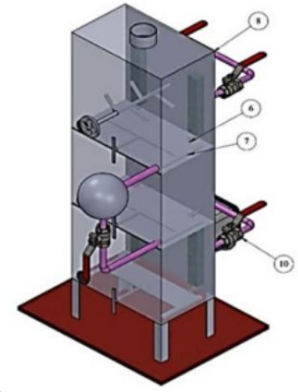




PENDING

(IN202411062676)

## A reactor system for treating organic waste and a method for the same



### NEED

Organic waste management faces significant challenges in efficiency, retention time, and biogas capture. What if there was a way to accelerate waste treatment while maximizing biogas production?

### TECHNOLOGY OVERVIEW

This reactor system efficiently treats organic waste in three chambers, utilizing aerobic and anaerobic digestion to improve waste breakdown, reduce retention time, and optimize biogas production. The system includes robust features like aeration and biogas recirculation.

### TECHNOLOGY KEY FEATURES

1) Three-chamber reactor for sequential aerobic and anaerobic digestion. 2) Biogas recirculation for process optimization. 3) Aeration and mechanical mixing for efficient breakdown. 4) Robust system with rust protection and sampling ports.

[Read more here](#)

### MARKET ANALYSIS

The global waste management market is projected to grow at a CAGR of 5.4%, reaching \$530 billion by 2033. Growing demand for sustainable waste treatment solutions drives this growth. (Source: Grand View Research, 2023)

### Target Industries

1) Waste Management Companies focusing on organic waste and biogas production. 2) Environmental Technology Providers developing efficient waste treatment systems. 3) Municipal and Industrial Sector looking for eco-friendly waste processing solutions.

### AT A GLANCE

- SDG 6 (Clean Water and Sanitation), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action)

Technology is available for licensing/ co-development.

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