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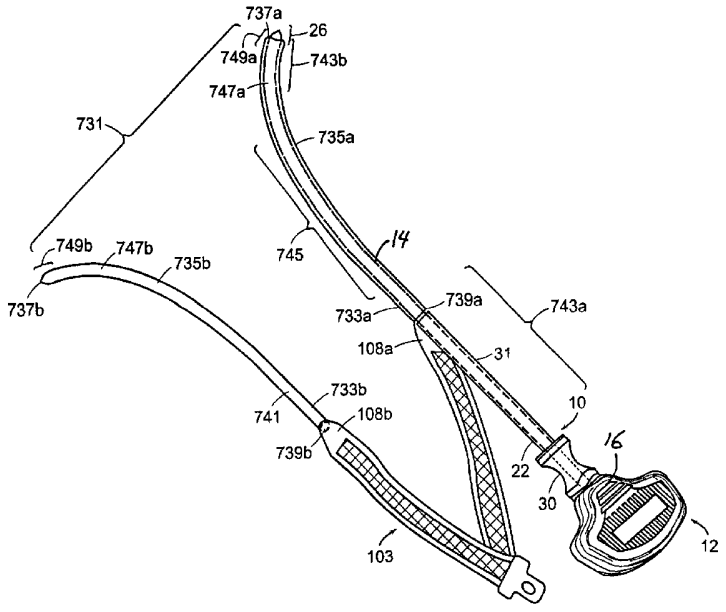
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(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

[Continued on next page]

(54) Title: SYSTEMS, METHODS AND DEVICES RELATING TO DELIVERY OF MEDICAL IMPLANTS



(57) Abstract: Implant delivery systems are disclosed. In general overview, an exemplary system includes any number of the following: a delivery device, a sling assembly, guide members, and connectors that interconnect the above. Embodiments of all the above components and their combinations are disclosed. Methods of using the above system in suprapubic, prepubic, transvaginal, trans-obturator and other approaches are also disclosed.

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GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 03/25568

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61B17/04 A61F2/00

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)
IPC 7 A61B A61F

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 practical, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 312 448 B1 (BONUTTI PETER M) 6 November 2001 (2001-11-06) column 7, line 39 - column 10, line 67; figures 1,2	1,2,10, 17,34
A	US 5 904 692 A (JACOB PAMELA ET AL) 18 May 1999 (1999-05-18) column 3, line 54 - column 4, line 2; figures 1,11,12	1,10,34
A	WO 00/74594 A (ETHICON INC) 14 December 2000 (2000-12-14) cited in the application figures 4A-4C	1,10,34
A	EP 1 159 920 A (UNITED STATES SURGICAL CORP) 5 December 2001 (2001-12-05) paragraph [0032]; figures 7,8	1,10,34

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[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in 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 document 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 another citation or other special reason (as specified)

"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

"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	Date of mailing of the international search report
22 April 2004	20. 08 2004

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Ducreau, F

Form PCT/ISA/210 (second sheet) (January 2004)

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 03/25568

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 899 909 A (ULMSTEN ULF ET AL) 4 May 1999 (1999-05-04) cited in the application the whole document -----	1,10,34

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 03/25568

Box I Observations where certain claims were found unsearchable (Continuation of item 1 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. [X] Claims Nos.: 25-33,87-98
because they relate to subject matter not required to be searched by this Authority, namely:

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery

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 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:

see additional 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. [X] 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.:

1-24, 34

Remark on Protest

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

[ ] No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.1

Claims Nos.: 25-33,87-98

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-24,34

Delivery device and system for delivering an implant to anatomical site in a body of a patient with a pusher tube.

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2. claims: 35-52,67-86

Delivery device and system for delivering an implant to anatomical site in a body of a patient with a shaft shaped to describe a plurality of curves.

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3. claims: 53-66

Delivery device for delivering an implant to anatomical site in a body of a patient with a shaft whose distal end includes a substantially straight portion bent at an angle relative to the shaft

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4. claims: 99-185

Connector for attaching a medical implant to a delivery device

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/US 03/25568

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Information on patent family members

International Application No
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