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- (71) Applicant (for all designated States except US): TEPHA, INC. [US/US]; 99 Hayden Avenue, Suite 360, Lexington, MA 02421 (US).
- (72) Inventors; and
- Inventors/Applicants (for US only): MOSES, Arikha [US/US]; 407 East 12th Street, 4f Se, New York, NY 10009 (US). STIRES, Emily [US/US]; 461 South Horizon Way, Neshanic Station, NJ 08853 (US). NATALE, Anthony [US/US]; 184 N. Shore Road, New Preston, CT 06777 (US).
- Agent: BATT, Rick; Convergent Law Group LLP, 475 N. Whisman Road, Suite 400, Mountain View, CA 94043 (US).

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(54) Title: SYSTEMS AND METHODS FOR MASTOPEXY

(57) Abstract: A mastopexy implant for maintaining the breast in an elevated and aesthetically pleasing position includes a lower pole support comprising end portions which may be affixed to the chest wall or to a previously installed upper suspension strut. The implant is loaded in an insertion device. The insertion device is inserted through a small incision and into a subcutaneous pocket created in an inferior half of the breast. The lower pole support may have various constructs and in one embodiment includes a unitary conformable mesh having a plurality of arm or band members which are attached across the breast parenchyma and to the chest wall.

International application No. **PCT/US2012/027975**

A. CLASSIFICATION OF SUBJECT MATTER

A61F 2/12(2006.01)i, A61L 27/14(2006.01)i, C08L 101/16(2006.01)i, A61F 2/52(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 2/12; A61F 2/02; A61F 2/00; A61F 2/52; A61B 17/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS(KIPO internal) & Keywords: KOMPASS, Google

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 2008-0027273 A1 (GUTTERMAN, L. R.) 31 January 2008 See abstract; paragraphs [0011]-[0103]; claims 1-10; figures 2-24.	1-6,8-20 22-44,71-99
A	US 7476249 B2 (FRANK, R. E.) 13 January 2009 See entire document.	1-6,8-20,22-44 ,71-99
A	US 2010-0331612 A1 (LASHINSKI, R. et al.) 30 December 2010 See entire document.	1-6,8-20,22-44 ,71-99
A	US 2008-0097601 A1 (CODORI-HURFF, J. and HAMMOND, D. C.) 24 April 2008 See entire document.	1-6,8-20,22-44 ,71-99
A	US 2010-0030015 A1 (DELORME, E. et al.) 04 February 2010 See entire document.	1-6,8-44,71-99

		Further documents are listed in the continuation of Box C.	
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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
- '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 mailing of the international search report

Date of the actual completion of the international search

24 OCTOBER 2012 (24.10.2012)

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Inho Han

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2012/027975

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:					
bec C S	taims Nos.: 7, 45-70 cause they relate to subject matter not required to be searched by this Authority, namely: claims 7, 45-70 pertain to methods for treatment of the human and thus relate to a subject-matter which this International earching Authority is not required, under Article 17(2)(a)(i) of the PCT and Rule 39.1(iv) of the Regulations under the PCT, o search.				
bec ext	nims Nos.: 21 cause 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: the term "herein" used in claim 21 is not clear to make meaningful search because of 'herein'.				
	nims 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.:				
	required additional search fees were timely paid by the applicant. Consequently, this international search report is tricted to the invention first mentioned in the claims; it is covered by claims Nos.:				
Remark or	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/US2012/027975

		101/	JS2012/02/9/
Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2008-0027273 A1	31.01.2008	None	
US 7476249 B2	13.01.2009	AU 2007-200245 A1 US 2006-0030939 A1 US 2007-0088434 A1 US 8007531 B2 WO 2008-066883 A2	08.02.2007 09.02.2006 19.04.2007 30.08.2011 05.06.2008
US 2010-0331612 A1	30.12.2010	EP 2352435 A1 US 2010-0137679 A1 US 7837613 B2 WO 2010-051506 A1	10.08.2011 03.06.2010 23.11.2010 06.05.2010
US 2008-0097601 A1	24.04.2008	EP 2068766 A2 EP 2068766 A4 EP 2068766 B1 EP 2409669 A1 W0 2008-016919 A2 W0 2008-016919 A3	17.06.2009 31.03.2010 19.10.2011 25.01.2012 07.02.2008 10.04.2008
US 2010-0030015 A1	04.02.2010	AU 2004-229194 A1 AU 2004-229194 B2 AU 2004-229195 A1 AU 2004-229195 B2 CA 2520727 A1 CA 2520818 A1 EP 1610714 A2 EP 1610715 A2 RU 2005131716 A US 2004-0249397 A1 US 2004-0249473 A1 US 2009-0118571 A1 US 7494495 B2 US 7588598 B2 WO 2004-091442 A2 WO 2004-091442 A3 WO 2004-091443 A2	28. 10. 2004 10. 06. 2010 28. 10. 2004 14. 05. 2009 28. 10. 2004 04. 01. 2006 04. 01. 2006 09. 12. 2004 09. 12. 2004 07. 05. 2009 24. 02. 2009 15. 09. 2009 28. 10. 2004 21. 04. 2005 28. 10. 2004