CLAIMS

1. A fluid path subassembly, comprising:

medicament flow pathway components of a medical device; and

a retainer configured for holding the components prior to assembly of the components into the device so that a center of gravity of the subassembly is disposed on a central longitudinal axis of the subassembly, and

wherein the retainer comprises:

a main body; and

a balancing weight for adjusting the center of gravity of the subassembly.

2. The subassembly according to claim 1, wherein the balancing weight is connectable to the main body.

3. The subassembly according to claim 1, wherein the retainer holds the components in a fixed position relative to the retainer.

4. The subassembly according to claim 1, wherein the medicament flow pathway components comprise:

a valve assembly connectable to a syringe barrel;

tubing connected at one end thereof to the valve assembly;

a port connected to a second end of the tubing;

a patient needle connected to the port to form a fluid pathway from the valve assembly through the patient needle; and

a needle cover for covering and uncovering the patient needle.

5. The subassembly according to claim 4, wherein the retainer comprises a feature for looping and securing the tubing.

6. The subassembly according to claim 4, wherein the valve assembly comprises:

a valve plate connected to the first end of the tubing;

a valve cover housing the valve plate to move therein;

wherein the fluid path subassembly further comprises a removable locking element to prevent movement of the valve plate relative to the valve cover.

7. The subassembly according to claim 4, wherein the needle cover also provides sterility.

8. A method of assembling a drug delivery device, comprising:

A) assembling a fluid path subassembly, including assembling medicament flow pathway components into a retainer configured for holding the components so that a center of gravity of the subassembly is disposed on a central longitudinal axis of the subassembly;

B) packaging the fluid path subassembly and sterilizing the packaged fluid path subassembly;

C) aseptically filling the sterilized fluid path subassembly;

D) inspecting the filled fluid path subassembly; and

E) assembling the filled fluid path subassembly into a device body, and

wherein step A further comprises adjusting a balancing weight of the retainer to align a center of gravity of the subassembly with a longitudinal axis of the retainer.

9. The method according to claim 8, wherein step D comprises rotating the subassembly about the retainer's longitudinal axis.

10. The method according to claim 8, wherein steps C and D are performed at a facility different from a facility at which steps A and B are performed.

11. An element of a fluid path subassembly, comprising:

a retainer configured for holding medicament flow pathway components of a medical device prior to assembly of the components into the device so that a center of gravity of the subassembly with the components installed is disposed on a central longitudinal axis of the subassembly, and

wherein the retainer comprises:

a balancing weight for adjusting the center of gravity of the subassembly.

12. The subassembly according to claim 11, wherein the retainer is adapted to hold the components in a fixed position relative to the retainer.

13. A method of assembling a drug delivery device, comprising:

assembling a fluid path subassembly, including assembling medicament flow pathway components into a retainer configured for holding the components; and

adjusting a balancing weight of the retainer to align a center of gravity of the subassembly with a longitudinal axis of the retainer.

14. The method according to claim 13, further comprising:

inspecting the fluid path subassembly.

15. The method according to claim 14, wherein inspecting the filled fluid path subassembly comprises rotating the subassembly about the retainer's longitudinal axis.