CLAIMS

1. A method for validating a decontamination procedure performed on a medical device using a decontamination system comprising a wipe, the method comprising:

capturing a video stream of a work area in which the decontamination procedure is carried out by a user;

analysing the video stream using a trained neural network to identify two or more decontamination events in the video stream that correspond with the decontamination procedure being correctly performed on the medical device, the decontamination events comprising:

- applying a decontaminating composition of the decontamination system to the wipe as a foam, and
- applying the decontaminating composition to the medical device using the wipe;

determining, based on the identified decontamination events, if the decontamination procedure has been completed; and

upon determining that the decontamination procedure has been completed, causing a corresponding indication to be provided to the user.

2. A method according to Claim 1, wherein determining if the decontamination procedure has been completed comprises determining a cumulative time for which the decontaminating composition is in contact with the medical device, and comparing the cumulative time to a predetermined minimum contact time.

3. A method according to any preceding claim, wherein determining if the decontamination procedure has been completed comprises determining if the decontaminating composition has been applied to the whole of a predetermined area of the medical device.

4. A method according to any preceding claim, wherein the decontamination composition is absorbed or impregnated in the wipe.

5. A method according to any preceding claim, wherein the medical device comprises a distal operative part and a proximal part, and wherein determining if the decontamination procedure has been completed comprises determining if the wipe has been moved in a direction away from the proximal part and towards the distal operative part.

6. A method according to Claim 5, wherein the decontamination events further comprise movement of the wipe in the direction away from the proximal part and towards the operative part while in contact with the device.

7. A method according to Claim 5 or Claim 6, wherein the decontamination events further comprise application of the wipe to the proximal part when first applying the wipe to the device.

8. A method according to any preceding claim, wherein determining if the decontamination procedure has been completed comprises determining if the wipe has been applied to all of a target area of the medical device.

9. A method according to any preceding claim, further comprising:

when analysing the video stream, identifying one or more alert events in the video stream that correspond with potential errors being made during performance of the decontamination process;

and upon identification of an alert event, causing a corresponding alert to be provided to the user.

10. A method according to Claim 9 when dependent on any of Claims 5 to 7, wherein the alert event or one of the alert events comprises movement of the wipe in a direction towards the proximal part from the operative part while in contact with the device.

11. A method according to Claim 9 when dependent on any of Claims 5 to 7 or according to Claim 10, wherein the alert event or one of the alert events

comprises application of the wipe to the operative part when first applying the wipe to the device.

12. A method according to any of Claims 9 to 11, wherein the alert event or one of the alert events comprises movement of the wipe at an excessive speed while in contact with the device.

13. A method according to any of Claims 9 to 12, wherein the alert event or one of the alert events comprises non-visibility in the work area of the user's hands, at least a part of the decontamination system and/or at least a part of the medical device.

14. A method according to any of Claims 9 to 13, wherein the alert event or one of the alert events comprises placing the device outside a designated clean part of the work area after applying the decontaminating composition to the device.

15. A method according to any preceding claim, wherein a subsequent further decontamination event comprises placing the device in a designated clean part of the work area.

16. A method according to any preceding claim, wherein a preceding further decontamination event comprises the presentation of a container containing at least a part of the decontamination system.

17. A method according to any preceding claim, comprising:

obtaining information relating to the medical device;

obtaining information relating to the decontamination system;

checking if the decontamination system and the medical device are compatible by cross-referencing the obtained information with a stored dataset; and

causing a corresponding indication of compatibility or non-compatibility to be provided to the user.

18. A method according to Claim 17, comprising analysing the video stream to obtain the information relating to the medical device and/or the information relating to the decontamination system.

19. A method according to Claim 18, comprising obtaining user confirmation of the information obtained by analysing the video stream.

20. A method according to any of Claims 17 to 19, wherein:

the information relating to the medical device comprises one or more of: a device type; a serial number;

and the information relating to the decontamination system comprises one or more of: a decontamination system type; a lot or batch number; a date of manufacture; a use-by or expiry date.

21. A method according to any of Claims 16 to 20, wherein the information relating to the medical device and/or the information relating to the decontamination system is used when determining if the decontamination procedure has been completed.

22. A method according to any of Claims 17 to 21, further comprising electronically logging the information relating to the medical device and the information relating to the decontamination system.

23. A method according to any preceding claim, comprising electronically logging that the decontamination procedure has been completed.

24. Apparatus for validating a decontamination procedure performed on a medical device using a decontamination system comprising a wipe, the apparatus comprising:

a camera system for capturing a video stream of a work area in which the decontamination procedure is carried out by a user;

an output device for providing audio, textual and/or visual indications

to the user;

an image analysis module configured to receive the video stream and to identify two or more decontamination events in the video stream that correspond with the decontamination procedure being correctly performed, the decontamination events comprising:

- applying a decontaminating composition of the decontamination system to the wipe as a foam, and
- applying the decontaminating composition to the medical device using the wipe; and

a validator module configured to determine, based on the or each identified decontamination event, if the decontamination procedure has been completed, and to cause the output device to provide a corresponding indication to the user upon determining that the decontamination procedure has been completed;

wherein the image analysis module comprises a neural network-based classifier trained to recognise said one or more decontamination events in the video stream.

25. An apparatus according to Claim 24, further comprising a logging module configured to electronically log that the decontamination procedure has been completed.

26. An apparatus according to Claim 24 or 25, comprising a smartphone or tablet computer device.