Claims

[Claim 1] An intravenous catheter apparatus comprising:
a catheter hub (12) arranged at a proximal end of a catheter tube (10), the catheter hub (12) having an inner surface (14) defining a chamber (16);
a needle (20) defining an axial direction and having a needle tip (24), the needle (20) extending through the chamber (16) and the catheter tube (10) when in a ready position;
a needle guard (32) slidably arranged on the needle (20) and received in the chamber (16) when the needle (20) is in the ready position, the needle guard (32) including a base portion (34) and first and second arms (36, 38) extending from the base portion (34), wherein the first arm (36) is deflected radially outwards by the needle (20) against a restoring force when the needle (20) is in the ready position whereby the needle guard (32) is brought into retaining contact with the catheter hub (12); and
retaining means for retaining the needle guard (32) in the chamber (16) as long as the first arm (36) is in its deflected state, the retaining means including a first disc-like retaining protrusion (58) provided on the first arm (36) and a retaining depression (18) formed in the inner surface (14) and adapted to receive the retaining protrusion (58).

[Claim 2] The intravenous catheter apparatus of claim 1, wherein the retaining protrusion (58) has generally parallel proximal and distal faces (60, 62) and/or a convex, in particular part-cylindrical, peripheral surface (64).

[Claim 3] The intravenous catheter apparatus of claim 1 or 2, wherein the first retaining protrusion (58) is arranged in the region of a distal end of the first arm (36).

[Claim 4] The intravenous catheter apparatus of any one of the preceding claims, wherein a second disk-like retaining protrusion (66) is arranged on the second arm (38) and adapted to engage with the retaining depression (18).

[Claim 5] The intravenous catheter apparatus of claim 4, wherein the second arm (38) can be deflected radially inwards when the needle tip (24) is received between the arms (36, 38), to thereby allow the second retaining protrusion (66) to disengage from the retaining depression (18).

[Claim 6] The intravenous catheter apparatus of claim 4 or 5, wherein the second

Claims

[Claim 1] An intravenous catheter apparatus comprising:
a catheter hub (12) arranged at a proximal end of a catheter tube (10), the catheter hub (12) having an inner surface (14) defining a chamber (16);
a needle (20) defining an axial direction and having a needle tip (24), the needle (20) extending through the chamber (16) and the catheter tube (10) when in a ready position;
a needle guard (32) slidably arranged on the needle (20) and received in the chamber (16) when the needle (20) is in the ready position, the needle guard (32) including a base portion (34) and first and second arms (36, 38) extending from the base portion (34), wherein the first arm (36) is deflected radially outwards by the needle (20) against a restoring force when the needle (20) is in the ready position whereby the needle guard (32) is brought into retaining contact with the catheter hub (12); and
retaining means for retaining the needle guard (32) in the chamber (16) as long as the first arm (36) is in its deflected state, **characterized in** the retaining means including a first disc-like retaining protrusion (58) provided on the first arm (36) and a retaining depression (18) formed in the inner surface (14) and adapted to receive the retaining protrusion (58), wherein the retaining protrusion (58) has generally parallel proximal and distal faces (60, 62).

[Claim 2] The intravenous catheter apparatus of claim 1, wherein the retaining protrusion (58) has a convex, in particular part-cylindrical, peripheral surface (64).

[Claim 3] The intravenous catheter apparatus of claim 1 or 2, wherein the first retaining protrusion (58) is arranged in the region of a distal end of the first arm (36).

[Claim 4] The intravenous catheter apparatus of any one of the preceding claims, wherein a second disk-like retaining protrusion (66) is arranged on the second arm (38) and adapted to engage with the retaining depression (18).

[Claim 5] The intravenous catheter apparatus of claim 4, wherein the second arm (38) can be deflected radially inwards when the needle tip (24) is received between the arms (36, 38), to thereby allow the second retaining protrusion (66) to disengage from the retaining depression (18).

[Claim 6] The intravenous catheter apparatus of claim 4 or 5, wherein the second