

ANAEROBIC TREATMENT METHOD AND APPARATUS

Abstract of the Disclosure

Anaerobic treatment of water is performed under anaerobic conditions with a biofilm formed on a surface of a fluid non-biological carrier in a reaction vessel. Stable high-load treatment is performed by preventing the blockage of the reaction vessel caused by the flotation and adhesion of the non-biological carrier in the reaction vessel and effectively recovering the settleability of the carrier floating owing to adhering air bubbles by simple means. A reaction vessel is charged with a fluid non-biological carrier having a size in the range of 1.0 to 5.0 mm and a settling velocity in the range of 200 to 500 m/h. Part of the carrier that has floated and flowed out of the reaction vessel is fed downward through a pipe having a vertical height of 50 cm or more so as to remove air bubbles adhering to the carrier and is returned to the reaction vessel.

Figure 1