

CLAIMS

1. A guidewire management device comprising:
a housing through which a lumen of a catheter passes; and
a locking mechanism mounted within the housing;
wherein the locking mechanism is configured to lock the housing if a guidewire is present in the lumen and to unlock the housing if the guidewire is absent from the lumen.
2. The guidewire management device as claimed in claim 1, wherein the housing is configured to enclose suture wings of the catheter when the housing is locked.
3. The guidewire management device as claimed in claim 1 or 2, wherein the locking mechanism comprises a lever structure comprising a first arm connected to a second arm, wherein the first arm is configured to abut the lumen and the second arm is configured to be actuated by the first arm.
4. The guidewire management device as claimed in claim 3, wherein the first arm is displaceable from a first position to a second position if the guidewire is inserted through the lumen, the first arm actuating the second arm to engage with a latch member to lock the housing.
5. The guidewire management device as claimed in claim 4, wherein the first arm is displaceable from the second position to the first position if the guidewire is removed from the lumen, the first arm actuating the second arm to disengage from the latch member to unlock the housing.
6. The guidewire management device as claimed in any one of the preceding claims, further comprising a guidewire holder connectable to an end of the lumen, wherein the guidewire holder comprises an elongated tube configured to receive an end of the guidewire.
7. The guidewire management device as claimed in claim 6, wherein the guidewire holder comprises a body comprising a curved track, and wherein the elongated tube is disposed along the curved track.

8. The guidewire management device as claimed in claim 7, wherein the body further comprise a depression configured to receive a thumb of a user, wherein at least a portion of the curved track is disposed in the depression.
9. A method of manufacturing a guidewire management device, the method comprising:
forming a housing having a channel for receiving a lumen of a catheter; and
mounting a locking mechanism within the housing such that the locking mechanism locks the housing if a guidewire is present in the lumen and unlocks the housing if the guidewire is absent from the lumen.
10. The method as claimed in claim 9, wherein forming the housing further comprises forming an enclosure for enclosing suture wings of the catheter when the housing is locked.
11. The method as claimed in claim 9 or 10, wherein the locking mechanism comprises a lever structure comprising a first arm connected to a second arm, wherein the second arm is configured to be actuated by the first arm, and wherein mounting the locking mechanism comprises disposing the first arm to abut the lumen.
12. The method as claimed in any one of claims 9 to 11, further comprising connecting a guidewire holder to an end of the lumen, wherein the guidewire holder comprises an elongated tube configured to receive an end of the guidewire.
13. The method as claimed in claim 12, further comprising forming a body of the guidewire holder, the body having a curved track, and disposing the elongated tube along the curved track.
14. The method as claimed in claim 13, wherein forming the body further comprises forming a depression for receiving a thumb of a user, wherein disposing at least a portion of the curved track in the depression.
15. A guidewire management method comprising:
providing the device as claimed in claim 6;

inserting a guidewire through a lumen of a catheter, the lumen passing through the housing of the device, until the guidewire reaches a predetermined depth;

advancing the catheter relative to the guidewire while holding the end of the guidewire using the holder; and

after the catheter reaches a predetermined position, withdrawing the guidewire from the lumen using the holder.