

1) Family number: 15906994 (JP2001322115 A2)

© PatBase

Title: SITE FACTORY FACILITY
Priority: JP20000145496 20000517

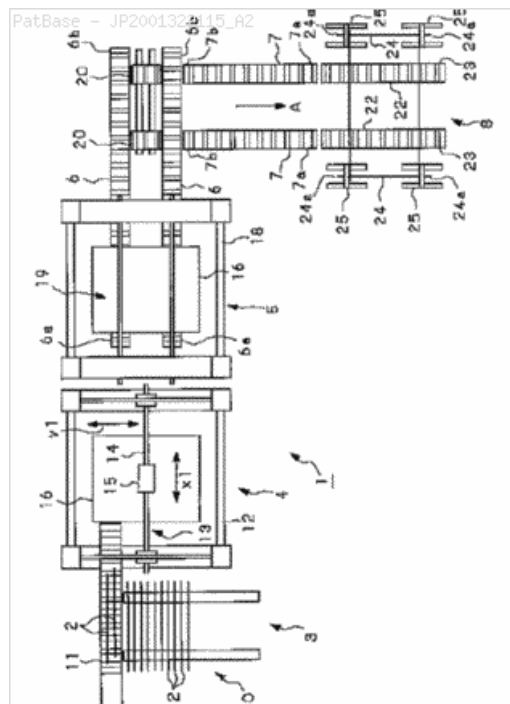
Family:	Publication number	Publication date	Application number	Application date
	JP2001322115 A2	20011120	JP20000145496	20000517

Probable Assignee: SHIMIZU CORP
Assignee(s):(std): SHIMIZU CONSTRUCTION CO LTD
Assignee(s): SHIMIZU CORP ; 清水建設株式会社
Inventor(s):(std): KONDO KOJI
Inventor(s): 近藤 弘司
Agent(s): 志賀 正武; 渡邊 隆; 青山 正和; 高橋 詔男
International class (IPC 8-9): B23P21/00 B28B15/00 B28C9/00 B28C9/02 E04G21/00
International class (IPC 1-7): B23P21/00 B28B15/00 B28C9/02

[Classification Explorer](#)

Forward Citations: CN105666686 B, CN105666686 A, JP2013512132 T2, ES2323620 AA,

Abstract:
PROBLEM TO BE SOLVED: To provide a site factory facility capable of being satisfactorily applied to a divided site or the like and facilitating a management of a product.SOLUTION: The site factory facility 1 comprises a material yard 3 for stocking reinforcing bars 2, 2, etc., a manufacturing yard 4 for manufacturing a PC floor board by using the bars 2, 2, etc., supplied from the yard 3, and a stock unit 8 for stocking the manufactured PC floor board. Both the yard 4 and the unit 8 are each formed of a facility equipment mounted at a transportable frame 12 or a support frame 25. Further, a conveyor 11, a working base 16, first and second roller conveyors 6, 7 capable of transporting a material and the board are provided between the yard 3 and the yard 4 and between the yard 4 and the unit 8.



2) Family number: 34661211 (ES1043906 UA)

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Title: IMPROVED URBAN SERVICE FOR MODULAR KIOSK. (MACHINE-TRANSLATION BY GOOGLE TRANSLATE, NOT LEGALLY BINDING)
Priority: ES19980002018U 19980728 ES19989802018U 19980728

Family:	Publication number	Publication date	Application number	Application date
	ES1043906 UA	20000201	ES19980002018U	19980728
	ES1043906 Y1	20000716	ES19980002018U	19980728
	ES1043906 YA	20000716	ES19980002018U	19980728

Probable Assignee: BLANCO BAEZA FERNANDO
Assignee(s):(std): BLANCO BAEZA FERNANDO

International class E04G1/00 E04G1/12

(IPC 8-9):

International class E04G1/12

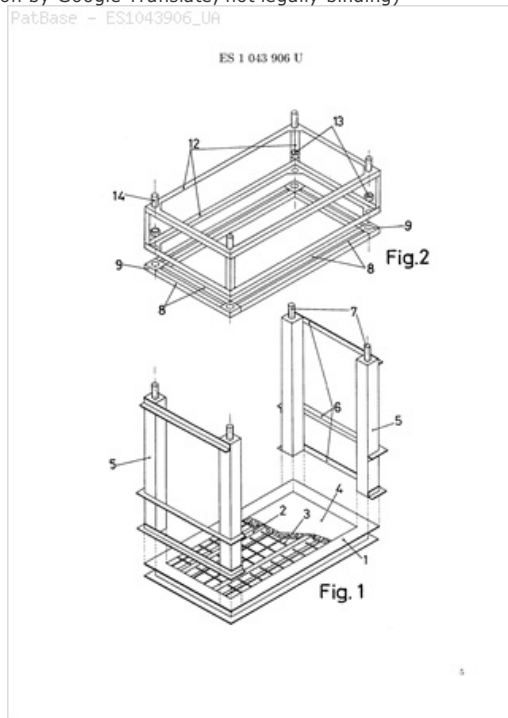
(IPC 1-7):

[Classification Explorer](#)

Forward Citations: EP2507021 A1,

Abstract:

Improved modular kiosk for urban service characterized by being constituted by modules or subassemblies that, assembled, originate the final set. It consists of four modules: the floor module, the supporting pillars, the blinds module and the roof module. The floor module consists of a metal frame strongly reinforced and stiffened, part of which is embedded in a concrete slab of uniform thickness that constitutes the floor itself. The support pillars in number of four, weldable by their lower end to the floor module, are metal structural tubes whose upper ends are respectively closed by welded metal plates, from each of which emerges, axially with the pillar, a threaded stud. Grouped in two pairs, the pillars of each pair are respectively joined by three bars of angular profile that form a right angle with those; the upper bar is attached to a single face of each pillar while the lower two, turning, are joined to two contiguous faces of each of the two pillars. The shutter module consists of a flat rectangular metal frame and each of its sides is constituted by two parallel and separate square tubes that are joined at the respective angles of the frame by a square metal plate coplanar with it and provided with a perforation central whose axis is normal to its largest face. The roof module consists of a parallelepiped metallic structure built with angled profile bars and sheet metal signs. On the lower major face of this parallelepiped, symmetrically made in the wallets that stiffen the four angles of said face, there are, respectively, four normal perforations thereto. From the brackets of the opposite and upper face, axially with the previous perforations, four threaded studs emerge respectively. (Machine-translation by Google Translate, not legally binding)



3) Family number: 35376274 (JP61137633 U1)

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Title: Portable type concrete - [shi] for [to] recuperation - [tobotsukusu] (Machine translation)

Priority: JP19850018732U 19850213

Family:

Publication number	Publication date	Application number	Application date
JP1835118 Y	19910123	JP19850018732U	19850213
JP2007854 Y2	19900226	JP19850018732U	19850213
JP61137633 U1	19860827	JP19850018732U	19850213

Inventor(s): 向井 外志雄

International class B28B11/00 B28B11/24 C04B40/00

(IPC 8-9):

International class B28B11/00 C04B40/00

(IPC 1-7):

[Classification Explorer](#)

Forward Citations: JP2013512132 T2,

Title: CONSTRUCTION CONNECTOR ANCHOR CAGE SYSTEM
Priority: US20040846470 20040514 US20090417470 20090402
Family:

Publication number	Publication date	Application number	Application date
DE102005022499 A1	20051208	DE200510022499	20050511
DE102005022499 B4	20171116	DE200510022499	20050511
FR2870555 A1	20051125	FR20050004860	20050513
FR2870555 B1	20120511	FR20050004860	20050513
GB200509854 A0	20050622	GB20050009854	20050513
GB2414028 A1	20051116	GB20050009854	20050513
GB2414028 B2	20090708	GB20050009854	20050513
JP2005325683 A2	20051124	JP20050170119	20050513
JP4969799 B2	20120704	JP20050170119	20050513
US2005252123 AA	20051117	US20040846470	20040514
US2009196694 AA	20090806	US20090417470	20090402
US8141320 BB	20120327	US20090417470	20090402

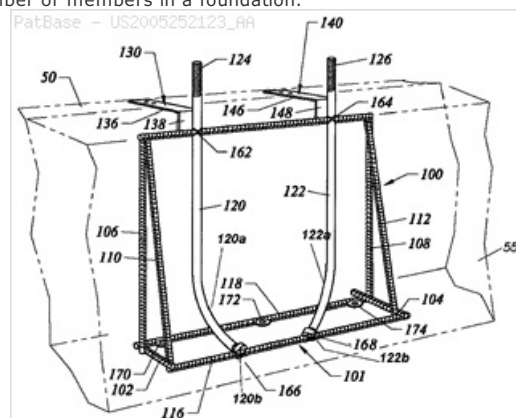
Probable Assignee: SIMPSON STRONG TIE CO INC
Assignee(s):(std): COLONIAS KAREN ; SIMPSON STRONG TIE CO INC
Assignee(s): SIMPSON MFG ; SIMPSON MFG INC CORP ; SIMPSON STRONG TIE CO ; SIMPSON STRONG TIE COMPANY INC ; シンプソン ストロング タイ カンパニー インコーポレーテッド
Inventor(s):(std): COLONIAS KAREN
Inventor(s): KAREN COLONIAS ; カレン コロニアス
Agent(s): CABINET LAVOIX; VIERRA MAGEN MARCUS AND DENIRO LLP; VIERRA MAGEN MARCUS HARMON AND DENIRO LLP
International class (IPC 8-9): B28B23/00 E02D27/00 E04B1/00 E04B1/38 E04B1/41 E04C5/16 E04G21/18
International class (IPC 1-7): B28B23/00 E02D27/00 E04B1/41 E04C5/16
CPC: E04B1/4157 E04B2001/4192 E04C5/06 E04G21/185
US class: 405/229 405/229P 52/293.3 52/295 52/295P 52/699 52/741.1 52/741.100S 52/742.14 52/745.2

[Classification Explorer](#)

Cited documents: JP55161125 A2, JPS55161125, JP4040321 A2, JP2038649 A2, US5054964 A, US5670076 A, US6922968 BA, US5240224 A, US6591574 BB, US2002083658 AA, US4736554 A, US7487597 BB, US6679649 BA, USD354905 S1, US6685399 BB, US4524553 A, US5228261 A, US4404781 A, US2002134037 AA, US5060436 A, US6632048 BB, US4413456 A, US6658806 BA, JP57146859 A2, JPS57146859, JP4040321 Y2, JP2003306946 A2, FR2633959 A1, US5042219 A, US5937604 A, JP2002173941 A2, JP4306365 A2, JP3087420 A2, WO9119055 A1, US4750306 A, US5388804 A, US5337534 A, US6065730 A,
Forward Citations: DE102012007700 B4
DE102012007700 A1
US2011127691 AA, WO20112693 A1, CN108222280 B, US10584502 BB, US2017260743 AA, US10449699 BB, US10415241 BB, CN108222280 A, US10112325 BB, US9937643 BB, US9523201 BB, US2007215784 AA, CN103982049 A, US9194125 BA, US2007236023 AA, US2013019542 AA, CN105839786 B, CN105839786 A, CN105401736 B, CN105401736 A, CN103216043 A,

Abstract:

An anchor member securing system includes a securing member and a rebar cage structure secured to the member. The securing system may include at least a first foundation placement guide. The anchor members may comprise mudsill anchors and anchor bolts, and the system provides more exact placement of the member or members in a foundation.

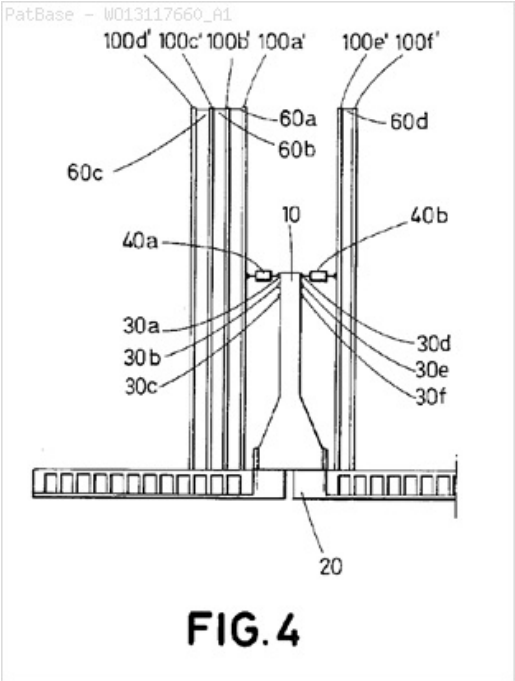


Title: STORAGE STRUCTURE FOR CONSTRUCTION MODULES OF A WIND TURBINE SUPPORT TOWER
Priority: ES20120030175 20120207
Family:

Publication number	Publication date	Application number	Application date
ES2460392 AB	20140513	ES20120030175	20120207
ES2460392 BA	20150721	ES20120030175	20120207
ES2460392 R1	20141014	ES20120030175	20120207
WO13117660 A1	20130815	WO2013EP52459	20130207

Probable Assignee: INNEO TORRES SL
Assignee(s):(std): INNEO TORRES S L
Inventor(s):(std): FERNANDEZ GOMEZ MIGUEL ANGEL ; JIMENO CHUECA JOSE EMILIO
Inventor(s): JOSE EMILIO JIMENO CHUECA ; MIGUEL ANGEL FERNANDEZ GOMEZ
Agent(s): LINAGE GONZALEZ RAFAEL; LINAGE RAFAEL
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW
International class (IPC 8-9): B65D85/64 E04G21/26 E04H12/00 E04H12/34 F03D1/00 F03D11/04
CPC: E04H12/00 F03D13/10 F03D13/20 F03D13/40 Y02E10/72 Y02E10/728
[Classification Explorer](#)
Cited documents: ES2371960 AA, WO12007318 A2, WO12003831 A2, US2010139181 AA, ES2326010 AA,
Forward Citations: US10145138 BB, ES2688842 AA,

Abstract:
A storage structure for construction modules of a wind turbine support tower that comprises an anchor pillar (10) provided with fastening means (30, 40), a support base (20) that extends perpendicularly from the pillar (10) and that is provided with a plurality of anchor assembly sets (50).



7) Family number: 7571124 (US4175361 A) © PatBase

Title: Openable canopy housing
Priority: US19770841838 19771013
Family:

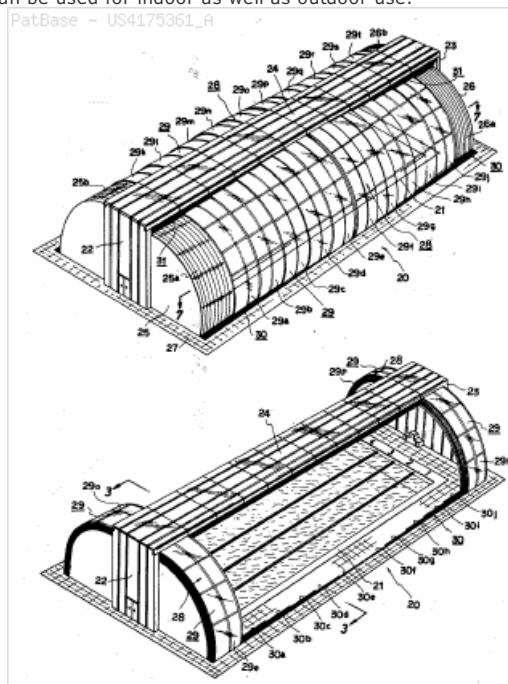
Publication number	Publication date	Application number	Application date
US4175361 A	19791127	US19770841838	19771013

Probable Assignee: KIYOMITSU TANAKA
Assignee(s):(std): KIYOMITSU TANAKA
Inventor(s):(std): KUMODE MASAMI
International class (IPC 8-9): E04B1/343 E04H3/14 E04H3/16 E06B3/00 E06B3/01 E06B3/92
International class (IPC 1-7): E04B1/32 E04B1/343
CPC: E04B1/34305 E04H3/165 E06B3/01 E06B3/922
US class: 52/66 52/67 D25/18
[Classification Explorer](#)
Cited documents: US3245178 A, US3028872 A, US2942658 A, US2789668 A, US1896433 A, US1861069 A, DE566844 A,
Forward Citations: USD844821 S1, EP0796964 A3, FR3067051 A1, US10151109 BB, US10000926 BA, US9915062 BB, US9879473 BA, FR3046190 A1, US2014338270 AA, US2017145682 AA, FR3018529 A1, US2007197304 AA, US2008256863 AA, US2011127691 AA, US2010115857 AA, US2009300997 AA, US2009158673 AA, US2009121207 AA, US2008244989 AA, US2007087850 AA, US2007078016 AA, US2007060404 AA, US2007051038 AA, US2007051036 AA, US2007054745 AA, US2007033868 AA, US2007066410 AA, US2007017164 AA, US2007017163 AA, US2006178222 AA, US2006052171 AA, US2006070308 AA, US2004187397 AA, US2003145882 AA, US8707632 BB, US8701356 BB, US8663023 BB, US8661575 BB, US8381452 BA, US6591557 BA, ES2323824 AA, US8282497 BB, US8251832 BB, US8210954 BB, US8209937 BB, US8197352 BB, US8186107 BB, US8162769 BB, US2011308173 AA, US2008263759 AA, US8136306 BB, US4876828 A, US8096892 BB, US8079916 BB, US8075413 BB, US8070615 BB, US7942752 BB, US7921601 BB, JP60124406 U1, FR2948394 A1, US7857704 BB, US7828667 BB, US7815514 BB, US7811177 BB, US7785207 BB, US7780536 BB, US7775896 BB, US7775895 BB, US7775894 BB, US7762900 BB, US7766753 BB, US7752815 BB, US7762899 BB, US7758435 BB,

US7740542 BB, US7727077 BB, US7594360 BB, US6367206 BA, US6718696 BB, US5829204 A, US5778603 A, US4783861 A, US6789360 BB, US4738057 A, US6754994 BB, US6415556 BA, US4528785 A, US5373668 A, US6698141 BB, US5983575 A, US4831792 A, US6082054 A, US4682449 A, US7520091 BB, EP0298528 A1, US7597630 BB, FR2885150 A1, US7263805 BB, EP0796964 A2, FR2781511 A1, FR2745599 A1, FR2512086 A1, US6374433 BA, US7497784 BB, US7491128 BB, US7371183 BB, US7371182 BB, US4735023 A, US4683686 A, US4674241 A, US6360492 BA,

Abstract:

An openable canopy housing having a series of movable, telescoping transparent arched panels which form the combination roof and sides. Part of the roof of the housing is formed by a horizontal beam which runs the length of the structure. The transparent panels can be selectively opened or closed to provide a structure which can be used for indoor as well as outdoor use.



8) Family number: 29515284 (ES278419 U)

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Title: METALLIC STRUCTURE FOR THE FIXATION OF PANELS, IN THE CONSTRUCTION OF PREFABRICATED UNITS. (MACHINE-TRANSLATION BY GOOGLE TRANSLATE, NOT LEGALLY BINDING)
Priority: ES19840278419U 19840326

Family:	Publication number	Publication date	Application number	Application date
	ES278419 U	19841116	ES19840278419U	19840326
	ES278419 Y	19850516	ES19840278419U	19840326
	ES278419 Y1	19850614	ES19840278419U	19840326

Probable Assignee: TECMACON SA

Assignee(s): TECMACON S A

International class E04D1/34
(IPC 8-9):

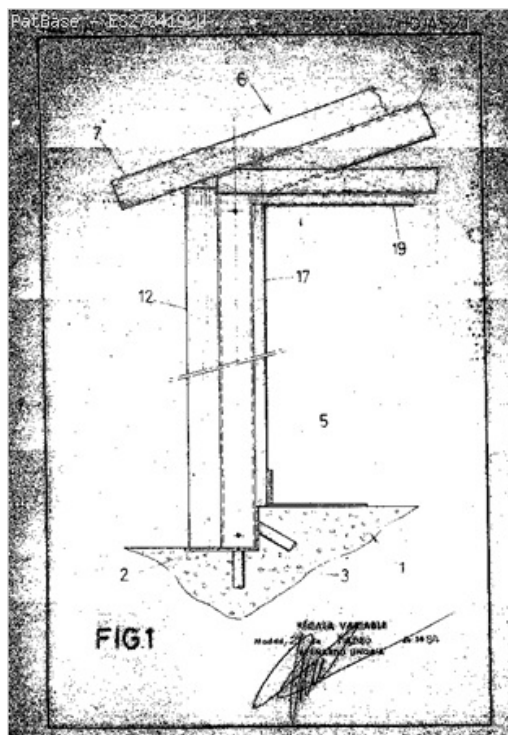
International class E04D1/34
(IPC 1-7):

[Classification Explorer](#)

Forward Citations: EP2507021 A1,

Abstract:

Metallic structure for fixing panels in the construction of prefabricated units, characterized by having an angular profile, equipped with a plurality of temples for fixing to the concrete slab or on a self-sufficient floor raised slightly on the ground, located perimeter and that has a series of transverse lugs uniformly distributed over its entire length, for the anchoring of the corresponding pillar through bolts through holes made in both elements with the pillar of square tubular section preferably and braced, by profile separators in "u" at heights corresponding to window sills, lintel doors and roof if required; standing on each two even pillars of opposite facades, trusses for supporting the roof, consisting of angular or tubular profiles of folded sheet, cross-linked to two slopes, equipped at their ends with two pairs of lugs that are introduced into the tubular profile of the pillar and that they are crossed by bolts with nuts; the enclosure in facades preferably being made by sandwich panels with incorporated polyurethane insulation, fixed to the pillars with self-tapping screws those of the facades, also with self-tapping screws sewn to the trusses and straps lying between them, which form the roof structure; the interior partitioning is determined by the backings, false ceilings and partitions, constituted by fire-retardant and water-repellent wood, leaving an air chamber between the panels used as transoms and the outer panel; fixing with screws the false ceiling to the bottom of the trusses and separation belts of the same, and the interior partition through u-profiles anchored to the slab or forged and the false ceiling whose outer faces are screwed, also being a camera of air that allows electrical installation and plumbing. (Machine-translation by Google Translate, not legally binding)



9) Family number: 1660280 (US4197623 A)

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Title: FACTORY BARGE FOR MANUFACTURING REINFORCED ELONGATED CONCRETE PRODUCTS

Priority: JP19770086293 19770719

Family:

Publication number	Publication date	Application number	Application date
DE2816363 A1	19790201	DE19782816363	19780413
DE2816363 B2	19800417	DE19782816363	19780413
DE2816363 C3	19810115	DE19782816363	19780413
FR2397973 A1	19790216	FR19780012239	19780418
FR2397973 B1	19811204	FR19780012239	19780418
GB1565779 A	19800423	GB19780015407	19780419
GR64296 B	19800303	GR19780156038	19780420
IT1102171 A	19851007	IT19780048923	19780417
IT7848923 A0	19780417	IT19780048923	19780417
JP1067165 C3	19810930	JP19770086293	19770719
JP54021415 A2	19790217	JP19770086293	19770719
JP56006847 B4	19810214	JP19770086293	19770719
NL7803925 A	19790123	NL19780003925	19780413
SE7804460 L	19790120	SE19780004460	19780419
US4197623 A	19800415	US19780893341	19780404

Probable Assignee: MITSUBISHI HEAVY IND LTD

Assignee(s):(std): DAIDO CONCRETE ; MITSUBISHI HEAVY IND LTD ; MITSUBISHI JUKOGYO DAIDO CO KK ; MITSUBISHI JUKOGYO KK DAIDO CO ; SHIMIZU HAABA CONST KK ; SHIMIZU HAABA KONSUTORAKUSHIYO ; SHIMIZU HARBOR CONST CORP

Assignee(s): DAIDO CONCRETE CO LTD ; MITSUBISHI JUKOGYO DAIDO CONCRETE CO LTD KK ; MITSUBISHI JUKOGYO EN DAIDO CONCRETE COLTD EN SHIMIZU HARBOR CONST CORP ALLE TE TOKIO KK ; MITSUBISHI JUKOGYO K K ; MITSUBISHI JUKOGYO KABUSHIKI KAISHA EN DAIDO CONCRETE COLTD EN SHIMIZU HARBOR CONST CORP ALLE TE TOKIO ; MITSUBISHI JUKOGYO KABUSHIKI KAISHADAIDO CONCRETE ; MITSUBISHI JUKOGYO KABUSHIKI KAISHADAIDO CONCRETE CO LTD ; MITSUBISHI JUKOGYO KK DAIDO CONCRETE CO LTD

Inventor(s):(std): ITOH Y ; ITOH YOSHITAKA ; ITOU YOSHITAKA ; MATSUYAMA C ; MATSUYAMA CHIAKI ; OGAWA S ; OGAWA SUSUMU ; SUZUKI T ; SUZUKI TOSHIMASA ; USUI Y ; USUI YASUO

Inventor(s): C MATSUYAMA ; ITOH YOSHITAKA EBINA ; OGAWA SUSUMU FUKUYAMA HIROSHIMA ; S OGAWA ; T SUZUKI ; TOSHIMASA SUZUKI CHIAKI MATSUYAMA SUSUMU OGAWA YOSHITAKA ITOH YASUO USUI ; USUI YASUO CHIGASAKI ; Y ITOH ; Y USUI

International class (IPC 8-9): B28B15/00 B28B21/00 B63B35/44

International class (IPC 1-7): B28B15/00 B28B21/00 B28B23/02 B63B35/00 B63B35/02 B63B35/44

CPC: B28B15/002 B63B35/44 Y10T29/5185

US class: 114/382 29/33.0D 29/33D 425/62 425/88

[Classification Explorer](#)

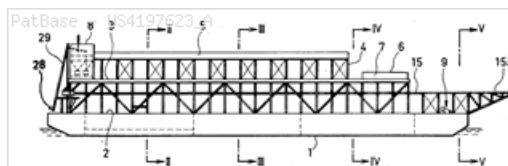
Cited documents: US451463 A, US390545 A, US379923 A, US3262411 A, US2630091 A, US3785314 A, FR2069975 A1,

Forward Citations: WO09033994 A1, ES2371960 AA, US2011127691 AA, US4290740 A, CN102695590 A, AU2010246534 BB, WO11063983 A1, JP62129212 A2, JP60500955 T2, WO9313924 A1, US5728327 A, FR2685885 A1, FR2747715 A1, FR2717147 A1, FR2598379 A1, FR2563802 A1,

Abstract:

A factory barge for manufacturing reinforced concrete products comprises a batcher plant mounted at one end of the hull for

preparing ready mixed concrete, a reinforced concrete product unloader mounted at the opposite end of the hull, and, between the batcher plant and the unloader, in the order mentioned, concrete placers for receiving the concrete from the batcher plant and placing it into elongated molds held in the fore-and-aft direction, compactors for compacting the concrete in the molds, a curer for curing the concrete compacted in the molds, and a mold remover for removing the molds from the cured concrete products. An equipment for fabricating reinforcement cylinders is mounted on a deck above the deck where the concrete placers are installed, and means for transferring the molds from the concrete placers to the compactors, curer, and mold remover is so disposed as to handle the molds while maintaining them in the fore-and-aft direction. The unloader includes a U-shaped opening formed at the end of the hull to accommodate a product delivery barge, and means for transferring the elongated reinforced concrete products, taken out of the molds by the mold remover, onto the delivery barge in the U-shaped opening, while maintaining the same orientation.



10) Family number: 41729946 (US2008086976 AA)

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Title: HOUSING MANUFACTURING SYSTEM AND METHOD

Priority: CA20062563187 20061011 US20070675938 20070216 CA20072601317 20070907
US20070852204 20070907 US20100900724 20101008 US20140543040 20141117
US20170441323 20170224

Family:	Publication number	Publication date	Application number	Application date
	CA2563187 AA	20080411	CA20062563187	20061011
	CA2601317 AA	20080411	CA20072601317	20070907
	CA2601317 C	20100720	CA20072601317	20070907
	US2008086976 AA	20080417	US20070675938	20070216
	US2008086978 AA	20080417	US20070852204	20070907
	US2011016694 AA	20110127	US20100900724	20101008
	US2015068005 AA	20150312	US20140543040	20141117
	US2017159283 AA	20170608	US20170441323	20170224
	US7832087 BB	20101116	US20070852204	20070907
	US8887399 BB	20141118	US20100900724	20101008
	US9587395 BB	20170307	US20140543040	20141117
	US9957710 BB	20180501	US20170441323	20170224

Probable Assignee: MATTAMY CORP

Assignee(s):(std): DIRKS JURGEN ; GILGAN PETER ; MATTAMY CORP ; MEEVIS WILLIAM ; MITCHELL WALTER ; VOHSEMER PETER

Inventor(s):(std): DIRKS JURGEN ; GILGAN PETER ; MEEVIS WILLIAM ; MITCHELL WALTER ; VOHSEMER PETER

Agent(s): PERRY AND CURRIER; REISING ETHINGTON BARNES KISSELLE PC; REISING ETHINGTON PC

International class B21D39/00 B23P19/04 B23P21/00 B60P3/00 E04B1/00 E04B1/343 E04B1/35 E04B7/00 E04D15/00
(IPC 8-9): E04G21/14 E04H1/00

CPC: E04B1/35 E04B2001/3577 B60P3/00 E04B1/34336 Y10T29/49623 Y10T29/49625 Y10T29/49627
Y10T29/49629 Y10T29/49829 Y10T29/5191 Y10T29/53365 Y10T29/534 Y10T29/53435 Y10T29/53539
Y10T29/53548

US class: 1/1 29/33K 29/430 29/430P 29/783 29/791 29/799 29/822 29/824 29/897.3 29/897.31 29/897.312
29/897.32 296/24.3 52/143 52/745.02 52/745.020S 52/745.04 52/745.040P 52/745.06 52/745.060P
52/745.19 52/749.1 52/749.100S

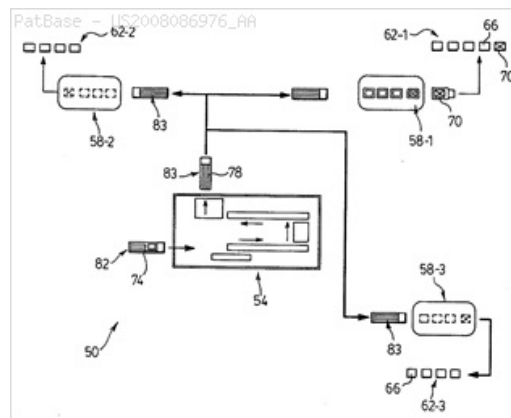
[Classification Explorer](#)

Cited documents: WO9704188 A1, WO9704187 A1, DE4324612 A1, DE2525434 A1, CA2359062 AA, US3758314 A, CA1163822, CA2434365, CA2449159, CA2430637, CA2437162, CA2226874, CA2226873, CA2398322, CA2182242, CA2139622, CA2449159 AA, CA2430637 AA, CA2434365 AA, CA2437162 AA, CA2226874 AA, CA2226873 AA, CA2398322 AA, CA2182242 AA, CA2139622 AA, CA1163822 A1, CA994717 A1, CA903975 A, WO9704188, WO9704187, DE4324612, DE2525434, CA2359062, US9587395 BB, US7832087 BB, US7467469 BB, US7152449 BB, US5174707 A, US6959514 BA, US6651393 BB, US2002174606 AA, US2002170243 AA, US4360298 A, US4231695 A, US4059931 A, US3537168 A, US3156018 A, US5353558 A, US4120133 A, US3279132 A, US5661930 A, US6935668 BA, US6588605 BA, US2002095888 AA, US4599829 A, US4161145 A, US3893705 A, US3679177 A, US2004103596 AA, US5425207 A, US4273485 A, US2940402 A, US2681233 A, US6067771 A, US5209540 A, US7025546 BB, US6540089 BB, US5890341 A, US4513545 A, US3574920 A, US5401098 A, US5191842 A, US5092504 A, US3501875 A, US6851079 BA, US3937329 A, US619237 A, US5706615 A, US4003182 A, US3788026 A, US3785314 A, US2752864 A, US6000192 A, US4884935 A, US4305538 A, US3707165 A, US2005257456 AA, US5991769 A, US5689705 A, US3994060 A, US6951079 BB, US6308491 BA, US5819498 A, US4546530 A, US2003172006 AA, US4110952 A, US3758067 A, US2002100235 AA, US4044854 A, US6253504 BA, US3743120 A, US6571528 BA, US6571523 BB, US5771645 A, US5765330 A, US4096675 A, US3962773 A, US3820216 A, US4450617 A, US3958705 A, US3958320 A, US5402618 A, US4512120 A, US3805365 A, US3800493 A, US6539401 BA, US4573302 A, US4899497 A, US4501098 A, US4187659 A, US3168206 A, US2002007605 AA, US4894909 A, US3633795 A, US2009229194 AA, US6681702 BA, US6467223 BA, US5943960 A, US5374151 A, US5136751 A, US5082415 A, US4597615 A, US4042118 A, US5472300 A,

Forward Citations: US2017159283 AA, US9957710 BB, US9587395 BB, US9388566 BB, US2014116000 AA, US2012324823 AA, US2009150208 AA, US8887399 BB, US2011016694 AA, CN108517966 B, CN108517966 A, US9482021 BB, US2015167331 AA, US2012297606 AA, US2018058069 AA, US10500772 BB, US10183425 BB, US9522492 BB, US9162381 BB, US2013037984 AA, US9108172 BB,

Abstract:

A system for manufacturing homes is provided. An embodiment includes a sub-assembly plant for assembling planar sections of a home according to production schedule for custom homes. The embodiment also includes at least one final assembly facility located proximal to a subdivision where a plurality of the custom homes are to be situated. The final assembly facility is for receiving the planar sections from the sub-assembly plant and for constructing the homes from planar portions according to the production schedule.



11) Family number: 31338318 (US2004237439 AA)

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Title: METHOD AND SYSTEM FOR PREFABRICATED CONSTRUCTION
Priority: US20030467410P 20030502 WO2004US13775 20040503 US20040837924 20040503
Family:

Publication number	Publication date	Application number	Application date
CN100532748 C	20090826	CN200480018884	20040503
CN1816667 A	20060809	CN200480018884	20040503
EP1629160 A1	20060301	EP20040751254	20040503
IN05575DN2005 A	20090911	IN2005DN05575	20051201
US2004237439 AA	20041202	US20040837924	20040503
US7665250 BB	20100223	US20040837924	20040503
WO04099515 A1	20041118	WO2004US13775	20040503

Probable Assignee: POWELL DAVID W
Assignee(s):(std): POWELL DAVID W
Assignee(s): D W 鲍威尔 ; D·W·鲍威尔
Inventor(s):(std): POWELL DAVID W
Inventor(s): D W 鲍威尔 ; D·W·鲍威尔
Agent(s): RICK B; 北京戈程知识产权代理有限公司; 王 初; 程 伟
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8-9): E02D27/32 E04B1/00 E04B1/20 E04B1/21 E04B1/32 E04B1/348 E04B5/43 E04B5/48 E04C2/52 E04C3/34 E04F15/024 E04H14/00

International class (IPC 1-7): E04B1/21 E04B1/32 E04B5/48 E04C2/52 E04C3/34

CPC: E04B1/20 E04B1/21 E04B1/34823 E04B2001/0053 E04B5/43 E04B5/48 E04C3/34 E04F15/02411

US class: 52/236.4 52/297 52/503 52/503S 52/505 52/505P 52/87 52/88 52/89

[Classification Explorer](#)

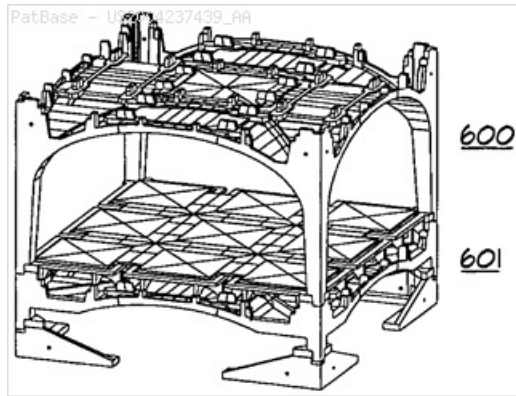
Cited documents: GBA1211716, BE510326 A, GB1211716 A, GB115457 A, FR992152 A, FR631028 A, EP0013570 A1, US1327889 A, US3299585 A, US3861102 A, US4137679 A, US4989382 A, US1851137 A, US3943672 A, US4144692 A, US4378664 A, US1097269 A, USRE39097 E, US858170 A, US4211043 A, US6088987 A, US829397 A, US4041666 A, US3902294 A, US5245802 A, US3696574 A, US3842557 A, US5826381 A, US1120104 A, US3289366 A, US4422269 A, US6332298 BA,

Forward Citations: IT201800009302 A1

WO20092716 A1, FR2993908 B1, CN104878957 A, AU2009210355 BB, WO07134073 A3, FR2993908 A1, WO07134073 A2, US10676889 BB, US10605402 BB, US2019119875 AA, US10280632 BB, US10280631 BB, US10280630 BB, US10267047 BB, US10161141 BB, US10119278 BA, USD815668 S1, US9587392 BB, US2014326332 AA, US2011127691 AA, US2010314305 AA, US9169641 BB, US8343343 BB, WO20006747 A1, US10372838 BB, FR2960865 B1, US10309108 BB, US10066403 BB, US9939807 BB, US9803380 BB, US9798837 BA, USD796774 S1, CN104631677 B, US2014156049 AA, CN104631677 A, USD777947 S1, US8516774 BB, US9493326 BB, US2015193561 AA, USD768466 S1, USD768420 S1, US9416807 BB, WO09152400 A1, US8458970 BB, US8322093 BB, US2010228666 AA, WO14116993 A1, US2009056253 AA, US2007264108 AA, US2007264107 AA, US2010275530 AA, US2010139184 AA, US2008302057 AA, US2008027684 AA, US2007271870 AA, US2007262040 AA, US2007260345 AA, US8973249 BB, US2013037497 AA, US2006259171 AA, US9103132 BB, US2006231681 AA, US9109874 BB, US2005004782 AA, US2004237421 AA, US9038947 BB, US8892457 BB, CN102287057 A, US8751206 BA, US8734705 BB, US8645196 BB, US8484928 BB, US8380470 BA, US8157210 BB, US8122680 BB, EP1722323 A1, FR2960865 A1, US7894920 BB, US7870691 BB, US7835810 BB, WO10071392 A1, US7599820 BB, WO08104085 A1, CN104775572 A, CN103221620 B, CN103221620 A, CN103255929 A, CN102216542 B, CN102146702 A, CN101812897 A, CN105102735 B, CN105102735 A, CN102695590 A,

Abstract:

A structure assembled from a combination of stackable modules, each module assembled from multiple prefabricated, transportable blocks. The blocks are typically reinforced cast concrete formed in reusable molds. Module framing blocks may include arched corner blocks, key blocks that interlock with a pair of corner blocks, and optional center blocks. Other structural elements include roof, floor, and wall components that interlock with the framing modules. Modules may be stacked or nested to form structures including buildings, elevated roadways, and parking garages. Utilities may be provided through optional conduits formed in the corner elements. The framing supports raised floor modules for ease in mechanical system installation and modification. The roof elements support usable terraces and rainwater collection. The blocks are demountable and reusable. The modules are self-supporting during erection, and may be assembled without fasteners.



12) Family number: 42500474 (US3863771 A)

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Title: GANTRY CRANES

Priority: GB19720056876 19721208 GB19730056876 19731102

Family:	Publication number	Publication date	Application number	Application date
	AU197363353 A1	19750612	AU19730063353	19731207
	BE808403 A	19740607	BE19730138674	19731207
	CA994287 A1	19760803	CA19730187687	19731207
	CH578481 A	19760813	CH19730017222	19731207
	DE2361133 A1	19740612	DE19732361133	19731207
	DE7343594 U	19770224	DE19730043594U	19731207
	ES421278 A1	19760416	ES19730421278	19731207
	FR2209708 A1	19740705	FR19730043583	19731206
	FR2209708 B1	19770812	FR19730043583	19731206
	GB1446853 A	19760818	GB19720056876	19721208
	IL43765 A0	19740314	IL19730043765	19731206
	IL43765 A1	19770831	IL19730043765	19731206
	IT1004041 A	19760710	IT19730054089	19731205
	JP50024968 A2	19750317	JP19730137245	19731207
	LU68953 A	19740509		00000000
	MT756 A	19740816	MT19730000756	19731206
	NL7316828 A	19740611	NL19730016828	19731207
	US3863771 A	19750204	US19730422323	19731206

Probable Assignee: DOBIE C H

Assignee(s):(std): BROWN W NOTI IN COMMERCIO COME ; CHARLES HERBERT DOBBIE ; DOBBIE AND PARTNERS ; DOBBIE C ; DOBBIE CHARLES ; DOBBIE CHARLES H ; DOBBIE CHARLES H TRADING AS C ; DOBBIE CHARLES H TRADING C AS ; DOBBIE CHARLES HERBERET ; DOBBIE CHARLES HERBERT ; DOBBIE PARTNERS C H ; DOBBIE PRUS CHACINSKI PALLET W ; DOBBIE C H ; HARRIS ; HARRIS W ; HARRIS WILLIAM B ; HARRIS WILLIAM B TRADING AS C ; HARRIS WILLIAM B TRADING C AS ; JOHN DAVID WINDERS ; NORMAN IVOR PALLETT ; PALLETT N ; PALLETT NORMAN I ; PALLETT NORMAN I TRADING AS C ; PALLETT NORMAN I TRADING C AS ; PRAUSCHACINSKI THADDEUS M ; PRUS C ; PRUS CHACINSKI T ; PRUS CHACINSKI THADDEUS M TRAD ; PRUSCHACINSKI THADDEUS M ; WINDERS J ; WINDERS JOHN D ; WINDERS JOHN D TRADING AS C H ; WINDERS JOHN D TRADING C H AS ; WINDERS JOHN DAVID

Assignee(s): (GROSSBRITANNIEN) ; BROWN W NOTI IN COMMERCIO COME C H DOBBIE AND PARTNERS ; DOBBIE CHARLES GB ; DOBBIE CHARLES H TRADING AS C H DOBBIE AND ; DOBBIE CHARLES H TRADING AS C H DOBBIE AND PARTNERS ; DOBBIE CHARLES H TRADING CH DOBBIE AND PARTNERS AS ; DOBBIE CHARLES HERBERT WINCHELSEA SUSSEX ; DOBBIE PRUS CHACINSKI PALLET WINDERS ; GROSSBRITANNIEN ; HARRIS WILLIAM B TRADING AS C H DOBBIE AND ; HARRIS WILLIAM B TRADING AS C H DOBBIE AND PARTNERS ; HARRIS WILLIAM B TRADING CH DOBBIE AND PARTNERS AS ; HARRIS WILLIAM BROWN PENARTH GLAMORGAN WALES ; OTHERS ; PALLETT NORMAN I TRADING AS C H DOBBIE AND ; PALLETT NORMAN I TRADING AS C H DOBBIE AND PARTNERS ; PALLETT NORMAN I TRADING CH DOBBIE AND PARTNERS AS ; PALLETT NORMAN IVOR SOUTHBOROUGH TUNBRIDGE WELLS ; PRUS CHACINSKI THADDEUS M TRADING AS C H ; PRUS CHACINSKI THADDEUS M TRADING AS C H DOBBIE AND PARTNERS ; PRUS CHACINSKI THADDEUS M TRADING CH DOBBIE AND PARTNERS AS ; PRUS CHACINSKI THADDEUS MARIAN LONDON ; THADDEUS MARIAN PRUS CHACINSKI ; TUNBRIDGE WELLS ; WILLIAM BROWN HARRIS ; WINDERS JOHN D TRADING AS C H DOBBIE AND ; WINDERS JOHN D TRADING AS C H DOBBIE AND PARTNERS ; WINDERS JOHN D TRADING CH DOBBIE AND PARTNERS AS ; WINDERS JOHN DAVID EPSOM SURREY

Inventor(s):(std): DOBBIE CHARLES H ; DOBBIE CHARLES HERBERT ; WINDERS JOHN D ; WINDERS JOHN DAVID

Inventor(s): CHARLES HERBERT DOBBIE ; DOBBIE CHARLES HERBERT WINCHELSEA SUSSEX ; JOHN DAVID WINDERS

Agent(s): EITAN PEARL LATZER AND COHEN ZEDEK; איתן פרל לצר וכחן צדק

International class (IPC 8-9): B66C B66C1/12 B66C17/00 B66C17/20 B66C19/00 B66C23/00 B66C23/26 E04G21/00 E04H1/00

International class (IPC 1-7): B66C1/12 B66C17/02 B66C17/20 B66C19/00 B66C23/26 B66C5/02 B66C5/04 E01D21/02 E04B1/35 E04G21/00

CPC: B66C19/00 E04H1/00 Y10T29/49828 Y10T29/49831

US class: 14/23 212/14 212/316 212/325 29/429 29/431 404/73 52/741.1 52/745.02 52/749.1

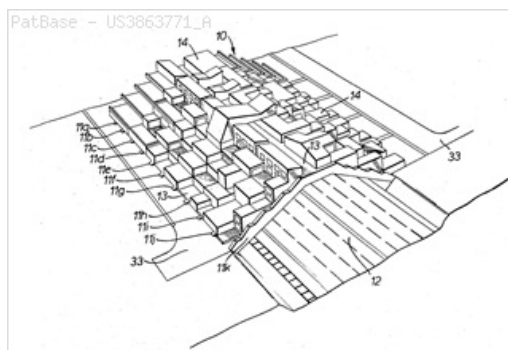
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Cited documents: US3784028 A, US3699688 A, US2554768 A,

Forward Citations: JP3242113 B2, JP10509680 T2, CN1047999 C, WO08058077 A3, US2011127691 AA, US2010025349 AA, CN103883134 A, US8678209 BB, US2011247993 AA, US5004044 A, US8029710 BB, WO9618565 A1, US5788096 A, WO08058077 A2, AU685313 B2, US5495956 A, US5195204 A, EP0797537 B1,

Abstract:

A movable gantry crane for erecting a wide span structure comprising several bridge-like sub-structures arranged side by side in spaced relationship, which crane comprises: a horizontal girder long enough to span the structure and supported at each side of the structure by movable support columns; a platform suspended from the girder from hangers so as to lie beneath a sub-structure to be erected and enable work to be carried on without interference with the area spanned by the structure; there being at least one set of hangers in front of this sub-structure, and at least one other set of hangers behind it and which can be displaced to permit the crane and the platform to be moved forward when the sub-structure has attained a stable condition; and a lifting device movable along the girder between the sets of hangers.

**13) Family number: 22662031** (US3254914 A)

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Title: MOBILE HOME UNDERFRAME CONSTRUCTION**Priority:** US19650465818 19650526

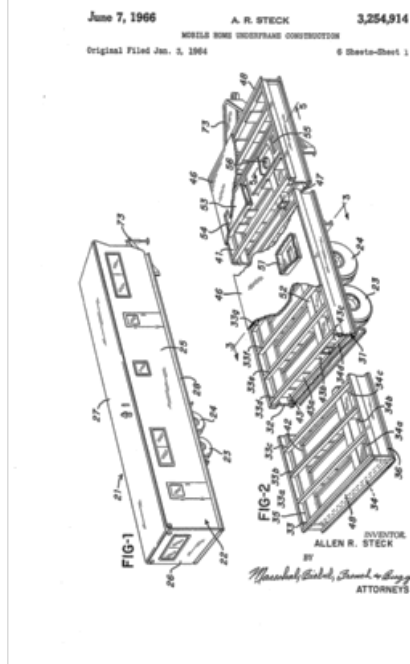
Family:	Publication number	Publication date	Application number	Application date
	US3254914 A	19660607	US19650465818	19650526

Probable Assignee: VINDALE CORP**Assignee(s):(std):** VINDALE CORP**Inventor(s):(std):** STECK ALLEN R**International class (IPC 8-9):** B62D21/18 B62D21/20 B62D53/00 B62D53/06**International class (IPC 1-7):** B60P3/32 B62D21/10 B62D21/18**CPC:** B62D21/20 B62D53/06**US class:** 280/789 280/797 280/81.1 52/143[Classification Explorer](#)**Cited documents:** US3188694 A, US3087741 A, US3036856 A, US2993728 A, US2982580 A, US2899237 A, US2846263 A, US2834599 A, US2756000 A, US2656196 A, US2346130 A,

Forward Citations: US2008203761 AA, US2009236824 AA, US2010050564 AA, US2008276568 AA, US2011127691 AA, US2011023381 AA, US2010320708 AA, US2008313974 AA, US2008027492 AA, US2007271858 AA, US2007199196 AA, US2007155207 AA, US2007045981 AA, FR3018255 A1, US2006096198 AA, US2006091640 AA, US2006012219 AA, US2005204560 AA, US2005052052 AA, US2005023860 AA, US2004261267 AA, US8876148 BB, US8505974 BB, US8474871 BA, US8322086 BB, US7021699 BB, US6860545 BA, US6807735 BB, US6565144 BA, US6776451 BB, US7340832 BB, US6688678 BB, US6502894 BA, US5746473 A, USRE37351 E, US8162352 BB, US6254132 BA, US6035590 A, US7878545 BB, US7111897 BB, US7765745 BB, US6637804 BA, US6623058 BA, US6505873 BA, FR2694736 A1, US6886875 BA, US7082685 BB, US7328927 BA, US6435102 BA, US4067158 A, US4065892 A, US4019299 A, US3959985 A, US3962885 A, US3964272 A, US3964271 A, US3996762 A, US7338109 BA, US4746164 A, US4728144 A, US7287780 BB, EP0584016 A1, US6447048 BB, US6343830 BA, US3727970 A, US3726538 A, US3332699 A, US7083213 BA, USD518758 S1,

Abstract:

(Claim 1) 1. A mobile home frame structure comprising: a pair of transversely spaced beams each extending 55 generally horizontally, each having a pair of flanges having upper and lower substantially flat surfaces generally in horizontal places, and each having an elongated web joining said pair of flanges and having the side surfaces of said web generally in vertical planes; a plurality of upper cross members extending horizontally and generally perpendicular to the beams, resting on and secured to the upper surfaces of both of the beams; a plurality of lower cross members extending horizontally and generally perpendicular to the beams, having their ends extending between the upper and lower flanges of the beams, having said ends resting on the upper surfaces of the lower flanges of said 70 beams, and each positioned substantially vertically below and thus aligned with one of said first mentioned upper cross members; means comprising a plurality of substantially vertically extending gussets each secured to one upper cross member and to its vertically aligned lower cross member for securing each said pair of aligned members together; and means comprising a cover secured to the upper surfaces of all of said upper cross members for securing said members together.

**14) Family number: 64407522** (CN106223708 A)

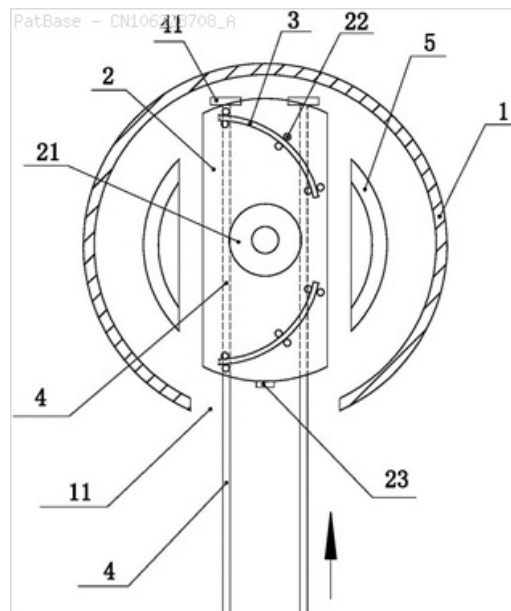
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Title: CHIMNEY STEEL INNER BARREL WALL PLATE TRANSFER SCHEME**Priority:** CN201610789531 20160831

Family:	Publication number	Publication date	Application number	Application date
	CN106223708 A	20161214	CN201610789531	20160831

Probable Assignee: SEPCO1 ELECTRIC POWER CONSTRUCTION CORP**Assignee(s):(std):** SEPCO1 ELECTRIC POWER CONSTRUCTION CORP**Assignee(s):** SHANDONG ELECTRIC POWER CONSTRUCTION ENGINEERING CO ; SHANDONG ELECTRIC POWER CONSTRUCTION OF FIRST ENGINEERING CO ; 山东电力建设第一工程公司 ; 山东电力建设第二工程公司**Inventor(s):(std):** GUO JINLUN ; HUANG KAI ; LIU GUIHUA ; WANG SHOUMIN**Inventor(s):** 刘桂华 ; 王守民 ; 郭金伦 ; 黄凯**Agent(s):** 济南诚智商标专利事务所有限公司 37105; 王汝银**International class**
(IPC 8-9): E04G21/14 E04G21/16 E04H12/28**CPC:** E04G21/14 E04G21/164 E04H12/28[Classification Explorer](#)**Cited documents:** CN105609148 A, CN104863374 A, CN103867022 A, CN103850442 A, US2011127691 AA,**Abstract:**

Disclosed is a chimney steel inner barrel wall plate transfer scheme which is used for bringing convenience to mounting of a chimney steel inner barrel. The chimney steel inner barrel wall plate transfer scheme is characterized in that a rail is arranged between the inside and the outside of a chimney, a door for avoiding the rail is arranged on the lower portion of the chimney, a transport cart is arranged on the rail, a traction lug plate is arranged on the transport cart, hoisting equipment is arranged at the center of the top of the transport cart, and a plurality of pairs of limiting piles clamping a steel inner barrel wall plate are arranged on each of two sides of the hoisting equipment. A transfer device is simple in structure and can be processed by adopting on-site waste materials, specific size of the transfer device can be adjusted according to size of a chimney concrete barrel wall door opening, the device is easy to process and manufacture, free of complex and heavy components and low in manufacturing cost. The device is flexible and convenient to use and can be used as a material transport and operation platform.



15) Family number: 33065179 (WO05019549 A1)

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Title: BUILDING CONSTRUCTION SYSTEM

Priority: WO2003ES00431 20030820 WO2004ES00382 20040820

Family:

Publication number	Publication date	Application number	Application date
AU2003260522 AA	20050310	AU20030260522	20030820
EP1669503 A1	20060614	EP20040766921	20040820
WO05019549 A1	20050303	WO2003ES00431	20030820
WO05019550 A1	20050303	WO2004ES00382	20040820

Probable Assignee: INCORIBE S L

Assignee(s):(std): CORREDERA ARTACHO ANDRES ; CORREDERA ARTACHO JUAN ANTONIO ; INCORIBE S L

Inventor(s):(std): ARTACHO ANDRES CORREDERA ; CORREDERA ARTACHO ANDRES ; CORREDERA ARTACHO JUAN ANTONIO

Inventor(s): ANDRES CORREDERA ARTACHO ; ARTACHO JUAN ANTONIO CORREDERA

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

International class E04B1/16 E04G11/00 E04G11/02

(IPC 8-9):

International class E04B1/16 E04B1/35 E04B2/84 E04B2/86 E04G11/10

(IPC 1-7):

CPC: E04B1/161 E04G11/02

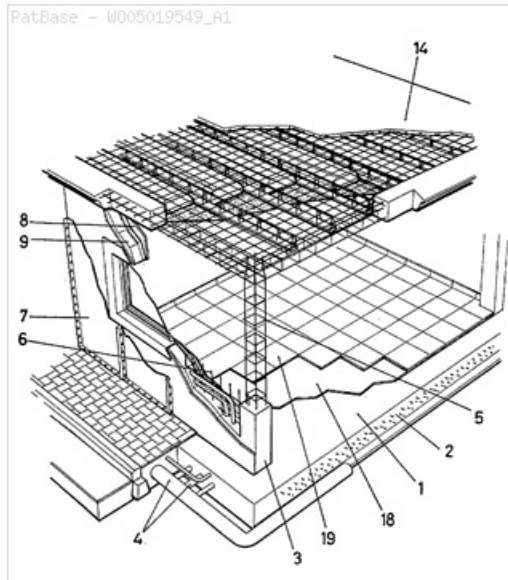
[Classification Explorer](#)

Cited documents: JP2002191112 A2, US4669234 A, EP0751262 A1, US4426061 A, DE3413550 A1, ES1052257 UA, WO9637674 A1, WO9529302 A1, GB2323404 A1, GB2065192 A1,

Forward Citations: US7998571 BB, US7993570 BB, US8993462 BB, US7524555 BB, GB2473032 A1, US8297018 BB, US8281535 BB, US7713615 BB, WO17129832 A1, CN109577538 A, CN108071230 A, EP2507021 A1, WO14024186 A1, WO14153066 A1, WO09097899 A1,

Abstract:

The invention relates to a mixed construction system which combines traditional or non-structural construction with structural construction, whereby concrete is used in both walls and slabs. According to the invention, a concrete slab (1) serves as a foundation means, and reinforced concrete structural pillars (3) are disposed thereon. Moreover, shuttering plates (7) are used to produce the walls, based on lightweight concrete which is reinforced using electrowelded meshes (6). In addition, gypsum plasterboards or similar (8) are connected to the inner face of the shuttering (7) corresponding to the outer walls, said boards defining the final finish of the inner face of said walls. Furthermore, other expanded polystyrene boards (9) are positioned inside the aforementioned gypsum plasterboards in order to provide thermal and acoustic insulation. Finally, gypsum plasterboards or similar are also provided on the shuttering plates corresponding to the slabs and, in this case, the plasterboards are damp proof and are used to form the facing surface of the ceilings.



16) Family number: 1002938 (US3659986 A)

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Title: APPARATUS FOR MAKING CONCRETE PRODUCTS

Priority: US19700019638 19700316

Family:	Publication number	Publication date	Application number	Application date
	US3659986 A	19720502	US19700019638	19700316

Probable Assignee: NATHAN L GELBMAN

Assignee(s):(std): NATHAN L GELBMAN

Inventor(s):(std): GELBMAN NATHAN L

Inventor(s): NATHAN L GELBMAN

International class (IPC 8-9): B28B5/04

International class (IPC 1-7): B28B15/00

CPC: B28B5/04

US class: 198/19R 425/123 425/162 425/168 425/424 425/432 425/449 425/454 425/455 425/88

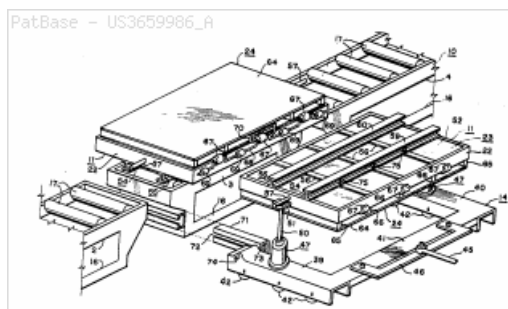
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Cited documents: US3530970 A, US3528144 A, US3223224 A, US2394228 A, US2298446 A, US1736363 A, US1574565 A, NL80317 A, CH269110 A,

Forward Citations: US10443206 BB, EP0409471 B1, US10053832 BB, US9718213 BB, US9630342 BB, US2015083231 AA, CN102695590 A, US2011127691 AA, US2009315210 AA, US2008258340 AA, US2007196529 AA, US2007193181 AA, US2004218985 AA, US9011137 BB, US8790109 BA, US8701569 BB, US8522694 BB, US2013015601 AA, US8438981 BB, US8420179 BB, US6352236 BA, US5219591 A, US6177039 BA, US5277853 A, US5807591 A, US6530769 BA, US3982874 A, FR2454359 A1, FR2452364 A1, US8167605 BB, EP0409471 A2, US7500840 BB, US7695268 BB, US3809516 A, US4279583 A, US4077757 A, US4061454 A, US4005972 A, US3947171 A, US3963395 A, US5395228 A, US5571464 A, US5544405 A, US5540869 A, US5505611 A, US5505610 A, US5505607 A, US5503546 A, US5059110 A, US3890075 A, US3874832 A,

Abstract:

An apparatus for mass producing large concrete products, in assembly line manner, on a floor mounted conveyor system, with which various operations are performed at different stations along the conveyor. A sectional mold, for casting purposes, is prepared at a first station and then moved forward. At a second station on the conveyor, the mold is vibrated and filled with concrete, and then moved forward. At a third station, the concrete is completely sealed within the mold, and the mold is elevated, removed from the conveyor, rotated 180 DEG, returned to the conveyor, and stripped from the casting. The casting is then moved along on the conveyor for storage.



17) Family number: 42396845 (US2010136156 AA)

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Title: PLANT FOR PRODUCTION OF CONCRETE

Priority: SE20070000887 20070412 WO2008SE00262 20080411

Family:

Publication number	Publication date	Application number	Application date
EP2134518 A1	20091223	EP20080724175	20080411
EP2134518 A4	20120111	EP20080724175	20080411
IN06311DN2009 A	20111014	IN2009DN06311	20091001
RU2009141708 A	20110520	RU20090141708	20080411
SE200700887 L	20081013	SE20070000887	20070412
SE531076 C2	20081209	SE20070000887	20070412
US2010136156 AA	20100603	US20080595598	20080411
WO08127174 A1	20081023	WO2008SE00262	20080411

Probable Assignee: INGENJORSFIRMA HEBE AB

Assignee(s):(std): BERGLING CHARLES ; INGENJOERS HEBE AB FA ; INGENJORS HEBE AB FA

Assignee(s): INGENJOERSFIRMA HEBE AB ; INGENJORSFIRMA HEBE AB ; ИНГЕНЬЕРСФИРМА ХЕБЕ АБ ; ИНГЕНЬЕРСФИРМА ХЕБЕ АБ (SE)

Inventor(s):(std): BERGLING CHARLES

Inventor(s): CHARLES BERGLING ; БЕРГЛИНГ ЧАРЛЬЗ ; БЕРГЛИНГ Чарльз (SE)

Agent(s): ALBINHS AB; ALSTON AND BIRD LLP; FRIBERG INGVAR

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

International class (IPC 8-9): B28B15/00 B28B5/00 B28B5/02

CPC: B28B1/503 B28B11/145 B28B15/005 B28B2007/0047 B28B5/04 B28B5/02

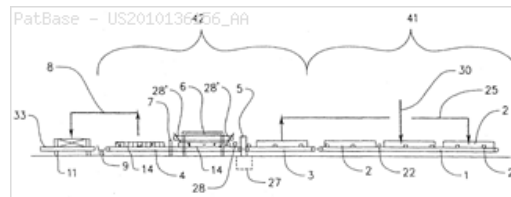
US class: 425/453 425/453P

[Classification Explorer](#)

Cited documents: GB744725 A, EP0917938 A1, GB2276581 A1, GB840252 A, US2011133357 AA, US2010183840 AA, US2005211871 AA, US6540502 BB, US5756131 A, US5290165 A, US5242291 A, US4548573 A, US4017247 A, US3954377 A, US3570586 A, US2983983 A, US2664592 A, US2582074 A, US2413109 A, US191504 A, JP2000246717, US3646643 A, DE2050377 A1, US2901808 A, BE556531 A, US1608690 A, CN105773941 A, US2011127691 AA,

Forward Citations: CN105773941 A, US2011127691 AA,

Abstract:
The invention relates to a plant for the production of concrete, comprising a mould for a molded concrete mass (**14**), the mould comprising a mould base and a wall construction (**2**) that can be removed from said mould base. The mold base of the mold comprises an upper part (**26**) of a first conveyor belt (**1**).



18) Family number: 34683319 (JP2007120080 A2)

© PatBase

Title: TOWER STRUCTURE

Priority: JP20050311417 20051026

Family:

Publication number	Publication date	Application number	Application date
JP2007120080 A2	20070517	JP20050311417	20051026
JP4746959 B2	20110810	JP20050311417	20051026

Probable Assignee: TAKENAKA DOBOKU

Assignee(s):(std): TAKENAKA DOBOKU ; TAKENAKA KOMUTEN CO

Assignee(s): TAKENAKA CIVIL ENGINEERING AND CONSTRUCTION CO LTD ; TAKENAKA CORP ; TAKENAKA CORPORATION ; TAKENAKA DOBOKU CO LTD ; TAKENAKA KOMUTEN CO LTD ; 株式会社竹中土木 ; 株式会社竹中工務店

Inventor(s):(std): HABASAKI ATSUSHI ; IGARASHI SHINYA ; KAWANISHI HIROSHI ; KAWARABAYASHI HIDEAKI ; SUGATA MASAHIRO ; YUKAWA MASAHIRO

Inventor(s): 五十嵐 信哉 ; 川西 浩史 ; 河原林 英彰 ; 油川 真広 ; 羽場崎 淳 ; 菅田 昌宏

International class (IPC 8-9): E04H12/00 E04H12/12

CPC: Y02E10/728

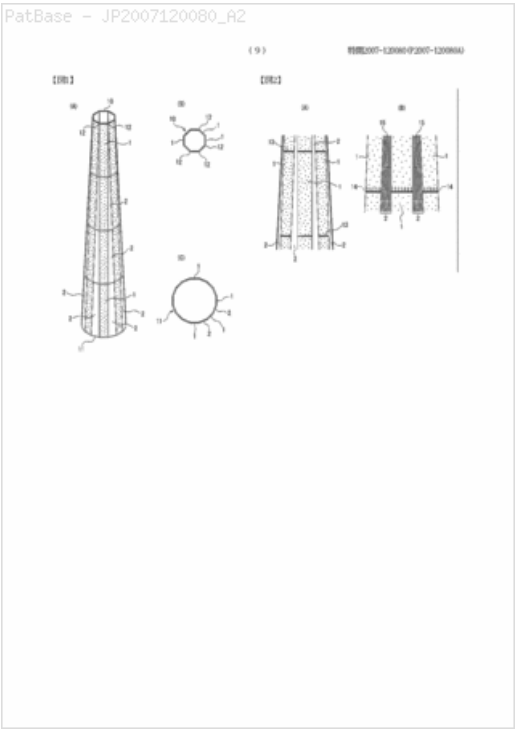
[Classification Explorer](#)

Cited documents: JP60129208 A2, JP55032813 A2, JPS60129208, JPS5532813, JP2005030066 A2,

Forward Citations: KR20150002183 A, KR102045580 B1, WO18015556 A1, JP5738408 B2, CN102971526 A, US9249597 BB, EP2239398 A1, DE102009014926 A1, JP2013512132 T2, JP2013534590 T2, JP2013007251 A2, JP2011099299 A2, WO10044380 A1,

Abstract:
PROBLEM TO BE SOLVED: To provide a tower structure formed in a polygon when viewed from above and as high as approximately 60 to 100 m or higher from the ground. SOLUTION: The ground portion 11 of this tower structure is formed in a polygon with corners of even number when viewed from above. The apex part 10 thereof is formed in a polygon with corners of N in quantity which is half that of the ground portion 11 when viewed from above. A rectangular flat surface 1 in which the length

of one side of the polygon forming the apex part 10 is made equal up to the ground portion 11 is formed as the outer surface of the polygon of the ground portion 11 on the alternate sides. The outer surfaces of the polygon of the ground portion 11 on the other sides are formed as triangular flat surfaces 2 in which the corner part 12 of the polygon of the apex part 10 positioned just above that outer surface is the apex angle. The tower-like outer surfaces are formed by the combination of the rectangular flat surfaces 1 with the triangular flat surfaces 2.



19) Family number: 59574057 (CN104723449 A)

© PatBase

Title: AUTOMATIC PRODUCTION LINE OF BUILDING INDUSTRIALIZATION CONCRETE PRECAST MEMBERS
Priority: CN201510076312 20150212

Family:	Publication number	Publication date	Application number	Application date
	CN104723449 A	20150624	CN201510076312	20150212
	CN104723449 B	20170818	CN201510076312	20150212

Probable Assignee: SHENYANG EASYPIC RESIDENTIAL INDUSTRIALIZATION CO LTD
Assignee(s):(std): SHENYANG EASYPIC RESIDENTIAL INDUSTRIALIZATION CO LTD
Assignee(s): SHENYANG EASYPIC RESIDENTIAL INDUSTRIALIZATION CO ; SHENYANG WEI TECHNOLOGY CO LTD
TAK HOUSING INDUSTRIALIZATION ; 沈阳卫德住宅工业化科技有限公司
Inventor(s):(std): TANG LIANG ; WANG TAIXIN ; ZHAO CHANGZHENG ; ZHENG XU ; ZHENG YONG
Inventor(s): 唐亮 ; 王太鑫 ; 赵长征 ; 郑勇 ; 郑旭
Agent(s): 俞鲁江 ; 沈阳优普达知识产权代理事务所(特殊普通合伙) 21234
International class (IPC 8-9): B28B15/00
CPC: B28B11/245 B28B15/00

[Classification Explorer](#)

Cited documents: US2011127691, CN104260185, CN101508144, CN104260185 A, US2011127691 AA, CN101508144 A,

Forward Citations: CN108422542 B, CN109822736 A, CN109483710 A, CN106166794 A, CN108265981 B, CN109159273 A, CN108265981 A, CN108422542 A, CN108247812 A, CN108249846 A, CN107511934 A, CN105690552 B, CN106182390 A, CN105922436 A, CN105569385 B, CN105690552 A, CN105569385 A, CN105538479 A, CN105459258 A,

Abstract:
The invention discloses an automatic production line of building industrialization concrete precast members. The automatic production line comprises a member bottom die sweeping station, a member bottom die line drawing station, a member bottom die release agent spraying station, a member side die, steel reinforcement framework and embedded part installing station, a member concrete primary pouring station, a member concrete vibrating station, a member heat insulating material installing station, a member connecting part installing station, a member concrete secondary pouring station, a member surface flattening station, a member surface galling station, a member pre-curing station, a member surface troweling station, a member final maintenance station, a member side die detaching station and a member hoisting station which are sequentially and cyclically connected. Centralized maintenance is achieved, energy is saved, energy consumption is reduced, and the mechanical degree is high. Procedures are compactly linked, worker employment is low, and production efficiency can be improved. Production cost of products is low, production can be flexibly arranged according to the demand ratio of the market for different members, and the requirements for a large amount of material supply of different products of different projects are met.

AU199462691 A1	19940914	AU19940062691	19940217
CA2156488 AA	19950818	CA19942156488	19940217
US5398472 A	19950321	US19930020290	19930219
WO9419551 A1	19940901	WO1994US01769	19940217

Probable Assignee: SHANDEL GROUP

Assignee(s):(std): SHANDEL GROUP ; SHANDEL GROUP THE

Assignee(s): EICHELKRAUT GERALD C ; SHANDEL GROUP 2533 N CARSON STREET STE 1116 CARSON ; THE SHANDEL GROUP

Inventor(s):(std): EICHELKRAUT GERALD C

Inventor(s): GERALD C EICHELKRAUT

Agent(s): UREN JOHN RUSSELL

Designated states: AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK ES FI FR GA GB GN GR HU IE IT JP KP KR KZ LK LU LV MC MG ML MN MR MW NE NL NO NZ PL PT RO RU SD SE SK SN TD TG UA UZ VN

International class (IPC 8-9): E04B1/04 E04B1/16 E04B2/84

International class (IPC 1-7): E04B1/04 E04B9/00

CPC: E04B1/165 E04B1/167 E04B2/845

US class: 52/380 52/381 52/443 52/745.09 524/430

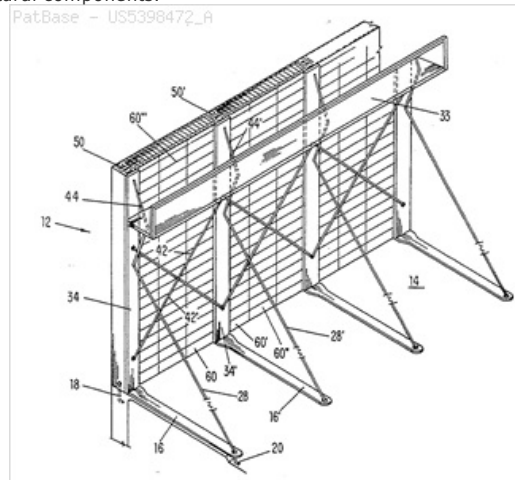
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Cited documents: US801361 A, US4597237 A, US4452028 A, US4397128 A, US4301198 A, US4292775 A, US3979870 A, US3559355 A, US3300943 A, US312375 A, US2964800 A, US225065 A, US1994644 A, US1633702 A, US1604097 A, US1402593 A,

Forward Citations: CN102691361 A, WO9606243 A1, US5806264 A, AU691326 B2, WO9722762 A1, US10683662 BA, US10415238 BA, US10415237 BA, US10202760 BA, US10087622 BB, US10060123 BB, US9809001 BB, US9690286 BB, US9566758 BB, US9562360 BB, US9540813 BB, US9506485 BB, US9382706 BB, US2011127691 AA, US2010122504 AA, US2009277119 AA, US2014130446 AA, US8307598 BB, US2007180603 AA, US8986809 BB, US9074366 BB, US2014352243 AA, US9140005 BB, US2006026925 AA, US2006037282 AA, US2005055935 AA, US2004134144 AA, US2003168575 AA, US8256173 BB, US5722198 A, US7073306 BA, US6061986 A, US5974747 A, US6041566 A, US5937588 A, US5749199 A, US7032356 BB, US7127858 BB, GB2471336 A1, WO10022477 A1, US5875607 A, US7162844 BB, US5937606 A,

Abstract:

The invention relates to systems and methods for quickly erecting horizontal and vertical structural members for use in residential, commercial, or industrial construction. The system utilizes building blocks composed of baled straw or other fibrous material, resulting in structures that are energy efficient and environmentally innocuous. A portable, reusable temporary support system is disclosed. The baled fiber blocks are stacked into wall or roofing components. Reinforcing ribs or beams are provided to enhance the load bearing capabilities of the component, and the bales are covered on their exposed faces with a rigid durable layer, preferably pneumatically applied concrete. Methods and apparatuses are disclosed for transferring shear forces between rigid exterior layers, vastly improving the structural integrity of the structural components.



22) Family number: 6657018 (JP55027231 A2)

© PatBase

Title: PREPARATION OF CONCRETE BLOCK

Priority: JP19780100058 19780818

Family:

Publication number	Publication date	Application number	Application date
JP55027231 A2	19800227	JP19780100058	19780818

Probable Assignee: NIKKEN KOGAKU KK

Assignee(s):(std): NIKKEN KOGAKU KK

Inventor(s):(std): YUKIMOTO MASASHI

International class (IPC 8-9): B28B15/00

International class (IPC 1-7): B28B13/00

[Classification Explorer](#)

Cited documents: JP47047343 A2,

Forward Citations: JP2013512132 T2,

Abstract:

Source: JP55027231 A2 **Machine translation:** The name of the invention] Claim 1 concrete block 1 [Source: manufacturing method 2] the construction of the appended claims. The construction site in the plant and the continuous cross. Mobile king of concrete blocks and carries the mobile curing device, the continuous mixing concrete batcher plant required It was prepared by the Da? concrete block manufacturing mold after the curing in the mobile the pouring concrete curing device has a predetermined strength after removal from the mold, the concrete blocks, characterized in that Production method. 6, [

23) Family number: 1827255 (DE2939472 A1)
© PatBase

Title:
Priority:
Family:

CONCRETE COLUMN WITH PRESTRESSED RODS - ALSO HAS AFTER STRESSING RODS WEDGED IN ANCHOR PLATE WITH SCREW HOLES
DE19792939472 19790928

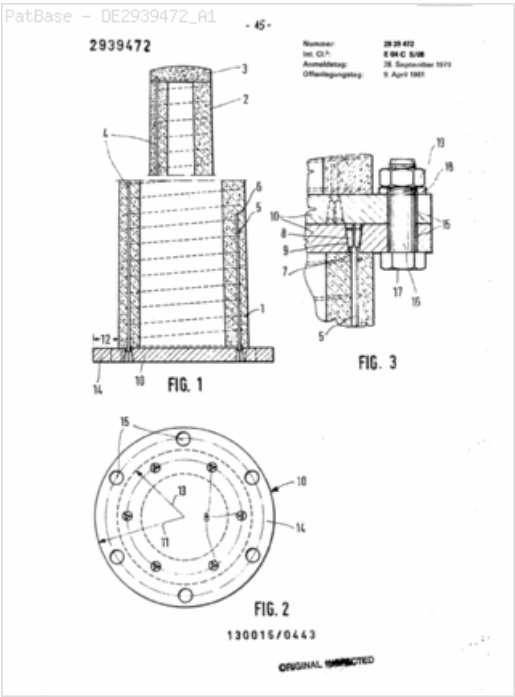
Publication number	Publication date	Application number	Application date
DE2939472 A1	19810409	DE19792939472	19790928

Probable Assignee: PFLEIDERER G A FA
Assignee(s):(std): PFLEIDERER FA G A ; PFLEIDERER G A FA
Assignee(s): G A PFLEIDERER GMBH AND CO KG
Inventor(s):(std): LANGMEYER GOTTFRIED ; SCHMID OTTO DIPL ING
International class (IPC 8-9): E04C2/06 E04C3/20 E04C3/26 E04C3/30 E04C3/34 E04C5/00 E04C5/08 E04C5/12 E04H12/00 E04H12/16
International class (IPC 1-7): E04C2/06 E04C3/26 E04C3/34 E04C5/08 E04H12/16
CPC: E04C2/06 E04C3/26 E04C3/34 E04C5/08 E04C5/12 E04H12/16
[Classification Explorer](#)
Forward Citations: DE102014104439 B4

CN102695590 A, WO09099360 A1, FR2872843 A1, AU2010246534 BB, WO11063983 A1,
DE102014104439 A1

US9057170 BB, US2011002744 AA, EP2631393 A1, AP2620 A, US5809711 A, FR2590606 A2, WO08136717 A1, FR2628779 A1, EP0758034 A1,

Abstract:
A column or mast, or slab, or other unit made of prestressed concrete, has prestressed stress rods arranged singly or in clusters, and connecting elements for attachment to other components. Use is made of additional after-stressing rods (5), with one end anchored in the concrete, and the other end (7) anchored in an anchoring plate (10) by means of wedges (8). The plate has holes (15) for screw connection to the anchoring plates of adjacent units. These can be in a part of the plate which laterally overlaps the unit's end face. Reinforcement is better attuned to moment lines, and can be simultaneously combined with connection and anchorage.



24) Family number: 16648 (US3659979 A)
© PatBase

Title:
Priority:
Family:

PLANT FOR MANUFACTURING SMALL STRUCTURAL ELEMENTS
DE19681771807 19680713

Publication number	Publication date	Application number	Application date
AT293932 B	19711025	AT19690006662	19690711
DE1771807 A1	19720302	DE19681771807	19680713

FR2015470 A1	19700430	FR19690024021	19690715
GB1242470 A	19710811	GB19690034240	19690707
JP49034730 B4	19740917	JP19690056021	19690714
SE348676 B	19720911	SE19690009719	19690709
US3659979 A	19720502	US19690839722	19690707

Probable Assignee: SCHNEIDER K

Assignee(s):(std): SCHNEIDER K ; SCHNEIDER KLAUS ; SCHNEIDER W ; SCHNEIDER WOLFGANG ; SCHNEIDER WOLFGANG DIPL KFM

Assignee(s): KLAUS SCHNEIDER ; WOLFGANG SCHNEIDER

Inventor(s):(std): SCHNEIDER K ; SCHNEIDER KLAUS ; SCHNEIDER W ; SCHNEIDER WOLFGANG ; SCHNEIDER WOLFGANG DIPL KFM

Inventor(s): KLAUS SCHNEIDER ; WOLFGANG SCHNEIDER

International class (IPC 8-9): B28B15/00

International class (IPC 1-7): B28B1/00 B28B15/00 B28B5/00 B65G49/00 E01C5/00 E04C1/00

CPC: B28B15/002

US class: 366/16 425/155 425/186 425/62 425/88 259/145

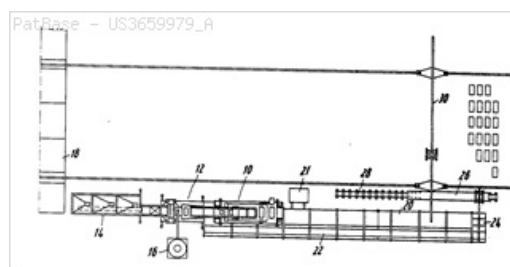
[Classification Explorer](#)

Cited documents: US3525131 A, US2711616 A, US1838672 A, FR1327037 A, CA704810 A,

Forward Citations: CN103128847 A, CN102695590 A, AU2010246534 BB, WO11063983 A1, ES2371960 AA, US2008022609 AA, US2002105107 AA, US4266916 A, US4244682 A, US6749783 BB, US4798698 A, US3868207 A,

Abstract:

A plant for manufacturing small structural concrete elements comprises a production station and a hardening station which both are provided with means for loading or unloading from a carrier vehicle. The hardening station is formed by a steam treatment tunnel consisting of two sections which are connected by hinge means in that way that for transport of the hardening station, one section is swung in position parallel to, and alongside of the other section. During operation, both sections together form a straight elongated tunnel.



25) Family number: 1345420 (US3994060 A)

© PatBase

Title: METHODS AND PRODUCTION LINES FOR THE MANUFACTURE OF PREFABRICATED BUILDINGS

Priority: NL19710013480 19711001 US19720292872 19720928 US19740524993 19741118

Family:

Publication number	Publication date	Application number	Application date
AU197247097 A1	19740404	AU19720047097	19720927
BE789265 A	19730115		00000000
BE789265 A2	19730115	BE19720122398	19720926
CA1006679 A1	19770315	CA19720152422	19720925
CH561114 A	19750430	CH19720014151	19720928
DE2206170 A1	19730802	DE19722206170	19720209
DE2206171 A1	19730802	DE19722206171	19720209
DE2206212 A1	19730802	DE19722206212	19720210
DE2206213 A1	19730802	DE19722206213	19720210
DE2206214 A1	19730802	DE19722206214	19720210
DE7204963 U	19740509	DE19720004963U	19720210
ES407455 A1	19760201	ES19720407455	19720929
FR2155489 A5	19730518	FR19720034766	19721002
FR2155490 A5	19730518	FR19720034767	19721002
GB1409557 A	19751008	GB19720044929	19720928
GB1409558 A	19751008	GB19720044930	19720928
IL40444 A0	19721128	IL19720040444	19720926
IL40444 A1	19751015	IL19720040444	19720926
IT968479 A	19740320	IT19720029913	19720930
JP48042522 A2	19730620	JP19720060525	19720619
JP48042555 A2	19730620	JP19720060526	19720619
NL170106 B	19820503	NL19710013480	19711001
NL170106 C	19821001	NL19710013480	19711001
NL7113480 A	19730403	NL19710013480	19711001
SE398905 B	19780123	SE19720012590	19720929
SE398905 C	19780511	SE19720012590	19720929
US3994060 A	19761130	US19740524993	19741118
ZA7206538 A	19730627	ZA19720006538	19720925

Probable Assignee: LELY CORNELIS V D

Assignee(s):(std): LELY C VAN D NV ; LELY CORNELIS V D ; LELY NV C VAN DER ; NIEUWENHOVEN HENDRICUS JACOBUS

Assignee(s): C VAN D LELY N V MAASLAND NIEDERLANDE ; C VAN D LELY N V WEVERSKADE 10 MAASLAND

NEDERLA ; C VAN D LELY NV ; C VAN D LELY TE MAASLAND NV ; C VAN DER LELY N V ; C VAN DER LELY N V MAASLAND NIEDERLANDE ; C VAN DER LELY N V TE MAASLAND ; C VAN DER LELY N V WEVERSKADE 10 MAASLAND NEDERLAND ; LELY C NV VAN D ; LELY C VAN D ; LELY CORNELIS VAN D ; LELY NV ; NIEUWENHOVEN HENDRICUS JACOBUS CORNELIS ; NIEUWENHOVEN HENDRICUS JC ; VAN DER LELY C N V ; VAN DER LELY CORNELIS ; VAN DER LELY NV C

Inventor(s):(std): DER LELY C VAN ; LELY C VAN D ; LELY CORNELIS VAN D ; LELY CORNELIS VAN DER ; NIEUWENHOVEN H ; NIEUWENHOVEN H J C ; NIEUWENHOVEN HENDRICUS J C ; NIEUWENHOVEN HENDRICUS JACOBUS ; VAN DER LELY C ; VAN DER LELY CORNELIS

Inventor(s): C VAN D LELY ; C VAN DER LELY ; CORNELIS VAN D LELY ; CORNELIS VAN DER LELY ; H J C NIEUWENHOVEN ; HENDRICUS JACOBUS CORNELIS NIEUWENHOVEN ; LELY CORNELIS VAN D ZUG ; LELY CORNELIS VAN DER ZUG ; NIEUWENHOVEN HENDRICUS JACOBUS CORNELIS ; NIEUWENHOVEN HENDRICUS JACOBUS CORNELIS BAAR

Agent(s): REINHOLD COHN AND PARTNERS; ריינהולד כהן ושותפיו

International class (IPC 8-9): B28B15/00 E04B1/348 E04B1/35 E04H5/00 E04H5/02

International class (IPC 1-7): B23P21/00 B28B1/00 B28B15/00 B28B23/00 B28B5/00 E04B1/00 E04B1/343 E04B1/348 E04B1/35 E04C2/00 E04G21/16 E04H1/00 E04H5/02

CPC: B28B15/00 Y10T29/49829 Y10T29/53317

US class: 29/430 29/772

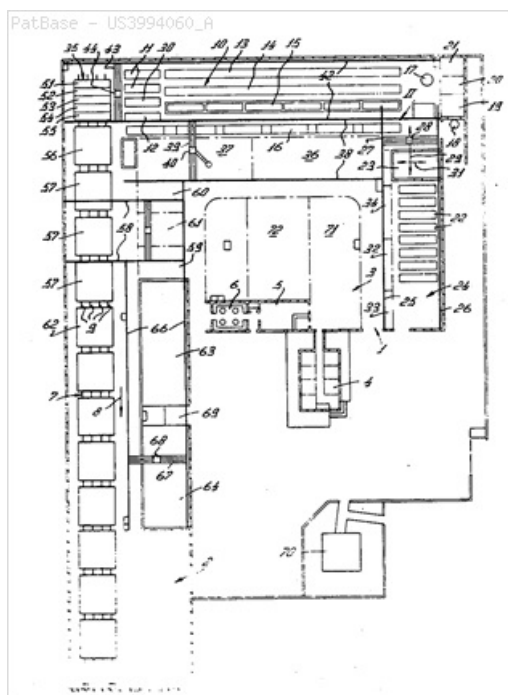
[Classification Explorer](#)

Cited documents: US3685129 A, US3611533 A, US3600870 A, US3574920 A, US3555763 A, US3399445 A, US3225434 A, US2852931 A, US2222037 A,

Forward Citations: US10518972 BB, US9959373 BB, US9957710 BB, US2016103937 AA, US9856081 BB, US9587395 BB, US2016090238 AA, US9453333 BB, US9245065 BB, US2007264110 AA, US2011016694 AA, US2011127691 AA, US2010283195 AA, US2009140038 AA, US2009025322 AA, US2008289287 AA, US2008184659 AA, US2008184630 AA, US2008184658 AA, US2008184640 AA, US2013338969 AA, US2008164078 AA, US2008111327 AA, US2008086978 AA, US2008086976 AA, US4450617 A, US8887399 BB, US7832087 BB, US2005235581 AA, US2005153818 AA, US2004160084 AA, US2003207742 AA, US2002010522 AA, US8657274 BB, US7574933 BB, US6855099 BB, US6979288 BB, US4546530 A, US7770477 BB, WO9704187 A1, WO9704188 A1, US7452173 BB, US6000192 A, US5402618 A, US6253504 BA, EP0839236 B1, EP0839237 B1, JP55062140 A2, JP50118919 A2, JP51076112 A2, CN103231901 A, WO09105050 A1, FR2311641 A1, DE4006627 A1, DE2622859 A1, DE4316568 C1,

Abstract:

A method of manufacturing prefabricated sections for buildings wherein metal frames have concrete cast between them which is heated and allowed to harden along a manufacturing line to form floor and wall components. Ceiling components with metal frames and, where applicable, roof components are also constructed in the manufacturing line. At the end of the manufacturing line, the floor, wall, ceiling and/or roof components are connected, form the desired section and moved onto an adjacent assembly line which is at right angles to the manufacturing line without altering the relative disposition of the sections whereby the longer sides of the section which were parallel to the length of the manufacturing line are carried transversely on the assembly line. The sections on the assembly line are connected together in the relationship they will bear in the finished building and doors, windows, panels and the like are added as the connected sections move along the assembly line from adjacent storage areas. Subsequently, the sections are disconnected and transported separately to the building site where they are assembled and connected.



26) Family number: 71793641 (ES2688842 AA)

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Title: SUPPORT FOR DOUBLE TRANSPORTATION AND TRANSPORTATION (MACHINE-TRANSLATION BY GOOGLE TRANSLATE, NOT LEGALLY BINDING)

Priority: ES20170030652 20170503

Family:	Publication number	Publication date	Application number	Application date
	ES2688842 AA	20181107	ES20170030652	20170503

Probable Assignee: UNIV VALLADOLID

Assignee(s):(std): UNIV VALLADOLID

Assignee(s): UNIVERSIDAD DE VALLADOLID

Inventor(s):(std): AIRA ZUNZUNEGUI JOSE RAMON ; BONILLA MORTE LUIS MIGUEL ; BROTO CARTAGENA MIGUEL ; DIEZ DELSO EPIFANIO

Inventor(s): EPIFANIO DIEZ DELSO ; JOSE RAMON AIRA ZUNZUNEGUI ; LUIS MIGUEL BONILLA MORTE ; MIGUEL BROTO CARTAGENA

Agent(s): PONS ANGEL

International class (IPC 8-9): B60P7/06 E04G21/16 F03D13/40

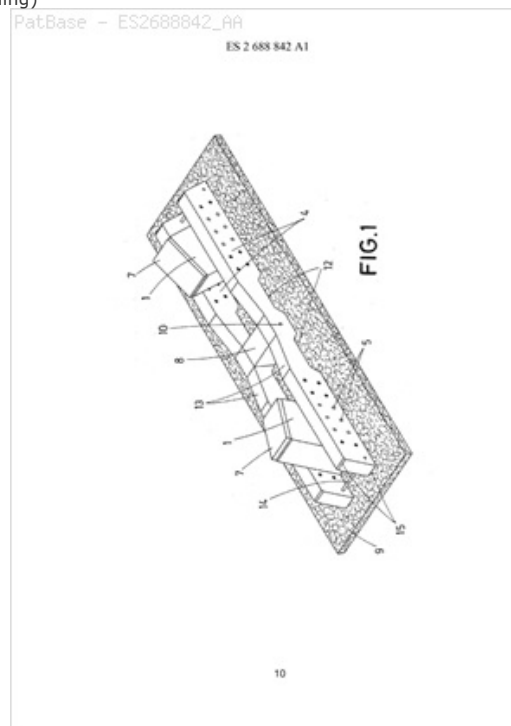
CPC: F03D13/40 Y02E10/72

[Classification Explorer](#)

Cited documents: WO11029965 A1, ES2371960 AA, ES2460392 AB, WO16055070 A1, WO15149809 A1, WO15035997 A1,

Abstract:

Support for storage and transport of voussoirs. The present invention relates to a support for storing and transporting voussoirs adaptable to different geometries and weights of voussoirs that can be used both for land or sea transport and for the collection of voussoirs in field or factory, where the support comprises two wedges which comprise a sloping upper surface intended to support the voussoir and at least one stringer connecting the wedges to maintain the distance between the two wedges, so that the support, by its own deformation, to avoid aesthetic marks or material damages in the support zones of the elements collected or transported. (Machine-translation by Google Translate, not legally binding)



27) Family number: 34381016 (US2007079565 AA)

© PatBase

Title: LIGHT WEIGHT SANDWICH PANELS

Priority: US2005070193P 20050725 US20060492224 20060725

Family:

Publication number	Publication date	Application number	Application date
US2007079565 AA	20070412	US20060492224	20060725

Probable Assignee: BAHRAMIAN BAHRAM

Assignee(s):(std): BAHRAMIAN BAHRAM

Inventor(s):(std): BAHRAMIAN BAHRAM

Agent(s): BAHRAM BAHRAMIAN

International class (IPC 8-9): E04H1/00 E04H5/00

CPC: B28B1/008 B28B1/32 B28B23/0087 B28B7/0079 E04B1/4121 E04B2/94 E04B5/29 E04C2/044 E04C2/049

US class: 52/235

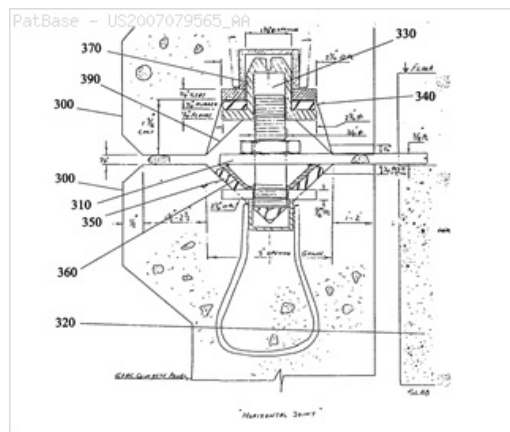
[Classification Explorer](#)

Cited documents: US5693409 A, US5473849 A, US4232494 A, US4549375 A, US6941720 BB, US6438923 BB, US6418686 BA, US4836718 A, US6058672 A,

Forward Citations: WO17178786 A1, CN104478345 A, US2011127691 AA, WO13010544 A1,

Abstract:

Light weight structural wall panels are made of two layers of load bearing skins, separated by a light-weight concrete, using expanded materials such as Perlite, Pulverized Fuel Ash, Styrene or foam cement to form a sandwiched construction for structural strength. The load-bearing skins, which are sprayed into a mold, are made of glass fiber, sand and cement matrix in different thickness and mix ratios. All edges of the encapsulated panels are made of the same GFRC matrix. The distance between GFRC inner and outer layers dictates the required structural strength of overall finished panel to resist wind and earthquake loadings. The sprayed layers and the core are made/cast while the concrete is green, before its initial setting-time to ensure structural integrity of components after curing.



28) Family number: 43625987 (US2010327488 AA)

Title:	METHOD OF MAKING HOLLOW CONCRETE ELEMENTS			
Priority:	US20080026247P 20080205	US20080026247 20080205	WO2008SE50456 20080422	
	US20080865888 20080422			

Family:	Publication number	Publication date	Application number	Application date
A	BRPI0822139 A2	20150623	BR2008PI22139	20080422
	CN101932414 A	20101229	CN200880126049	20080422
	CN101932414 B	20130102	CN200880126049	20080422
	EP2237938 A1	20101013	EP20080779257	20080422
	EP2237938 A4	20120404	EP20080779257	20080422
	IN01326MN2010 A	20101105	IN2010MN01326	20100622
	JP2011510844 T2	20110407	JP20100544908T	20080422
	JP5389051 B2	20140115	JP20100544908T	20080422
	RU2010136963 A	20120320	RU20100136963	20080422
	RU2457106 C2	20120727	RU20100136963	20080422
	US2010327488 AA	20101230	US20080865888	20080422
	WO09099360 A1	20090813	WO2008SE50456	20080422
	ZA201004474 A	20110928	ZA20100004474	20100624

Probable Assignee: TELEFONAKTIEBOLAGET LM ERICSSON PUBL

Assignee(s):(std): AY LUTFI ; ERICSSON TELEFON AB L M ; ERICSSON TELEFON AB L M PUBL ; HAEGER PETER ; TELEFONAKTIEBOLAGET L M EHRIKSSON PABL : TELEFONAKTIEBOLAGET LM ERICSSON PUBL

Assignee(s): TELEFONAKTIEBOLAGET L M ERICSSON (PUBL); ТЕЛЕФОНАКТИЕБОЛАГЕТ Л М ЭРИКССОН (ПАБЛ);
ТЕЛЕФОНАКТИЕБОЛАГЕТ Л М ЭРИКССОН (ПАБЛ) (SE); テレフォンアクチャーボラゲット エル エム エリクソン パブル; 艾利
森电话股份有限公司

Inventor(s):(std): AJ LUFTI ; AY LUFTI ; HAEGER PETER ; HAGER PETER ; KHEGER PETER ; LUTFI AY ; PETER HAEGER

Inventor(s): H GER PETER; LUFTI AY; АЙ ЛУФТИ; АЙ Луфти (SE); ХЕГЕР ПЕТЕР; ХЕГЕР Петер (SE); アーイー ルトフイ; ヘルゲル ベテル; 卢特福 埃; 彼得 哈格

Agent(s): KUEHN FRIEDRICH HEINRICH; NILSSON CHARLOTTE; POTOMAC PATENT GROUP PLLC; 下山 治; 中科专利
商标代理有限公司 11021; 大塚 康弘; 大塚 康徳; 木村 秀二; 潘剑颖; 高柳 司郎

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

International class B28B B28B1/44 B28B21/00 B28B21/02 B28B21/24 B28B21/30 B28B21/60 B28B21/80 B29C41/04 E04H
(IPC 8-9): E04H12/00 E04H12/12

International class B28B21/24 B28B21/80 E04H12/12
(IPC 1-7):

CPC: B28B13/027 B28B21/30 B28B23/10 E04H12/12 E04H12/16

US class: 264/312 264/312P 425/460 425/460S

Classification Explorer

Cited documents: GB1391763 A, DE2939472 A1, EP1645701 A2, FR2872843 A1, GB2030511 A1, DE2228882 A1, WO9836886 A1, SE2007050306, US4084782 A, JP8294992, JP3147932, JP2003039591, JP47025218, JP63092413, JP2003039591 A2, JP8294992 A2, JP3147932 A2, JP47048256 B4, JP41010695 Y1, JP51000153 U, JP47025218 A2, JP36021897 B1, JP47048256 B1, JP63092413 A2, JPS4725218, JP54748256 B1, JPS6392413, JP8072030 A2, CH374817 A, GB693640 A, US2597934 A, DE602305 A, FR928897 A, GB889118 A, US2008074 A.

Forward Citations: EP3049595 B1,

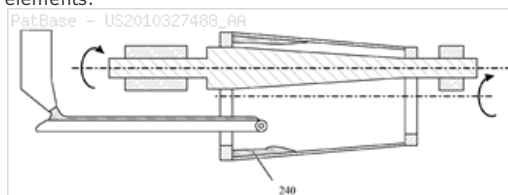
DE102017011046 A1

EP2963206 B1, AU2014328802 BB, EP23049595 A4, CN102574293 A, CN102695590 A, EP2963206 A1, CN103909574 B, AU2010246534 BB, WO11063983 A1, ES2371960 AA, CN103909574 A, CN102574293 B, ES2472306 A, FR2980230 A1, US10465410 BB, RU186612 U1, US10006203 BB, US2016215518 AA, US9630341 BB, US9523211 BB, US9498897 BB, US2014298737 A, US8633865 BB, US2011248902 AA, JP2013067024 A2, EP2310595 B1, EP2310595 A1, CN109591182 A, CN103522411 B, CN103522411 A.

Abstract:

Abstract. A method of making an open ended hollow concrete element includes arranging a mold about a substantially horizontal roller shaft, the mold having a sleeve-shaped mold wall defining the outer peripheral shape of the concrete element and first and second end rims, each with an inner periphery smaller than the inner periphery of the mold wall at the respective end and

defining the end surfaces of the concrete element. The mold is rotatably supported by the roller shaft by abutment at the inner peripheries of the first and second end rims so that the roller shaft upon rotation defines the inner peripheral shape of the concrete elements. The method further includes rotating the shaft to rotate the mold; feeding curable concrete to the rotating mold; stopping the rotation of the mold; and removing the cured concrete element from the mold. The inner perimeter of the mold wall defines an exterior shape of the concrete element that varies along and/or radially to the direction of the rotational axis. There is further provided an arrangement for making such concrete elements.



29) Family number: 36071793 (US2009145073 AA)

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Title: ARCHITECTURAL STRUCTURE, STRUCTURAL UNIT AND METHOD FOR CONSTRUCTING THE SAME
Priority: JP20060059409 20060306 WO2006JP316868 20060828 WO2006JP16868 20060828
 WO2006JP324475 20061207 WO2006JP24475 20061207

Family:	Publication number	Publication date	Application number	Application date
	CN101316972 A	20081203	CN200680044115	20061207
	CN101316972 B	20120307	CN200680044115	20061207
	EP1992751 A1	20081119	EP20060834230	20061207
	EP1992751 A4	20090401	EP20060834230	20061207
	HK1125681 A1	20090814	HK20090103181	20090403
	HK1125681 A3	20090814	HK20090103181	20090403
	JP2007102264 A1	20090723	JP20080503754T	20061207
	JP4192207 B1	20081210	JP20080503754T	20061207
	JP4192207 B2	20081210	JP20080503754T	20061207
	KR100919097 B1	20090928	KR20087015351	20061207
	KR20080099848 A	20081113	KR20087015351	20061207
	TW200734515 A	20070916	TW20060146017	20061208
	US2009145073 AA	20090611	US20060087121	20061207
	WO07102264 A1	20070913	WO2006JP324475	20061207
	WO08026239 A1	20080306	WO2006JP316868	20060828

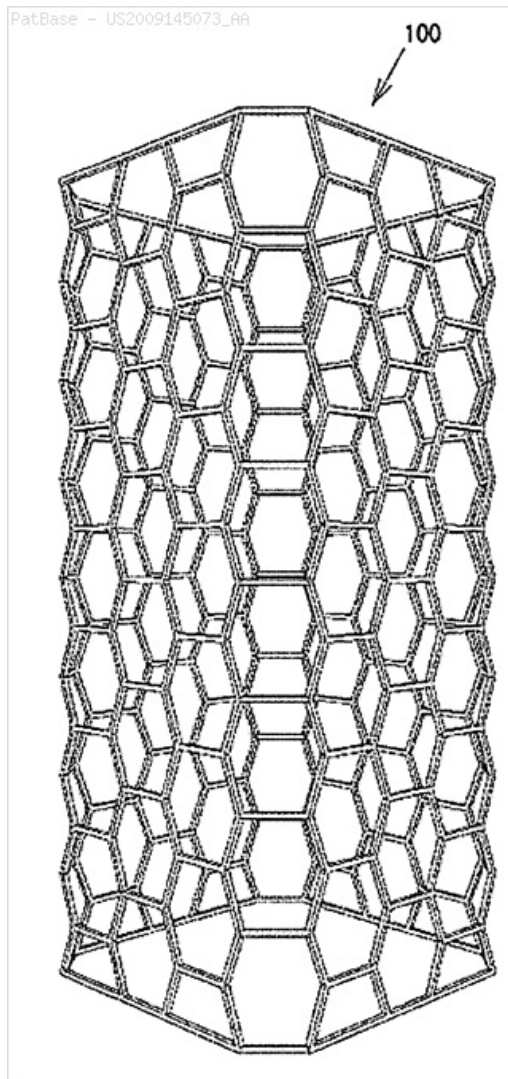
Probable Assignee: SEKISUI CHEMICAL CO LTD
Assignee(s):(std): KAMOSHITA TSUTOMU ; SEKISUI CHEMICAL CO LTD ; TAKESHIMA ICHIRO
Assignee(s): SEKISUI CHEMICAL CO ; 积水化学工業株式会社 ; 積水化学工業株式会社 ; 積水化学工業株式会社 ; 세키스이케미칼 가부시카가이샤
Inventor(s):(std): ICHIRO TAKESHIMA ; KAMOSHITA TSUTOMU ; TAKESHIMA ICHIRO ; TSUTOMU KAMOSHITA
Inventor(s): 竹嶋 一郎 ; 鴨下 勉 ; 鴨下勉 ; 카모시타 츄수토무 ; 타케시마 이치로
Agent(s): KOJIMA TAKIRO ; KOJIMA TAKIRO ET AL ; NIXON AND VANDERHYP PC ; RIEDER HANS JOACHIM ET AL ; SUNHOPE INTELLECTUAL PROPERTY LTD ; 北京信慧永光知识产权代理有限公司 11290 ; 小島 高城郎 ; 小林 生央 ; 李雪春 ; 武玉琴 ; 河合 典子 ; 성낙훈
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW
International class (IPC 8-9): E04B1/58 E04C3/32 E04B E04B1/02 E04B1/06 E04B1/20 E04B1/22 E04B1/24 E04B1/32 E04B1/343 E04B1/35 E04B1/38 E04B1/58 E04B2/56 E04B2/90 E04B2/94 E04C2/40 E04C3/32 E04H12/00 F16S5/00
CPC: E04B1/18 E04B1/22 E04B1/34 E04B2001/3583 E04B1/32 E04B2001/3235 E04B2001/3276 E04C2/04
US class: 52/653.1 52/656.2 52/745.21 52/745.210S 52/656.200S 52/653.100P

[Classification Explorer](#)

Cited documents: WO08026239 A1, JP61083738 A2, JP6287913 A2, JP9060301 A2, JP9004130 A2, JP9328816 A2, JP53043217 A2, JP5311897 A2, JP58033664 A2, JP52121912 A2, JP61036435 A2, JP5033394 A2, JP2000144909 A2, JP10018431 A2, JP2003160911 A2, JP6093688, JP58033664, JP55055741, JP5033394, JP2003160911, US4324037 A, JP9328816, JP9060301, JP9004130, JP6287913, JP2001173889 A2, JP61083738, JP61036435, JP53043217, JP2006316868, JP2000144909, JP10018431, FR2135759 A5, FR1558292 A,
Forward Citations: WO19047813 A1, WO07102264 A1, JP2008142792 A1, JP4146511 B1, CN103982005 A, CN102888894 A, US9834325 BB, US9353909 BB, US2011127691 AA, US9175492 BB, US2011239563 AA, US8474212 BB, US2012137621 AA, KR101725781 B1, US10392800 BA, US9598865 BB, CN108193828 A, CN108086479 A, CN101871236 A,

Abstract:

The present invention provides an architectural structure having a main frame of honeycomb configuration that is erected vertically and expands in a plane, a structural unit therefore, and a method for constructing the same. An architectural structure having a main frame formed by connecting a plurality of structural units, wherein a virtual honeycomb configuration that is erected vertically and expands in a plane is provided with one structural unit (1, 2, 3, 4, 5, 6) disposed at a position that includes one apex (h1, h2, h3, h4, h5, h6) of a hexagonal cell (H1, H2) that is the unit cell thereof in front view, means are provided for rigidly joining two structural units by disposing joint surfaces, that are formed in part of the respective outer circumferential surfaces of the two structural units that adjoin each other, so as to oppose each other, while the surfaces (s1, s2, s3, s4, s5, s6) that are rigidly joined each crosses one of the sides of the hexagonal cell, and an opening (W) surrounded by all the structural units that are disposed on the hexagonal cell is formed in the mid portion of each hexagonal cell.



30) Family number: 936307 (US3552072 A)

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Title: METHOD AND APPARATUS FOR HOUSING AN ENCLOSED AREA WITH AERO-TRUSSED STRUCTURES
Priority: US19680766754 19681011

Family:	Publication number	Publication date	Application number	Application date
	US3552072 A	19710105	US19680766754	19681011

Probable Assignee: JAMES P O CONNELL

Assignee(s):(std): JAMES P O CONNELL

Inventor(s):(std): O CONNELL JAMES P

Inventor(s): JAMES P O CONNELL

International class
 (IPC 8-9): E04B7/16 E04H15/20 E04H3/10

International class
 (IPC 1-7): E04B1/345 E04B7/16 E04G11/04 E04H14/00 E04H6/44

CPC: E04B7/166 E04H15/20 E04H2015/203 E04H2015/204 E04H3/10

US class: 52/2 52/2.17 52/2.19 52/6 52/64 D25/12 D25/132 D25/18

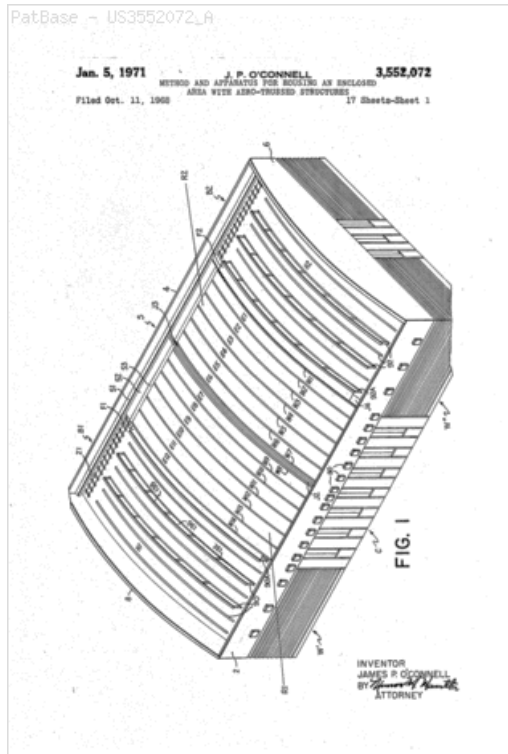
[Classification Explorer](#)

Forward Citations: US10513056 BA, JP6362275 B2, JP2017115372 A2, US9915062 BB, US2017145682 AA, US9527261 BA, WO13014121 A3, US2011127691 AA, US8707632 BB, US8701356 BB, US2012291363 AA, US2013042541 AA, WO13014121 A2, US5778603 A, US4038788 A, US5983575 A, US4831792 A, US4682449 A, EP1752600 A1, US3742657 A, US4426744 A,

Abstract:

ABSTRACT OF THE DISCLOSURE

An improved building technique which utilizes a novel light-weight aero-trussed roof construction. The aero-trussed roof is embodied in one form in a stadium-type housing structure which encloses an arena area used for public entertainment. The housing structure includes spaced apart side wall which may have moveable roof sections of considerable magnitude and span adjustable on the side walls towards and away from 20 one another to shelter or exposed the area as desired. The aero-trussed roof sections whether moveable or stationary are comprised by reinforced gas-filled bodies which are inflated from a suitable gas supply within the structure and novel power driven carriage means may be provided, where moveable roof sections are used, for rapidly advancing or retracting the gas-inflated sections in a position for sheltering or exposing the enclosed arena area as may be required.



31) Family number: 41151522 (US2008022609 AA)

© PatBase

Title: MOBILE MANUFACTURING PLANTS FOR PRODUCING PREFAB ELEMENTS

Priority: US20060460865 20060728

Publication number	Publication date	Application number	Application date
US2008022609 AA	20080131	US20060460865	20060728

Probable Assignee: BIT TECHNOLOGIES LTD

Assignee(s):(std): BIT TECHNOLOGIES LTD

Assignee(s): BIT TECHNOLOGIES LIMITED

Inventor(s):(std): FRANCO VALENTE CARMINE ; MAURIZIO PECCOLO

Agent(s): GREENBLUM AND BERNSTEIN PLC

International class
(IPC 8-9): E04B7/14

CPC: B28B15/002 B28B7/082 E04H15/18

US class: 52/83

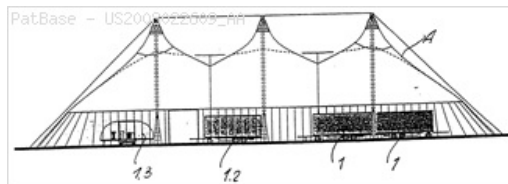
[Classification Explorer](#)

Cited documents: US3624889 A, US4057284 A, US2008264459 AA, US2005179276 AA, US4266916 A, US3659979 A, US5730523 A, US5864991 A, US2003000167 AA,

Forward Citations: US10384873 BB, US10131388 BB, US2011209321 AA, US8789269 BB, US2011127691 AA, US8863443 BB, US2011258941 AA,

Abstract:

The present invention concerns a mobile plant for producing prefabricated elements for the building industry. The mobile plant comprises a covering canopy structure (A) that can be dismantled, such as a large tent or a hall, assembly tables (1, 1.1, 1.2, 1.3) for producing elements of brick material and mortar, an installation (14) for preparing the reinforcing irons for the panel elements of brick and mortar, a concrete mixer plant (3) for supplying the mortar, and/or a plant for generating auxiliary means (steam, electric current, compressed air, etc.) and/or a service container (7) for the personnel and for managing the plant. All these equipment elements are mounted on trailers and/or in containers that can be transported by road or by rail to the building site or the buildings to be erected. The main advantage of the mobile plant is seen in the maximum work rationalisation that yields considerable savings in time and in means.



32) Family number: 34372673 (DE202006016561 U1)

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Title: DEVICE FOR MANUFACTURING OF COMPONENTS FROM HARDENABLE CASTING SLIP E.G. PLACES CLOSE TO BUILDING SITES, HAS TRANSPORTABLE CONTAINER HAVING INNER SIDE FORMED TO CONTROL INTAKE AND REMOVAL OF COMPONENTS OF RELEVANT EQUIPMENTS

Priority: DE200610051045 20061030 DE200620016561U 20061030

Family:	Publication number	Publication date	Application number	Application date
	DE102006051045 A1	20080508	DE200610051045	20061030
	DE202006016561 U1	20070308	DE200620016561U	20061030

Probable Assignee: KASTNER ERICH

Assignee(s):(std): KASTNER ERICH ; MAIER GERHARD

Inventor(s):(std): KASTNER ERICH ; MAIER GERHARD

International class B28B15/00

(IPC 8-9):

CPC: B28B1/0873 B28B11/24 B28B15/002 B28B5/04 E04G21/16

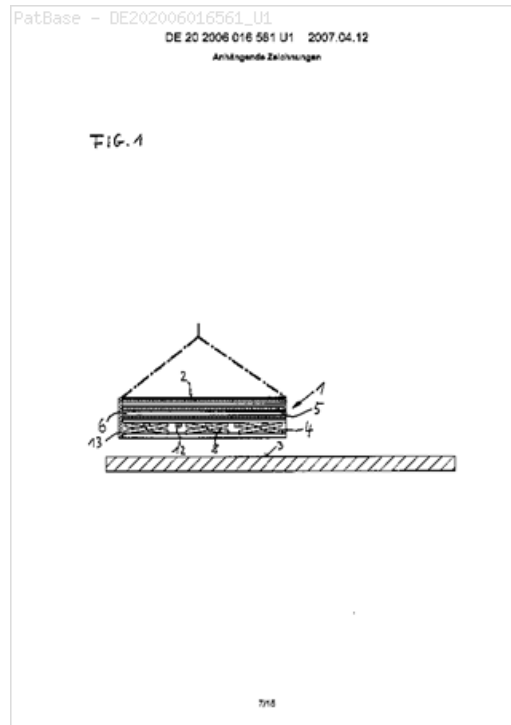
[Classification Explorer](#)

Cited documents: DE1887648 U, DE1887649 U, DE1584746 A1, DE1683985 A1, DE2034205 A1, DE3105287 A1, DE1177996 B,

Forward Citations: US9895827 BB, WO12130222 A3, WO12130222 A2, AU2010246534 BB, WO11063983 A1, DE102011015600 A1

Abstract:

The device (1) consists of a transportable container (2). The inner side of container is formed to control intake and removal of the components of relevant equipments (4,5). The container is deductible or adjustable at the site. The container has supporting elements to align on the base (3) of the component.



33) Family number: 56784878 (US2014182240 AA)

© PatBase

Title: MOULD FOR PRECAST CONCRETE ELEMENT PRODUCTION

Priority: ES20120032051 20121227

Family:	Publication number	Publication date	Application number	Application date
	EP2749386 A2	20140702	EP20130199616	20131226
	EP2749386 A3	20151209	EP20130199616	20131226
	ES2472306 AA	20140630	ES20120032051	20121227
	ES2472306 BA	20150602	ES20120032051	20121227
	US2014182240 AA	20140703	US20130142667	20131227
	US9169831 BB	20151027	US20130142667	20131227

Probable Assignee: ACCIONA WINDPOWER SA

Assignee(s):(std): ACCIONA WINDPOWER SA

Inventor(s):(std): ARISTEGUI LANTERO JOSE LUIS ; ARLABAN GABEIRAS TERESA ; GARCIA MAESTRE IVAN ; GARCIA SAYES JOSE MIGUEL ; N EZ POLO MIGUEL ; NUNEZ POLO MIGUEL ; RUIZ ALDAMA ALFONSO

Inventor(s): ALFONSO RUIZ ALDAMA ; IVAN GARCIA MAESTRE ; JOSE LUIS ARISTEGUI LANTERO ; JOSE MIGUEL GARCIA SAYES ; MIGUEL NUNEZ POLO ; TERESA ARLABAN GABEIRAS

Agent(s): MCNEES WALLACE AND NURICK LLC; PONS ANGEL; PONS ARINO ANGEL

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

International class B28B7/02 B28B7/04 B29D99/00 E04H12/12 F03D11/04
(IPC 8-9):

CPC: B28B7/02 B28B7/04 B29D99/001 E04H12/12 Y02E10/728 Y10T428/1317

US class: 1/1 264/299 425/150 428/34.6 52/831

[Classification Explorer](#)

Cited documents: WO11157659 A1, WO13056715 A1, US4814126 A, US4637586 A, US4181287 A, US3801059 A, US3703271 A, US884931 A, US2505342 A, US2014287084 AA, US2011020131 AA, US2004026601 AA,

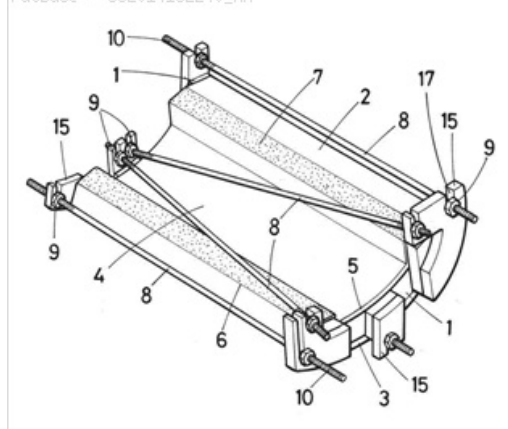
US1327006 A, US1274252 A, WO09099360 A1, JP2016006 A2, FR2581923 A1, ES2371960 AA, ES2049623 AB, ES2049623 a2, WO11063983 A1, DE19841065 A1,

Forward Citations: CN109940743 A, CN105673355 A, CN109514710 A, CN105715463 A, WO19148985 A1, WO18193281 A1, CN105715463 B,

Abstract:

The present invention can be included in the technical field of moulds for precast concrete element production and relates to a mould for precast concrete element production wherein the relative position of the side walls that define the upper and lower flanks of the precast concrete element is defined by elements that are independent from the rest of the mould, as well as to the manufacturing process that uses the aforementioned mould for precast concrete element production, the precast concrete element thus obtained and a wind turbine comprising, in turn, at least one precast concrete element produced using said mould.

PatBase - US2014182240_AA



34) Family number: 13967424 (JP2000210923 A2)

© PatBase

Title: MANUFACTURE OF CONCRETE UNIT

Priority: JP19990310208 19991029

Family:	Publication number	Publication date	Application number	Application date
	JP2000210923 A2	20000802	JP19990310208	19991029
	JP3120980 B2	20001225	JP19990310208	19991029

Probable Assignee: YAMADA HIROSHI

Assignee(s):(std): YAMADA HIROSHI

Assignee(s): 山田 普

Inventor(s):(std): YAMADA HIROSHI

Inventor(s): 山田 普

Agent(s): 小谷 悦司; 植木 久一; 樋口 次郎

International class (IPC 8-9): B28B11/00 B28B11/24 B28B17/00

International class (IPC 1-7): B28B11/24 B28B17/00

[Classification Explorer](#)

Cited documents: JP59133008, JP5014130 U, JP3261508, JP49085121, JP3244506, JP3004463 U, JP1039697 Y2,

Forward Citations: EP2939809 B1, JP2013512132 T2, EP2939809 A1,

Abstract:

PROBLEM TO BE SOLVED: To improve workability by suppressing increases in an energy and a cost caused by a heat loss of a heating steam. SOLUTION: The apparatus for manufacturing a concrete unit comprises a form 6 having a cavity for charging a ready mixed concrete, and a boiler 5 for supplying steam for heating and curing the mixed concrete in the cavity 65. In this case, rails 3 laid along a form arraying place 2 for arraying a plurality of the forms 6, and a moving housing 4 moving on the rails 3 are provided. The boiler 5 is installed in the housing 4. The place 2 is formed to array the plurality of the forms 6 in series. The rails 3 of a pair are laid to extend in a longitudinal direction of the place 2 through the place 2, and a moving body is constituted to run on the rails 3 in the state of bridging over the forms 6.

Priority: FR20040007746 20040712

Family:	Publication number	Publication date	Application number	Application date
	FR2872843 A1	20060113	FR20040007746	20040712
	FR2872843 B1	20061006	FR20040007746	20040712

Assignee(s):(std): ELECTRICITE DE FRANCE

Inventor(s): ILIE PETRE LAZAR ; RODRIGUE LARGENTON

(IPC 8-9):

(IPC 1-7):

Classification Explorer

Forward Citations: CN102213193 A,

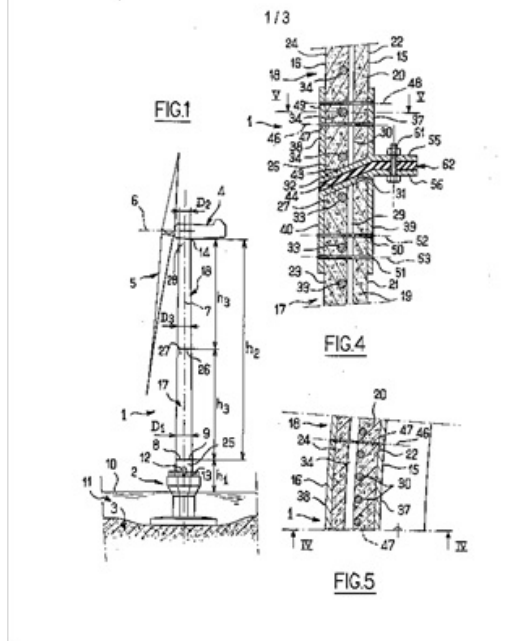
DE102007020483 A1

WO17055622 A1, FR3041984 A1, AU2010250804 BB, EP2253782 B1, CN102459787 A, WO10134029 A3, WO09099360 A1, AU2010246534 BB, WO11063983 A1, ES2371960 AA,

DE102008029651 B3

US9163613 BB, RU2550124 C2, EP2631394 A1, EP2631393 A1, EP2354536 A1,

The method involves decomposing a mast (1) into lower and upper sections (17,18) having a weight compatible with pre-casting outside mast construction site and with a transport and handling on the site. Each section has longitudinal concrete walls (19, 20) housing rectilinear rods (29, 30). The sections are assembled between them and with a base and a nacelle of a wind turbine in a rigid way by longitudinal traction and compression. An independent claim is also included for a longitudinally prestressed concrete mast.

**36) Family number: 56440742** (EP2939809 A1)

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Title: PORTABLE FACILITY FOR THE MANUFACTURE OF PREFABRICATED CONCRETE ELEMENTS FOR CONCRETE TOWERS

Priority: ES20140030587U 20140430 ES20140030587 20140430 EP20150165971 20150430

Family:

Publication number	Publication date	Application number	Application date
BR202015009894 U2	20151201	BR20152009894U	20150430
DE602015032108 D1	20190711	DE201560032108T	20150430
EP2939809 A1	20151104	EP20150165971	20150430
EP2939809 B1	20190619	EP20150165971	20150430
ES1109530 UA	20140516	ES20140030587U	20140430
ES1109530 Y1	20140806	ES20140030587U	20140430
ES2746423 T3	20200306	ES20150165971T	20150430
IN01209DE2015 A	20160610	IN2015DE01209	20150430
MX2015005569 A1	20160310	MX20150005569	20150430
MX367781 B	20190905	MX20150005569	20150430
PL2939809 T3	20200131	PL20150165971T	20150430
ZA201502970 A	20160928	ZA20150002970	20150430

Probable Assignee: NORDEX ENERGY SPAIN SAU

Assignee(s):(std): ACCIONA WINDPOWER SA ; NORDEX ENERGY SPAIN S A U

Assignee(s): NORDEX ENERGY SPAIN SAU BARASOAIN

Inventor(s):(std): ARISTEGUI LANTERO JOSE LUIS ; ARLABAN GABEIRAS TERESA ; GABEIRAS TERESA ARLABAN ; GARCIA MAESTRE IVAN ; GARCIA SAYES JOSE MIGUEL ; LANTERO JOSE LUIS ARISTEGUI ; MAESTRE IVAN GARCIA ; NUNEZ POLO MIGUEL ; POLO MIGUEL NUNEZ ; SAYES JOSE MIGUEL GARCIA

Inventor(s): IVAN GARCIA MAESTRE ; JOSE LUIS ARISTEGUI LANTERO ; JOSE MIGUEL GARCIA SAYES ; MIGUEL NUNEZ POLO ; TERESA ARLABAN GABEIRAS

Agent(s): ANGEL PONS ARINO; PONS; PONS ANGEL; PONS ARINO ANGEL

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

International class (IPC 8-9): B28B15/00 B28B7/02 E01C E04B E04B1/00 E04B1/04 E04G E04G13/02 E04G21/02 E04H12/12 E04H5/02

CPC: B28B15/002 B28B7/02 E04G13/021 E04H12/12 E04H5/02 F05B2230/21

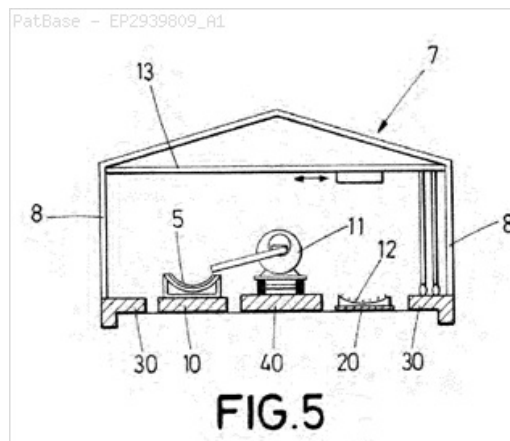
[Classification Explorer](#)

Cited documents: JP3603957 B2, US2012324823 AA, ES2371960 BA, FR858786 A, GB476340 A, JP2000210923 A2, DE202004021402 U1, DE202004021402 U, WO19207142 A1,

Forward Citations: WO19207142 A1,

Abstract:

The present invention relates to a portable facility for the manufacture of prefabricated concrete elements for concrete towers, which enables a reduction in the time and material employed in the start-up of said facility which enables the execution of the manufacture of the prefabricated concrete elements for concrete towers and enables, at each area of the same, the optimisation of the use of the concrete necessary to withstand the stresses associated with the weight of the elements leaning on said areas, reducing the total surface area of the facility covered by the concrete and the time and resources necessary both for its start-up and its dismantling.



37) Family number: 29229525 (US4783861 A)

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Title: COVERING STRUCTURE

Priority: FR19850016464 19851106 EP19860201919 19861103 CA19860522364 19861106

Family:	Publication number	Publication date	Application number	Application date
	AT40731 E	19890215	AT19860201919T	19861103
	AU198664884 A1	19870514	AU19860064884	19861106
	AU591531 B2	19891207	AU19860064884	19861106
	CA1303810 A1	19920623	CA19860522364	19861106
	DE3662064 D1	19890316	DE19863662064T	19861103
	DK165511 B	19921207	DK19860005260	19861104
	DK165511 C	19930419	DK19860005260	19861104
	DK526086 A	19870507	DK19860005260	19861104
	DK526086 A0	19861104	DK19860005260	19861104
	EP0224290 A1	19870603	EP19860201919	19861103
	EP0224290 B1	19890208	EP19860201919	19861103
	ES2007295 B3	19920216	ES19860201919T	19861103
	FR2589500 A1	19870507	FR19850016464	19851106
	FR2589500 B1	19880108	FR19850016464	19851106
	JP1682303 C3	19920731	JP19860264857	19861106
	JP3050063 B4	19910731	JP19860264857	19861106
	JP62170666 A2	19870727	JP19860264857	19861106
	NZ218203 A	19881028	NZ19860218203	19861106
	US4783861 A	19881115	US19860927764	19861106
	ZA8608456 A	19870729	ZA19860008456	19861106

Probable Assignee: BRELAN SA

Assignee(s):(std): BRELAN SA ; BURURAN SA ; LEURENT GHISLAIN ; LEURENT GHISLAIN H

Assignee(s): LEURENT GHISLAIN HENRI

Inventor(s):(std): BRELAN S A ; LEURENT GHISLAIN H ; LEURENT CHISLAIN HENRI ; LEURENT G H ; LEURENT GHISLAIN H ; LEURENT GHISLAIN HENRI

Inventor(s): CHISLAIN HENRI LEURENT ; GHISLAIN HENRI LEURENT ; JISURAN ANRI RURAN ; ジスラン・アンリ・ルラン

Agent(s): LORD AND CO; OGILVY RENAULT LLP SENCRL SRL

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

International class (IPC 8-9): A01G9/14 A01G9/16 E04B1/32 E04B1/343 E04B7/16 E04H3/14 E04H3/16

International class (IPC 1-7): A01G9/14 A01G9/16 E04B1/32 E04B1/342 E04B1/343 E04B7/16 E04H3/16 E04H3/18 E04H3/19 E05D15/06

CPC: A01G9/1469 A01G9/16 E04B1/34357 E04B7/166 E04H3/165 Y02A40/25

US class: 4/498 49/425 52/67

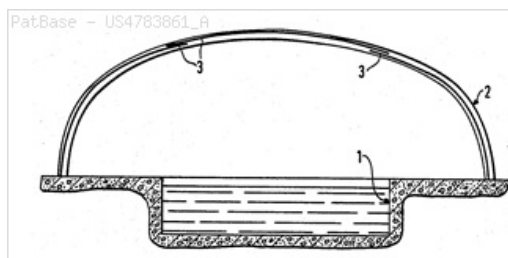
[Classification Explorer](#)

Cited documents: US4674241 A, US4639970 A, US4611436 A, US4175361 A, US3845591 A, US3745706 A, US3662410 A, US3248830 A, US509704 A1, GB601228 A, US2323106 A, GB1551771 A, FR2555219 A1, EP0001948 A1, CH613249 A,

Forward Citations: GB2568927 A1, US9879473 BA, WO05042124 A3, US2007197304 AA, US2011127691 AA, GB2230797 A1, US2009300997 AA, US2009158673 AA, AU2002255035 BB, US2007087854 AA, US2007078016 AA, US2004187397 AA, US8663023 BB, US8661575 BB, FR2816343 A1, ES2276601 AA, US8282497 BB, US8251832 BB, US8210954 BB, US8209937 BB, US8197352 BB, US8162769 BB, US2008263759 AA, US8136306 BB, US8096892 BB, US8079916 BB, US8075413 BB, US8070615 BB, US7942752 BB, US7921601 BB, US7857704 BB, US7828667 BB, US7815514 BB, US7811177 BB, US7780536 BB, US7785207 BB, US7775896 BB, US7775895 BB, US7775894 BB, US7762900 BB, US7766753 BB, US7762899 BB, US7758435 BB, US7740542 BB, WO05042124 A2, US7727077 BB, US6637160 BB, US5062243 A, US6754994 BB, US5117594 A, US5203125 A, US7520091 BB, GB2230797 B2, FR2821635 A1, EP1239099 A1, US7597630 BB, AU2002255035 BH, FR2892745 A1, US7263805 BB, FR2881160 A1, US6374433 BA, EP1500756 A1, US7497784 BB, US7491128 BB, US7371183 BB, US7371182 BB, US5024040 A, US7285053 BB, US5187914 A, JP2009098037 A2, WO0229182 A1, FR2815065 A1, EP1322826 B1, EP2657434 B1, EP2657434 A3, EP2657434 A2, GB2216156 A1, WO14125244 A1, FR2989987 A1, FR2989986 A1, WO13144368 A1, FR2981105 A1, FR2979362 A1, EP2292875 A1, EP0266667 A1, JP2013672 A2, FR2948397 A1, EP2098661 A1, FR2705380 A1, EP0633370 A1, FR2928394 A1, EP2065539 A1, FR2928395 A1, ES2073966 AB, BE1006877 AE, FR2900174 A1, FR2778937 A1, FR2715685 A1, FR2627530 A1, GB2216156 B2, DE9002719 U1, DE3904941 A1,

Abstract:

An openable covering structure for any desired location which is particularly well adapted for use in conjunction with a swimming pool, comprising several covering elements extending above the basin of the swimming pool and movable relative to one another. Each covering element comprises two parallel arches between which extend transparent or translucent covering plates. To make the opening operations easier and to extend the opening possibilities, each arch of a covering element has, in at least one of its front vertical faces, at least three parallel and superimposed grooves which extend over the entire length of the arch and in which are respectively fitted at least three covering plates mounted in the grooves so as to be capable of transversely sliding.

**38) Family number: 43815770 (US2011107708 AA)**

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Title: METHOD FOR PRODUCING CONCRETE PREFINISHED PARTS
Priority: DE200810016828 20080401 WO2009EP02374 20090401 EP20090727458 20090401
Family:

Publication number	Publication date	Application number	Application date
AR073160 AA	20101020	AR2009P101170	20090401
AU2009231216 AA	20091008	AU20090231216	20090401
AU2009231216 BB	20131121	AU20090231216	20090401
BRPI0909023 A2	20150922	BR2009PI09023	20090401
BRPI0909023 B1	20200317	BR2009PI09023	20090401
CA2719145 AA	20091008	CA20092719145	20090401
CA2719145 C	20150324	CA20092719145	20090401
CN101990487 A	20110323	CN200980112302	20090401
CN101990487 B	20170714	CN200980112302	20090401
CY1117206 T1	20170405	CY20161100154T	20160225
DE102008016828 A1	20091015	DE200810016828	20080401
DE502009011989 D1	20160218	DE200950011989T	20090401
DK2279065 T3	20160321	DK20090727458T	20090401
EP2279065 A2	20110202	EP20090727458	20090401
EP2279065 B1	20160106	EP20090727458	20090401
ES2563081 T3	20160310	ES20090727458T	20090401
HR20160239 T1	20160408	HR20160000239	20160307
HU028548 T2	20161228	HU20090727458T	20090401
IN03468KN2010 A	20111125	IN2010KN03468	20100920
IN309004 B	20190315	IN2010KN03468	20100920
JP2011522713 T2	20110804	JP20110502288T	20090401
JP5372134 B2	20131218	JP20110502288T	20090401
KR101237238 B1	20130226	KR20107023800	20090401
KR20110003350 A	20110111	KR20107023800	20090401
ME01099 B	20121220	ME20100000159	20090401
MX2010010889 A1	20101215	MX20100010889	20090401
PL2279065 T3	20160531	PL20090727458T	20090401
SI2279065 T1	20160331	SI20090031371T	20090401
TN2010000441 A1	20111229	TN20100000441	20100924
TR201604350 T4	20160421	TR20160004350T	20090401
US2011107708 AA	20110512	US20090936171	20090401
US8597564 BB	20131203	US20090936171	20090401
WO09121581 A2	20091008	WO2009EP02374	20090401
WO09121581 A3	20091217	WO2009EP02374	20090401
WO09121581 A8	20101118	WO2009EP02374	20090401

Probable Assignee: WOBLEN ALOYS
Assignee(s):(std): ALOYS WOBLEN ; HOELSCHER NORBERT ; HOLSCHER NORBERT ; WOBLEN ALOYS ; WOBLEN PROPERTIES GMBH
Assignee(s): アロイス ヴォベン ; 艾勞埃斯 烏本 ; 艾勞埃斯·烏本 ; 워벤 알로이즈
Inventor(s):(std): HOELSCHER NORBERT ; HOLSCHER NORBERT ; NORBERT HOELSCHER ; NORBERT HOLSCHER ; WOBLEN ALOYS
Inventor(s): ALOYS WOBLEN ; HA LSCHER NORBERT ; HLSCHER NORBERT ; HÄLSCHER, NORBERT ; ノルベルト ヘルシャー ; 諾貝特 赫爾舍 ; 諾貝特·赫爾舍 ; 힐세르, 노베르트
Agent(s): CENK SEVINC; EISENFUEHR SPEISER; EISENFUEHR SPEISER PATENTANWAELTE RECHTSANWAELTE PARTGMBB; GUELZOW MARC; OYEN WIGGS GREEN AND MUTALA LLP; PIZZEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; ROEB MARIA; SEED IP LAW GROUP PLLC; 北京集佳知识产权代理有限公司 11227; 张春水; 田军锋; 원대영
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW
International class B23C3/00 B28B1/00 B28B1/16 B28B11/00 B28B11/04 B28B11/08 B28B11/12 B28B19/00 B28B21/00
(IPC 8-9): B28B21/02 B28B21/92 B28B7/00 B28B7/22 E04C2/04 E04H12/00 E04H12/12 F03D11/04 F03D13/00

F03D13/20

International class
(IPC 1-7):

B28B11/08 E04C2/04 E04H12/12 F03D11/04

CPC:

B28B1/008 B28B11/08 B28B21/02 B28B21/92 B28B7/22 E04H12/12 F03D13/20 F05B2230/60
F05B2240/912 Y02E10/72 Y02E10/728 Y02P70/50

US class:

264/296 264/296S 264/333 52/651.01 52/651.010P

[Classification Explorer](#)

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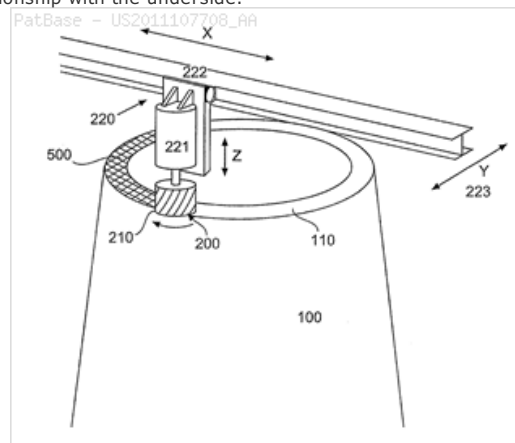
JP2007321710, WO0204766, DE10349155, DE10133607, DE202010000169 U, DE29809541 U, JP11172964, JP11029911, JP10205428, JP200341897, JP634014 A2, WO09121581 A2, WO04007955 A1, WO9943910 A1, WO8602689 A1, JP2003041897 A2, JP6034014 A2, JP6101348 A2, JP5346052 A2, JP4118266 A2, JP1147005 A2, JP6015518 A2, GB1349292 A, FR2783266 A1, FR2775492 A1, FR1249458 A, DE19841047 C1, DE19823650 A1, DE4216367 A1, DE6905988 U, DE1038743 B, US2011107708 AA, JP50133652 A2, US2413268 A, US2064791 A, US1567301 A, US7114295 BB, US5666774 A, US5555697 A, US3606666 A, US5944323 A, US5934035 A, US3977137 A, US1723216 A, US7752825 BB, US5029879 A, US3967421 A, US2756479 A, US5771518 A, US4333660 A, US4272929 A, US6389764 BA, US6381912 BA, US4386172 A, US3666606 A, US3504500 A, US3180570 A, US3721056 A, US2826800 A, US6185885 BA, US5860256 A, US5176408 A, US4890420 A, US2130911 A, JP2003245848 A2, JP2001062814 A2, JP2000283019 A2, JP2005030066 A2, JP8323729 A2, WO04007955, JP2007321710 A2, CN200968081 Y, WO0204766 A2, DE10133607 A1, US2006254168 AA, DE10349155 A1,

Forward Citations:

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DE102017011046 A1
EP3502378 A1, EP3118453 A4, EP3246493 A1, JP5438834 B2, US9657494 BB, US9533428 BB, JP5596230 B2, EA023349 B1, CN102574293 A, JP2013512132 T2, WO14067884 A1, US8978328 BB, TWI468575 B, KR101479432 B1, CN102574293 B, JP2013535607 T2, AU2010305794 BB, JP2013507277 T2, WO13098086 A1, WO11045319 A1,
DE102011078016 A1
EP2359997 A1,
DE102009049435 A1
US2013269286 AA, US2012260591 AA, US10252443 BB, EP3095569 A1, US2014283478 AA, US9243418 BB, US8597564 BB, US2012326353 AA, KR20140094638 A, KR101644728 B1, JP2015505744 T2, US10494830 BB, EP3212862 B1, EP2580409 B1, EP2782728 B1, US9587413 BB, TWI570313 B, AU2012342545 BB, WO16066907 A1, WO11157659 A1, US9091095 BB, AU2011267203 BB,
DE102010039796 A1
DE102012011770 A1
RU2564422 C2,
DE102011087025 B4
WO13076166 A1,
DE102011087025 A1
CN103958139 B, CN102939427 A, CN103958139 A, CN102939427 B,

Abstract:

There is provided a process for producing precast concrete parts, in particular pylon segments. Concrete is poured into a casting mold with a planar bottom for producing a planar underside. After the concrete has reached at least a minimum strength an equalization layer is applied to a join surface of the precast concrete part that is opposite to the underside. As soon as the equalization layer has reached the minimum strength, the precast concrete part is placed on a horizontally oriented surface and the equalization layer on the top side is removed in a plane-parallel relationship with the underside.



39) Family number: 1365731 (US4005972 A)

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Title: Invertible apparatus for molding a concrete panel

Priority: US19750565101 19750404

Family:

Publication number	Publication date	Application number	Application date
US4005972 A	19770201	US19750565101	19750404

Probable Assignee: BEARINGWALL SYSTEMS INC

Assignee(s):(std): BEARINGWALL SYSTEMS INC

Inventor(s):(std): SOMMERS ALEX

International class B28B13/00 B28B13/02 B28B7/00 B28B7/08

(IPC 8-9):

International class B28B13/06

(IPC 1-7):

CPC: B28B13/02 B28B7/08

US class: 249/137 425/439 425/443 425/452

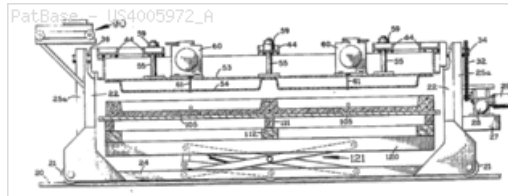
[Classification Explorer](#)

Cited documents: US978600 A, US847618 A, US3753453 A, US3704979 A, US3682448 A, US3659986 A, US3196513 A, US3149392 A, US3021867 A, US2407168 A, US2298446 A, US1242120 A, US1154387 A, FR908887 A,

Forward Citations: US2011127691 AA, US5281125 A, US2008258340 AA, US2007193181 AA, US2006081759 AA, US2004218985 AA, US4334851 A, US7695268 BB, FR2424381 A2, US4149697 A, WO8300114 A1, US6869553 BA, US5770244 A,

Abstract:

Apparatus for molding a concrete panel having:



40) Family number: 925246 (US3534512 A)

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Title: COLLAPSIBLE SHELTER

Priority: US19690807006 19690313

Family:

Publication number	Publication date	Application number	Application date
US3534512 A	19701020	US19690807006	19690313

Probable Assignee: WILLIAM BALLAS

Assignee(s):(std): WILLIAM BALLAS

Inventor(s):(std): BALLAS WILLIAM

Inventor(s): WILLIAM BALLAS

International class E04B1/344 E04H1/12

(IPC 8-9):

International class E04B1/344 E04H6/02

(IPC 1-7):

CPC: E04B1/3445 E04H1/12

US class: 135/115 52/143 52/67 52/670 52/71

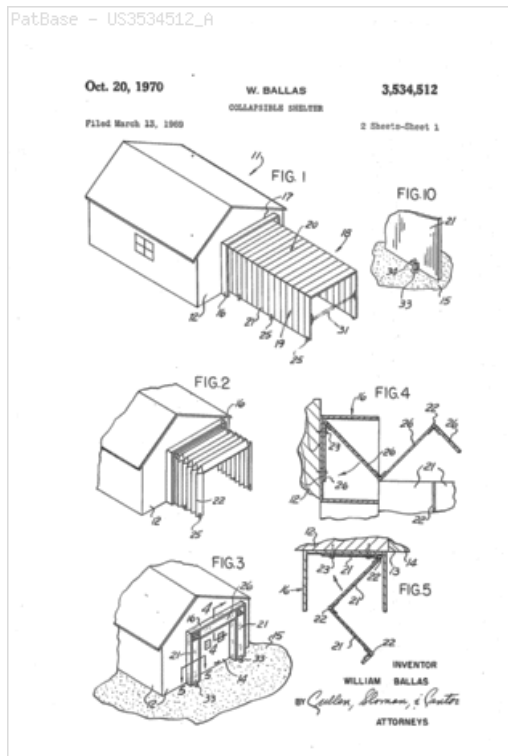
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Cited documents: US3461627 A, US3443344 A, US3407546 A, US3155419 A, US3092126 A, US2852814 A, US2257153 A,

Forward Citations: US10704258 BB, US2019301159 AA, US2018328032 AA, US10214895 BB, US10100510 BA, US2008210284 AA, US2011127691 AA, US2011094554 AA, US2009288694 AA, US2008236765 AA, US2007193127 AA, US2004244308 AA, US2003075644 AA, US8739474 BB, US8695284 BB, US2013139449 AA, GB2447276 A1, US6009930 A, US6199337 BA, US6192642 BA, US6427409 BB, WO9012171 A1, US7874304 BB, US7213632 BA, WO07087574 A2, US6739551 BB, US3984949 A, US5272848 A, US4932172 A, US4829726 A, US5983576 A, US5384992 A, US5282606 A, US5214885 A, US3744841 A, US3629982 A, US4425929 A,

Abstract:

(Claim 1) 1. A collapsible open-ended shelter comprising a pair of spaced accordion foldable side walls and an accordion foldable top wall at its ends overlying and flexibly and pivotally connected to the side walls; said walls each including a series of elongated panels; hinges interconnecting said panels along their edges; means anchoring the corresponding panel at the one ends of said walls; said panels being coplanar when open and in transverse parallel engaging relation when accordion collapsed; casters swivelably mounted at the lower ends of said side panels engageable with the ground surface; and pivot means interconnecting the outer hinged edges of an adjacent pair of top panels at their ends with the corresponding outer hinged edges of an adjacent pair of side panels at their upper ends, whereby the top panels foldably collapse simultaneously with said side panels.

**41) Family number: 24050501** (US3925679 A)

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Title: MODULAR OPERATING CENTERS AND METHODS OF BUILDING SAME FOR USE IN ELECTRIC POWER GENERATING PLANTS AND OTHER INDUSTRIAL AND COMMERCIAL PLANTS, PROCESSES AND SYSTEMS

Priority: US19730399582 19730921 US19770835561 19770922

Family:	Publication number	Publication date	Application number	Application date
	US3925679 A	19751209	US19730399582	19730921
	USRE30229 E	19800311	US19770835561	19770922
	USRE30280 E	19800520	US19770835569	19770922

Probable Assignee: WESTINGHOUSE ELECTRIC CORP

Assignee(s):(std): WESTINGHOUSE ELECTRIC CO ; WESTINGHOUSE ELECTRIC CORP

Inventor(s):(std): BERMAN PAUL A ; CREWS ROY E ; GIRAS THEODORE C

International class
(IPC 8-9): E04B1/348 E04H5/00 E04H5/02 F01K13/00

International class
(IPC 1-7): B65D85/00 H02B15/00

CPC: E04B1/3483 E04H2005/005 E04H5/02 F01K13/00 Y10S52/04

US class: 290/1 290/1.00R 290/1R 52/125.6 52/745.02 52/745.03 52/79.1 52/79.12 52/DIG.4 52/DIG.004

[Classification Explorer](#)

Cited documents: US3848138, US3489911, US3461633, US3461633 A, US3848138 A, US3489911 A,

Forward Citations: WO17147405 A1, EP3419761 A4, US9904268 BB, US9904263 BB, US2011230980 AA, US2010188410 AA, US8135481 BB, US7110835 BB, US2007208549 AA, US2010168874 AA, US2010139882 AA, US2008300698 AA, WO07041160 A2, US2008066004 AA, US9046881 BB, US2006130422 AA, WO13177643 A1, US2004153804 AA, US2004055225 AA, US2004010991 AA, US2003213210 AA, US2003079479 AA, US8881039 BB, US8825183 BB, US8756517 BB, US8671625 BB, WO11018056 A1, US6532398 BB, US6556888 BB, US6546312 BA, US6482296 BA, US8185219 BB, US2010300013 AA, US8127241 BB, US8000814 BB, US7749358 BB, US7673422 BB, US6874287 BB, US6786051 BB, EP2226574 B1, US10202896 BB, US2016369689 AA, US9267706 BB, US2011215645 AA, US2009229194 AA, US2009015021 AA, US2009118871 AA, US2007040382 AA, US2006279976 AA, US2006069453 AA, US2006006652 AA, US2003216893 AA, US2014359998 AA, EP2226574 A3, US7466033 BB, US7122913 BB, EP0058354 A1,

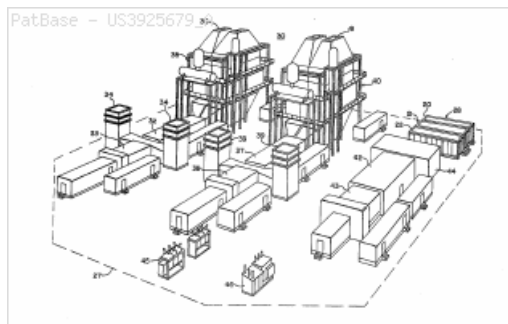
DE102006001977 B3

US7756590 BB, US7477950 BB, US7122913 B2, US2018036709 AA, GB2550184 B2, US10575430 BB, EP2516759 B1, US10458140 BB, US10371394 BB, US10294658 BB, US10280608 BB, EP2440028 B1, RU2680900 C2, EP2753772 B1, AU2017200302 BB, EP1902175 A4, US10184397 BB, US10155251 BB, CN102378945 A, EP1971727 B1, US10123451 BB, CN106948490 A, US10106974 BB, EP2101017 A3, JP2015086875 A2, US2018080376 AA, US10005106 BB, AU2014212811 BB, GB2550184 A1, GB2550183 A1, US2011036018 AA, EP3159459 A3, US2017089060 AA, WO17020136 A1, EP0849435 A3, AU2012293500 BB, US9565783 BA, US9534370 BB, US9529940 BB, US9518735 BB, EP2516759 A4, US9427782 BB, AU2014202657 BB, US9404271 BA, US9376828 BB, US9376801 BA, US9347233 BB, US2015114004 AA, US9345173 BB, CN102695590 A, US9316408 BB, US2015241085 AA, US2012147552 AA, US2015135636 AA, US2011257938 AA, CN103774869 B, EP2440028 A3, US2015303770 AA, US2011189936 AA, WO13021182 A1, US2008222969 AA, US2010212253 AA, US2010223858 AA, CN103257952 A, CN103774869 A, WO14120429 A3, US2014298734 AA, US8826600 BB, US8397441 BB, US8001730 BB, US7827738 BB, US2007082588 AA, US2008134589 AA, US2009198388 AA, US2011016802 AA, US2011127691 AA, US2010290197 AA, US8439333 BB, US2009050591 AA, US2012077429 AA, US2008236070 AA, US2015240474 AA, US2008123288 AA, US2008064317 AA, US2008062647 AA, US2008060372 AA, US2008060790 AA, US2007294964 AA, US2007094946 AA, US9144172 BB, C2298003 B6, US9115504 BB, CN102378945 B, WO10132896 A1,

WO15001463 A1, US8931217 BB, US2013201618 AA, EP2516759 A1, US8872366 BB, US8870166 BB, US8867193 BB, US8816518 BB, US8683753 BB, US8587136 BB, US8549869 BA, US2011146164 AA, US8484929 BA, US2011258837 AA, US2012066985 AA, WO0146565 A1, US8333039 BB, US8264840 BB, WO12087417 A1, US7591107 BB, US2006201074 AA, US8198966 BB, US6209330 BA, EP0156699 A1, US8047904 BB, US8033772 BB, US7551971 BB, US7511960 BB, US4545159 A, GB2474944 A1, US7894945 BB, EP1971727 A1, US7864527 BA, US7856838 BB, US7854652 BB, EP2101017 A2, EP1902175 A1, US4373338 A, WO0111198 A1, US6581383 BB, NL1009598 C2, FR2751799 A1, EP0821457 A1, FR2560532 A1, FR2453274 A1, FR2438724 A1, FR2452196 A1, EP0849435 A2, WO0068117 A1, US6176046 BA, GB2273724 A1, GB2264470 A1, DE4341511 A1,

Abstract:

Modular operating centers for use in electric power generating plants and other industrial and commercial plants, processes and systems are constructed by using a novel prefabricated modular technique. This technique includes loading a plurality of transportable room-size building modules with control system equipment at a factory site. Typically, the control system equipment includes sophisticated and complex electrical and electronics data processing and control equipment. The control system equipment is installed and bolted down in the different building modules and the equipment in each module is inter-wired at the factory site. Temporary inter-module connections are established between the control system equipment in different ones of the building modules and such equipment, as a whole, is then thoroughly tested and adjusted under simulated use conditions. Thereafter, the loaded and tested building modules are separated and separately transported to the industrial or commercial installation site. At the installation site, the building modules are joined together to form an integral weatherproof building structure and the inter-module control system equipment connections are re-established to provide a tested and substantially ready-to-go control center for the plant, process or system in question. A novel feature of this technique is that structural building modules are used as the shipping containers for transporting complex electrical and electronics equipment to the final installation site.



42) Family number: 28484395 (JP2003074185 A2)

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Title: ON-SITE MANUFACTURING-EXECUTION METHOD FOR PC (PRECAST) MEMBER

Priority: JP20010270673 20010906

Family:

Publication number	Publication date	Application number	Application date
JP2003074185 A2	20030312	JP20010270673	20010906
JP3603957 B2	20041222	JP20010270673	20010906

Probable Assignee: OKISOU KENSETSU KK

Assignee(s):(std): OKISOU KENSETSU KK

Assignee(s): 株式会社沖創建設

Inventor(s):(std): MAEDA HISAYA ; YOKOTA YOSHIFUMI

Inventor(s): 前田 久弥 ; 横田 恵文

International class (IPC 8-9): B28B15/00 E04G21/14

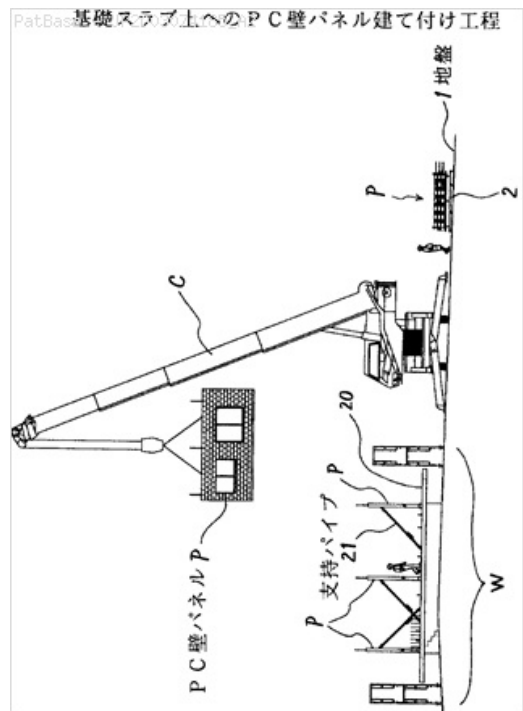
International class (IPC 1-7): B28B15/00 E04G21/14

[Classification Explorer](#)

Forward Citations: EP2939809 B1, US10316469 BB, JP2016141952 A2, JP6417230 B2, WO16120908 A1, JP2013512132 T2,

Abstract:

PROBLEM TO BE SOLVED: To manufacture a member such as a PC wall panel in a small area on a job site for constructing a PC building, enable the member to be efficiently assembled for execution of work, and dispense with a conventional factory exclusive to the PC member. SOLUTION: Work for a horizontal working stage 2 is executed adjacently to a construction area; the PC member P is manufactured on the working stage 2; and the manufactured PC member P is transferred by a crane C, so as to be assembled for execution of work. Specifically, work for a slab 20 is executed in the construction area, while heap-up type manufacture is carried out in such a manner that the upper-side PC wall panels P are formed sequentially on the panel P formed on the working stage 2; after the execution of the work for the slab 20, the heap-up-type-manufactured panels P are transferred for erection onto the slab 20 in the construction area; other members and the like, which are required for the execution of the work, are manufactured, while the working stage 2 is not used for the manufacture of the panels P; and the working stage 2 is used alternately for the heap-up type manufacture of the panels P and the other work.



43) Family number: 41896917 (JP2008101363 A2)

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Title: COLUMNAR STRUCTURE, ITS CONSTRUCTION METHOD, AND CONCRETE PANEL

Priority: JP20060283251 20061018

Publication number	Publication date	Application number	Application date
JP2008101363 A2	20080501	JP20060283251	20061018

Probable Assignee: ORIENTAL SHIRAISHI CORP

Assignee(s):(std): ORIENTAL SHIRAISHI CORP

Assignee(s): オリエンタル白石株式会社

Inventor(s):(std): SHOJI AKIO

Inventor(s): 正司 明夫

Agent(s): 安彦 元; 林 信之

International class E04H12/00 E04H12/12 F03D11/00 F03D11/04

(IPC 8-9):

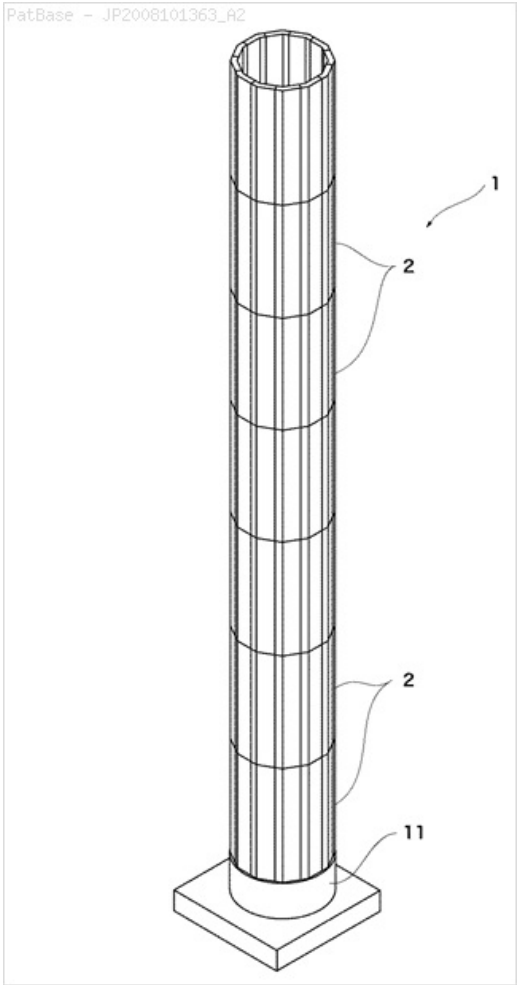
CPC: E04H12/16 F03D13/10 F03D13/20 F05B2240/912 Y02E10/72 Y02E10/728 Y02P70/50

[Classification Explorer](#)

Forward Citations: CN108779648 A, CN106762444 B, EP2558714 B1, CN106762444 A, WO17125215 A1, JP5738408 B2, KR20160142541 A, KR101713552 B1, CN104234491 B, JP5608247 B2, CN102612598 A, CN104234491 A, US9249597 BB, US8844237 BB, WO11058158 A1, JP2013518210 T2, JP2013512132 T2, WO12007069 A1, JP2013534590 T2, TWI491800 B, KR101471265 B1, JP2011099299 A2, ES2361358 AA, ITMI20092007 A1,

Abstract:

PROBLEM TO BE SOLVED: To enhance particularly transportability, earthquake resistance and resistance to wind damage, reduce manufacturing costs, and enhance working efficiency, in the construction of a large-scale main tower. SOLUTION: A columnar structure 1 is constructed by constituting a peripheral wall in such a manner that concrete panels 2, the vertical portion of which is longer than a circumferential portion, are circumferentially and vertically combined together. In this case, the concrete panels 2 are circumferentially and vertically arranged with a void in between; reinforcements, which are protruded from a circumferential end and/or a vertical end, arranged with the void, are connected together by means of a mechanical joint 35; and the void is filled with a filler 36.



44) Family number: 1293886 (US3963395 A)

© PatBase

Title: Mass production line for fabricating structural building members

Priority: US19740445069 19740225

Family:	Publication number	Publication date	Application number	Application date
	US3963395 A	19760615	US19740445069	19740225

Probable Assignee: AUTOMATED CONSTRUCTION IND INC

Assignee(s):(std): AUTOMATED CONSTRUCTION IND INC

Assignee(s): AUTOMATED CONSTRUCTION INDUSTRIES INC

Inventor(s):(std): BOURDO JOHN LORIN

International class
(IPC 8-9): B29C44/02 B29C44/12

International class
(IPC 1-7): B29D27/00

CPC: B29C44/1233

US class: 264/46.4 425/441 425/451 425/454 425/817R 425/88 425/817.00R

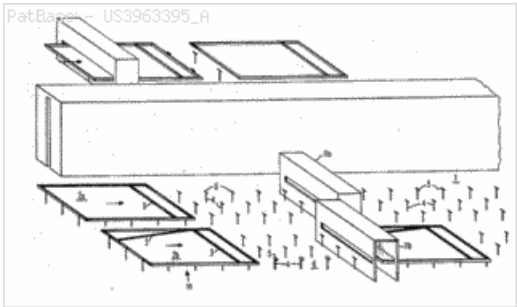
[Classification Explorer](#)

Cited documents: US3813463 A, US3778018 A, US3659986 A, US3640335 A, US3604497 A, US3543335 A, US3407457 A, US3362674 A, US3233285 A, US3151196 A, US2990929 A,

Forward Citations: US10683661 BB, EP3517701 A1, US9862126 BB, WO15143087 A1, US2011127691 AA, US5275544 A,

Abstract:

An improved mass production assembly line is provided for fabricating building walls and similar structural members in molds by applying a hardenable polyester film to the cavity surfaces of mold halves, joining the mold halves and then introducing a mixture into the mold cavity to form a polyurethane foam.



Classification Explorer

Forward Citations: JP2013512132 T2, JP52022564 A2,

Abstract:

Abstract:
Source: JP49065981 A2 **Machine translation:** The invention described in claim 1, [Source: as the number "2" 's name and central Tokyo Co., Ltd. representative invention 4-6 Kanda Surugadai, Chiyoda Ward 6 friends of the 11121(291) I housewives, building name 5- ((6271) giving way of the calyx Bu 2 grace) 'member 1 beam-to-column described herein, the name of the invention the manufacturing method and the device 2 for rebar claims (1), required shape, a spiral shape obtained by bending in reinforcing bar extending in the axial direction, after being extended in the axial direction of the rebar, rebar, characterized in that joined to another beam member, the manufacturing method of the pillars reinforcing bar (2) rebar holder to support the take-up rotating together with the take-up unit, the winding holder as the rotational force of the pull-out force rebar rebar to wire drawing while the line supplying roller die consisting of die or the like, and Iwao enlarger reduction unit, the reduction unit is provided which is fixed to the mounting table, the mounting table and the take-up to the take-up holder one of the direction along the axis of the movable column member, characterized in that reinforcing bar of manufacturing equipment.

