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English

(26) Publication Language:

English

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S2012/0056 8 February 2012 (08.02.2012) IE

(71) Applicant (for all designated States except US): **XELTEK LIMITED** [IE/IE]; Central Commercial Park, Centre Park Road, Cork (IE).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **WALSH, Anthony** [IE/IE]; Aynsley, Curraheen, County Cork (IE).

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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, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO,

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18 April 2013

(54) Title: A METHOD AND AN APPARATUS FOR PRODUCING AN ELONGATED ELEMENT FROM AN ELONGATED MEMBER

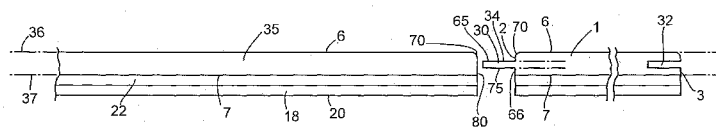


Fig. 9

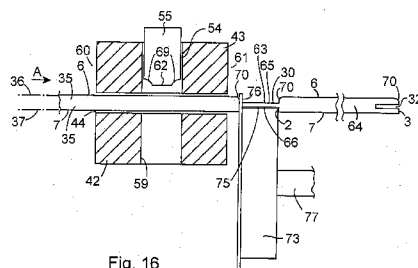


Fig. 16

(57) Abstract: A method for sequentially producing lap planks (1) from a continuous extruded member (35) of plastics material comprises forming a tongue (30) on a first end (2) of the lap plank (1) and a groove (32) on the opposite second end (3) of the lap plank (1), so that a plurality of the lap planks (1) can be joined in end-to-end abutting relationship with the tongue (30) of each lap plank engaged in the groove (35) of an adjacent lap plank (1). The tongue (30) of each lap plank (1) is formed by an indent (34) formed in a front surface (6) of the extruded member (35) to form one surface of the tongue (30), and the other surface of the tongue (30) is formed by machining material from the rear surface (5) of the extruded member (35) adjacent the indent (34). In the sequential production of the lap planks (1), the groove (35) is formed in an end (80) of the elongated member (35) from which the just formed lap plank (1) has been severed, and the tongue of that next to be formed lap plank (1) is then formed.



INTERNATIONAL SEARCH REPORT

International application No
PCT/IE2012/000019

A. CLASSIFICATION OF SUBJECT MATTER
 INV. E04F13/18 B27F1/04 B29C44/20
 ADD. B29C47/00 B29C67/00 B29C69/02

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)
 B29C B27F E04B E04C E04F B27C

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.
X	GB 1 166 954 A (SMALL GEORGE GUTHRIE) 15 October 1969 (1969-10-15)	1-6, 8-13, 24-43, 55-65, 195
Y	page 1, lines 19-30 page 1, line 74 - page 2, line 14 page 2, lines 36-45 page 2, lines 115-125 page 3, lines 11-48 page 3, lines 66-71 page 3, lines 112-117 claims 1-15 figures 1-7	7,19-23, 167,168, 170

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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</p> <p>"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</p> <p>"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</p> <p>"&" document member of the same patent family</p>
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Date of the actual completion of the international search 6 February 2013	Date of mailing of the international search report 19/02/2013
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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 Ngwa, Walters
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/IE2012/000019

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.:
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

1. 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.:
1-13, 19-43, 53-151, 167-170, 195, 196
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.

INTERNATIONAL SEARCH REPORT

International application No
PCT/IE2012/000019

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	GB 1 359 483 A (INGHAM & CO LTD R E) 10 July 1974 (1974-07-10) page 1, lines 20-62 claims 1-5 figures 1-5	7
A	----- US 2008/295431 A1 (AN PAO YU [US]) 4 December 2008 (2008-12-04) abstract paragraph [0039] - paragraph [0042] figures 1-4	1-13, 24-43, 195
Y	----- US 5 224 318 A (KEMERER W JAMES [US]) 6 July 1993 (1993-07-06) figures 16-17	7
X	----- WO 03/078761 A1 (VALINGE ALUMINIUM AB [SE]; PERVAN DARKO [SE]; PERVAN TONY [SE]) 25 September 2003 (2003-09-25) abstract figures 4-11	1,19-22, 54-66, 167-169
Y	----- EP 2 031 147 A2 (UNILIN BEHEER BV [NL]) 4 March 2009 (2009-03-04) abstract paragraph [0079] - paragraph [0085] claims 1-18 figures 1-25	19-23, 53, 167-170
X	----- US 2007/022694 A1 (CHEN HAO A [US] ET AL) 1 February 2007 (2007-02-01)	1,54-68, 196
Y	abstract paragraph [0135] claims 1-60 figures 1-13	69-151
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Y	abstract claims 1-30 figures 1-15	53, 69-151, 169
A	----- DE 20 2007 013379 U1 (WEMHOENER ANLAGEN GMBH & CO KG [DE]) 12 February 2009 (2009-02-12) abstract claims 1-5 figure 1/1	55-151
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INTERNATIONAL SEARCH REPORT

International application No

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 2 180 116 A2 (NICOCYL GMBH [DE]) 28 April 2010 (2010-04-28) abstract claims 1-11 figures 1-3 -----	19-23, 53-151, 167-170

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FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-13, 24-43, 195

A method for forming an elongated element from an elongated member.

2. claims: 14-18

A method for cutting-off an elongated element from an elongated member.

3. claims: 19-23, 53, 54, 167-170

A method/device for machining an elongated element.

4. claims: 44-52

A method for forming a cellular elongated plastic element.

5. claims: 55-151, 196

A method for sequentially producing elongated elements having a pair of interengageable complementary formations.

6. claims: 152-166, 171-194, 197

A method for sequentially producing elongated elements having a terminal coupling means.

7. claims: 198-214

An elongated element with a pair of interengageable complementary formations.

8. claims: 215-232

An elongated element with coupling means.

9. claims: 233-239

Apparatus for forming an elongated element from an elongated member.
