

ABSTRACT

Stepwise Alkaline/Ultrasound Pre-treatment of Waste Activated Sludge Prior to Anaerobic Digestion

There is disclosed a process for pre-treating an organic waste, comprising the steps of: (i) providing an organic waste; (ii) treating the organic waste with ultrasound and a first dose of an alkaline and/or peroxide composition; and (iii) adding a second dose of the alkaline and/or peroxide composition after a period of time, while continuing treatment of the waste with ultrasound, wherein in step (ii) the treatment of the organic waste with ultrasound and the first dose of an alkaline composition are started simultaneously or concomitantly. An apparatus adapted for use in said process is also disclosed.

FIG. 1