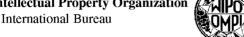
(19) World Intellectual Property Organization





(43) International Publication Date 13 July 2006 (13.07.2006)

(51) International Patent Classification: A61B 18/18 (2006.01)

(21) International Application Number:

PCT/US2006/000873

(22) International Filing Date: 10 January 2006 (10.01.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/643,056 10 January 2005 (10.01.2005) US 11/328,970 9 January 2006 (09.01.2006) US

(71) Applicant (for all designated States except US): OPTI-MEDICA CORPORATION [US/US]; 3130 Coronado Drive, Santa Clara, CA 95054 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): BLUMENKRANZ, Mark, S. [US/US]; 20 Larguita Lane, Portola Valley, CA 94028 (US). PALANKER, Daniel, V. [IL/US]; 1618 Wright Avenue, Sunnyvale, CA 94087 (US). MOR-DAUNT, David, H. [US/US]; 23116 Summit Road, Los Gatos, CA 95033 (US). ANDERSEN, Dan, E. [US/US]; 303 Oakwood Place, Menlo Park, CA 94025 (US).

(10) International Publication Number WO 2006/074469 A3

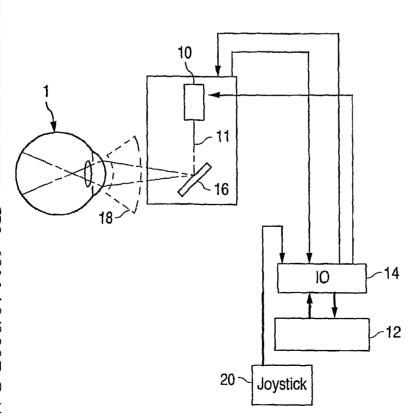
- (74) Agent: LIMBACH, Alan, A.; DLA Piper Rudnick Gray Cary US LLP, 2000 University Avenue, East Palo Alto, CA 94303 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR PATTERNED PLASMA-MEDIATED LASER TREPHINATION OF THE LENS CAPSULE AND THREE DIMENSIONAL PHACO-SEGMENTATION



(57) Abstract: System and method for making incisions in eye tissue at different depths. The system and method focuses light, possibly in a pattern, at various focal points which are at various depths within the eye tissue. A segmented lens can be used to create multiple focal points simultaneously. Optimal incisions can be achieved by sequentially or simultaneously focusing lights at different depths, creating an expanded column of plasma, and creating a beam with an elongated waist.

WO 2006/074469 A3 |||||||||||||

WO 2006/074469 A3



 before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments 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.

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

11 October 2007

INTERNATIONAL SEARCH REPORT

International application No. PCT/US06/00873

A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - A61B 18/18 (2007.01)				
USPC - 606/4 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(8) -A61B 18/18 (2007.01) USPC - 606/4				
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) MicroPatent, IP.com, DialogPro				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where a	ppropriate, of the relevant passages	Relevant to claim No.	
X - Y	US 4,538,608 A (L'ESPERANCE JR) 03 September 1	985 (03.09.1985) entire document	1-3, 22-27, 48-50 	
Υ	US 2003/0125718 A1 (MUNNERLYN et al) 03 July 2003 (03.07.2003) entire document		4-18, 29-44	
Υ	US 5,098,426 A (SKLAR et al) 24 March 1992 (24.03.1992) entire document		19-21, 45-47	
Υ	US 6,325,792 B1 (SWINGER et al) 04 December 2001 (04.12.2001) entire document		19-21, 45-47	
Y	US 5,505,693 A (MACKOOL) 09 April 1996 (09.04.1996) entire document		28	
А	US 5,112,328 A (TABOADA et al) 12 May 1992 (12.05.1992) entire document		1-50	
		:		
Further documents are listed in the continuation of Box C.				
* Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand to be of particular relevance to be of particular relevance				
"E" earlier application or patent but published on or after the international "X" docume filing date conside		"X" document of particular relevance; the considered novel or cannot be considered.	claimed invention cannot be	
cited to	nt which may throw doubts on priority claim(s) or which is establish the publication date of another citation or other	"Y" document of particular relevance; the o	claimed invention cannot be	
special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "Considered to involve an inventive step when the document combined with one or more other such documents, such combinate being obvious to a person skilled in the art			ocuments, such combination	
"P" document published prior to the international filing date but later than "&" document member of the same patent family the priority date claimed				
			te of mailing of the international search report	
06 May 2007 0 9 AUG 2007 1				
Name and mailing address of the ISA/US		Authorized officer:		
Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450		Blaine R. Copenheaver PCT Helpdesk: 571-272-4300		
Facsimile No	571-273-3201	PCT Neipuesk: 571-272-4300 PCT OSP: 571-272-7774		