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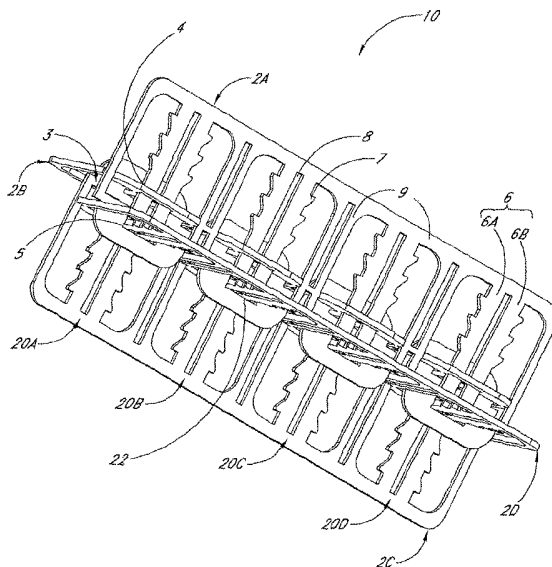
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- (74) Agent: **ALTMAN, Daniel, E.**; Knobbe, Martens, Olson & Bear, LLP, 2040 Main Street, Fourteenth Floor, Irvine, CA 92614 (US).
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- (71) Applicant (*for all designated States except US*): **REVA MEDICAL, INC.** [US/US]; 5751 Copley Drive, Suite B, San Diego, CA 92111 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **PADILLA, Orlando** [US/US]; 24582 Via Carissa, Laguna Niguel, CA 92677 (US). **ESSER, Keith** [US/US]; 6196 Castleton Drive, San Diego, CA 92117 (US). **ZELTINGER, Joan** [US/US]; 230 Coneflower Street, Encinitas, CA 92024 (US).
- Declaration under Rule 4.17:**
— of inventorship (Rule 4.17(iv)) for US only

[Continued on next page]

(54) Title: A SLIDE AND LOCK STENT AND METHOD OF MANUFACTURE FROM A SINGLE PIECE SHAPE



(57) Abstract: The present invention provides a lumen support prosthesis (10) composed of interlocking radial modules (2A, 2B, 2C, 2D) which is fabricated fully assembled from a signal piece shape, without welding or bonding. The prosthesis comprises at least one locking mechanism (6, 7, 22), allowing for one-way sliding of the radial modules and expansion of the prosthesis from a collapsed state, but inhibits radial recoil from the expanded diameter. The prosthesis may be fabricated from biologically degradable materials which have certain medical advantages.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/27531

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B05D 3/00; B23P 13/04; B44C 1/22; A61F 2/06
 US CL : 29/557, 558; 623/1.15, 1.16, 1.18, 1.2, 1.34, 1.38, 1.42, 901, 924, 925, 926; 427/2.24
 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)
 U.S. : 29/557, 558; 623/1.15, 1.16, 1.18, 1.2, 1.34, 1.38, 1.42, 901, 924, 925, 926; 427/2.24

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 NONE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A, E	US 6,623,521 B2 (STEINKE et al.) 23 September 2003 (23.06.2003), see column 3, line 16 - column 6, line 60.	1-6
A	US 6,224,626 B1 (STEINKE) 01 May 2001 (01.05.2001), see figures 1-31B.	1-6
A	US 6,033,436 A (STEINKE et al.) 07 March 2000 (07.03.2000), see figures 1-29.	1-6
A	US 5,733,328 A (FORDENBACHER) 31 March 1998 (31.05.1998), see figures 1 and 7.	1-6
A	US 5,441,515 A (KHOSRAVI et al.) 15 August 1995 (15.08.1995), see figures 2-5 and 16-22.	1-6

<input type="checkbox"/> Further documents are listed in the continuation of Box C.	<input type="checkbox"/> See patent family annex.
* Special categories of cited documents:	"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
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier application or patent published on or after the international filing date	"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
"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)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"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 03 March 2004 (03.03.2004)	Date of mailing of the international search report 05 APR 2004
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer Jermie Cozart Telephone No. 703-308-1148 <i>Sheila H. Veney</i> Paralegal Specialist Tech. Center 3700
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/27531

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claim Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claim 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. Claim Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:
Please See Continuation 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 fee, this Authority did not invite payment of any additional fee.
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.: 1-6

Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

BOX II. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claim(s) 1-6, drawn to a method for manufacturing a prosthesis.

Group II, claim(s) 7 and 8, drawn to a prosthesis.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group I requires the special technical feature of machining by cutting or etching in the first plane a pattern comprising a loop having a slide and lock structure therein which is not required by Group II; Group II requires the special technical feature of a tubular member having series of slidably-engaged radial elements which is not required by Group I; Since Group I requires a special technical feature which is not required by Group II, and Group II requires a special technical feature which is not required by Group I, restriction as indicated is proper.