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[Continued on next page]

(54) Title: SUPPORT FRAMEWORK FOR BUILDING CASING, BUILDING CASING, BUILDING STRUCTURE AND METHOD FOR MANUFACTURING THEREOF

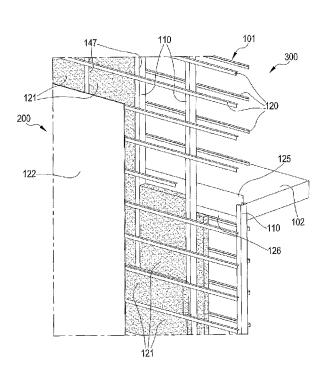


FIG.40

(57) Abstract: A support framework (101) for building casings (200) using pultruded uprights, a building casing (200) and a building structure (300). Also described are a process for realizing and installation of the building structure (300), as well as manufacturing processes of the various components of the framework.



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UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, (88) Date of publication of the international search report: GW, KM, ML, MR, NE, SN, TD, TG).

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- 24 July 2014

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#### INTERNATIONAL SEARCH REPORT

International application No PCT/IB2013/059918

A. CLASSIFICATION OF SUBJECT MATTER INV. E04B1/28 E04B2/56 E04B2/96 ADD. E04B2/74 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) E04B Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPO-Internal, WPI Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Category\* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Χ US 2006/254167 A1 (ANTONIC JAMES P [US]) 1-86, 16 November 2006 (2006-11-16) 364-375 paragraph [0004]; figures 1,2,5,6,22,34 paragraph [0047] - paragraph [0068] paragraph [0079] - paragraph [0082] US 2008/307739 A1 (CLUCAS SCOTT [US]) χ 364,365, 18 December 2008 (2008-12-18) 370,371, 374 paragraph [0031] - paragraph [0035]; figures 2,4,5,5A,5B

EP 1 621 692 A1 (RIGUELLE M JACQUES [BE]) 1 February 2006 (2006-02-01) paragraph [0036] - paragraph [0038];

\* Special categories of cited documents :

figure 1

χ

- "A" document defining the general state of the art which is not considered to be of particular relevance
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- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
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- "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

1-86

- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "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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### **INTERNATIONAL SEARCH REPORT**

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2. Claims Nos.:  because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
see additional sheet
As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  1-86, 364-375
Remark on Protest  The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.  The additional search fees were accompanied by the applicant's protest but the applicable protest
fee was not paid within the time limit specified in the invitation.  No protest accompanied the payment of additional search fees.

### **INTERNATIONAL SEARCH REPORT**

International application No
PCT/IB2013/059918

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT  Category*  Citation of document, with indication, where appropriate, of the relevant passages  X  US 1 818 418 A (MILLARD EMMOR H) 11 August 1931 (1931-08-11) page 1, line 59 - page 3, line 23; figure 1  X  US 5 846 018 A (FROBOSILO RAYMOND C [US] ET AL) 8 December 1998 (1998-12-08) column 3, line 9 - line 44; figures 2,4  X  US 4 121 391 A (SCHROEDER DONALD EARL) 24 October 1978 (1978-10-24)	Relevant to claim No.  1-86
US 1 818 418 A (MILLARD EMMOR H) 11 August 1931 (1931-08-11) page 1, line 59 - page 3, line 23; figure 1  US 5 846 018 A (FROBOSILO RAYMOND C [US] ET AL) 8 December 1998 (1998-12-08) column 3, line 9 - line 44; figures 2,4  US 4 121 391 A (SCHROEDER DONALD EARL) 24 October 1978 (1978-10-24)	1-86
11 August 1931 (1931-08-11) page 1, line 59 - page 3, line 23; figure  1  US 5 846 018 A (FROBOSILO RAYMOND C [US] ET AL) 8 December 1998 (1998-12-08) column 3, line 9 - line 44; figures 2,4  US 4 121 391 A (SCHROEDER DONALD EARL) 24 October 1978 (1978-10-24)	
ET AL) 8 December 1998 (1998-12-08) column 3, line 9 - line 44; figures 2,4  US 4 121 391 A (SCHROEDER DONALD EARL) 24 October 1978 (1978-10-24)	1-86
24 October 1978 (1978-10-24)	
column 2, line 11 - column 3, line 22; figure 1	1-86

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-86, 364-375

A support framework comprising a plurality of uprights and connected by constraining elements

1.1. claims: 364-375

A wall structure comprising a plurality of uprights and a plurality of closure panels

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2. claims: 87-179

A support framework comprising a plurality of uprights and at least a projecting element whereby a connecting device engages a first end of the projecting element with an upright

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3. claims: 180-279

A support framework comprising a plurality of uprights and at least a stirrup

4. claims: 280-319, 362, 363

A connecting device for support frameworks

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5. claims: 320-361

A stirrup for a support framework

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### **INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No
PCT/IB2013/059918

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US 4121391	Α	24-10-1978	NONE			