

ABSTRACT

A filtration apparatus comprising a container that houses a filtration tank to which contaminated water is supplied, an agitation tank, and a screw conveyor disposed within said agitation tank is provided. Filtration media is housed within the agitation tank and the container. The agitation tank has lateral surface openings, lower openings, and an upper opening. When the screw conveyor rotates, filtration media as well as water (contaminated water) is conveyed upward from the lower openings to the upper opening while being agitated. At the same time, filtration media circulates between the agitation tank and the container and is cleansed. When cleansing is complete, a backwash water supply pump backwashes water, and expels contaminants separated and removed from the filtration media out of the container by an expulsion pump. Lateral surface doors close lateral surface openings by drive means only during cleansing (agitation). This structure increases the filtration area.