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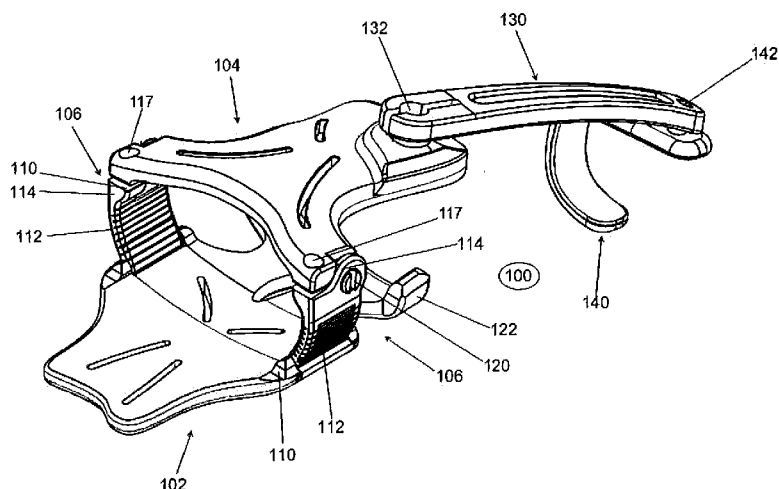
Published:

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- (88) **Date of publication of the international search report:**
26 February 2015

(54) **Title:** A SPLINT

FIGURE 3



(57) **Abstract:** A splint that facilitates moving bones into a desired orientation that substantially corresponds to the orientation of a non-fractured bone. The splint may be provided in forms suitable for use in treating different fractures, such as wrist, ankle, and the meta-carpal of the finger. The split includes locking mechanisms which hold the split in desired orientations.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/NZ2014/000117

A. CLASSIFICATION OF SUBJECT MATTER**A61F 5/058 (2006.01)**

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)

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)

WPC & EPODOC: IPC A61F5/01, A61F5/04, A61F5/05; CPC A61F5/0118, A61F5/013, A61F5/05841, A61F5/058; Key Words (splint, brace, fractur+, wrist, ankle, hand, metacarpal and like terms)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	Documents are listed in the continuation of Box C	



Further documents are listed in the continuation of Box C



See patent family annex

* "A"	Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance	"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
"E"	earlier application or patent but published on or after the international filing date	"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
"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)	"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
"O"	document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search
22 December 2014

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INTERNATIONAL SEARCH REPORT		International application No.
C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		PCT/NZ2014/000117
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 7841998 B2 (POMEROY et al.) 30 November 2010 abstract; figures 1, 3, 4; column 2 lines 44-50, column 3 lines 25-59, column 5 lines 50-65, column 6 lines 44-47; claims 2, 7, 8,10	1-8, 12-16, 19
X	US 6179800 B1 (TORRENS) 30 January 2001 figures 1-8; column 1 lines 4-17, column 4 lines 47-48, 65, column 6 lines 4-25	1-10, 13-16
X	US 2009/0043232 A1 (BORSCHNECK) 12 February 2009 figures 3-11, 16, 17; para [0057]	1-5, 8-12, 16
X	US 2008/0208093 A1 (HASSLER et al.) 28 August 2008 abstract; figures 1-3, 6, 8; para [0043], [0045]	1-11, 13-16, 18-21, 24-26
X	US 5328448 A (GRAY. Sr.) 12 July 1994 figures 1-5	1-6, 9-10, 13-16, 18, 21
X	US 4366812 A (NUZZO) 04 January 1983 figures 3-5, 7; column 6 lines 57-60, column 5 lines 28-32	1-7, 13-15, 18, 24-26
X	US 4782825 A (LONARDO) 08 November 1988 figures 3, 8-10, 12-14	1-7, 18, 23-26
X	US 2312523 A (CORBETT) 02 March 1943 figures 5, 7; claim 6	1-4, 16-17
X	US 4243026 A (BARBER) 06 January 1981 figures 2, 5-7	1-4, 18-19, 22, 24-26
X	US 4932396 A (GARRIS) 12 June 1990 figures 1, 3, 5, 7	1-4, 18-19, 22, 24-26

Form PCT/ISA/210 (fifth sheet) (July 2009)

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:
the subject matter listed in Rule 39 on which, under Article 17(2)(a)(i), an international search is not required to be carried out, including
2. ☒ Claims Nos.: **27**
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 Supplemental Box
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 all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying 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.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/NZ2014/000117**Supplemental Box****Continuation of Box II**

The claim does not comply with Rule 6.2(a) because it relies on references to the description and/or drawings.

INTERNATIONAL SEARCH REPORT		International application No. PCT/NZ2014/000117	
Information on patent family members			
This Annex lists known patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.			
Patent Document/s Cited in Search Report		Patent Family Member/s	
Publication Number	Publication Date	Publication Number	Publication Date
US 7841998 B2	30 November 2010	US 7841998 B2	30 Nov 2010
		AU 2006245521 A1	16 Nov 2006
		AU 2006245521 B2	22 Dec 2011
		CA 2608141 A1	16 Nov 2006
		CN 101198283 A	11 Jun 2008
		CN 101198283 B	19 May 2010
		EP 1890618 A1	27 Feb 2008
		GB 2425960 A	15 Nov 2006
		JP 2008539925 A	20 Nov 2008
		JP 4938002 B2	23 May 2012
		WO 2006120482 A1	16 Nov 2006
US 6179800 B1	30 January 2001	EP 0952798 A1	03 Nov 1999
		GB 2290032 A	13 Dec 1995
		GB 2290032 B	13 May 1998
		WO 9533428 A1	14 Dec 1995
US 2009/0043232 A1	12 February 2009	US 2008177208 A1	24 Jul 2008
		US 7670308 B2	02 Mar 2010
US 2008/0208093 A1	28 August 2008	US 7993294 B2	09 Aug 2011
		CN 1988862 A	27 Jun 2007
		DE 102004029457 A1	12 Jan 2006
		EP 1755505 A1	28 Feb 2007
		EP 1755505 B1	24 Dec 2008
		JP 2008502389 A	31 Jan 2008
		JP 4904259 B2	28 Mar 2012
		WO 2005122974 A1	29 Dec 2005
US 5328448 A	12 July 1994		
US 4366812 A	04 January 1983		
US 4782825 A	08 November 1988	US 4840168 A	20 Jun 1989
US 2312523 A	02 March 1943		
US 4243026 A	06 January 1981		
Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.			

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

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INTERNATIONAL SEARCH REPORT Information on patent family members		International application No. PCT/NZ2014/000117	
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Patent Document/s Cited in Search Report		Patent Family Member/s	
Publication Number	Publication Date	Publication Number	Publication Date
US 4932396 A	12 June 1990	US 4770166 A	13 Sep 1988
End of Annex			
Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001. Form PCT/ISA/210 (Family Annex)(July 2009)			