

ABSTRACT

A fluid filtration unit comprising a housing accommodating a stationary cylindrical filter element, defining a raw fluid chamber extending between an inlet of the housing and raw fluid face of the cylindrical filter element, and a filtered fluid chamber extending between a filtered fluid face of the filter element and an outlet from the housing. A flushing and backspraying assembly comprising at least one flushing pipe coupled to a lower pressure source and extending within the raw fluid chamber, and configured with a plurality of flushing nozzles disposed in close proximity with the raw fluid face of the filter element, and at least one backspraying arm coupled to a pressurized fluid source and extending within the filtered fluid chamber and configured with an array of backspraying nozzles disposed in close proximity with the filtered fluid face of the filter element, and a driving mechanism for selectively imparting the flushing and backspraying assembly with rotary and linear motion.