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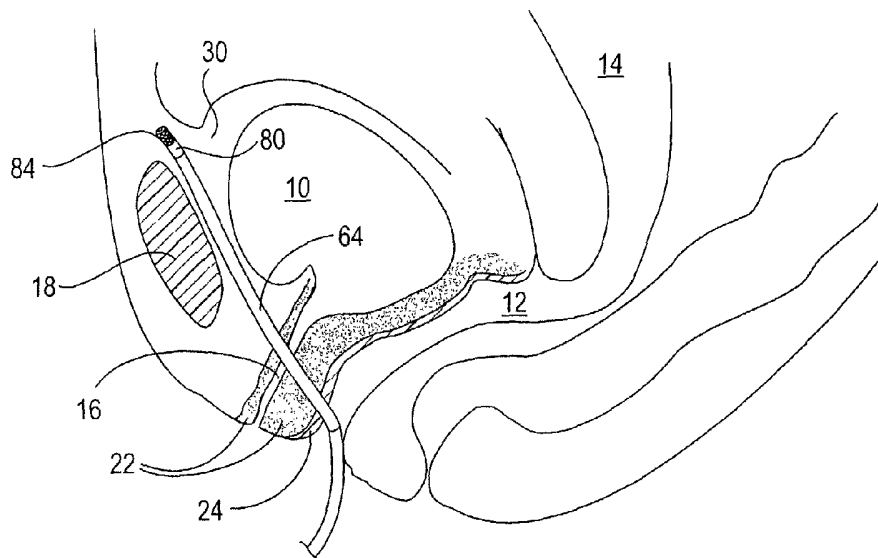
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(54) Title: URETHRAL SUPPORT FOR INCONTINENCE



(57) Abstract: The present invention provides methods, devices, and systems for supporting the urethra in a patient to treat urinary incontinence. Support of the urethra (16) involves forming upward force with the support to hold the urethra (16) in a more desired position. The present invention utilizes the space of Retzius (30), within which portions of the urethral support (84) are positioned. Ingrowth by surrounding tissues to the urethral support material provide further stability and such ingrowth, combined with the position of the support (84), allow sufficient tension to be applied to support to hold the urethra in place. Placement of such a urethral support is achieved by minimally invasive techniques, such as with the use of laparoscopic instruments. Such techniques allows placement of the urethral support (84) by accessing the space of Retzius through the vaginal wall without penetrating the abdominal wall. Such techniques also avoid perforations of nearby organs, such as bladder, by utilizing specialized penetration devices.



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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US02/31674

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61F 5/48  
US CL : 128/885

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. : 128/885,886,DIG22; 600/29-31

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)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 5,899,909 A (CLAREN et al.) 04 May 1999, (04.05.1999) See the entire document.	1-5, 11 and 21-26 ----- 6
Y	US 5,637,074 A (ANDINO et al.) 10 June 1997 (10.06.1997), See the entire document.	6
A	US 5,337,736 A (REDDY) 16 August 1994, See the entire document.	7-10 and 12-20

 Further documents are listed in the continuation of Box C.
  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 document 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

10 FEBRUARY 2003

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## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US02/31674**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.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
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:

Please See Extra 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.:

**Remark on Protest**

- The additional search fees were accompanied by the applicant's protest.  
 No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US02/31674

## BOX II. OBSERVATIONS WHERE UNITY OF INVENTION WAS LACKING

This ISA found multiple inventions as follows:

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack Unity of Invention because they are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for more than one species to be searched, the appropriate additional search fees must be paid. The species are as follows: Group I, Claims 1-11 and 21-26; Group II, Claims 12-20

The species listed above do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: The search required for group I is not required for group II.