CLAIMS

We claim:

1. A downhole tool subassembly comprising:
   an outer sleeve having a first set of apertures extending from an inner bore of the outer sleeve through an external surface of the outer sleeve;
   a pin coupled to the outer sleeve and extending inward from the inner bore of the outer sleeve; and
   an inner sleeve slidingly engaged with the outer sleeve and having a slot and a second set of apertures extending from a sleeve bore of the inner sleeve through an external surface of the inner sleeve, the inner sleeve being operable to restrict flow across the first set of apertures when the inner sleeve is in a first position,
   wherein the pin engages the slot, and
   wherein the slot comprises a first tracking path, a second tracking path offset from the first tracking path, and a first transition path extending from the first tracking path to the second tracking path.

2. The downhole tool subassembly of claim 1, wherein the slot further comprises a third tracking path offset from the second tracking path and a second transition path extending from the second tracking path to the third tracking path.

3. The downhole tool subassembly of claim 2, wherein the first tracking path, second tracking path, and third tracking path are parallel to an axis of the sleeve.

4. The downhole tool subassembly of claim 2, wherein the sleeve is operable permit flow across the first set of apertures and second set of apertures when the sleeve is moved to a second position in which the second set of apertures is at least partially aligned with the first set of apertures.

5. The downhole tool subassembly of claim 4, wherein the first position corresponds to the pin being in an uphole portion of the first tracking path, and wherein the second position corresponds to the pin being in an uphole portion of the second tracking path.

6. The downhole tool subassembly of claim 5, wherein the sleeve is operable restrict flow across the first set of apertures and second set of apertures when the sleeve is moved to a third position in which the second set of apertures is misaligned with the first set

of apertures, and wherein the first position corresponds to the pin being in an uphole portion of the third tracking path.

7. The downhole tool subassembly of claim 1, wherein the second set of apertures is offset from the first set of apertures by a preselected distance when the sleeve is in the first position, and wherein an uphole portion of the first tracking path is offset from an uphole portion of the second tracking path by the preselected distance.

8. The downhole tool subassembly of claim 1, wherein the first set of apertures and second set of apertures are arranged parallel to a central axis of the outer sleeve.

9. The downhole tool subassembly of claim 1, wherein the first set of apertures and second set of apertures are arranged perpendicular to a central axis of the outer sleeve.

10. The downhole tool subassembly of claim 1, further comprising a spring positioned between a cavity formed by an outer surface of the sleeve, an inner surface of the outer sleeve, and wherein the spring biases a shoulder of the sleeve away from an outer sleeve cap, the outer sleeve cap being coupled to a second end of the outer sleeve.

11. The downhole tool subassembly of claim 10, wherein the sleeve comprises a sealing seat.

12. A method of directing downhole flow in a wellbore comprising:

directing a fluid to an uphole portion of a downhole tool subassembly comprising:

an outer sleeve having a first set of apertures extending from an inner bore of the outer sleeve through an external surface of the outer sleeve;

a pin coupled to the outer sleeve and extending inward from the inner bore of the outer sleeve; and

an inner sleeve slidingly engaged with the with outer sleeve and having a slot and a second set of apertures extending from a sleeve bore of the inner sleeve through an external surface of the inner sleeve, the inner sleeve being operable to restrict flow across the first set of apertures when the inner sleeve is in a first position,

wherein the pin engages the slot, and

wherein the slot comprises a first tracking path, a second tracking path offset from the first tracking path, and a first transition path extending from the first tracking path to the second tracking path,

wherein the method further comprises directing the fluid through the inner sleeve to a downhole portion of the downhole tool subassembly.

13. The method of claim 12, wherein the slot further comprises a third tracking path offset from the second tracking path and a second transition path extending from the second tracking path to the third tracking path.

14. The method of claim 12, further comprising displacing the inner sleeve relative to the outer sleeve to a second position in which the second set of apertures is at least partially aligned with the first set of apertures and diverting the fluid from the inner bore of the inner sleeve through the first set of apertures.

15. The method of claim 14, wherein displacing the inner sleeve relative to the outer sleeve to the second position comprises moving the pin from an uphole portion of the first tracking path to an uphole portion of the second tracking path.