Patent Search

Invention Title	A SYSTEM FOR SACCHARIFICATION, GASIFICATION AND UPGRADATION OF LIGNOCELLULOSE WASTE FOR PRODUCTION OF GREEN ENERGY
Publication Number	01/2024
Publication Date	05/01/2024
Publication Type	INA
Application Number	202211037786
Application Filing Date	30/06/2022
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	BIO-MEDICAL ENGINEERING
Classification (IPC)	C12M0001000000, C12M0001107000, B09B0003000000, A01G0009240000, B09B0001000000

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Abstract:

ABSTRACT A SYSTEM FOR SACCHARIFICATION, GASIFICATION AND UPGRADATION OF LIGNOCELLULOSE WASTE FOR PRODUCTION OF GREEN ENERGY The present invention describes a self-sustainable system for saccharification, gasification and upgradation of lignocellulose waste for production of green energy. In the present invention, the system is driving its power requirements from the batteries charged using solar panels and fulfils Sustainable Development Goal of climate change mitigation by reducing Green House Gases by using microbial functional diversity. The present invention automates the process of innovative biogas generation process, wherein the Lignocellulosic waste (municipal solid waste (MSW) of landfill sites contains methane, carbon dioxide and nitrous oxide) shall be first shredded in a shredding chamber at controlled temperature environment with the help of temperature sensor and micro-controller. Accompanied Drawing [Fig. 1]

Complete Specification

DESC:FIELD OF INVENTION:
This invention generally relates to the field of the self-sustainable system for saccharification, gasification and upgradation of lignocellulose waste for production of green energy, and more particularly relates to developing a Self-Sustainable System for Saccharification, gasification and upgradation of Lignocellulose waste for production of Green Energy by using Renewable energy and ICT.
BACKGROUND OF THE INVENTION
Lignocellulose is the biomass resource for enriching the most in the world, is fired by raw material production of lignocellulose Material ethanol not only can effectively alleviating energy crisis, mitigation environmental pollution, and meet the big rule of future fuel ethanol The target of sustainable development of mould petroleum replacing, with great economic worth and social meaning. At present, it is wooden Cellulose simultaneous saccharification and fermentation technique (Simultaneous saccharification and fermentation, SSCF) It is widely used in the production of cellulosic ethanol. However, lignocellulosic materials for fuel ethanol has to pass through pre-place The conditions such as reason, the high temperature of pre-processing process, high pressure can make lignocellulose that Partial digestion occurs, and discharge various The compounds such as organic acid, furans and phenols. These compounds to the activity of enzymolysis process cellulase, Saccharomycetic growth and fermentation have obvious inhibitory action, cause cellulase, saccharomyces cerevisiae normal Work, becomes the major obstacle of cellulosic ethanol production.
There are few references made to the present invention as given below:
CN108866108A discloses a production biological flue gas technical field, in particular to a kind of method with lignocellulosic material production biological flue gas includes the following steps:(1) lignocellulosic material smashes;(2) into the lignocellulosic material of crushing, addition ionic liquid 1,3- methylimidazole Methylsulfate, 1- ethyl-3-

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Page last updated on: 26/06/2019