DESIGN AND CONSTRUCTION OF AN AUTOMATIC NIGHT LIGHT

SWITCH BY

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DECLARATION

I **Wilber Nambasi** hereby declare that this dissertation is my own original work and it has never been submitted for any degree or its equivalent award in any university or institution of high learning within or outside Uganda

Signature...

Date..

APPROVAL

I certify that **Wilber Nambasi** carried our research and wrote this dissertation under my supervision. This dissertation has been submitted with my approval as the supervisor

SUPERVISOR: MR. OWALU ANTHONY

Signature..

Date..

DEDICATION

I dedicate this piece of work to my beloved Mum Mrs. Nabwire Janet, my brothers and sisters and my other relatives who helped me to through this process successfully and finally Mr. Owalu Anthony who have always guided me throughout this journey, May the good Lord bless you abundantly.

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ABSTRACT

The main aim of the study was to design an automatic ON/OFF night light switch using light dependent resistor. Majority of street lights, outdoor lights, and a number of indoor home appliances are typically operated and maintained manually in many occasions. This is tiresome activity and can cause errors in power control which gives room to intruders. A community with full power control reduces theft since criminals prefer darkness to light. An automatic night light switch was successfully designed. It is a simple device that can fit in a very small casing

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1.0   INTRODUCTION

This chapter involves the founders of night light switch with the specific years they were discovering and upgrading the night light switch, the need for night light switch in preference to the other switches, the overall reason and specific reasons for designing an automatic night light switch. The chapter also includes clear explanation of studying how to design an automatic nightlight.

1.1   Background of study.

The first light switch employing "quick-break technology" was invented by John Henry Holmes in 1884 in the Shield field district of Newcastle upon Tyne. The "quick-break" switch overcame the problem of a switch's contacts developing electric arcing whenever the circuit was opened or closed. Arcing would cause pitting on one contact and the build-up of residue on the other, and the switch's useful life would be diminished. Holmes' invention ensured that the contacts would separate or come together very quickly, however much or little pressure was exerted by the user on the switch actuator. The action of this "quick break" mechanism meant that there was insufficient time for an arc to form, and the switch would thus have a long working life. This "quick break" technology is still in use in almost every ordinary light switch in the world today, numbering in the billions, as well as in many other forms of electric switch.

(Electric light years 1878-1899-England'sNorth East).

The toggle light switch was invented in 1897 by William J. Newton

As a component of an electrical wiring or home wiring system, the installation of light switches is regulated by some authority concerned with safety and standards. In different countries the standard dimensions of the wall mounting hardware (boxes, plates, etc.) may

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