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(71) Applicant: **XOFT MICROTUBE, INC.** [US/US]; 49000
Milmont Drive, Fremont, CA 94538 (US).

(72) Inventors: **FORMAN, Michael**; 18311 Las Cumbres
Road, Los Gatos, CA 95033 (US). **LOVOI, Paul, A.**;
19152 DeHavilland Drive, Saratoga, CA 95070 (US).
SMITH, Peter, C.; 2411 S. Cabrillo Hwy., Half Moon
Bay, CA 94019 (US).

(74) Agent: **FREIBURGER, Thomas, M.**; P.O. Box 1026,
Tiburon, CA 94920 (US).

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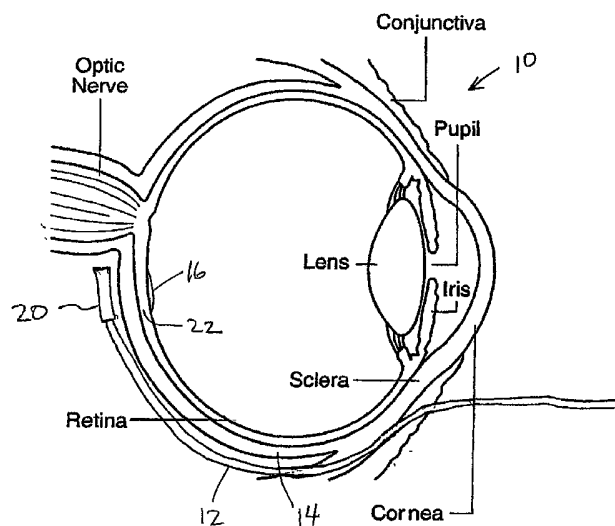
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(54) Title: TREATMENT OF AGE-RELATED MACULAR DEGENERATION



(57) Abstract: Age-related macular degeneration is treated by radiation delivered from a miniature x-ray tube (20) inserted via a catheter (12) around the globe of the eye, to a position behind the macula (16). Methods are described for properly locating the catheter (12) and x-ray tube (20), using illumination on the catheter (12) and viewing through the front of the eye, or sensors on the catheter and a scanned beam shone from the front of the eye. Fluorescent excited by x-rays can also be used. Also described are methods and devices for immobilizing the probe once properly located in the eye, for standoff of the x-ray tube (12) from the target tissue, and for achieving prescription radiation dose in the choroid (22) while eliminating dose to adjacent tissues. The x-ray treatment can be enhanced using a radiosensitizing drug, and can be combined with PDT.



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/US04/24005

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61N 5/00

US CL : 600/003

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. : 600/001-008, 452, 459; 128/897-899; 378/65, 119

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 5,637,073 A (FREIRE) 10 June 1997, see entire document.	31-32 ----- 1-3, 11-14, 18-19, 25, 40-43, 4633, 46
X --- Y	US 6,443,881 B1 (FINGER) 03 September 2002, see entire document.	31 ----- 1-2, 11-14, 18-19, 25, 40-41, 46
Y,P	US 2003/0179854 A1 (JAAFAR) 25 September 2003, see entire document.	1-3, 11-14, 18-19, 25, 40-43, 46
A	US 6,554,757 B1 (GEITZ) 29 April 2003, see entire document.	1-46

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

☐ See patent family annex.

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Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

John P Lacyk

Telephone No. 308-0858

Sheila H. Veney
Paralegal Specialist
Tech. Center 3700