"Design of a Maximum Power Point Tracker (MPPT)"

This thesis paper is submitted to the Department of Electrical & Electronic Engineering, Stamford University Bangladesh for the partial fulfillment of the degree of Bachelor of Science in Electrical & Electronic Engineering.

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DECLARATION

This is to certify that this work has been done by us and it has not submitted elsewhere for the award of any degree or diploma.

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Thesis Report Series-2009

The series is published by

Bachelor of Science in Engineering thesis report

Department of Electrical & Electronic Engineering

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The Conclusion and viewpoints represented in this study are those of the authors and do not necessarily coincide with those of the department.

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ACKNOWLEDEMENT

First of all, we like to show our highest gratitude to the Almighty Allah for His kindness on us that make it possible for us to complete the study and preparation of this project and thesis.

The thesis work “Design of a Maximum Power Point Tracker” has been conducted in partial fulfillment of the requirements for the degree of Bachelor of Science (B.Sc.) in Electrical & Electronic Engineering.

This critical works become possible for us due to the unconditional help and co-operation in different ways by many people. We express our gratefulness and thanks to them for their assistance in preparation of this project and thesis.

We are very grateful to our Supervisor, Md.Atiqul Islam, Senior Lecturer of the Department of Electrical & Electronic Engineering, Stamford University Bangladesh for his sincere co-operation and sufficient time for discussions and continuous suggestions.

We are indebted to Prof.A. M. Rezaul Karim Talukder, the Chairman of the Department of Electrical & Electronic Engineering, Stamford University Bangladesh for giving us patient hearing ,sufficient time for discussions and continuous suggestions and guidance for preparation of this ‘Project and Thesis’. He is also our respected teacher who helped us a lot in many ways unlimitedly not only in preparation of this project and thesis but also to fulfill the requirements for earning the degree of B.Sc. in Electrical & Electronic Engineering.

We are also grateful to all of our teachers of the university for their co-operation and dedication teaching for the achievement of the degree of B.Sc. in Electrical & Electronic Engineering. Co-operation and assistance of all the officers and staffs of the Stamford University Bangladesh are healthfully acknowledged.

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Date: 12.07.2009

ABSTRACT

Power obtained from a photovoltaic (PV) array need to be processed for optimum utilization. The Maximum Power Point Tracker (MPPT) makes it sure that the load always gets the maximum available power obtained from the PV array.

For different types of load condition and solar insolation variation, the power extracted from the solar panel varies .The current through the panel and the voltage across it is multiplied by an analogue multiplier given a signal at the output proportional to the PV power. The proportional power signal is differentiated whose output is employed to vary the duty cycle of a DC-TO-DC converter to optimize the deliverance of power to the load.

In our thesis paper we designed and studied the **Maximum Power Point Tracker (MPPT)** of a solar system.