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**Declaration under Rule 4.17:**

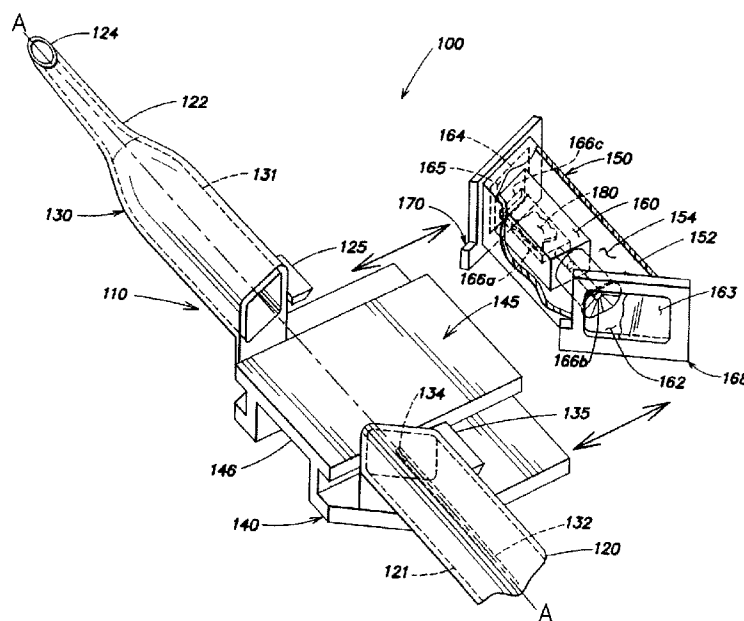
— as to the identity of the inventor (Rule 4.17(i))

**Published:**

— with international search report  
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:  
28 August 2008

(54) Title: INJECTOR APPARATUS FOR USE WITH INTRAOCULAR LENSES AND METHODS OF USE



(57) Abstract: An IOL injector comprising a plunger and an injector body having an axis, the IOL injector comprising a distal body portion having a first lumen disposed therethrough, and a distal cutting surface disposed proximate a proximal end of the distal portion and extending proximally from said first lumen into a space into which a container is to be received. In some embodiments, a proximal body portion is included with a second lumen disposed therethrough. In such embodiments, the proximal portion and the distal portion are separated along the axis by a gap.

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# INTERNATIONAL SEARCH REPORT

International application No

PCT/US2007/085192

## A. CLASSIFICATION OF SUBJECT MATTER

INV. A61F2/16

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)

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.
Y	US 2002/077633 A1 (KIKUCHI TOSHIKAZU [JP] ET AL) 20 June 2002 (2002-06-20) paragraph [0043] - paragraph [0090]; figure 1	1-19, 24-29
Y	EP 1 287 792 A (CANON STAAR CO INC [JP]) 5 March 2003 (2003-03-05) the whole document	1-19, 24-29
Y	US 5 976 150 A (COPELAND BARRY L [US]) 2 November 1999 (1999-11-02) claims; figure 3	1-19, 24-29
X	US 4 787 904 A (SEVERIN SANFORD L [US] ET AL) 29 November 1988 (1988-11-29) column 7, line 45 - column 8, line 31; figures 9-11	20,21,23
Y		22
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☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

\* Special categories of cited documents:

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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)

\*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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\*8\* document member of the same patent family

Date of the actual completion of the international search

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# INTERNATIONAL SEARCH REPORT

International application No

PCT/US2007/085192

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

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 605 093 B1 (BLAKE LARRY W [US]) 12 August 2003 (2003-08-12)	20, 21, 23
Y	column 15 - column 18 -----	22
Y	EP 1 114 623 A (HOYA HEALTHCARE CORP [JP]) 11 July 2001 (2001-07-11) the whole document -----	22
Y	WO 03/049645 A (IOLTECHNOLOGIE PRODUCTION [FR]; TOURRETTE PHILIPPE [FR]; BERNARD PASCA) 19 June 2003 (2003-06-19) abstract -----	20-23
Y	US 2004/238392 A1 (PETERSON ROD T [US] ET AL) 2 December 2004 (2004-12-02) the whole document -----	20-23

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2007/085192

### 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:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an 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.:

#### 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.

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

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

1. claims: 1-19, 24-29

An IOL injector

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2. claims: 20-23

A container for use with an IOL injector

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/085192

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2002077633	A1	20-06-2002	JP 3728155 B2 JP 2001104363 A	21-12-2005 17-04-2001
EP 1287792	A	05-03-2003	AT 325586 T CN 1406564 A DE 60211258 T2 JP 3861138 B2 JP 2003070830 A US 2003045886 A1	15-06-2006 02-04-2003 24-05-2007 20-12-2006 11-03-2003 06-03-2003
US 5976150	A	02-11-1999	AU 5228299 A WO 0010490 A1	14-03-2000 02-03-2000
US 4787904	A	29-11-1988	NONE	
US 6605093	B1	12-08-2003	NONE	
EP 1114623	A	11-07-2001	AU 773209 B2 AU 6013600 A CA 2343369 A1 CN 1317954 A WO 0103611 A1 JP 3569509 B2 NZ 510438 A TW 533070 B US 6386357 B1	20-05-2004 30-01-2001 18-01-2001 17-10-2001 18-01-2001 22-09-2004 31-10-2003 21-05-2003 14-05-2002
WO 03049645	A	19-06-2003	AU 2002364835 A1 CA 2469465 A1 CN 1602173 A EP 1453440 A2 FR 2833154 A1 JP 2005515807 T US 2005125000 A1	23-06-2003 19-06-2003 30-03-2005 08-09-2004 13-06-2003 02-06-2005 09-06-2005
US 2004238392	A1	02-12-2004	AU 2004245116 A1 BR PI0410917 A CA 2527891 A1 EP 1628598 A1 JP 2006526462 T US 2007123980 A1 US 2007095700 A1 WO 2004108018 A1	16-12-2004 27-06-2006 16-12-2004 01-03-2006 24-11-2006 31-05-2007 03-05-2007 16-12-2004