DUAL AXIS SOLAR TRACKING SYSTEM

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ABSTRACT

Increased demand for energy causes a fossil fuel source available is decreased. Environmental pollution that occurred raise concerns. This problem causes people to exploit new technologies to produce clean and renewable energy such as solar energy. In this technical paper, a system for collecting the solar energy from the sun was created by using solar tracking system. The system used PIC microcontroller in order to control the movement of solar panel towards the sun. Theoretically described as the energy collected from the sun will be better if the solar panel position always facing the sun.

TABLE OF CONTENTS

DECLARA	ATION	i
APPROVA	AL	ii
ACKNOW	VLEDGEMENT	iii
ABSTRACT		iv
TABLE OF CONTENTS		v
LIST OF FIGURES		viii
LIST OF TABLES		х
LIST OF SYMBOLS OF ABBREVIATIONS		xi
CHAPTE	R 1: INTRODUCTION	
1.1	INTRODUCTION	1
1.2	SYSTEM OVERVIEW	3

1.3	PROBLEM STATEMENT	4
1.4	PROJECT OBJECTIVE	4
1.5	SCOPE OF PROJETCS / LIMITATION	4
1.6	PROJECT OUTLINES	5

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

Solar Energy is most unlikely to vanish and is utilized as renewable source of energy. The method of extracting electrical energy from solar energy is enhancing as renewable energy source.

Compared to the other conventional renewable energy sources, solar energy had become one of the most essential resource of electrical energy [1]. Solar energy has widely practiced and well known because of its cleanliness, abundance and sustainability [2]. Estimation from different researches state that about 0.16% covering of the land on earth can provide 20TW of power within 10% efficient of solar conversion system that is nearly twice the rate of world's fossil energy consumption [3]. The comparisons shows an impressive magnitude that solar energy had which is more than present day human technology can grant for energy. The necessity of tracking mechanism in solar system can be prove by this research.