

Claims:

1. A cassette for use with a pumping apparatus having a pumping system for engaging a pump set, the cassette comprising:

a cassette body configured for releasable attachment to the pumping apparatus to mount the cassette on the pumping apparatus, the cassette body having at least one mounting formation; and

at least one identification member mounted on the cassette body by the mounting formation of the cassette body, the identification member and mounting formation being formed to mount the identification member in any one of a plurality of predetermined orientations, each predetermined orientation indicating a different functional configuration of the pump set.

2. The cassette of claim 1, further comprising a fitting mounted on the cassette body, the fitting including the at least one mounting formation.

3. The cassette of claim 2, further comprising tubing, wherein the fitting includes an inlet port and an outlet port, the tubing connecting the inlet port to the outlet port.

4. The cassette of claim 1, wherein the at least one identification member is an axially magnetized magnet, and the plurality of predetermined orientations include one of a north and south pole of the magnet facing in a first direction, and said one of the north and south pole of the magnet facing in a second direction, opposite the first direction.

5. The cassette of claim 1, wherein the at least one identification member is a diametrically magnetized magnet, and the plurality of predetermined orientations include multiple angular positions of the magnet.

6. The cassette of claim 1, wherein the at least one identification member comprises a single identification member, the single identification member and mounting formation being configured to indicate up to eight different functional configurations.

7. The cassette of claim 1, wherein the at least one identification member comprises a magnet and the at least one mounting formation comprises a pocket in the cassette body.

8. The cassette of claim 1, further comprising:

a plurality of identification members, the identification members being positioned and arranged on the cassette body to indicate the functional configuration of the pump set as being one of feed, feed/flush, feed wifi, feed/flush wifi, neonatal feed, neonatal feed/flush, neonatal feed wifi, and neonatal feed/flush wifi; or

a tubing, wherein the cassette body defines a housing having an interior that receives at least a portion of the tubing.

9. A fitting assembly for use in a cassette of a pump set, the fitting assembly comprising: a body comprising an inlet port and an outlet port, the body being configured for attachment to the cassette; and at least one identification member mounted on the body for indicating a functional configuration of the pump set.

10. The fitting assembly of claim 9, further comprising a pocket formed in the body, the at least one identification member comprising a magnet received in the pocket; or

wherein the at least one identification member is one of an axially magnetized magnet and a diametrically magnetized magnet.

11. A method of assembling a cassette, the method comprising providing a cassette for use with a pumping apparatus having a pumping system for engaging a pump set, and mounting at least one identification member to the cassette for indicating a functional configuration of the pump set.

12. The method of claim 11, wherein:

the identification member is a magnet, mounting the at least one identification member to the cassette comprising selectively mounting the magnet to the cassette with one of a north pole and a south pole of the magnet facing away from the cassette for being identified by a sensor in the pumping apparatus to indicate the functional configuration of the pump set; or

the at least one identification member is a diametrically magnetized magnet for being identified by an angularity magnet sensor in the pumping apparatus to indicate the functional configuration of the pump set.

13. A flow control system comprising: a flow control apparatus including a pumping device and a sensor; and a pump set including a cassette and tubing mounted to the cassette, the cassette being configured for releasable attachment to the flow control apparatus to mount the cassette and tubing to the flow control apparatus, the cassette having at least one mounting formation and at least one identification member mounted on the cassette by the mounting formation, the identification member and mounting formation being formed to mount the identification member in any one of a plurality of predetermined orientations, each predetermined orientation indicating a different functional configuration of the pump set, the sensor being configured to detect the presence and orientation of the at least one identification member for determining the functional configuration of the pump set.

14. The system of claim 13, wherein:

the at least one identification member is an axially magnetized magnet, and wherein the plurality of predetermined orientations include one of a north and south pole of the magnet facing in a first direction, and said one of the north and south pole of the magnet facing in a second direction, opposite the first direction, and, wherein the sensor comprises a hall-effect sensor; or

the flow control apparatus comprises a plurality of sensors, each sensor being configured to detect the presence and orientation of an identification member for determining the functional configuration of the pump set..

15. The system of claim 14, wherein the at least one identification member is a diametrically magnetized magnet, and wherein the plurality of predetermined orientations include multiple angular positions of the magnet, preferably wherein the sensor comprises an angularity magnet sensor.