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- (81) **Designated States** (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
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[Continued on nextpage]

(54) **Title:** NON-BEARING MODULAR CONSTRUCTION SYSTEM

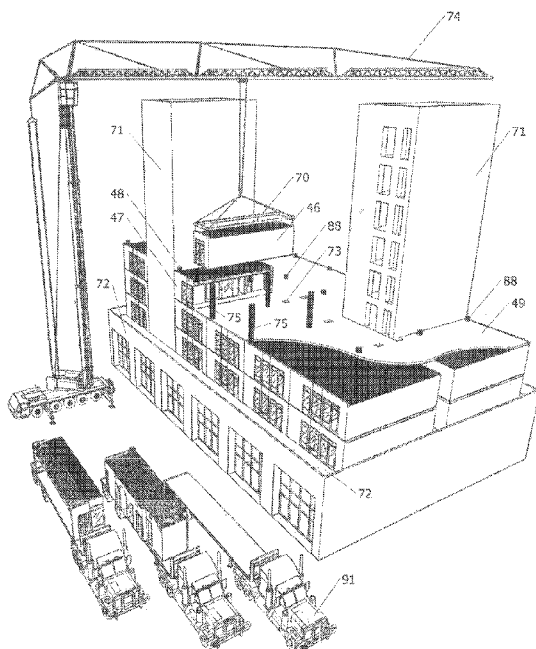


Fig. 12

(57) **Abstract:** Methods and apparatus facilitate the construction of a building using prefabricated building units, each having a horizontal upper exterior surface and a plurality of vertical wall surfaces, wherein at least some of the prefabricated building units have at least one hollow column formwork structure. The prefabricated building units are lowered onto a pre-existing base at a construction site. A first story of the building is created by arranging a plurality of the prefabricated building units adjacent to each other on the base. Structural bearing material is applied to fill the hollow column formwork structures to create structural columns connected to the structural deck. Structural bearing material is applied to the horizontal upper exterior surfaces of the adjacent prefabricated building units to create a single structural deck over the prefabricated building units.

- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 12/65674

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - E04B 1/343 (201 3.01)**USPC - 52/79. 11**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC(8): E04B 1/343 (201 3.01)

USPC: 52/79.1 1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

IPC(8): E04B 1/16,1/348; E04B 2/84; 2/86; E04B 5/16; E04G 11/02,13/00,1 3/02,13/06 (2013.01)

USPC: 52/79.1 , 79.2, 79.7, 79.8, 79.9, 79.1 1, 79.1 3, 79.14, 220.1 , 220.2, 220.8, 234, 236.3, 742.14, 745.02, 745.03, 745.04, 745.1

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Patbase, Google: Pre-fab*, prefab*, formwork, building*, modul*, unit%, concrete, cement, stack*, cell%, cube%, box*, multi, story#, storey#, level%, multiple, fill#, pour#, cast#, on-site, in situ, column%, hole%, opening%, ceiling, floor

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 201 1/1 37496 A1 (KATSALIDIS) 10 November 201 1 (10.1 1.201 1) entire document, see especially Fig 1, 3 and 20 and pg 2, ln 5-6; pg 12, ln 18-19, 22-25; pg 13, ln 22; pg 14, ln 1-2, 8-9, 18-26; pg 17, ln 19-20; pg 19, ln 20-26; pg 20, ln 24-26; pg 21, ln 5-15; pg 22, ln 1-20; pg 25, ln 18-23; pg 26, ln 12-20; pg 29, ln 23 to pg 30, ln 7	1-1 1, 13-22 -----
Y		12
Y	US 5,867,964 A (PERRIN) 9 February 1999 (09.02.1999) Fig 15; col 20, ln 24-35	12
A	US 2005/0072061 A1 (Marty) 07 April 2005 (07.04.2005), entire document	1-22
A	WO 2009/012801 A1 (Theler) 29 January 2009 (29.01 .2009) entire document	1-22
A	US 8001 730 B2 (WALLANCE) 23 August 201 1 (23.08.201 1) entire document	1-22
A	US 5,575,1 19 A (WOLFOWITZ) 19 November 1996 (19.1 1.1996) entire document	1-22
A	US 3,678,638 A (MOUGIN) 25 July 1972 (25.07.1 972) entire document	1-22

☐ Further documents are listed in the continuation of Box C.

* Special categories of cited documents:

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

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