

ABSTRACT

The water treatment system of the present invention includes: a biological treatment stage for treating an organic wastewater by an action of a microorganism; an ozone gas producing stage for generating ozone gas; a sludge transferring stage for withdrawing and transferring a part of the microorganism-mixed liquid in the biological treatment stage; an ozone treatment stage for bringing ozone into contact with the part of the microorganism-mixed liquid transferred; and a treated liquid returning stage for returning the treated liquid after the ozone treatment from the ozone treatment stage to the biological treatment stage. Undecomposed aggregated microorganisms after the ozone treatment are separated and concentrated, and an ozone treatment is selectively applied to the aggregated undecomposed microorganisms thus separated and concentrated.