

Abstract

PLUNGER PUMPING ARRANGEMENT FOR A HOLLOW FIBER FILTER

A fluid filtration assembly includes a filter housing having a first end for fluid connection with a fluid storage vessel. A filter cartridge is disposable within the filter housing, and a plunger pump is coupled at a second end of the filter housing. The plunger pump includes a housing having a rigid portion and a flexible portion. The flexible portion has a plunger-engaging portion for coupling to the plunger of an actuator. The flexible portion selectively movable with respect to the rigid portion via the actuator. The filter cartridge can be a hollow fiber filter. The plunger pump can be configured to induce alternating tangential flow in at least a portion of the assembly. The fluid filtration assembly can be provided as a disposable single-use arrangement.

Figure 3