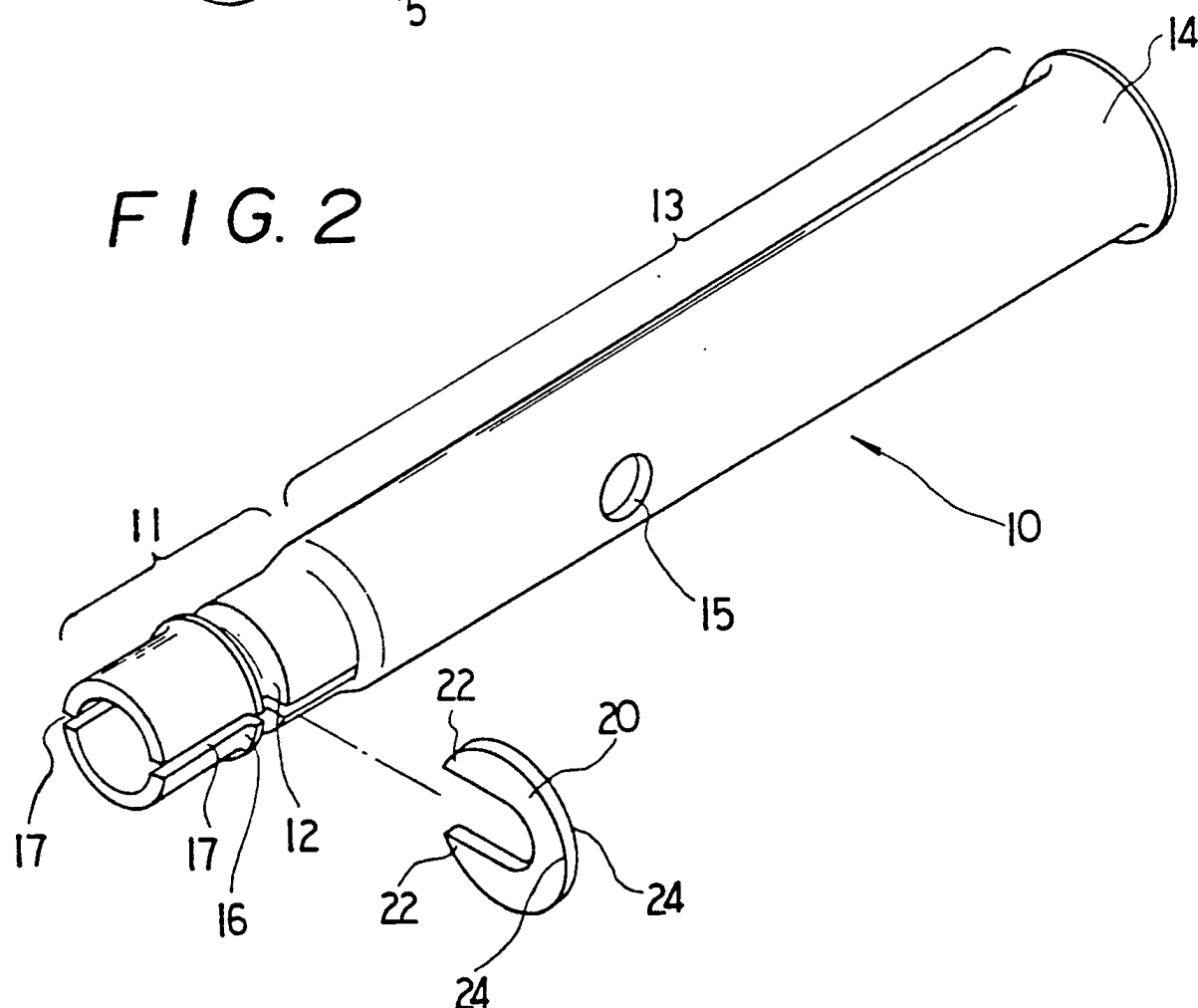


FIG. 2



Publication numbers

JP2007014

DE69108457

DE69108457

JP7039747

EP0462737

KR940008284

US5116176

EP0462737

JP04128473

KR920001094

EP0462737

Publication kind codes

C

T2

D1

B2

B1

B1

A

A3

A

A

A2

Publication dates

1996-01-11

1995-09-07

1995-05-04

1995-05-01

1995-03-29

1994-09-09

1992-05-26

1992-05-20

1992-04-28

1992-01-30

1991-12-27

Earliest priority date

1990-06-20

Title

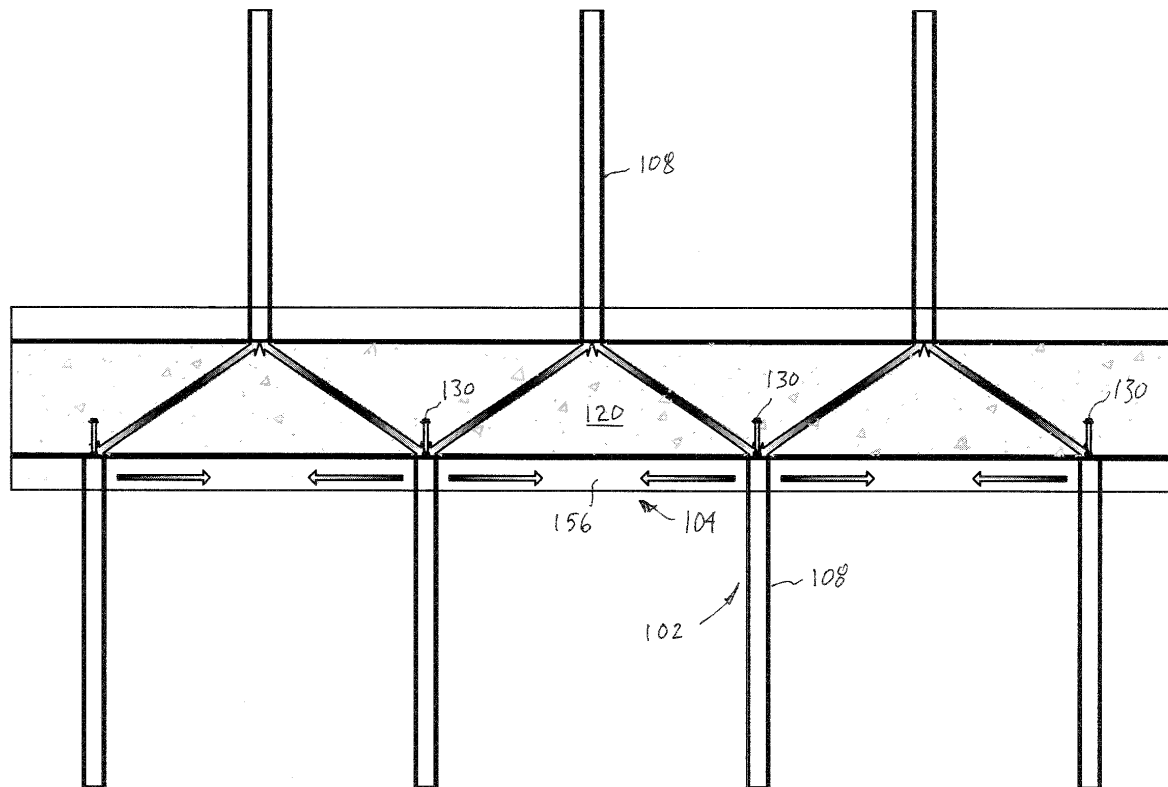
(EP-462737)

Expansion anchor.

Abstract

(EP0462737)

An expansion anchor capable of being inflated by thrusting a lock plug (30, 68) onto a contracted portion (11, 51, 61) to spread a clamp member (20, 40, 53, 63) having acutely angular peripheral edges (24). When the anchor is inflated within a hole in a rigid material such as concrete, the angular edges (24) of the clamp member (20, 40, 53, 63) bite into the rigid material, so that the anchor is no longer released out of the rigid material. <IMAGE>



MX339027

US8661755

CA2751659

CA2650667

US20100218443

MX2009000894

US20090188187

CA2650667

CA2751659

B

B2

C

C

A1

A

A1

A1

A1

2016-05-05

2014-03-04

2013-11-19

2011-11-29

2010-09-02

2009-08-28

2009-07-30

2009-07-24

2009-07-24

Earliest priority date

2008-01-24

Title

(US20090188187)

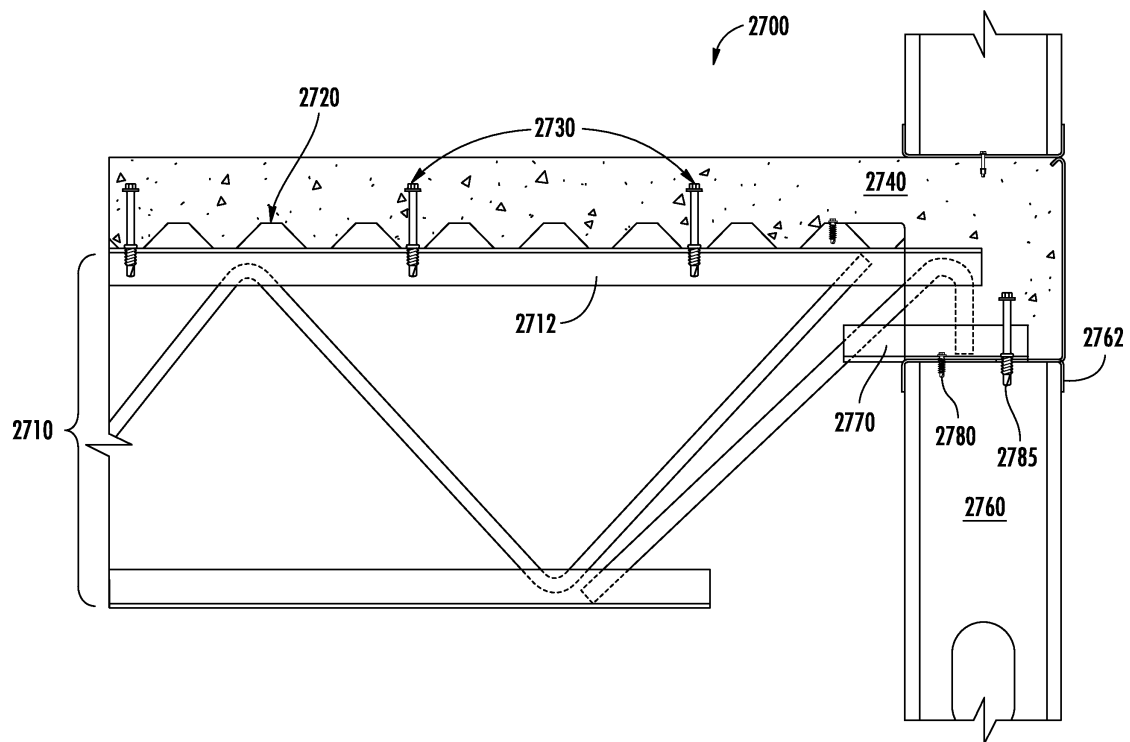
Composite wall and floor system

Abstract

(US20090188187)

Embodiments of the present invention provide systems for **connecting** a flooring system to a vertical wall. In one embodiment the building structure includes a floor comprising a cementitious slab and a wall supporting at least a portion of the cementitious slab. A plurality of stand-off screws extend from the top of the wall into the cementitious slab and are configured to transfer forces between the cementitious slab and the wall. The stand-off screws comprise a lower screw portion and an upper stand-off portion. The lower screw portion is drilled into the top of the wall, and the upper stand-off portion extends above the top of the wall and is encapsulated within the cementitious slab. In some embodiments, at least a portion of the lower screw portion is heat treated to a higher degree of hardness relative to the remainder of the stand-off screw.

Family 55/61 - FAMPAT - ©Questel

Images**Publication numbers**

US8950143

US8621806

US20140000206

CA2769662

CA2650688

US20130008112

US8230657

US20100275544

MX2009000891

US20090188192

CA2650688

CA2769662

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B2

B2

A1

C

C

A1

B2

A1

A

A1

A1

A1

Publication dates

2015-02-10

2014-01-07

2014-01-02

2013-07-23

2013-05-14

2013-01-10

2012-07-31

2010-11-04

2009-08-28

2009-07-30

2009-07-24

2009-07-24

Earliest priority date

2008-01-24

Title

(US20130008112)

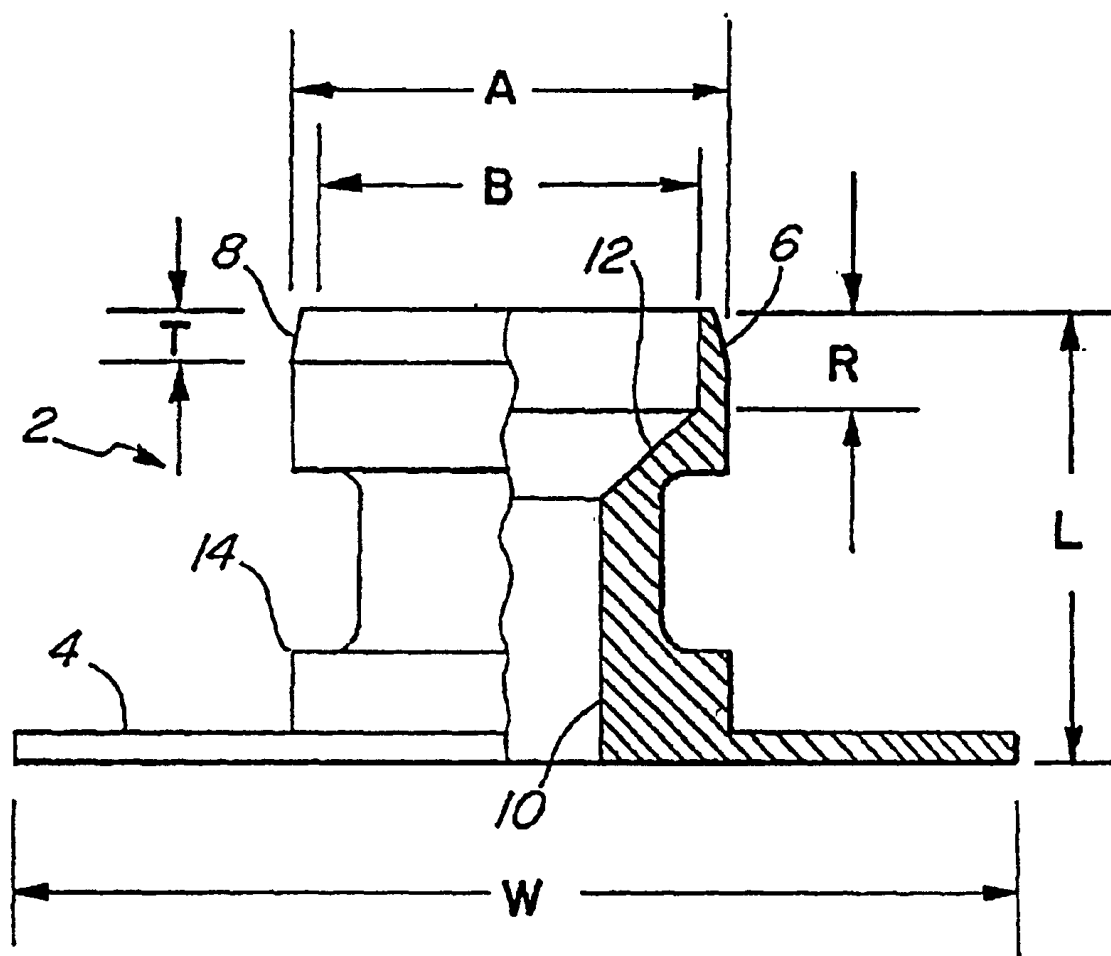
Composite joist floor system

Abstract

(US20130008112)

The composite joist floor system includes joists supported by supporting members. Corrugated steel decking is positioned over the joists such that the corrugations are substantially perpendicular to the joists. Self-drilling, self-tapping, stand-off screws are spaced along the length of the joist, aligned with the deck corrugations. These stand-off screws provide the required shear transfer between the joist and concrete slab to form a composite floor system. The placed concrete encapsulates the upper non-threaded shank portions of the stand-off screws and the end of the joists. After the concrete has cured, the resultant system comprised of steel joists, steel decking, stand-off screws, and concrete, act together to form a composite system with greater load carrying capacity and less vertical deflection. The stand-off screws connect the joist upper chords to the concrete slab allowing the joist and concrete slab to act as a unit, by transferring shear between the two joined components.

Images



Publication numbers

US6862863

EP1300596

US20020050105

Publication kind codes

B2

A1

A1

Publication dates

2005-03-08

2003-04-09

2002-05-02

Earliest priority date

1999-02-03

Title

(EP1300596)

Flush panel spacer and method and apparatus of installing the same

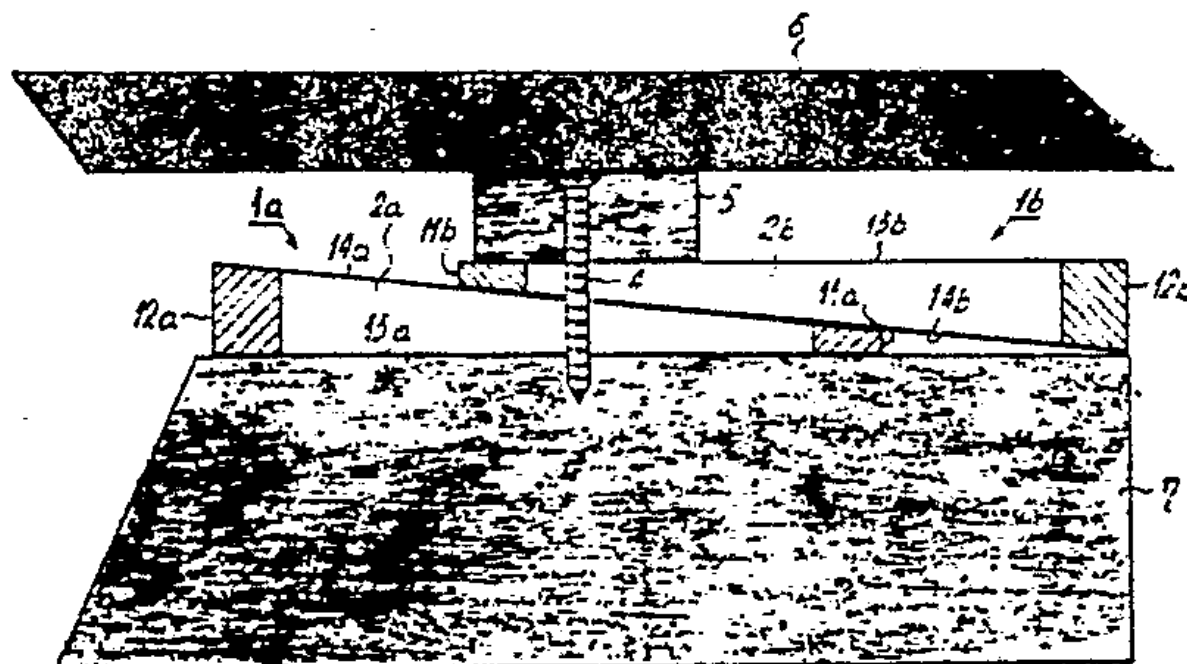
Abstract

(EP1300596)

A method of installing an insert in a sandwich panel (100) for mounting a fastener includes making a hole in the panel (100) and inserting a spacer (70) having a height greater than the thickness of the panel (100). An entrance rim (88) of the spacer (70) extends above an upper surface of the panel (100) and a setting tool (28) exerts a force on the entrance rim (88) to force it into the hole and to position an upper edge of the entrance rim (88) flush with the panel surface. The spacer

(70) can include an annular groove (84) on an interior wall of the entrance rim (88) to facilitate the cold working deformation during an installation in the panel (100) and a hole engaging surface (80) to align and maintain the spacer (70) within the hole. An outer exterior surface of the entrance rim (88) can be indented and coated with a first sealing compound (74) to ensure a watertight seal with the panel (100). A second sealant material can be provided within the entrance rim (88) for sealing with a head of any fastener extending through the spacer (70). An improved floor panel with spacer is accordingly provided for aircraft. <IMAGE>

Images



Publication numbers

FR2625244

Publication kind codes

A1

Publication dates

1989-06-30

Earliest priority date

1987-12-24

Title

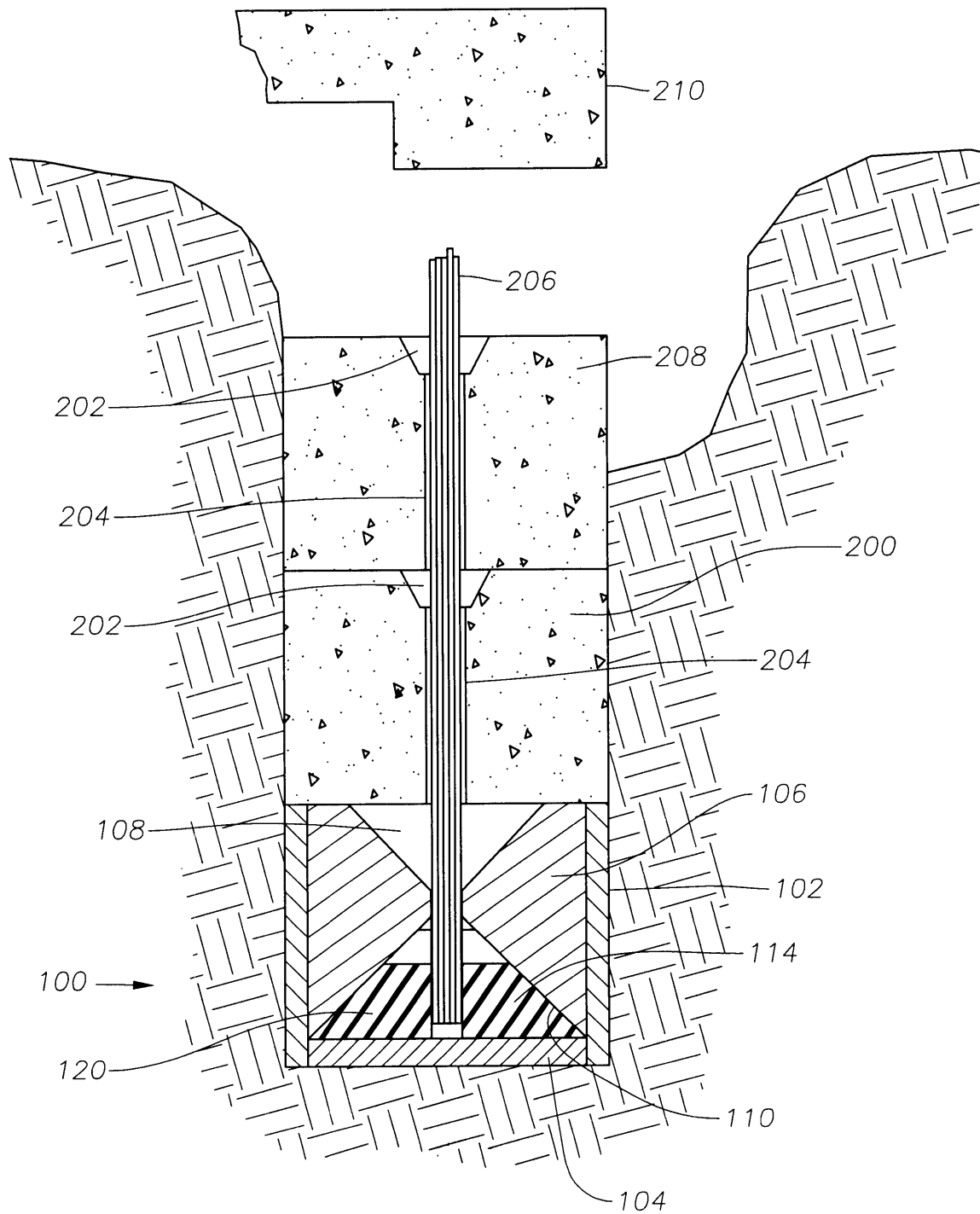
(FR2625244)

Wedging device for levelling a floor, ceiling, wall or panel

Abstract

(FR2625244)

The wedging device for levelling, for example, a compound floor 6 with beams 5 on a concrete slab 7 comprises two wedges 1a, 1b. Each wedge is wedge-shaped with a predetermined slope between a bearing surface 13a, 13b and a sliding surface 14a, 14b. The sliding surfaces are in contact and slide on each other so that the bearing surfaces are substantially parallel. The wedges have two longitudinal stud holes 2a, 2b which can be crossed by means, such as screws 4, to hold the wedges at a desired thickness. The sliding of the sliding surfaces on each other allows the thickness of the device to be selected easily and the sliding can be made easier by means for guiding one of the wedges on the other, such as assembly with tongue and groove. <IMAGE>



US6634830

B1

2003-10-21

2000-09-21

(US6634830)

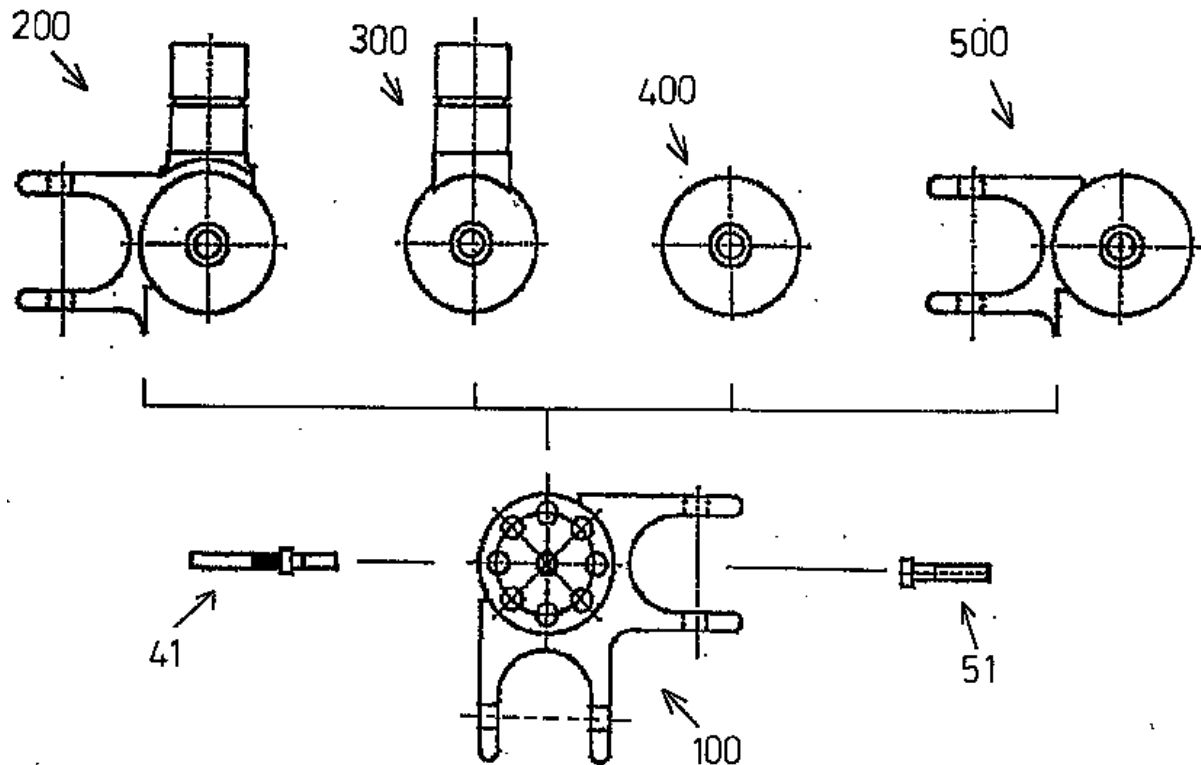
Method and apparatus for post-tensioning segmented concrete pilings

Abstract

(US6634830)

A foundation repair piling made up of segments is post tensioned by a cable fed into the segments after the piling is installed. A cable anchor serves as a base segment of multiple concrete piling segments. After installing all the concrete segments on top of the base segment, a cable is inserted into passages in the segments. The cable is threaded through the completely installed piling segments and into the cable anchor. After the cable bottoms out in the cable anchor, upward tension is applied to the cable. As the cable is pulled, cable lock members in the cable anchor increase gripping pressure even as the cable tension increases, thereby solidly anchoring the end of the cable in the cable anchor. After the desired tension is reached, the cable is terminated at the top of the last segment. The tension is held by a termination lug at the top end of the cable.

Family 59/61 - FAMPAT - ©Questel

Images**Publication numbers**

DE29521524

DE19524877

Publication kind codes

U1

A1

Publication dates

1997-06-19

1997-01-09

Earliest priority date

1995-07-07

Title

(DE19524877)

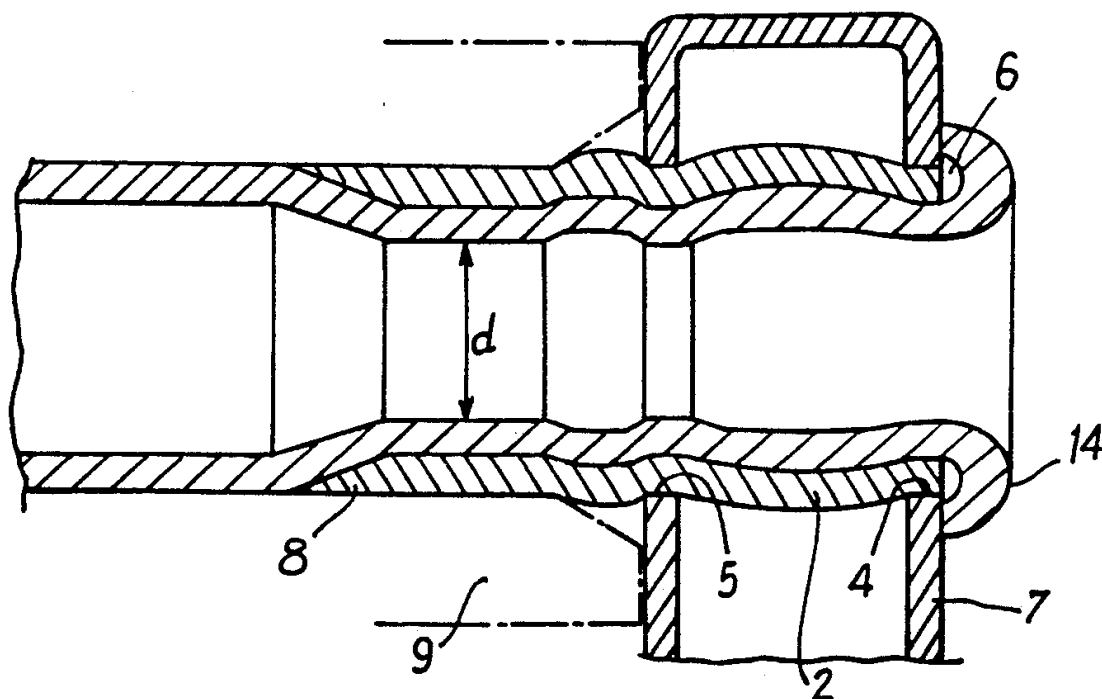
Connection arrangement for detachable bracing - comprising of **connection** base and hook elements arranged with bracing and mounted around axle

Abstract

(DE19524877)

A **connector** for releasable struts (10-14), in particular tubular struts or mounting members for tent -, stage - and trade, wherein at least one of the struts (12, 13, 14) a **connecting** base member having (100) a base body (21) is associated, with a further strut (10, 11) associated **connection** terminal (200; 300; 400; 500), a **connecting** member (31), engageable, wherein the **connecting** terminal (200; 300; 400; 500) with respect to the **connecting** primitive (100) about a common axis (25; 35) by **friction** between opposing surfaces of the base - and **connector** body (21, 31) pivotally and struts (10, 11) by a **connecting** core - and **connecting** terminal (100, 200; 300; 400; 500) mounted on the retainer (41; 51) in a predetermined pivoting position can be latched.

Images



Publication numbers

DE3320164

US4597687

FR2528132

FR2528132

DE3320164

Publication kind codes

C2

A

B1

A1

A1

Publication dates

1986-08-07

1986-07-01

1985-09-27

1983-12-09

1983-12-08

Earliest priority date

1982-06-03

Title

(US4597687)

Device for **connecting** a tube and a sheet metal element

Abstract

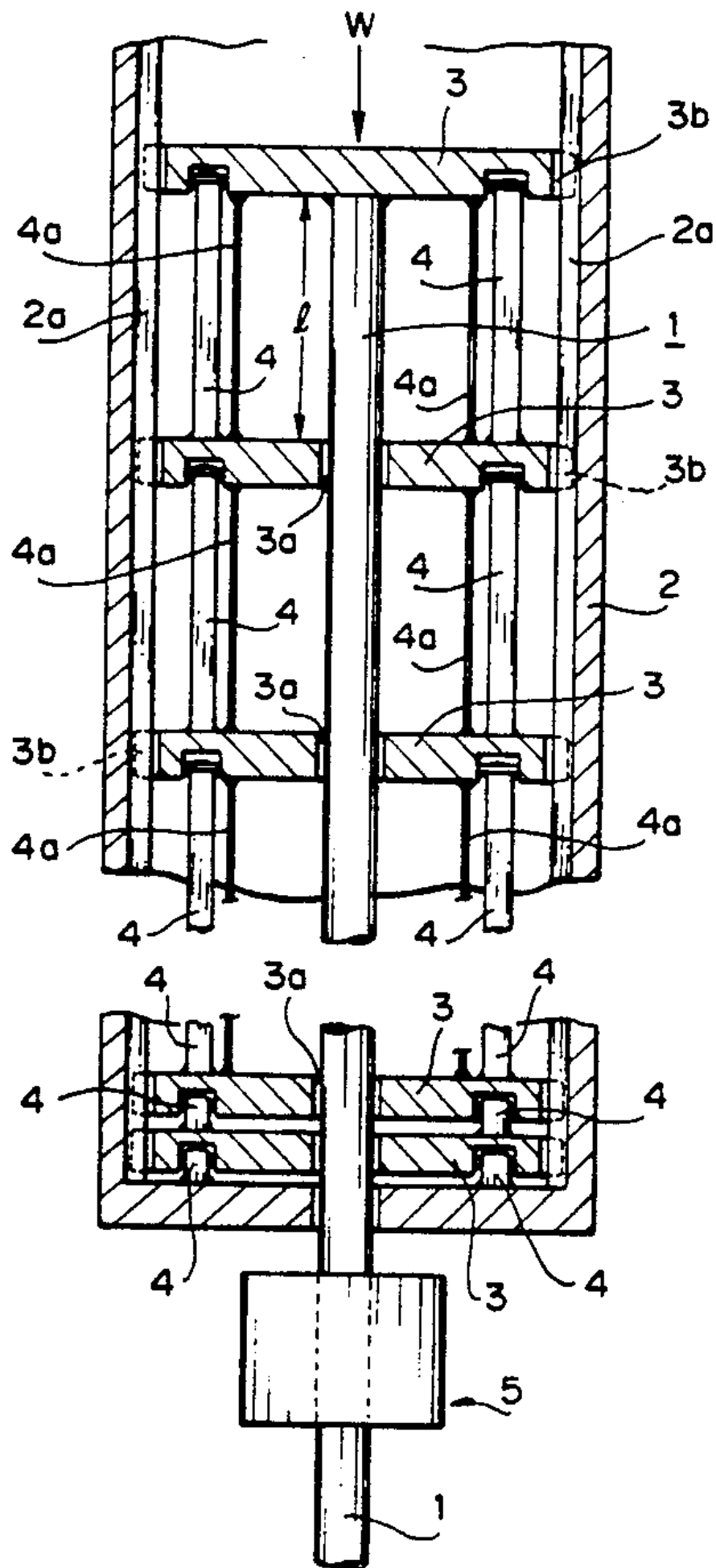
(US4597687)

This invention relates to a process and a device for an angular **connection** of the end of a tube with one (or more) sheet metal element(s), quickly and reliably. The forward portion of a tubular shape (1) is contracted by force-fitting in a ring (2) whose outside dimensions are approximately equal to those of the opening (4) and the inside dimensions, less than the

initial outside dimensions of the tubular shape, and whose rear end (6) is flush with the rear face (7) of the sheet metal (3), this ring (2) being compressed on the thickness of the sheet metal (3) between the tubular shape (1) and the opening (4) in the sheet metal, while the end (10) of the tubular shape is flanged outward in a corolla on the rear face (7) of the sheet metal element. This process can be used in particular to attach rungs to side rails of a ladder or rods to rails of guard railings and also for making scaffolding or tube exchangers.

Family 61/61 - FAMPAT - ©Questel

Images



Publication numbers

JP2652592
RU2062749
SU2062749
IT1258907
JP07330292
FR2676430
CA2068376
GB2257416
US5279084
AU644735
CN1067950
GB2257416
DE4216356
FR2676430
AU1628392
ITMI921127
GB9209913
ITMI921127

Publication kind codes

B2
C1
C1
B
A
B1
C
B
A
B2
A
A
A1
A1
A
A1
D0
D0

Publication dates

1997-09-10
1996-06-27
1996-06-27
1996-03-01
1995-12-19
1995-04-14
1995-03-21
1994-08-17
1994-01-18
1993-12-16

1993-01-13

1993-01-13

1992-11-26

1992-11-20

1992-11-19

1992-11-18

1992-06-24

1992-05-12

Earliest priority date

1991-05-17

Title

(US5279084)

Movement mechanism of telescopic column

Abstract

(US5279084)

The invention provides a moving mechanism which can be made so small and lightweight as to be portable when being contracted, which can be formed into a longer higher column than conventional potable column, and which can thus realize a large moving amount without increasing the weight thereof. The movement mechanism has a slender moving member, a driving portion for moving the moving member, a plurality of centering members each having a through hole for the moving member at the center thereof, **connected** to each other and are moved in linkage with the movement of the moving member so that the distance between the respective centering members can be changed, and a movement passage for supporting and guiding the movement of the centering members.