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PUBLICATION OF THE PATENT OFFICE

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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(57) Abstract :

A METHOD TO ENHANCE THE PERFORMANCE OF A MICROBIAL FUEL CELL ABSTRACT A double-chambered Microbial Fuel Cell (MFC) comprising two chambers such as an anode chamber consisting of an anode electrode and the synthetic wastewater as a substrate with mutant strain of Pseudomonas Aeruginosa and a cathode chamber consisting of a cathode electrode and a distilled water; the two chambers are separated by a membrane; complex biochemical reactions take place at anode involving breaking down of complex organic compounds into simple molecules, protons and electrons and these reactions are catalyzed by mutant strain of Pseudomonas Aeruginosa; the electrons generated at anode travel through the external circuit and reach cathode to form water by re-combining with protons and oxygen and the flow of electrons through the external circuit is thus utilized as electricity by the load, the double-chambered Microbial Fuel Cell (MFC) with the mutant strain of Pseudomonas Aeruginosa converts chemical energy of the organic compounds present in synthetic wastewater into electricity. The double chambered Microbial Fuel Cells (MFC) with mutant strains helps in achieving an 8-fold increase in voltage generation instead of pure strain

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