

# METHOD AND DEVICE FOR FUEL AND POWER GENERATION BY CLEAN COMBUSTION OF ORGANIC WASTE MATERIAL

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## Description

Solid wastes, being derivatives of fossil fuels, are an extremely rich source of energy. Moreover, it has been observed that the quantity of such wastes has increased many folds over the past few decades. However, the conventional direct combustion techniques for treatment of these wastes lead to diffused flames with uncontrollable, inefficient energy production, along with generation of unhealthy soot and hydrocarbons. **This novel approach enables the development and use of a system for clean combustion of organic waste materials to generate much greener fuel and power without releasing pollutants.**

## Value Proposition

The system/method:

- Involves the use of pyrolysis to generate pyrolyzed fuels which are either used as such or burned to generate energy
- Allows for a clean burning of waste plastics with premixed flames (without releasing pollutants)
- Enables a careful energy balancing with minimization of heat losses as observed in prior art techniques
- Allows for a large scale utilization of organic wastes, thereby decreasing/emptying landfill spaces
- Would be useful for key commercial applications such as advanced thermal-to-energy conversions, and clean waste-to-energy power generation

## Intellectual Property Status

PCT Application PCT/US2011/063306

## License Status

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