

Brief Summary of the ~~Invention~~ Disclosure

In a first aspect, there is provided an intraocular lens delivery system, comprising:
an injector body having a bore surrounded by an inner wall;
a plunger configured to fit within the bore the plunger comprising:
 a shaft; and
 a plurality of protrusions extending from the shaft; and
a plurality of deflectable members connected to the plunger and configured to contact the
inner wall and to be deflected when the plunger is inserted within the bore, wherein the
deflectable members center the shaft and wherein the plurality of deflectable members, when
inserted within the injector body, contribute to producing a predetermined force resisting
advancement of the plunger when deflected in the bore,
wherein the deflectable members are arc-shaped and configured such that a peak of each
arc-shaped deflectable members contacts the inner wall, and
wherein each of the deflectable members extends between a pair of the plurality of
protrusions.

In a particular embodiment of the present ~~invention~~ disclosure, an intraocular lens delivery system includes an injector body having a bore surrounded by an inner wall. The system further includes a plunger configured to fit within the bore. The system also includes a plurality of deflectable members connected to the plunger and configured to contact the inner wall and to be deflected when the plunger is inserted within the bore. The deflectable members center the shaft and, when inserted within the injector body, contribute to producing a predetermined force resisting advancement of the plunger when deflected in the bore.

In a second aspect, there is provided a method of manufacturing an intraocular lens
delivery system, comprising:
 determining a resistance force to advancement of a plunger within an injector body
having a bore surrounded by an inner wall, the plunger comprising a shaft and a plurality of
protrusions extending from the shaft;
 determining a shape for a plurality of deflecting members connected to the plunger that
will deflect when the plunger is received within the bore of the injector body to contribute to
producing the predetermined resistance force; and
 manufacturing an intraocular lens delivery system including the injector body, the
plunger, and the plurality of deflecting members,

wherein the deflectable members are arc-shaped and configured such that a peak of each arc-shaped deflectable members contacts the inner wall, and

wherein each of the deflecting members extends between a pair of the plurality of protrusions.

In another embodiment of the present ~~invention~~disclosure, a method of manufacturing an intraocular lens delivery system includes determining a resistance force to advancement of a plunger within an injector body having a bore surrounded by an inner wall. The method also includes determining a shape for a plurality of deflecting members connected to the plunger that will deflect when the plunger is received within the bore of the injector body to contribute to producing the predetermined resistance force. The method further includes manufacturing an intraocular lens delivery system including the injector body, the plunger, and the plurality of deflecting members.

Other objects, features and advantages of the present ~~invention~~disclosure will become apparent with reference to the drawings, and the following description of the drawings and claims.

Brief Description of the Drawings

FIGURE 1 illustrates an intraocular lens delivery system according to a particular embodiment of the present invention;

FIGUREs 2A and 2B show different views of a plunger according to a particular embodiment of the present invention; and

FIGURE 3 is a flowchart showing an example method of manufacturing an intraocular lens delivery system according to another embodiment of the present invention.