

CLAIMS

What is claimed is:

1. A guidewire-management device, comprising:
a guidewire;
a first sleeve configured for distally feeding the guidewire out of the guidewire-management device or proximally feeding the guidewire into the guidewire-management device; and
a second sleeve proximal of the first sleeve configured for feeding the guidewire in concert with the first sleeve, at least a length of the guidewire extending between the first sleeve and the second sleeve disposed within a sterile barrier configured to maintain sterility of the guidewire.
2. The guidewire-management device of claim 1, wherein the first sleeve has a distal-end portion configured as a male connector with a Luer taper for connecting the first sleeve to a complementary female connector.
3. The guidewire-management device of either claim 1 or 2, wherein the first sleeve is configured to straighten the guidewire when proximally feeding the guidewire into the guidewire-management device.
4. The guidewire-management device of any claim of claims 1-3, wherein the first sleeve includes a seal configured to block fluid from entering or escaping the guidewire-management device when proximally feeding the guidewire into the guidewire-management device.
5. The guidewire-management device of any claim of claims 1-4, wherein the first sleeve has a proximal-end portion including a bore configured to house a distal-end portion of the sterile barrier.
6. The guidewire-management device of any claim of claims 1-5, wherein the second sleeve has a distal-end portion including a bore configured to house a proximal-end portion of the sterile barrier.

7. The guidewire-management device of any claim of claims 1-6, wherein the second sleeve has a proximal-end portion including another bore configured to stop an end of the guidewire from completely passing through the second sleeve.

8. The guidewire-management device of any claim of claims 1-7, wherein the guidewire has a distal-end portion including a 'J'-shaped tip configured to straighten as the tip of the guidewire enters the first sleeve when proximally feeding the guidewire into the guidewire-management device.

9. The guidewire-management device of any claim of claims 1-8, wherein the guidewire has a proximal-end portion including a ball end configured to stop the guidewire from completely passing through the second sleeve.

10. The guidewire-management device of any claim of claims 1-9, wherein the sterile barrier is a pleated bag configured to unpleat as it is drawn from the second sleeve and pleat as it is inserted into the first sleeve while distally feeding the guidewire out of the guidewire-management device.

11. The guidewire-management device of any claim of claims 1-9, wherein the sterile barrier is a bellowed boot configured to stretch from an equilibrium state and relax back into the equilibrium state while distally feeding the guidewire out of the guidewire-management device.

12. A guidewire-management device, comprising:
- a guidewire;
 - a frame including a pair of tubular rails;
 - a guidewire conduit threaded through the tubular rails, the guidewire conduit including the guidewire disposed therein having a distal-end portion including a 'J'-shaped tip and a proximal-end portion including a ball end;
 - a first sleeve mounted between each rail of the pair of rails, the first sleeve configured for distally feeding the guidewire out of the guidewire-management device or proximally feeding the guidewire into the guidewire-management device; and
 - a second sleeve mounted between each rail of the pair of rails proximal of the first sleeve, the second sleeve configured for feeding the guidewire in concert with the first sleeve, at least a length of the guidewire extending

between the first sleeve and the second sleeve disposed within a sterile barrier configured to maintain sterility of the guidewire.

13. The guidewire-management device of claim 12, wherein the first sleeve has a distal-end portion configured as a male connector with a Luer taper for connecting the first sleeve to a complementary female connector.

14. The guidewire-management device of either claim 12 or 13, wherein the first sleeve is configured to straighten the tip of the guidewire as the tip of the guidewire enters the first sleeve when proximally feeding the guidewire into the guidewire-management device.

15. The guidewire-management device of any claim of claims 12-14, wherein the second sleeve has a proximal-end portion including a bore with a constriction configured to capture the ball end of the guidewire and stop the guidewire from completely passing through the second sleeve.

16. The guidewire-management device of any claim of claims 12-15, wherein the guidewire conduit has a proximal-end portion including a plug configured to stop the ball end of the guidewire from passing through an opening in a proximal end of the guidewire conduit, thereby preventing the tip of the guidewire from completely passing through the first sleeve and reforming the 'J'-shaped tip when proximally feeding the guidewire into the guidewire-management device.

17. The guidewire-management device of any claim of claims 12-16, wherein the sterile barrier is a pleated bag configured to unpleat as it is drawn from a bore in a distal-end portion of the second sleeve and pleat as it is inserted into a bore in a proximal-end portion of the first sleeve while distally feeding the guidewire out of the guidewire-management device.

18. The guidewire-management device of any claim of claims 12-16, wherein the sterile barrier is a bellowed boot configured to stretch from an equilibrium state and relax back into the equilibrium state while distally feeding the guidewire out of the guidewire-management device.

19. A guidewire-management device, comprising:
a handle;
a guidewire including a 'J'-shaped tip in a distal-end portion of the guidewire;

- a first sleeve formed in a distal-end portion of the handle;
- a second sleeve formed in a proximal-end portion of the handle, at least a length of the guidewire extending between the first sleeve and the second sleeve disposed within a sterile barrier configured to maintain sterility of the guidewire; and
- a thumb wheel disposed under the guidewire between the first sleeve and the second sleeve configured to assist in distally feeding the guidewire out of the guidewire-management device by way of the first sleeve or proximally feeding the guidewire into the guidewire-management device by way of the first sleeve.

20. The guidewire-management device of claim 19, wherein the first sleeve has a distal-end portion configured as a male connector with a Luer taper for connecting the first sleeve to a complementary female connector.

21. The guidewire-management device of either claim 19 or 20, wherein the first sleeve is configured to straighten the 'J'-shaped tip of the guidewire as the tip of the guidewire enters the first sleeve when proximally feeding the guidewire into the guidewire-management device.

22. The guidewire-management device of any claim of claims 19-21, wherein the second sleeve has a proximal-end portion including a bore with a constriction configured to capture a ball end of the guidewire and stop the guidewire from completely passing through the second sleeve.

23. The guidewire-management device of any claim of claims 19-22, wherein the sterile barrier is a pleated bag over an entirety of the guidewire excepting that within or distal to the first sleeve configured to pleat as the bag is inserted into a bore in a proximal-end portion of the first sleeve while distally feeding the guidewire out of the guidewire-management device.

24. The guidewire-management device of any claim of claims 19-23, wherein a proximal end of the bag is closed providing a proximal limit to proximally feeding the guidewire into the guidewire-management device by way of the first sleeve, the proximal limit established by the proximal end of the bag configured to prevent the 'J'-shaped tip of the

guidewire from passing completely through the first sleeve when proximally feeding the guidewire into the guidewire-management device by way of the first sleeve.

25. A method of a guidewire-management device, comprising:
connecting a first sleeve of the guidewire-management device to a hub of a medical device inserted into an insertion site of a patient, the first sleeve configured as a male connector with a Luer taper; and
advancing a guidewire of the guidewire-management device from the first sleeve through the hub of the medical device and into the insertion site of the patient, the guidewire disposed within a sterile barrier configured to maintain sterility of the guidewire until being fed into the first sleeve.
26. The method of claim 25, wherein advancing the guidewire includes pinching the guidewire within the sterile barrier and advancing the guidewire into the first sleeve by hand, the sterile barrier being a pleated bag or a bellowed boot.
27. The method of claim 25, wherein advancing the guidewire includes pressing the guidewire within the sterile barrier onto a thumb wheel and rolling the thumb wheel to advance the guidewire into the first sleeve, the sterile barrier being a pleated bag.
28. The method of any claim of claims 25-27, further comprising ceasing to advance the guidewire into the insertion site of the patient when a ball end of a proximal-end portion of the guidewire is captured in a constriction of a bore in a proximal-end portion of a second sleeve of the guidewire-management device.
29. The method of any claim of claims 25-28, further comprising withdrawing the guidewire from the insertion site of the patient through the hub of the medical device and into the first sleeve, a seal in the first sleeve blocking fluid from entering or escaping the guidewire-management device when withdrawing the guidewire from the insertion site.
30. The method of claim 29, wherein a distal-end portion of the guidewire includes a 'J'-shaped tip configured to straighten as the tip of the guidewire enters the first sleeve when withdrawing the guidewire from the insertion site.

31. The method of either claim 29 or 30, further comprising ceasing to withdraw the guidewire from the insertion site of the patient when a proximal end of the guidewire abuts a plug in a proximal-end portion of a guidewire conduit of the guidewire-management device.