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(54) Title: DEVICE FOR GLAUCOMA TREATMENT AND METHODS THEREOF

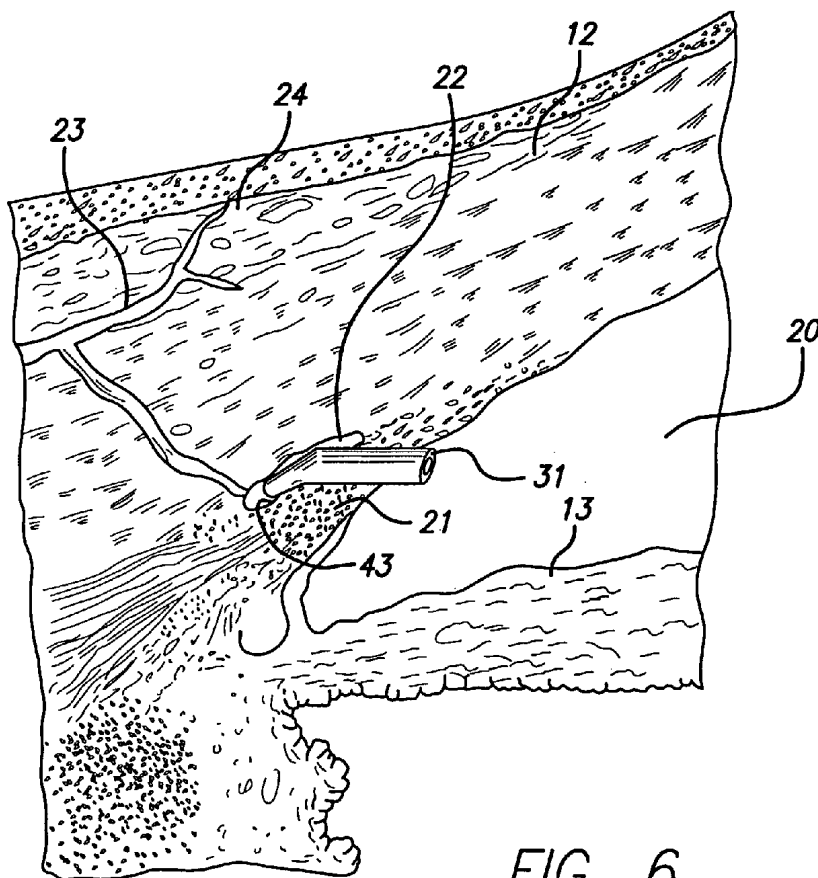


FIG. 6

(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 (21) with the use of a seton implant (31). The seton implant (31) is used to prevent a healing process known as filling in, which has the tendency to close surgically created openings in the trabecular meshwork (21), which is a major site of resistance to outflow in glaucoma. In addition to bypassing the diseased trabecular meshwork (21) at the level of the trabecular meshwork (21), existing outflow pathways are also used or restored. The seton implant (31) is positioned through the trabecular meshwork (21) so that an inlet end (44) of the seton implant (31) is expose to the anterior chamber (20) of the eye (10) and an outlet end (33) is positioned into fluid collection channels at about an exterior surface (43) of the trabecular meshwork (21) or up to the level of aqueous veins (23).



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/08088

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61M 31/00
 US CL : 604/521

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. : 604/521, 8, 9, 48, 49, 93; 606/2, 4-6, 14-17

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 None

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X U --- U Y	US 5,865,831 A (COZEAN et al) 02 February 1999, see Column 3, lines 23-39.	1, 3, 4 U ----- --- U 2, 5-12, 14-23
X U --- U Y	US 4,428,746 A (MENDEZ) 31 January 1984, see Column 2, lines 56-61.	1, 3, 4, 8 U ----- U 13
A	US 5,558,629 A (BAERVELDT et al) 24 September 1996, see entire document.	1-23
A	US 5,180,362 A, (WORST) 19 January 1993, see entire document.	1-23

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
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"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)	"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
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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Continuation of B. FIELDS SEARCHED Item 3: EAST

search terms: glaucoma, aqueous humor, pressure, Schlemm's canal, trabecular meshwork, seton implant