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[Continued on next page]

(54) Title: APPARATUS AND METHOD COMPRISING DEFORMABLE LENS ELEMENT

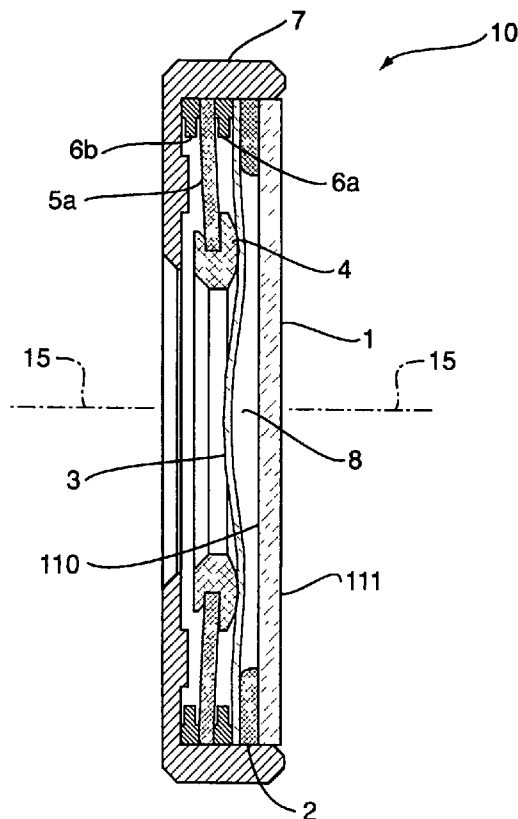


FIG. 2

(57) Abstract: An apparatus for use in a lens assembly, the apparatus comprising a deformable lens element having an axis and a deformable surface, at least part of which transmits image forming light rays, and a force imparting structural member disposed to impart a force to said deformable surface, wherein the apparatus is adapted so that said force imparting structural member is capable of imparting at least one of a pushing force or a pulling force to the deformable surface.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

INV. G02B3/14 G02B26/08 G02B7/38
ADD. G02B26/06 G02B15/00 G06K7/10 H04N5/232

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)

G02B G06K H04N

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 , WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 917 657 A (KANEKO TAKASHI [JP] ET AL) 29 June 1999 (1999-06-29) abstract; figures -----	1-101
X A	US 4 784 479 A (IKEMORI KEIJI [JP]) 15 November 1988 (1988-11-15) abstract; figures -----	1-62, 65-101 63,64
X A	JP 01 140118 A (MITSUBISHI HEAVY IND LTD) 1 June 1989 (1989-06-01) abstract; figures -----	1-62, 65-101 63,64
X A	US 4 783 153 A (KUSHIBIKI NOBUO [JP] ET AL) 8 November 1988 (1988-11-08) abstract; figures -----	1-62, 65-101 63,64
	-/--	

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

'E' earlier document but published on or after the international filing date

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'P' document published prior to the international filing date but later than the priority date claimed

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'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.

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Date of the actual completion of the international search

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Date of mailing of the international search report

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Name and mailing address of the ISA/

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Ward, Seamus

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2007/025707

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document with indication where appropriate, of the relevant passages	Relevant to claim No
X A	US 4 802 746 A (BABA TAKESHI [JP] ET AL) 7 February 1989 (1989-02-07) abstract; figures -----	1-62, 65-101 63,64
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X	US 2006/072915 A1 (ONOZAWA MASARU [JP]) 6 April 2006 (2006-04-06) paragraph [0038] paragraph [0044] figures -----	63,64
A	US 2005/218231 A1 (MASSIEU JEAN-LOUIS [FR]) 6 October 2005 (2005-10-06) abstract; figures -----	63,64
A	US 2005/212952 A1 (TRITEYAPRASERT SOROJ [JP] ET AL) 29 September 2005 (2005-09-29) abstract; figures -----	63,64

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2007/025707

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
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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.

D 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: 1-62,65-101

Apparatus for use in a lens assembly and deformable lens element

2. claims: 63,64

Hand held data collection terminal with triggering/exposure arrangements for a succession of frames

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2007/025707

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