CLAIMS

1. A method for recovering filtered fluid retained in a filter system including a filter device comprising a housing having an inlet and an outlet defining a filtration flow path between the inlet and the outlet, and a porous filter medium across the filtration flow path, the porous medium having an upstream side and a downstream side; the system also including a filtered fluid receiving container arranged downstream of the outlet, and a fluid flow path between the outlet and the filtered fluid receiving container, the fluid flow path comprising a first hollow conduit having a first outer wall, a first inner wall, and a first inner diameter; and a second hollow conduit having a second outer wall, a second inner wall, and a second inner diameter; wherein the first hollow conduit and the second hollow conduit are coaxially arranged with the first hollow conduit arranged within the second hollow conduit, with a space between the first outer wall and the second inner wall; the method comprising:

(a) passing sterile air and/or sterile gas through the outlet of the filter device and through the first inner diameter of the first hollow conduit along the fluid flow path into the filtered fluid receiving container;

(b) passing fluid to be filtered along the filtration flow path through the filter device and passing filtered fluid through the space between the first outer wall and the second inner wall along the fluid flow path into the filtered fluid receiving container, wherein a volume of filtered fluid is retained in the housing between the downstream side of the porous filter medium and the outlet;

and,

(c) allowing the sterile air and/or sterile gas to pass from the filtered fluid receiving container through the first inner diameter of the first hollow conduit along the fluid flow path and through the outlet into the housing of the filter device, and displacing retained filtered fluid through the space between the first outer wall and the second inner wall along the fluid flow path into the filtered fluid receiving container.

2. A method for recovering filtered fluid retained in a filter system including a filter device comprising a housing having an inlet and an outlet defining a filtration flow path between the inlet and the outlet, and a porous filter medium across the filtration flow path, the porous medium having an upstream side and a downstream side; the system also including a filtered fluid receiving container arranged downstream of the outlet, and a fluid flow path between the outlet and the filtered fluid receiving container, the fluid flow path comprising a first hollow conduit having a first inner diameter, and a second hollow conduit having a second inner diameter, wherein the first hollow conduit and the second hollow conduit are coaxially arranged with the first hollow conduit within the second hollow conduit, the method comprising:

(a) filtering fluid by passing the fluid along the filtration flow path through the filter device and passing filtered fluid through the space between the first outer wall and the second inner wall along the fluid flow path into the filtered fluid receiving container, wherein a volume of filtered fluid is retained in the housing between the downstream side of the porous filter medium and the outlet;

and,

(b) allowing sterile air and/or the sterile gas to pass from the filtered fluid receiving container through the first inner diameter of the first hollow conduit along the fluid flow path and through the outlet into the housing of the filter device, and displacing retained filtered fluid through the space between the first outer wall and the second inner wall along the fluid flow path into the filtered fluid receiving container.

3. The method of claim 1, including passing air and/or gas through a sterilizing grade porous filter medium to produce the sterile air and/or the sterile gas, before passing the sterile air and/or the sterile gas along the filtration fluid flow path.

4. A filter system for recovering fluid comprising:

(a) a filter device comprising a housing having an inlet and an outlet defining a filtration flow path between the inlet and the outlet, and a porous filter medium across the filtration flow path, the porous medium having an upstream side and a downstream side;

(b) a filtered fluid receiving container arranged downstream of the outlet, and

(c) a fluid flow path between the outlet and the filtered fluid receiving container, the fluid flow path comprising a first hollow conduit having a first inner diameter, and a second hollow conduit having a second inner diameter, wherein the first hollow conduit and the second hollow conduit are coaxially arranged with the first hollow conduit within the second hollow conduit.

5. The filter system of claim 4, further comprising a sterilizing grade filter device arranged upstream of the filter device in (a).