Claims

1. An apparatus, comprising:

(a) a main body portion including:

(i) a proximal channel extending along a longitudinal axis and configured to slidably receive a plunger of a syringe, and

(ii) a first stop surface disposed at a fixed location proximal of the proximal channel, the first stop surface facing proximally and being configured to selectively engage the plunger of the syringe to arrest distal advancement of the plunger relative to a barrel of the syringe;

(b) first and second deflectable beams disposed distal of the proximal channel and on first and second sides of the longitudinal axis, respectively, the first and second beams being configured to cooperate with each other to securely grip the barrel of the syringe; and

(c) first and second deflectable flanges disposed distal of the first and second beams on the first and second sides of the longitudinal axis, respectively, the first and second flanges being configured to cooperate with each other to grip the barrel of the syringe.

2. The apparatus of claim 1, further comprising a hilt portion disposed distal of the main body portion, the hilt portion including at least one finger flange extending laterally outwardly relative to the longitudinal axis and configured to be gripped by a user.

3. The apparatus of claim 2, wherein the hilt portion includes the first and second beams.

4. The apparatus of any one of claims 2 to 3, further comprising a support portion disposed distal of the hilt portion, the support portion including an elongate arm and a cradle at a distal end of the elongate arm.

5. The apparatus of claim 4, wherein the support portion includes the first and second flanges.

6. The apparatus of any one of claims 4 to 5, wherein the cradle includes a distal channel extending along the longitudinal axis and configured to receive the barrel of the syringe.

7. The apparatus of any one of claims 1 to 6, wherein the main body portion further includes a proximal recess disposed proximal of the proximal channel to define the first stop surface.

8. The apparatus of any one of claims 1 to 7, wherein the main body portion further includes an intermediate recess disposed distal of the proximal channel, the intermediate recess being configured to receive the barrel of the syringe.

9. The apparatus of any one of claims 1 to 8, wherein the main body portion further includes at least one distal recess disposed distal of the proximal channel, the at least one distal recess being configured to receive at least one finger flange of the syringe.

10. The apparatus of any one of claims 1 to 9, further comprising first and second detents extending laterally inwardly relative to the longitudinal axis from the first and second beams, respectively, the first and second detents being configured to frictionally engage the barrel of the syringe.

11. The apparatus of any one of claims 1 to 10, further comprising first and second detents extending laterally inwardly relative to the longitudinal axis from the first and second flanges, respectively, the first and second detents being configured to frictionally engage the barrel of the syringe.

12. The apparatus of any one of claims 1 to 11, wherein the first and second beams are configured to deflect laterally away from each other from respective undeflected states toward

respective deflected states, wherein the first and second beams are resiliently biased toward the respective undeflected states.

13. The apparatus of any one of claims 1 to 12, wherein the first and second flanges are configured to deflect laterally away from each other from respective undeflected states toward respective deflected states, wherein the first and second flanges are resiliently biased toward the respective undeflected states.

14. The apparatus of any one of claims 1 to 13, further comprising a syringe, the syringe comprising:

(i) a barrel having a second stop surface disposed distal of the first stop surface, and

(ii) a plunger slidably disposed in the barrel and configured to selectively engage each of the first and second stop surfaces.

15. The apparatus of claim 14, wherein the plunger is slidably received by the proximal channel.

16. The apparatus of any one of claims 14 to 15, wherein the barrel is securely gripped by the first and second beams.

17. The apparatus of any one of claims 14 to 16, wherein the barrel is securely gripped by the first and second flanges.

18. The apparatus of any one of claims 14 to 17, further comprising a delivery instrument, the delivery instrument comprising:

(i) a flexible cannula configured to fit between a choroid and a sclera in a patient’s eye, and

(ii) a needle slidably disposed in the cannula, the needle defining a lumen in fluid communication with the barrel of the syringe.

19. A system, comprising:

(a) a delivery instrument having a distal end;

(b) a syringe including:

(i) a barrel, and

(ii) a plunger slidably disposed in the barrel;

(c) a fluid path extending between the barrel and the distal end of the instrument; and

(d) a dose dock including:

(i) a receptacle configured to receive the barrel of the syringe, and

(ii) a stop surface disposed at a fixed location proximal of the receptacle, the stop surface facing proximally,

wherein the plunger is configured to be advanced distally relative to the barrel from a first longitudinal position to a second longitudinal position to thereby purge any air from the fluid path, the stop surface being configured to selectively engage the plunger of the syringe to prevent distal advancement of the plunger relative to the barrel beyond the second longitudinal position.

20. A method of operating a system, the system including (i) a dose dock including (A) a receptacle, and (B) a first stop surface, and (ii) a syringe including (A) a barrel having a second stop surface, and (B) a plunger slidably disposed in the barrel, the method comprising:

(a) retracting the plunger proximally relative to the barrel to a first longitudinal position to thereby draw fluid from a fluid source into the barrel;

(b) inserting the barrel of the syringe into the receptacle of the dose dock;

(c) decoupling the fluid source from the barrel;

(d) coupling the barrel to an instrument;

(e) with the barrel of the syringe disposed in the receptacle of the dose dock and coupled to the instrument, advancing the plunger distally relative to the barrel to a second longitudinal position to thereby purge any air from a fluid path between the barrel and a distal end of the instrument, the plunger engaging the first stop surface in the second longitudinal position, the first

stop surface preventing further distal advancement of the plunger relative to the barrel;

(f) removing the barrel of the syringe from the receptacle of the dose dock; and

(g) with the barrel of the syringe removed from the receptacle of the dose dock and coupled to the instrument, advancing the plunger distally relative to the barrel to a third longitudinal position to thereby dispense the fluid from the barrel through the distal end of the instrument, the plunger engaging the second stop surface in the third longitudinal position, the second stop surface preventing further distal advancement of the plunger relative to the barrel.