

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference P1500PC00	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/AU2018/050585	International filing date (<i>day/month/year</i>) 13 June 2018	(Earliest) Priority Date (<i>day/month/year</i>) 14 June 2017

Applicant
FREEDOM PHYSIOTHERAPY WA PTY LTD

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of **6** sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of:

The international application in the language in which it was filed.

A translation of the international application into , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

b. This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6bis(a)).

c. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. **Certain claims were found unsearchable** (See Box No. II).

3. **Unity of invention is lacking** (See Box No. III).

4. With regard to the **title**,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. **1**

as suggested by the applicant.

as selected by this Authority, because the applicant failed to suggest a figure.

as selected by this Authority, because this figure better characterizes the invention.

b. none of the figures is to be published with the abstract.

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.:
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 Supplemental Box for Details

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/AU2018/050585

A. CLASSIFICATION OF SUBJECT MATTER

A61F 5/058 (2006.01) A61F 5/055 (2006.01) A47C 16/00 (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)

PATENW (EPODOC, WPIAP, TXTE Cluster); CPC/IPC/FI as appropriate: A61F5/05808, A61F5/05883, A61F5/05891, A61F5/3707, A61H1/0296, A61F5/055, A61F5/058, A47C16/00, A61G15/12, A61C19/00, B60N2/882, A47C7/383, A47C7/38. Classification used in various combinations and with selected keywords: jaw, shin, mandible, head, neck, chest, shoulder, brace, splint, bracket, cradle, orthosis, lock, latch, engage, fasten, secure, ratchet, pillow, cushion, U-shape, hinge and similar terms. Applicant and inventor names searched in PATENW and IP Australia internal databases.

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

* Special categories of cited documents:		
"A" 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 August 2018Date of mailing of the international search report
22 August 2018

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INTERNATIONAL SEARCH REPORT		International application No.
C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		PCT/AU2018/050585
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	WO 2016/197178 A1 (HAIRY TURTLE PTY LTD) 15 December 2016 abstract, 0017, 0018, 0022, 0032, 0033, 0053, 0055, 0056, 0066, Figs: 1, 4, 6, 8, 9, 13 abstract, 0017, 0018, 0022, 0053, 0066, Figs: 1, 4, 6, 8, 9, 13	1, 11, 12, 13 6 to 10
Y	KR 10-1454665 B1 (JUNG et al.) 03 November 2014 0019, Fig. 2	6 to 10
A	US 2015/0150711 A1 (UNIVERSITY OF LIMERICK) 04 June 2015	
A	KR 10-1623049 B1 (MUN et al) 20 May 2016	
A	US 2013/0221168 A1 (BERNARDONI) 29 August 2013	
A	US 2016/0220410 A1 (HWANG) 04 August 2016	

Supplemental Box**Continuation of: Box III**

This International Application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept.

This Authority has found that there are different inventions based on the following features that separate the claims into distinct groups:

- Claims 1 to 10 are directed to a jaw support with a chest engaging member, neck support, jaw support member and first and second elongate members. The feature of the second elongate member rotatable about an axis passing through the first and second ends of the first elongate member is specific to this group of claims.
- Claims 11 to 17 are directed to a jaw support with a chest engaging member, neck support, jaw support member, first and second elongate members and a locking mechanism. The feature of the locking mechanism is specific to this group of claims.

PCT Rule 13.2, first sentence, states that unity of invention is only fulfilled when there is a technical relationship among the claimed inventions involving one or more of the same or corresponding special technical features. PCT Rule 13.2, second sentence, defines a special technical feature as a feature which makes a contribution over the prior art.

When there is no special technical feature common to all the claimed inventions there is no unity of invention.

In the above groups of claims, the identified features may have the potential to make a contribution over the prior art but are not common to all the claimed inventions and therefore cannot provide the required technical relationship. The only feature common to all of the claimed inventions and which provides a technical relationship among them is claim 1.

However this feature does not make a contribution over the prior art because it is disclosed in:

D1 WO 2016/197178 A1 (HAIRY TURTLE PTY LTD) 15 Dec 2016

Therefore in the light of this document this common feature cannot be a special technical feature. Therefore there is no special technical feature common to all the claimed inventions and the requirements for unity of invention are consequently not satisfied *a posteriori*.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2018/050585

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
WO 2016/197178 A1	15 December 2016	WO 2016197178 A1	15 Dec 2016
		AU 2016275548 A1	01 Feb 2018
		CA 2988999 A1	15 Dec 2016
		CN 107635436 A	26 Jan 2018
		JP 2018519139 A	19 Jul 2018
		US 2017202378 A1	20 Jul 2017
		US 9867486 B2	16 Jan 2018
		US 2018132621 A1	17 May 2018
KR 10-1454665 B1	03 November 2014	KR 20140112678 A	24 Sep 2014
		KR 101454665 B1	03 Nov 2014
US 2015/0150711 A1	04 June 2015	US 2015150711 A1	04 Jun 2015
KR 10-1623049 B1	20 May 2016	KR 101623049 B1	20 May 2016
US 2013/0221168 A1	29 August 2013	US 2013221168 A1	29 Aug 2013
US 2016/0220410 A1	04 August 2016	US 2016220410 A1	04 Aug 2016
		KR 101616119 B1	28 Apr 2016

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)(January 2015)