

CLAIMS

1. A medical device, comprising:

a needle assembly (16) comprised of a needle hub (36) and a needle (34) securely coupled to the needle hub (36), the needle hub (36) having a proximal end (46), a distal end (48), and a fluid communication pathway (50) extending therebetween;

a resiliently deflectable actuator arm (60) extending from the needle hub (36) and having an actuator button (64) formed thereon, wherein the actuator arm (60) is cantilevered;

a barrel having proximal and distal ends and a passage extending therebetween, wherein the needle hub (36) is slidably disposed within the passage and the needle hub (36) is axially movable relative to the barrel from a distal position where the needle (34) projects distally beyond the distal end of the barrel and a proximal position where the needle (34) is entirely contained within the barrel, and wherein the barrel comprises an aperture (90) extending therethrough, wherein the aperture (90) engages the actuator button (64) when the needle hub (36) is in the distal position, and wherein the actuator button (64) is disengaged from the aperture (90) when the actuator arm (60) is resiliently deflected and the needle hub (36) is in the proximal position;

a spring (18) disposed in the barrel for propelling the needle hub (36) to the proximal position when the actuator arm (60) is deflected and the actuator button (64) is disengaged from the aperture (90); and

a septum (68) fitted within the distal end of the barrel, wherein the needle (34) extends through the septum (68) when the needle hub (36) is in the distal position, and wherein the septum (68) seals the barrel when the needle hub (36) is in the proximal position,

c h a r a c t e r i z e d i n t h a t

an absorbent sponge (128) is fitted in proximity to the septum (68) within the distal end (48) of the barrel (20), wherein the needle (34) extends through the sponge when the needle (34) is in the distal position, and wherein the sponge absorbs and retains any fluid on the outside of the needle as the needle is retracted into the proximal position.

2. The medical device of claim 1, further comprising an annular sleeve (130) rotatably disposed about a circumference of the proximal end (46) of the barrel (20), wherein the sleeve (130) is selectively rotatable between a first position and a second position, and wherein the sleeve (130) comprises a cover (134) and a slot (136).
3. The medical device of claim 2, wherein the slot (136) extends 180° around the circumference of the sleeve (130).
4. The medical device of claim 3, wherein the cover (134) obscures the aperture (90) and the actuator button (64) when the sleeve (130) is in the first position, and wherein the aperture (90) and the actuator button (64) are accessible through the slot (136) when the sleeve (130) is in the second position.
5. The medical device of claim 3, wherein the sleeve (130) prevents the needle assembly (16) from being inadvertently propelled into the proximal position when the sleeve (130) is in the first position, and wherein the sleeve (130) must be rotated to the second position before the actuator arm (60) can be deflected such that the actuator button (64) disengages the aperture (90) and the needle assembly (16) is propelled under the spring force into the proximal position.

6. The medical device of claim 1, wherein the actuator button (64) includes a first interlocking edge (66') and the aperture (90) includes a corresponding second interlocking edge (92').
7. The medical device of claim 6, wherein the first and second interlocking edges (66', 92') interlock when the needle hub (36) is in the distal position and the actuator button (64) engages the aperture (90).
8. The medical device of claim 7, wherein the spring (18) biases the first and second interlocking edges (66', 92') into interlocking engagement when the needle hub (36) is in the distal position and the actuator button (64) engages the aperture (90).
9. The medical device of claim 8, wherein the interlocking engagement of the interlocking edges (66', 92') prevents the needle assembly (16) from being inadvertently propelled into the proximal position, and wherein the needle assembly (16) must be moved distally against the spring bias until the interlocking edges (66', 92') disengage before the actuator arm (60) can be deflected such that the actuator button (64) disengages the aperture (90) and the needle assembly (16) is propelled under the spring force into the proximal position.
10. The medical device of claim 1, wherein a raised or textured surface of the actuator button (64) allows a user to frictionally grip the actuator button (64).