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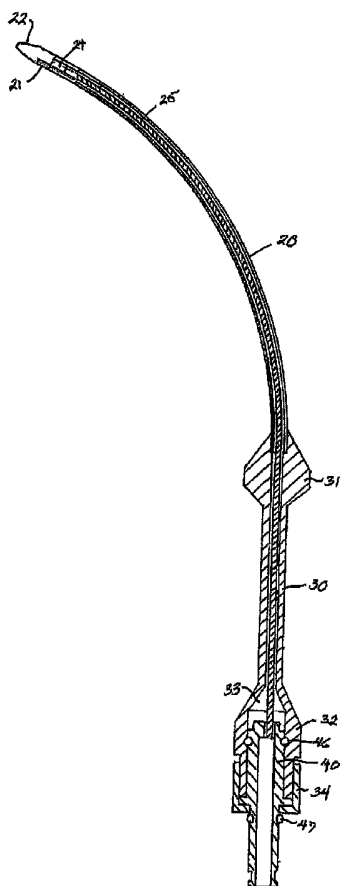
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- (71) Applicant and
(72) Inventor: VALTCHEV, Konstantin, L. [CA/CA]; 233
Beecroft Road, Toronto, Ontario M2N 6Z9 (CA).
- (74) Agent: MOFFAT & CO.; P.O. Box 2088, Station D, 427
Laurier Avenue W., 12th Floor, Ottawa, Ontario K1P 5W3
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[Continued on next page]

(54) Title: URETHRAL SLING INTRODUCER AND METHOD OF USE



(57) Abstract: A method and sling introducer (10) for installing a sub-urethral sling tape (100) through a vaginal incision wherein the sling introducer (10) includes an instrument unit (11) having an elongated curved hollow tubular member (20) having a ported conical tip (22) and a capture aperture (21) dimensioned to receive one end of a sling tape (100) wherein the tubular member (20) slidably receives a hollow capture piston (24) that may captively engage the sling tape (100) between the ported conical tip (22) and the capture piston (24) while saline solution is being introduced through a hollow handle member that is in open fluid communication with the hollow tubular member (20).

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2004/001979

A. CLASSIFICATION OF SUBJECT MATTER IPC7: A61B 17/00				
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) IPC7: A61B 17/04, A61F 2/00 USCL: 600/30, 606/190				
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched				
Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used) Delphion, Canadian Patent Database Keywords: introducer, handle, piston				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).		
A	US6491703	1-17		
A	US6273852	1-17		
A	US5934283	1-17		
A	US5403328	1-17		
A	US5899909	1-17		
A	US5112344	1-17		
A	US6565590	1-17		
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.				
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> * 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 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 </td> <td style="width: 50%; border: none;"> "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 </td> </tr> </table>			* 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 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
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Name and mailing address of the ISA/CA Canadian Intellectual Property Office Place du Portage 1, C114 - 1st Floor, Box PCT 50 Victoria Street Gatineau, Quebec K1A 0C9 Facsimile No.: 001(819)953-2476		Authorized officer Ciprian Galasiu (819) 953-0639		

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International application No.
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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of the 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. Claim Nos. : 14-17

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

Method for treatment of the human body by surgery. Although claims 14-17 are directed to a method of medical treatment of the human body, the search has been carried out based on the use of the apparatus defined in claims 1-13.

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 dependant 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 International Searching Authority found multiple inventions in this international application, as follows :

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 claim 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 claim 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

Information on patent family members

International application No.
PCT/CA2004/001979

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date		
US6491703	10-12-2002	AU697010 B2	24-09-1998		
		AU704712 B2	29-04-1999		
		AU3402495 A	22-03-1996		
		AU7350296 A	30-04-1997		
		CA2198778 A1	07-03-1996		
		CA2231155 A1	17-04-1997		
		CN1083708B B	01-05-2002		
		CN1119123B B	27-08-2003		
		DE69519737D D1	01-02-2001		
		DE69519737T T2	19-04-2001		
		DE69618650D D1	28-02-2002		
		DE69618650T T2	19-09-2002		
		DE69633078D D1	09-09-2004		
		DK778749T T3	05-02-2001		
		DK854691T T3	22-04-2002		
		DK1151722T T3	30-08-2004		
		EP0778749 A1	18-06-1997		
		EP0854691 A1	29-07-1998		
		EP1151722 A2	07-11-2001		
		EP1159921 A2	05-12-2001		
		ES2152423T T3	01-02-2001		
		ES2170880T T3	16-08-2002		
		JP3229327B2 B2	19-11-2001		
		JP3333519B2 B2	15-10-2002		
		JP11514266T T	07-12-1999		
		RU2161916 C2	20-01-2001		
		SE503271 C2	29-04-1996		
		SE506164 C2	17-11-1997		
		SE9402872 A	01-03-1996		
		SE9503512 A	10-04-1997		
		US5899909 A	04-05-1999		
		US6491703 B1	10-12-2002		
		US2002165566 A1	07-11-2002		
		WO9606567 A1	07-03-1996		
		WO9713465 A1	17-04-1997		
		US6273852	14-08-2001	AU769863 B2	05-02-2004
				AU770937 B2	11-03-2004
				AU775053 B2	15-07-2004
				AU4710500 A	28-12-2000
				AU5315300 A	28-12-2000
AU5465900 A	28-12-2000				
BR0011726 A	05-08-2003				
CA2376278 A1	14-12-2000				
CA2376281 A1	14-12-2000				
CA2376282 A1	14-12-2000				
CA2449474 A1	12-12-2002				
CA2475910 A1	21-08-2003				
CN1409625T T	09-04-2003				
CN1433288T T	30-07-2003				
EP1194091 A1	10-04-2002				
EP1200011 A1	02-05-2002				
EP1399088 A1	24-03-2004				
EP1417934 A2	12-05-2004				
EP1474073 A1	10-11-2004				
JP2003501144T T	14-01-2003				
JP2003523786T T	12-08-2003				
JP2004500152T T	08-01-2004				

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/CA2004/001979

		US6273852 B1	14-08-2001
		US6475139 B1	05-11-2002
		US2001049467 A1	06-12-2001
		US2002077526 A1	20-06-2002
		US2002188169 A1	12-12-2002
		US2003023138 A1	30-01-2003
		US2003149440 A1	07-08-2003
		US2003176762 A1	18-09-2003
		US2004267088 A1	30-12-2004
		WO0074594 A1	14-12-2000
		WO0074613 A1	14-12-2000
		WO0074633 A2	14-12-2000
		WO02098322 A1	12-12-2002
		WO03068107 A1	21-08-2003
US5934283	10-08-1999	US5934283 A	10-08-1999
US5403328	04-04-1995	CA2094685 A1	23-10-1993
		EP0567130 A1	27-10-1993
		US5403328 A	04-04-1995
		US5662663 A	02-09-1997
US5899909	04-05-1999	AU697010 B2	24-09-1998
		AU704712 B2	29-04-1999
		AU3402495 A	22-03-1996
		AU7350296 A	30-04-1997
		CA2198778 A1	07-03-1996
		CA2231155 A1	17-04-1997
		CN1083708B B	01-05-2002
		CN1119123B B	27-08-2003
		DE69519737D D1	01-02-2001
		DE69519737T T2	19-04-2001
		DE69618650D D1	28-02-2002
		DE69618650T T2	19-09-2002
		DE69633078D D1	09-09-2004
		DK778749T T3	05-02-2001
		DK854691T T3	22-04-2002
		DK1151722T T3	30-08-2004
		EP0778749 A1	18-06-1997
		EP0854691 A1	29-07-1998
		EP1151722 A2	07-11-2001
		EP1159921 A2	05-12-2001
		ES2152423T T3	01-02-2001
		ES2170880T T3	16-08-2002
		JP3229327B2 B2	19-11-2001
		JP3333519B2 B2	15-10-2002
		JP11514266T T	07-12-1999
		RU2161916 C2	20-01-2001
		SE503271 C2	29-04-1996
		SE506164 C2	17-11-1997
		SE9402872 A	01-03-1996
		SE9503512 A	10-04-1997
		US5899909 A	04-05-1999
		US6491703 B1	10-12-2002
		US2002165566 A1	07-11-2002
		WO9606567 A1	07-03-1996
		WO9713465 A1	17-04-1997

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/CA2004/001979

US5112344	12-05-1992	AT119758T T	15-04-1995
		AU623697 B2	21-05-1992
		AU4406489 A	01-05-1990
		BR8907704 A	30-07-1991
		DE68921762D D1	20-04-1995
		DE68921762T T2	03-08-1995
		EP0437481 A1	24-07-1991
		JP2717868B2 B2	25-02-1998
		US5112344 A	12-05-1992
		WO9003766 A1	19-04-1990
US6565590	20-05-2003	AR247668 A1	31-03-1995
		AT169475T T	15-08-1998
		AT204148T T	15-09-2001
		AT239523T T	15-05-2003
		AU661905 B2	10-08-1995
		AU773152 B2	20-05-2004
		AU3992493 A	09-12-1993
		AU6239200 A	19-02-2001
		CA2097491 A1	03-12-1993
		CA2193975 A1	11-01-1996
		CA2240348 A1	19-06-1997
		CA2275150 A1	03-12-1993
		CA2345056 A1	08-02-2001
		DE69320258D D1	17-09-1998
		DE69320258T T2	08-04-1999
		DE69330616D D1	20-09-2001
		DE69330616T T2	29-11-2001
		DE69628038D D1	12-06-2003
		DE69628038T T2	22-01-2004
		DK573273T T3	10-05-1999
		EP0573273 A2	08-12-1993
		EP0768844 A1	23-04-1997
		EP0835638 A1	15-04-1998
		EP0871513 A1	21-10-1998
		EP1143860 A2	17-10-2001
		EP1249253 A1	16-10-2002
		ES2121584T T3	01-12-1998
		ES2161408T T3	01-12-2001
		ES2197256T T3	01-01-2004
		JP2677947B2 B2	17-11-1997
		JP3566965B2 B2	15-09-2004
		JP3569530B2 B2	22-09-2004
		JP2000501634T T	15-02-2000
		JP2003524471T T	19-08-2003
		PL299163 A1	10-01-1994

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/CA2004/001979

US5496345 A	05-03-1996
US5540711 A	30-07-1996
US5607443 A	04-03-1997
US5702416 A	30-12-1997
US5730756 A	24-03-1998
US5772680 A	30-06-1998
US5817123 A	06-10-1998
US5836961 A	17-11-1998
US6004337 A	21-12-1999
US6264604 B1	24-07-2001
US6312442 B1	06-11-2001
US6364892 B1	02-04-2002
US6368337 B1	09-04-2002
US6432121 B1	13-08-2002
US6514272 B1	04-02-2003
US6540764 B1	01-04-2003
US6562056 B2	13-05-2003
US6565589 B1	20-05-2003
US6565590 B2	20-05-2003
US6632234 B2	14-10-2003
US6679900 B2	20-01-2004
US6695856 B2	24-02-2004
US6755845 B2	29-06-2004
US6758853 B2	06-07-2004
US2002111652 A1	15-08-2002
US2003191490 A1	09-10-2003
US2004015182 A1	22-01-2004
US2004167557 A1	26-08-2004
US2004236363 A1	25-11-2004
WO0108565 A2	08-02-2001
WO9600531 A1	11-01-1996
WO9721461 A1	19-06-1997
WO9912603 A1	18-03-1999