

CLAIMS

1. An IV catheter system comprising:
 - a catheter component comprising:
 - a catheter hub comprising a top, a bottom, a side disposed between the top and the bottom, a catheter hub distal end, and a catheter hub proximal end, wherein the catheter hub is shaped to define a chamber extending between the catheter hub distal end and the catheter hub proximal end, and a needle port at the catheter hub proximal end that provides access to the chamber;
 - a cannula extending distally from the catheter hub distal end;
 - a wing fixedly secured to the catheter hub and extending outwardly from the side of the catheter hub or the bottom of the catheter hub; and
 - a needle component inserted into the needle port, the needle component comprising:
 - a needle hub, comprising a top, a bottom, a needle hub distal end and a needle hub proximal end;
 - a needle extending distally from the needle hub distal end along an axis, wherein the needle extends distally beyond the cannula, wherein the needle comprises a bevel oriented towards the top of the needle hub; and
 - a grip extending from the needle hub, generally parallel to the axis and the wing such that the wing and the grip overlap, wherein a proximal portion of the grip is attached to the needle hub, wherein a distal portion of the grip is not attached to the needle hub and extends along a side of the needle hub between the top and the bottom of the needle hub.
2. The IV catheter system of claim 1, wherein the wing is a first wing, wherein the catheter component further comprises a second wing;
 - wherein the catheter hub comprises a catheter hub intermediate portion between the catheter hub proximal end and the catheter hub distal end;
 - wherein the catheter component further comprises an extension tubing junction extending outwardly from the catheter hub intermediate portion to connect the catheter hub to extension tubing; and
 - wherein the second wing is disposed proximal to the extension tubing junction and extends between the catheter hub and the extension tubing junction but does not extend outwardly beyond the extension tubing junction.
3. The IV catheter system of claim 1, wherein the needle hub includes opposing side grips and the catheter component includes a push tab, wherein each of the side grips comprises a protrusion.
4. The IV catheter system of claim 3, wherein the needle component includes a flash chamber, the opposing side grips being formed on opposing side of the flash chamber.
5. The IV catheter system of claim 1, wherein the catheter component further comprises:

an extension tubing junction extending outwardly from the catheter hub intermediate portion to connect the catheter hub to extension tubing;

wherein the extension tubing junction extends in an opposite direction of the wing.

6. The IV catheter system of claim 5, wherein the wing is a first wing, wherein the catheter component further comprises a second wing that extends in the opposite direction of the first wing, the second wing incorporating but not extending beyond the extension tubing junction.

7. The IV catheter system of claim 6, wherein the first wing is more flexible than the second wing.

8. An IV catheter system comprising:

a catheter component comprising:

a catheter hub comprising a catheter hub distal end and a catheter hub proximal end, wherein the catheter hub is shaped to define a chamber extending between the catheter hub distal end and the catheter hub proximal end, and a needle port at the catheter hub proximal end that provides access to the chamber; and

a cannula extending distally from the catheter hub distal end; and

a push tab positioned on a top of the catheter hub proximal end; and

a needle component comprising:

a needle hub comprising a needle hub distal-most edge and a needle hub proximal end, a top of the needle hub distal-most edge including a cut-out proximate the catheter hub and aligned with the push tab, wherein an outer surface of the catheter hub extends from a proximal end of the push tab to the cut-out to form a region configured for placement of a digit of a user; and

a needle extending distally from the needle hub distal end along an axis.

9. The IV catheter system of claim 8, wherein the catheter component includes a securement platform.

10. The IV catheter system of claim 9, wherein the push tab and the securement platform are connected via a connecting channel constructed of a same material as the push tab and the securement platform, wherein the connecting channel protrudes from an outer surface of the catheter hub.

11. The IV catheter system of claim 10, wherein the catheter component includes a strain relief positioned at the catheter hub distal end around the cannula, the strain relief being coupled to the securement platform by another connecting channel constructed of the same material, wherein the strain relief and the securement platform are integrally molded.

12. The IV catheter system of claim 9, wherein the catheter component comprises a first protrusion protruding from an outer surface of the catheter hub and the needle component comprises a second protrusion protruding from an inner surface of the needle hub, wherein the first protrusion and

the second protrusion interface to limit rotation of the needle component relative to the catheter component and are also configured to rotate away from each other.

13. The IV catheter system of claim 8, further comprising,
a flash component that includes a path-defining structure for controlling flow of blood within the flash component.

14. The IV catheter system of claim 1, wherein the grip comprises an alignment ridge that protrudes towards the wing, wherein the alignment ridge extends parallel to the axis.

15. The IV catheter system of claim 1, wherein the wing comprises a plurality of slots parallel to the axis, wherein the grip comprises a plurality of alignment ridges disposed within the plurality of slots, wherein the plurality of slots extend through a proximal end of the wing such that the alignment ridges are configured to move proximally through the slots, wherein each of the plurality of slots comprises a proximal end, wherein each of the plurality of alignment ridges comprises a distal end that contacts the proximal end of the plurality of slots to prevent the needle component from moving proximal to the catheter component when the plurality of alignment ridges are disposed within the plurality of slots.

16. The IV catheter system of claim 15, wherein each of the plurality of alignment ridges comprises a proximal end, wherein the proximal ends of each of the plurality of alignment ridges are disposed distal to the proximal end of the wing.

17. The IV catheter system of claim 2, wherein the second wing comprises a protrusion oriented substantially perpendicular to the axis and fixed between the extension tubing junction and the catheter hub.

18. The IV catheter system of claim 8, wherein the cut-out comprises an arc shape.