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INTRODUCTION

In view of the recent amendment made in the Patents Act, 1970 by the Patents (Amendment) Act, 2005 effective from 01st January 2005, the Official Journal of The Patent Office is required to be published under the Statute. This Journal is being published on weekly basis on every Friday covering the various proceedings on Patents as required according to the provision of Section 145 of the Patents Act 1970. All the enquiries on this Official Journal and other information as required by the public should be addressed to the Controller General of Patents, Designs & Trade Marks. Suggestions and comments are requested from all quarters so that the content can be enriched.

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| (51) International classification | :B03B0009060000, F16H0057080000, B09B0003000000, B02C0018220000, | (71)Name of Applicant: 1)R. V. College of Engineering Address of Applicant: Mysore Road, R.V. Vidyaniketan post, Bengaluru - 560059 Karnataka, India. Bengaluru Karnataka India |
|---|---|--|
| (4) P. L. P | A61L0011000000 | (72)Name of Inventor: |
| (31) Priority Document No | :NA | 1)Vinutha Moses |
| (32) Priority Date | :NA | 2)Harshith Rathore |
| (33) Name of priority country | :NA | 3)Solanki Prasad Amar |
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(57) Abstract:

The present invention discloses a novel apparatus for enzymatic hydrolysis for organic waste management, the apparatus comprises a mechanical reduction assembly with a dual shaft shredder, reducing waste to a small, defined size, and a hydrothermal treatment unit that heats the shredded waste to enhance enzymatic reactivity. Central to the system is the enzymatic reaction chamber, equipped with a blending mechanism for even enzyme distribution. The apparatus regulates pH levels, enzyme-substrate ratios, and temperature within the chamber, optimizing the hydrolysis process. This apparatus efficiently processes the organic waste into monomeric constituents, significantly reducing waste volume and aiding in the extraction of valuable byproducts with enhanced nutrient

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