

SUDS **190**. The waste reservoir **156** may have a viewing window **198** with indicia **200**, such as graduated markings, that indicate the fill level of the waste reservoir **156**.

[0055] With reference to **FIG. 4A**, the SUDS **190** has a fluid inlet port **202** that is configured for releasable connection with the connection port **192** (shown in **FIG. 3A**). The fluid inlet port **202** receives fluid delivered from the fluid injector system **100**. The fluid inlet port **202** is desirably a hollow, tubular structure, as shown in **FIG. 4B**. The SUDS **190** further has a waste outlet port **204** that is configured for releasable connection or association with the waste inlet port **196** (shown in **FIG. 3A**). The waste outlet port **204** receives waste fluid and delivers such waste fluid to the waste reservoir **156** during, for example, a priming operation of the SUDS **190**. The waste outlet port **204** is desirably a hollow, tubular structure, as shown in **FIG. 4B**. The waste outlet port **204** may be connected to, inserted into, or located in the waste inlet port **196** so that the waste fluid may flow through the waste inlet port **196** and continue into waste reservoir **156**. The fluid inlet port **202** and the waste outlet port **204** may be spaced apart from each other by a spacer **206**. In some embodiments, the spacer **206** is dimensioned to position the fluid inlet port **202** and the waste outlet port **204** for alignment with the connection port **192** and the waste inlet port **196**, respectively. It is noted that the SUDS **190** is shown in **FIG. 4A** in a state after removal from packaging (not shown). Prior to use, the SUDS **190** is desirably packaged in a pre-sterilized, sealed package that protects the SUDS **190** from contamination with air or surface-borne contaminants. Alternatively, the sealed package and SUDS **190** may be sterilized after packaging.

[0056] The SUDS **190** desirably has an asymmetrical structure, so that the user can only attach the SUDS **190** to the MUDS **130** in one orientation. In this manner, the user is prevented from attaching the fluid inlet port **202** to the waste inlet port **196**. In some embodiments, a fin **207** may be provided on at least a portion of the SUDS **190** to prevent erroneous insertion of the SUDS **190** in the connection port **192**. In certain embodiments, the fin **207** may be formed on the spacer **206** proximate to the waste outlet port **204**. In this manner, the fin **207** may interfere with the incorrect insertion of the SUDS **190** into the connection port **192**. Structures and shapes other than fin **207** may be used to prevent erroneous insertion of the SUDS **190** into connection port **192**,

[0057] In some embodiments, tubing **208** may be connected at its proximal end **210** to the fluid inlet port **202**. The tubing **208** is configured to deliver fluid received from the fluid inlet port **202**. The distal end **212** of the tubing **208** may have a connector **214** that is configured for connection with the waste outlet port **204** or a fluid path connected to the patient (not

17. The medical connector of claim 1, wherein the fluid inlet port has at least one seal for forming a fluid-tight connection between the fluid inlet port and the connection port.

18. A single-use disposable set connector comprising:

- a fluid inlet port configured for removable engagement with a connection port of a multi-use disposable set (MUDS) to establish a fluid connection therewith;

- a waste outlet port configured for removable engagement with a waste inlet port of the MUDS to establish a fluid connection therewith;

- a spacer separating the fluid inlet port from the fluid outlet port;

- a locking mechanism configured for removably securing the connector to the MUDS, the locking mechanism having a flexible tab that is deflectable between an engaged position and a disengaged position by deflecting at least a portion of the flexible tab;

- a patient fluid line connected, at a first end, to the fluid inlet port; and

- a connector connected to a second end of the patient fluid line,

wherein fluid flow through the patient fluid line is unidirectional from the first end to the second end, and

wherein the connector connected to the second end of the patient fluid line is configured for removable fluid connection with the waste outlet port for delivering fluid to a patient.

19. A method of delivering fluid using a single-use disposable set (SUDS) connector, the method comprising:

- fluidly connecting a fluid inlet port of the SUDS connector with a connection port of a multi-use disposable set (MUDS);

- establishing a fluid communication between a waste outlet port of the SUDS connector and a waste inlet port of the MUDS;

- priming the SUDS connector by delivering fluid from the fluid inlet port to the waste outlet port through a fluid line;

- disconnecting the fluid line from the waste outlet port; and

- delivering fluid from the fluid inlet port to a connector through the fluid line.