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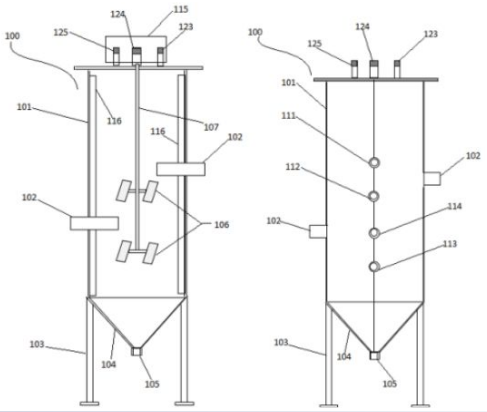
PENDING

(IN202111051662)
An anaerobic reactor for efficient biomethanation of organic waste



NEED

Organic waste contributes to 2.5 billion tons of global waste annually, much of which is underutilized in renewable energy production. Traditional methods waste efficiency. What if we could maximize methane output while ensuring precise control of the biomethanation process?

TECHNOLOGY OVERVIEW

This anaerobic reactor technology offers a novel approach to biomethanation of organic waste. It integrates real-time monitoring of temperature, pressure, reactor volume, and mixing to optimize biogas production. The process maximizes methane yield and reduces waste through an efficient and automated system.

TECHNOLOGY KEY FEATURES

Efficient biomethanation through precise control of temperature, pressure, mixing, and volume. Real-time data tracking with continuous remote monitoring. Optimized for organic waste like food waste, sewage, and landfill leachate. Maximizes methane production while minimizing waste.

Read more here

MARKET ANALYSIS

The global biogas market is projected to grow at a 6.5% CAGR, reaching $58.8B by 2033. India's biofuel market is expected to grow at a 9.6% CAGR. Key drivers include demand for renewable energy, waste management, and sustainability. (Source: MarketsandMarkets, Allied Market Research)

Target Industries

1) Biofuel production facilities leveraging waste-to-energy solutions 2) Waste management firms enhancing organic waste processing 3) Renewable energy companies developing sustainable, scalable biogas production systems

AT A GLANCE

- SDG 7 (Affordable and Clean Energy), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action)

Technology is available for licensing/ co-development.

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