

CLAIMS

1. A needle safety device comprising:

a needle connected to a needle hub, said needle comprising a needle shaft and a change in profile near a needle tip; and

5 a needle guard having a body defining an interior cavity, a distal wall comprising a distally facing wall surface and a proximally facing wall surface at a distal end of the body having a distal opening, and a proximal wall at a proximal end having a proximal opening having the needle shaft passing through both the distal opening and the proximal opening in a ready to use position in which the needle tip is exposed; wherein the change in profile has a larger cross-
10 sectional dimension than a dimension of the proximal opening for engaging the proximal opening in a protective position;

wherein the needle guard comprises at least two biasing members including a first biasing member and a second biasing member and wherein the second biasing member is located closer to the distal end than the proximal end, the second biasing member has a first position when the
15 needle tip is exposed and a second position when the needle tip is located inside the interior cavity of the needle guard;

wherein in the first position the second biasing member is biased by the needle shaft and wherein in the second position the second biasing member is not biased by the needle shaft and covers at least part of the distal opening of the distal wall to prevent the needle tip from re-
20 emerging out the distal opening; and

wherein the second biasing member has a free end and a fixed end and wherein the fixed end of the second biasing member is located closer to the distal end than the free end is to the distal end.

25 2. The device of claim 1, wherein the second biasing member has an intermediate bent section.

3. The device of claim 1, further comprising a catheter hub and a catheter tube and wherein the needle guard is located in an interior cavity of the catheter hub.

4. The device of claim 2, wherein the bent section has a V-shape.

5. The device of claim 1, wherein the first biasing member comprise a first biasing arm and wherein the first biasing arm has a fixed end and a free end and wherein the fixed end of the first biasing arm is located closer to the proximal end than the free end is to the proximal end.

6. The device of claim 1, wherein a plurality of fingers define the distal wall with the distal opening and wherein the distal opening is a dynamic opening that changes size depending on the position of the needle shaft.

7. The device of claim 1, wherein the distal opening is circumscribed by a plurality of independently movable fingers each with a fixed end and a free end and wherein the fixed end is located closer to the distal end than the free end.

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8. The device of claim 1, wherein the body is made from a plastic material or from a stamped metal sheet.

9. The device of claim 1, wherein the needle guard is rolled from a stamped metal sheet and wherein the stamped metal sheet has a plurality of cuts or slits for forming the biasing members.

10. A method of using the needle safety device of claim 1, further comprising moving the needle guard and the needle relative to another so that the needle guard covers the needle tip.