

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
14 February 2002 (14.02.2002)

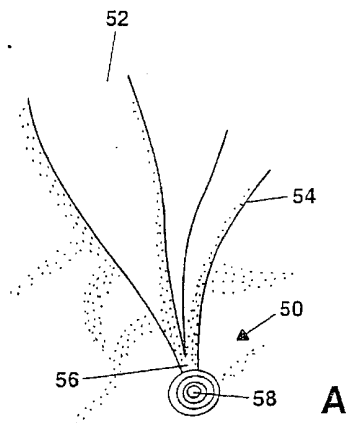
PCT

(10) International Publication Number
WO 02/11621 A3

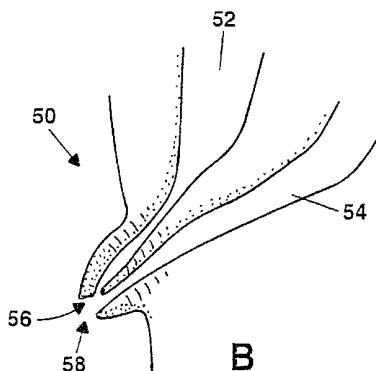
- (51) International Patent Classification⁷: **A61B 17/32**
- (21) International Application Number: PCT/US01/22983
- (22) International Filing Date: 20 July 2001 (20.07.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
09/621,210 21 July 2000 (21.07.2000) US
- (63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:
US 09/621,210 (CON)
Filed on 21 July 2000 (21.07.2000)
- (71) Applicant and
(72) Inventor: **HEISS, Frederick, W.** [US/US]; 112 Barlett Hill, Concord, MA 01742 (US).
- (74) Agents: **HOOVER, Thomas, O.** et al.; Bowditch & Dewey, LLP, 161 Worcester Road, Framingham, MA 01701-5700 (US).
- (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, 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, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian

[Continued on next page]

(54) Title: BILLIARY SPHINCTER SCISSORS



(57) Abstract: Biliary sphincter scissors, used in a sphincterotomy, include a stationary blade and an actuated blade having dimensions which allow the scissors to pass through a channel in an endoscope. The biliary sphincter scissors include a flexible arc-shaped curvature in the distal end to allow for creation of an incision in a sphincterotomy.



WO 02/11621 A3



patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(88) Date of publication of the international search report:

6 June 2002

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.

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 01/22983

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61B17/32

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

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, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 439 478 A (PALMER) 8 August 1995 (1995-08-08) abstract; figures 1,2,6 column 4, line 29 -column 5, line 31	1-5,8-10
Y	---	6,7,11, 20,21
Y	US 5 951 488 A (SLATER ET AL.) 14 September 1999 (1999-09-14) column 5, line 7-18 column 7, line 22-24 column 9, line 52-67	6,7,11
Y	US 4 407 273 A (OUCHI) 4 October 1983 (1983-10-04) abstract; figures -----	20,21

Further documents are listed in the continuation of box C.

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.
- *G* document member of the same patent family

Date of the actual completion of the international search

18 March 2002

Date of mailing of the international search report

26/03/2002

Name and mailing address of the ISA

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

Authorized officer

Giménez Burgos, R

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/22983

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5439478	A	08-08-1995	US 5454378 A	03-10-1995
			US 5228451 A	20-07-1993
			US 5133727 A	28-07-1992
			US 5507297 A	16-04-1996
			US 5192298 A	09-03-1993
			US 5293878 A	15-03-1994
			US 5171258 A	15-12-1992
			AU 1448095 A	01-08-1995
			CA 2179807 A1	13-07-1995
			EP 0746242 A1	11-12-1996
			JP 9507149 T	22-07-1997
			WO 9518574 A1	13-07-1995
			AT 171358 T	15-10-1998
			AU 6624994 A	24-10-1994
			CA 2159623 A1	13-10-1994
			DE 69413525 D1	29-10-1998
			DE 69413525 T2	11-02-1999
			EP 0691823 A1	17-01-1996
			US 5431645 A	11-07-1995
			WO 9422377 A1	13-10-1994
			AU 6174894 A	29-08-1994
			DE 4490796 T0	11-01-1996
			JP 8509623 T	15-10-1996
			WO 9417741 A1	18-08-1994
			US 5396900 A	14-03-1995
			US 5482054 A	09-01-1996
			US 6041679 A	28-03-2000
			US 5553624 A	10-09-1996
			US 5613499 A	25-03-1997
			AU 4282093 A	18-11-1993
			WO 9320754 A1	28-10-1993
			US 5419339 A	30-05-1995
			AT 133845 T	15-02-1996
			CA 2065240 A1	11-11-1991
			DE 69117028 D1	21-03-1996
			EP 0491890 A1	01-07-1992
			US 5443480 A	22-08-1995
			WO 9116856 A1	14-11-1991
			US 5531755 A	02-07-1996
			US 5395386 A	07-03-1995
			US 6264617 B1	24-07-2001
			US 5666965 A	16-09-1997
			US 5171256 A	15-12-1992
			US 5275612 A	04-01-1994
			US 5156633 A	20-10-1992
			US 5152778 A	06-10-1992
			US 5141519 A	25-08-1992
			US 5133736 A	28-07-1992
			US 5133735 A	28-07-1992
			US 5203785 A	20-04-1993
US 5951488	A	14-09-1999	US 5647115 A	15-07-1997
			US 5542432 A	06-08-1996
			US 5507296 A	16-04-1996
			AU 694757 B2	30-07-1998
			AU 1568695 A	21-08-1995
			CA 2181545 A1	10-08-1995
			CN 1143899 A	26-02-1997

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/22983

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5951488	A	EP 0843533 A1	27-05-1998
		JP 9508540 T	02-09-1997
		US 6193671 B1	27-02-2001
		WO 9520914 A1	10-08-1995
		US 5636639 A	10-06-1997
		US 5638827 A	17-06-1997
		US 5645075 A	08-07-1997
		US 5746216 A	05-05-1998
		US 5840043 A	24-11-1998
		US 5431645 A	11-07-1995
		US 5395386 A	07-03-1995
		US 5482054 A	09-01-1996
		US 5613499 A	25-03-1997
		US 6264617 B1	24-07-2001
		US 5666965 A	16-09-1997
		US 5228451 A	20-07-1993
		US 6024708 A	15-02-2000
		US 5241968 A	07-09-1993
US 4407273	A	04-10-1983 DE 3206763 A1	14-10-1982