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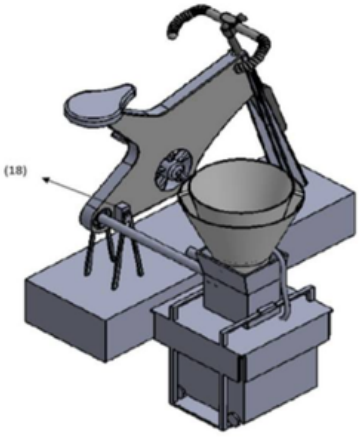
A SYSTEM AND METHOD FOR SHREDDING ORGANIC WASTE USING CROWD SOURCED MANUAL POWER

Seeking parties interested in licensing and commercialization of technology.

Technology Brief

This technology provides an eco-friendly system and method for converting organic food waste into compost by harnessing crowd-sourced manual energy. The system integrates a stationary bicycle mechanically connected via a long drive shaft to shredder blades housed within a processing assembly. As a user pedals, food waste from a loader bin is mechanically shredded and directed into a mobile collector bin, where automated dosing mechanisms introduce water and composting catalysts. Embedded sensors continuously monitor both the physical composting parameters and the user's pedaling effort, feeding this data into a gamified IoT application that rewards users to promote active community engagement and sustainable waste management practices.

Block Diagram



Technical Applications

This crowd-powered shredding system is designed for decentralized waste management across residential complexes, educational institutions, public parks, fitness centers, and community gardens. It offers an off-grid, energy-efficient solution for local municipal bodies and bulk waste generators seeking to reduce landfill contributions, process kitchen waste at the source, and engage citizens through interactive, health-focused sustainability initiatives.

Salient Features

- Crowd-Powered Mechanical Shredding
- Automated Catalyst & Moisture Dosing
- Gamified IoT Sensor Integration

Glimpse of the Technology

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iTNT-TECH-0193

TECHNOLOGY SECTOR
Clean Energy & Sustainability

IP STATUS
Patent Granted

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TECHNOLOGY READINESS LEVEL
TRL 3

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