CLAIMS

1. A drug delivery safety device comprising:

a locking element comprises a housing having a curved-shaped outer sidewall with a flat ledge on a top portion, an inner sidewall having an open central cavity, a back wall located between the inner and outer sidewalls;

the inner sidewall having a distal end and a proximal end, the distal end having one or more detenting ribs protruding radially outward around the outer circumference, the proximal end of the inner sidewall having one or more inwardly protruding tabs;

a needleless IV connector disposed in the open central cavity of the inner sidewall and held between the one or more inwardly protruding tabs of the inner sidewall;

a first insert having an open distal end and an open proximal end; a sidewall extending between the open distal end and the open proximal end, the sidewall on the distal end having more than one detents on an inside circumference of the sidewall protruding radially inward toward the central axis, the one or more detents of the first insert having a complimentary fit with the one or more detenting ribs of the housing when the first insert is place into the housing;

a keyway cut into the sidewall on the proximal end of the first insert to correspond with an individual patient;

a keying element comprising a housing having a outer sidewall having a curved shape with a flat ledge on a top portion, the outer sidewall having an open distal end and a proximal end having a back wall, an inside surface of the proximal end of the outer sidewall having one or more detents located around the circumference of the inside surface of the proximal end of the outer sidewall protruding radially outward, the back wall having an open central cavity formed by a second inner wall;

a second insert having an open distal end and an open proximal end; a sidewall extending between the open distal end and the open proximal end, the sidewall on the proximal end having one or more detenting ribs on an outer circumference of the sidewall protruding radially outward, the one or more detenting ribs of the second insert having a complimentary fit with the one or more detent of the housing when the second insert is place into the housing, a key tab projecting radially inward from the distal end of the second insert toward the central axis;

the outer sidewall of the keying element having a diameter smaller than the outer diameter of the outer sidewall of the locking element to enable the keying element to slide into the locking element when the keyway of the locking element is aligned with the tab projecting radially inward from the distal end of the second insert.

2. The drug delivery safety device of claim 1 wherein the locking element is placed on a drug delivery device.

3. The drug delivery safety device of claim 2 wherein the drug delivery device is a syringe.

4. The drug delivery safety device of claim 1 wherein the keying element is placed on a intravenous access device.

5. The drug delivery safety device of claim 1 wherein the position of the keyway and key tab is patient specific.

6. The drug delivery safety device of claim 1 wherein the position of the keyway and key tab is specific to a route of administration.
7. The drug delivery safety device of claim 1 wherein the position of the keyway and key tab is specific to a drug class.

8. The drug delivery safety device of claim 1 further comprising a visual indicator for drug family identification.

9. The drug delivery safety device of claim 1 wherein the housing of the locking element is imprinted with numerical values assigned to different positions of the keyway.

10. The drug delivery safety device of claim 1 wherein the housing of the keying element is imprinted with numerical values assigned to different positions of the key tab.

11. The drug delivery safety device of claim 1 wherein the housing of the keying element is imprinted with numerical values assigned to different detachable protrusions.

12. A drug delivery safety device comprising:

a locking element comprises a housing having an outer sidewall, an inner sidewall, a back wall located between the inner and outer sidewalls; the outer sidewall having a curved shape with a flat ledge on a top portion, the inner sidewall creating an open central cavity, the inner sidewall having a distal end and a proximal end, the inside surface of the curved portion of the outer sidewall having one or more detachable interference ribs protruding radially outward towards the central axis, the proximal end of the inner sidewall having one or more inwardly protruding tabs;

a needleless IV connector disposed in the open central cavity of the inner sidewall and held between the one or more inwardly protruding tabs of the inner sidewall;

a keying element comprising a housing having a sidewall having a curved shape with a flat ledge on a top portion, the sidewall having an open distal end and a proximal end having a back wall; one or more detachable protrusions extending radially outward along an outer circumference of the curved portion of the sidewall; the back wall having an open central cavity;

the one or more detachable interference ribs of the locking element being configurable to form gaps in a pattern to correspond with an individual patient and the detachable protrusions of the keying element being configurable to complement the gaps formed on the locking element;

the sidewall of the keying element having a diameter smaller than the diameter of the outer sidewall of the locking element to enable the keying element to slide into the locking element when the gaps of the locking element are aligned with the protrusions of the keying element.

13. The drug delivery safety device of claim 12 wherein the locking element is placed on a drug delivery device.

14. The drug delivery safety device of claim 13 wherein the drug delivery device is a syringe.

15. The drug delivery safety device of claim 12 wherein the keying element is placed on a intravenous access device.

16. The drug delivery safety device of claim 12 wherein the position of the protrusions on the keying element is patient specific.

17. The drug delivery safety device of claim 12 wherein the position of the protrusions on the keying element is specific to a route of administration.

18. The drug delivery safety device of claim 12 wherein the position of the protrusions on the keying element is specific to a drug class.

19. The drug delivery safety device of claim 12 further comprising a visual indicator for drug family identification.

20. The drug delivery safety device of claim 12 wherein the housing of the locking element is imprinted with numerical values assigned to different detachable interference ribs.