

FLUID TREATMENT SYSTEM

ABSTRACT

There is described a fluid treatment system comprising: (i) a fluid inlet; (ii) a fluid outlet; and (iii) a fluid treatment zone in fluid communication with the fluid inlet and the fluid outlet. The fluid treatment zone comprises a housing within which is disposed a fluid separation section (the separation section may include a single separation device or a combination of two or more similar or dissimilar separation devices) and a fluid radiation section in fluid communication with one another. The fluid separation section removes solids in the fluid and the fluid radiation section irradiates the fluid to deactivate microorganisms in the fluid. The fluid separation section and the fluid radiation section are configured to have a substantially common fluid flow path which significantly reduces the space or footprint requirement of and/or significantly reduces hydraulic head loss (pressure drops) in the overall fluid treatment system while allowing the two sections to perform their respective functions.

Figure 3