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(71) Applicant (for all designated States except US): SOUND ERGONOMICS, LLC [US/US]; 6830 NE Bothell Way, Suite 236, Kenmore, WA 98028 (US).

(72) Inventors; and

- Inventors/Applicants (for US only): BAKER, Joan, P. [US/US]; 13706 94th Ave NE, Kirkland, WA 98034 (US). COFFIN, Carolyn, T. [US/US]; 3512 NE 189th Place, Lake Forest Park, WA 98155 (US). GRIFFIN, William [US/US]; 7965 Poole Station Road, Angles Camp, CA 95222 (US). DELGADO, Ralph [US/US]; 5160 Breese Circle, El Dorado Hills, CA 95762 (US).
- Agent: FLINDT, Kyle, H.; P.O. Box 1390, Issaquah, WA 98027-0057 (US).
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Declarations under Rule 4.17:

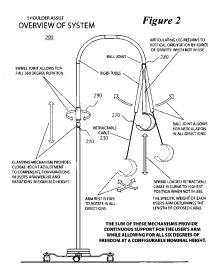
of inventorship (Rule 4.17(iv))

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))
- (88) Date of publication of the international search report:

30 September 2010

(54) Title: ERGONOMIC ABDUCTED ARM SUPPORT APPARATUS, SYSTEM, AND METHOD



(57) Abstract: An ergonomic occupational health support device that supports the arm and/or shoulder during difficult prolonged periods of arm abduction. The described apparatus, methods and systems of ergonomic arm support reduce the muscle fatigue of an operator's arm when held in the abducted or reaching position and thereby optimize muscle recovery. Muscle fatigue caused by the stress on the upper extremity muscles of the shoulder and arm of an operator (e.g., a sonographer) is greatly reduced when placed into the arm cradle of the disclosed apparatus and will diminish or disappear as the muscles are able to relax and be refreshed.



International application No. **PCT/US2009/006203**

A. CLASSIFICATION OF SUBJECT MATTER

A61F 5/042(2006.01)i, A61F 5/045(2006.01)i

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)

A61F 5/042; A47C 7/54; A47F 5/00; B43C 15/00; B68G 5/00; F41A 27/30

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) eKOMPASS(KIPO internal) & Keywords: arm, support, rest, ergonomic, spring, calble, and stand.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
A	US 6086024 A1 (CONGRESS; MICHAEL ALAN) 11 July 2000 See the whole document.	1-12
A	US 2005-0012376 A1 (SIMINOVITCH; MICHAEL J. et al.) 20 January 2005 See the whole document.	1-12
A	US 6347771 B1 (LAUZON; PIERRE et al.) 19 February 2002 See the whole document.	1-12
A	US 6098936 A1 (BIRRELL; ANDREW) 08 August 2000 See the whole document.	1-12
A	US 6082034 A1 (MUSMANNO; BRAD A.) 04 July 2000 See the whole document.	1-12

	Further documents are	listed in	n the conti	nuation o	f Boy 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 application or patent 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 citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other
- "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
- "&" document member of the same patent family

Date of the actual completion of the international search

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Date of mailing of the international search report

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Korean Intellectual Property Office Government Complex-Daejeon, 139 Seonsa-ro, Seogu, Daejeon 302-701, Republic of Korea

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Authorized officer

KIM Sang Woo

Telephone No. 82-42-481-8384



INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2009/006203

Box No. II	Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)			
This internat	ional search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:			
	ims Nos.: eause they relate to subject matter not required to be searched by this Authority, namely:			
1//	ims Nos.: 13-20			
ext	eause they relate to parts of the international application that do not comply with the prescribed requirements to such an ent that no meaningful international search can be carried out, specifically:			
	laims 13-20 refer to a method of manufacture. However, the matter manufactured from the method is not specified. Claims 3-20 are too broad to make meaningful search, because the claims do not define the matter for which protection is sought.			
	tims Nos.: cause 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 Interna	tional Searching Authority found multiple inventions in this international application, as follows:			
	all required additional search fees were timely paid by the applicant, this international search report covers all searchable ims.			
	all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment any additional fee.			
	only some of the required additional search fees were timely paid by the applicant, this international search report covers y 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 Information on patent family members			International application No. PCT/US2009/006203	
Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
US 6086024 A1	11.07.2000	None		
US 2005-0012376 A1	20.01.2005	US 6923505 B2	02.08.2005	
US 6347771 B1	19.02.2002	None		
US 6098936 A1	08.08.2000	None		
US 6082034 A1	04.07.2000	None		