

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
26 October 2006 (26.10.2006)

PCT

(10) International Publication Number  
**WO 2006/112952 A3**

(51) International Patent Classification:  
A61F 2/16 (2006.01)

(21) International Application Number:  
PCT/US2006/006783

(22) International Filing Date:  
23 February 2006 (23.02.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
11/106,922 15 April 2005 (15.04.2005) US

(71) Applicant (for all designated States except US): MINU LLC [US/US]; 321 Miles Branch Road, Pittsboro, North Carolina 27312 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): PEYMAN, Gholam A. [US/US]; 8654 Pontchartrain Blvd, Unit 1, New Orleans, Louisiana 70124 (US).

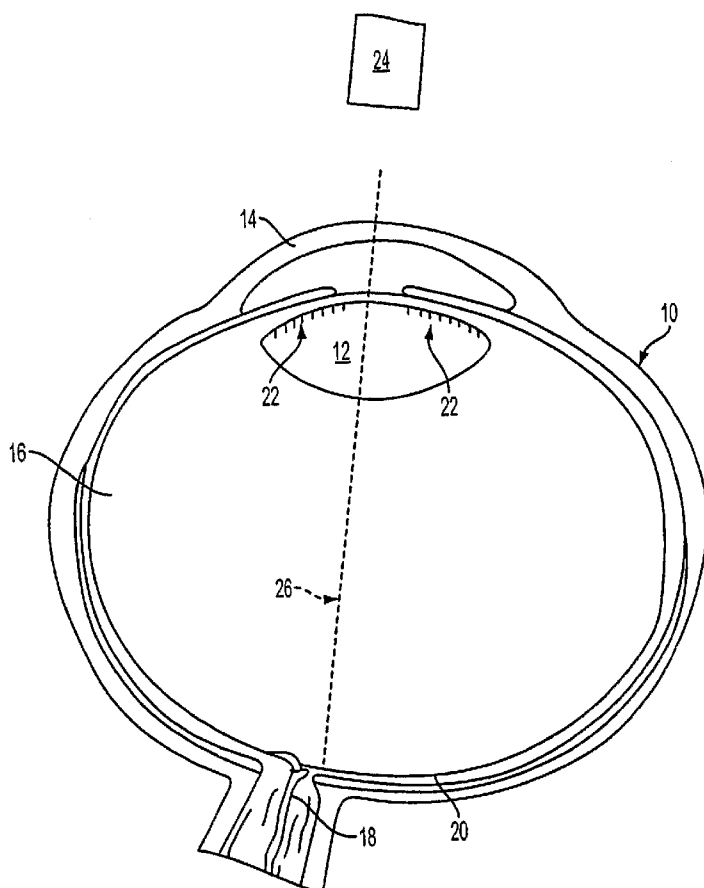
(74) Agents: HOWELL, Jeffrey J. et al.; BELL, BOYD & LLOYD LLC, P.o. Box 1135, Chicago, Illinois 60690-1135 (US).

(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).

[Continued on next page]

(54) Title: INTRAOCULAR LENS AND ADAPTED FOR ADJUSTMENT VIA LASER AFTER IMPLANTATION



(57) Abstract: A method and apparatus is provided for an intraocular device adapted for adjustment via a laser after implantation into an eye. The intraocular device is inserted into an eye, and one or more optical characteristics of the eye, including the intraocular device, are measured. Then, a groove configuration is determined for the intraocular device, and the configuration is ablated into the intraocular device with a short pulse laser.



**Published:**

— with international search report

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

21 December 2007

*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/US06/06783

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61F 2/16 (2007.01)

USPC - 623/6.22

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) - A61F 2/16 (2007.01)

USPC - 623/6.22; 606/5

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 appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,288,293 A (O'DONNELL JR) 22 February 1994 (22.02.1994) entire document	1-5, 12-17
Y	US 5,156,622 A (THOMPSON) 20 October 1992 (20.10.1992) entire document	1-23
Y	US 4,665,913 A (L'ESPERANCE JR) 19 May 1987 (19.05.1987) entire document	1-23
Y	US 4,787,903 A (GRENDahl) 29 November 1988 (29.11.1988) entire document	1-23
Y	US 4,907,586 A (BILLE et al) 13 March 1990 (13.03.1990) entire document	3, 7, 13, 19
A	US 2002/0133228 A1 (SARVER) 19 September 2002 (19.09.2002) entire document	1-23
A	EP 0941717 A1 (ANELLO et al) 15 September 1999 (15.09.1999) entire document	1-23
A	WO 1991/16865 A1 (THOMPSON et al) 14 November 1991 (14.11.1991) entire document	1-23



Further documents are listed in the continuation of Box C.



\* 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 application or patent 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

"&amp;" document member of the same patent family

Date of the actual completion of the international search

06 August 2007

Date of mailing of the international search report

24 SEP 2007

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. 571-273-3201

Authorized officer:

Blaine R. Copenheaver

PCT Helpdesk: 571-272-4300

PCT OSP: 571-272-7774

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/06783

## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 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.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
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 No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:  
Group I, claims 1-23, drawn to a method of altering the optical characteristics of an intraocular device comprising a short pulse laser.  
Group II, claims 24-26, drawn to a computer program product comprising a computer usable medium.

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 additional fees, this Authority did not invite payment of additional fees.
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.:  
1-23

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.