

What is claimed is:

1. An intraocular lens (IOL) transfer case for transferring an IOL to an injection cartridge, comprising:

5 a lens holder for holding the IOL including a bore;

an inner surface of the bore comprising folding members ~~within the lens holder~~ configured to fold the IOL into a partially folded position when the IOL is slid through the bore across the folding members;

10 an interface configured to ~~removably~~ connect to an injection cartridge while the injection cartridge is separated from a handpiece that facilitates injection of the IOL from the injection cartridge into a patient's eye, wherein the interface is positioned to deliver the IOL in the partially folded position ~~within~~ into the injection cartridge when the interface is connected to the injection cartridge and the injection cartridge is configured to disconnect from the interface while leaving the IOL in the partially folded position to allow the injection cartridge

15 to be connected to a handpiece such that the IOL can be injected from the injection cartridge into a patient's eye; and

a plunger connected to the lens holder and configured to push the IOL through the bore, across the folding members, and into the partially folded position ~~through the bore to deliver the IOL into the injection cartridge, wherein a longitudinal axis of the plunger is~~ substantially aligned with a longitudinal axis of the injection cartridge.

20

2. The IOL transfer case of Claim 1, wherein the folding members comprise at least one ramp asymmetrically positioned within the bore.

25 ~~3. The IOL transfer case of Claim 1, wherein the folding members comprise at least one cam for folding haptics of the IOL.~~

~~4. The IOL transfer case of Claim 1, wherein the folding members comprise rails configured to hold the IOL in the partially folded position.~~

30 53. The IOL transfer case of Claim 1 or 2, further comprising a cap, the cap configured to hold the IOL in a rest position.

64. The IOL transfer case of Claim 53, wherein the cap is frictionally engaged on a top of the lens holder.

35

75. The IOL transfer case of Claim 53, wherein the cap urges the IOL against the folding members when depressed and slides the IOL across the folding members when turned.

40 86. The IOL transfer case of ~~Claim 1~~ any of the preceding claims, wherein the plunger comprises a thumb slide used to advance the plunger through the bore.

97. The IOL transfer case of ~~Claim 1~~any of the preceding claims, wherein the interface comprises a recess generally conforming to a shape of the injection cartridge.

5 | 108. The IOL transfer case of ~~Claim 1~~any of claims 1 to 6, wherein the interface comprises locking features configured to lock the injection cartridge in position when the interface is connected to the injection cartridge.

119. A method of transferring an IOL from a lens transfer case to an injection cartridge, comprising:

providing a lens transfer case comprising a lens holder for holding the IOL, ~~a bore within the lens holder including a bore, and an inner surface of the bore comprising folding members within the bore~~ configured to fold the IOL into a partially folded position when the IOL is slid through the bore across the folding members;

removably connecting an injection cartridge, while the injection cartridge is separated from a handpiece that facilitates injection of the IOL from the injection cartridge into a patient's eye, to the lens transfer case;

releasing the IOL from a rest position in the lens transfer case;

sliding the IOL through the bore, across the folding members, to fold the IOL into the partially folded position;

pushing the IOL in the partially folded position through a distal end of the bore into the injection cartridge; and

disconnecting the lens transfer case from the injection cartridge while leaving the IOL in the partially folded position to allow the injection cartridge to be connected to a handpiece such that the IOL can be injected from the injection cartridge into a patient's eye.

1210. The method of Claim 119, further comprising treating the injection cartridge with a viscoelastic material before the pushing of the IOL into the injection cartridge.

1311. The method of Claim 119 or 10, wherein the step of sliding the IOL across the folding members comprising pushing the IOL across the folding members using a plunger.

1412. The method of Claims 119 or 10, wherein:

the step of releasing the IOL comprises depressing a cap of the lens transfer case to urge the IOL against the folding members; and

the step of sliding the IOL over the folding members comprises twisting the cap to rotate the IOL over the folding members.

1513. The method of any of Claim 119 to 12, wherein the step of removably connecting the injection cartridge to the lens transfer case comprises locking the injection cartridge in position relative to the lens transfer case.