

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
11 June 2009 (11.06.2009)

PCT

(10) International Publication Number
WO 2009/071918 A3

(51) International Patent Classification:
E04H 3/12 (2006.01) *B32B 15/08* (2006.01)
E04F 11/104 (2006.01)

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(21) International Application Number:
PCT/GB2008/004040

(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, BR, BW, BY, BZ, CA, CH, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(22) International Filing Date:
5 December 2008 (05.12.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0723813.2 5 December 2007 (05.12.2007) GB

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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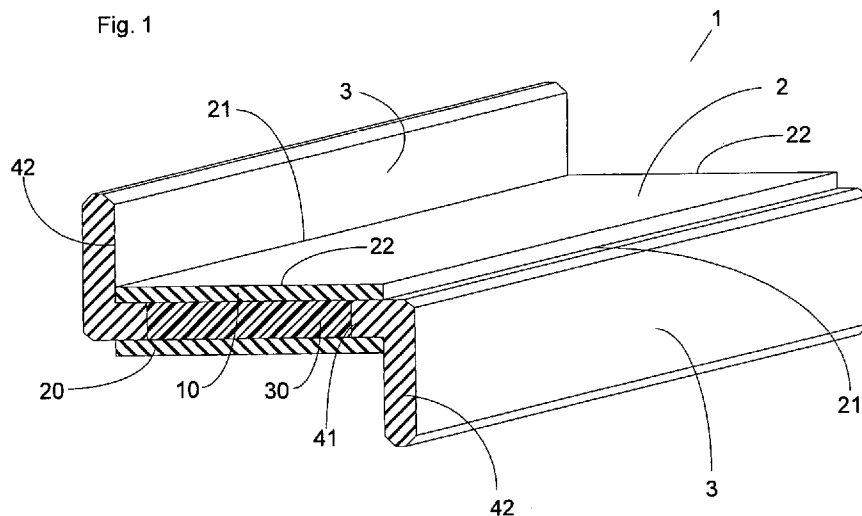
Published:
— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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(75) Inventor/Applicant (*for US only*): **KENNEDY, Stephen, John** [CA/CA]; 42 Hampton Avenue, Ottawa, Ontario K17 0NT (CA).

(88) Date of publication of the international search report:
23 July 2009

(54) Title: STRUCTURAL MEMBER AND A STEPPED STRUCTURE



(57) Abstract: A structural member (1) comprising: a run portion (2) formed by a sandwich structure having first (10) and second (20) plates and a core of a plastics or polymer material between and bonded to said metal plates so as to transfer shear forces therebetween; and a rise portion (3) formed by a metal member/ said rise portion being fixed to said run portion and with a first longitudinal end portion (41) of said metal member being inserted between said metal plates.



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INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2008/004040

A. CLASSIFICATION OF SUBJECT MATTER
 INV. E04H3/12 E04F11/104 B32B15/08

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)
 E04H B32B E04F

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 practical, search terms used)
 EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	GB 2 368 041 A (INTELLIGENT ENGINEERING [BS]) 24 April 2002 (2002-04-24) cited in the application page 5, line 11 - page 7, line 21 page 8, line 3 - line 13 page 9, line 11 - page 10, line 11; figures 2-8,14,15	1,2,6, 9-12,16, 17,20-23 5,7,8, 18,19
X A	US 5 357 724 A (SONODA MUNEKATSU [JP]) 25 October 1994 (1994-10-25) column 2, line 18 - column 4, line 21; figures 1-5	1,2,6,9, 12,17 5,7
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Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents :

A document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *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 *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 *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. *Z* document member of the same patent family
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Date of the actual completion of the international search	Date of mailing of the international search report
27 May 2009	08/06/2009

Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Stefanescu, Radu
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INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2008/004040

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2006/150540 A1 (KENNEDY STEPHEN J [CA]) 13 July 2006 (2006-07-13) page 2, left-hand column, paragraph 22 - right-hand column, paragraph 29; figures 1-5	1,5-11, 17-22
A	----- WO 2005/001218 A (J D GRINSTEAD GENERAL CONSTRUC [US]; GRINSTEAD JOHN D [US]) 6 January 2005 (2005-01-06) page 4, line 5 - page 6, line 16; figures 2-5 -----	1,2,5,6, 17,20

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2008/004040

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:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.: 24
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:
see FURTHER INFORMATION sheet PCT/ISA/210

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:

1. As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable 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.:

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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 24

Dependent claim 24 does not meet the requirements of Article 6 PCT in that the matter for which protection is sought is not clearly defined. Moreover the claim attempts to define the subject-matter with references to the drawings without mentioning any technical features, contrary to the Rule 6.2 PCT.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.2), should the problems which led to the Article 17(2)PCT declaration be overcome.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/GB2008/004040

Patent document cited in search report	Publication date	Publication date	Patent family member(s)	Publication date
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			US 6895717 B1	24-05-2005
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