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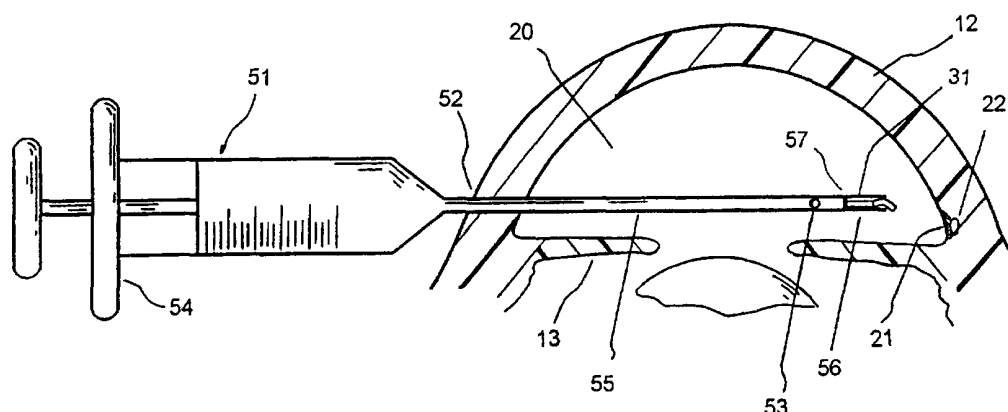
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ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: APPARATUS AND METHOD FOR TREATING GLAUCOMA



(57) Abstract: Surgical methods and related medical devices for treating glaucoma are disclosed. The method comprises trabecular bypass surgery, which involve bypassing diseased trabecular meshwork with the use of a seton implant. The seton implant is used to prevent a healing process known as filling in, which has a tendency to close surgically created openings in the trabecular meshwork. The surgical method and novel implant are addressed to the trabecular meshwork, which is a major site of resistance to outflow in glaucoma. In addition to bypassing the diseased trabecular meshwork at the level of the trabecular meshwork, existing outflow pathways are also used or restored. The seton implant is positioned through the trabecular meshwork so that an inlet end of the seton implant is exposed to the anterior chamber of the eye and an outlet end is positioned into fluid collection channels at about an exterior surface of the trabecular meshwork or up to the level of aqueous veins.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/07398

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61F9/007

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 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	WO 98 30181 A (ALLAN BRUCE DUNCAN SAMUEL ; JONES STEPHEN ALISTER (GB); MUIR ANDREW) 16 July 1998 (1998-07-16) page 31, line 32 -page 32, line 4; figure 14 ---	1-6
E	EP 1 114 627 A (GRIESHABER & CO AG) 11 July 2001 (2001-07-11) paragraph '0017!; figures ---	1-6
X	US 6 004 302 A (BRIERLEY LAWRENCE A) 21 December 1999 (1999-12-21) column 3, line 65 -column 4, line 19; figures --- -/--	7-9



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
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- \*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

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\*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

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\* & \* document member of the same patent family

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## INTERNATIONAL SEARCH REPORT

International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 00 72788 A (OPTONOL LTD ;YARDEN ORIT (IL); YARON IRA (IL); WERNER MARY C (US)) 7 December 2000 (2000-12-07) page 8, line 4 - line 18; figures ---	7,8
X	US 5 626 559 A (SOLOMON ARIE) 6 May 1997 (1997-05-06) column 2, line 60 - line 65; figures ---	10
A	WO 89 00869 A (WHITE THOMAS C) 9 February 1989 (1989-02-09) claims; figures ---	10
X	US 6 007 511 A (PRYWES ARNOLD S) 28 December 1999 (1999-12-28) column 3, line 6 -column 4, line 6; claims 8-15; figures ---	14,15, 17,18
X	US 5 893 837 A (FEINGOLD VLADIMIR ET AL) 13 April 1999 (1999-04-13) column 1, line 11 - line 16; claims; figures ---	14
X	US 5 180 362 A (WORST J G F) 19 January 1993 (1993-01-19) abstract; figures ---	14
A	---	15,17
X	US 5 676 679 A (LEGEAIS JEAN-MARC ET AL) 14 October 1997 (1997-10-14) claims; figures -----	18

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 01/07398

### 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. ☒ Claims Nos.: 11-13  
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. ☐ 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.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

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

1. Claims: 1-6

A seton for treating glaucoma comprising an inlet and outlet portion wherein the inlet portion is disposed at an angle relative to the outlet portion

(Problem: Providing an anatomical insertion through the trabecular meshwork into Schlemm's canal)

2. Claims: 7-9

A seton for treating glaucoma comprising an inlet and outlet portion wherein the outlet portion has at least one protrusion

(Problem: Exertion of traction against the inner surface of Schlemm's canal)

3. Claim : 10

A seton for treating glaucoma comprising an inlet and outlet portion and an one-way valve in at least one of the inlet and outlet portion

(Problem: drainage of aqueous humor in only one direction)

4. Claims: 14-17

An apparatus for delivering a seton comprising an elongate tube having a lumen and a removable, elongate guide member within said lumen

(Problem: Positioning a seton in the trabecular meshwork in an eye)

5. Claims: 18,19

An apparatus for delivering a seton comprising an elongate tube having a distal end portion comprising a cutting member

(Problem: Forming an opening in the trabecular meshwork of an eye)

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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