



RETSA - Real Time Security Alert

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Abstract

Insecurity is a major challenge in our current world today. Millions of shillings and property has been lost, many lives has been lost due to insecurity. It is high time to embrace innovation and invention of ways to curb the societal problems like this. That is why there is need to come up with faster security alert systems. This innovation is alert system that notifies the owner or users on an illegal access to their property. The system ensures the property access points are secured with active detectors that signal the main system to alert the owner of illegal access. Therefore ensuring that the owner can monitor his property wherever he or she is e.g. outside country, outside the locality. Due to this challenge the (RETSA – Real Time Security Alert) system that notifies the owner or users on an illegal access to their property was developed. The system ensures the property access points are secured with active detectors that signal the main system – (RETSA) to alert the owner of illegal access. Therefore ensuring that the owner can monitor his property wherever he or she is e.g. outside country, outside the locality.

Keywords: RETSA, Detectors, Signal, Security, Alert.

1. Introduction

This is a system that is designed to work as security problem solution. The system allows the owner of the property or person in charge to get notification upon His or Her property Access without Authority. The notification is received by the owners' phone/person in charge phone. The background information of this invention is as follows: The General Concept that lead to birth of this invention came through many experiments and assumptions after an increase of a security challenge in Kenya at most.

The experiments and assumption started in 28th September, 2012 after a huge increase of Insecurity in Polyview Estate in Kisumu City in Kenya where I stayed with my Brother Josephat Yator and His Family. On thinking on how to solve the problem, Alarm installation could come in to my Mind. After that successful trial on the experiments, I took a step in developing my concept. And through advancement of it, lead to birth of many devices using the same concept to enable them work and enable them solve security problems in different fields. The invention gives a wider field of application industrially.

Its Technical field is Information Communication Technology in that it allows Network Connectivity involvement issue and Communication Device components to solve security problem. The principle uses as an information and Communication technology invention is to be applied on Access points of; Vehicle, Domestic Houses / Commercial Buildings, Financial institutions as well as Industries and Factories, including the Cow shed in areas affected by cattle rustling so as to provide Notifications in an Unauthorized Access, to the owner or person in charge within a shortest time possible.



2. The problem

Currently many existing systems do not notify the owner on unauthorized access to their property immediately. This is because most systems send the notification to the emails indicating all information of security status. Other systems send data of security status to an online synchronized system thus compelling the owner to login to the site creating a waste of time for response. That is why I came up with the system to solve this by sending alert to a mobile phone via short message service popularly known as SMS.

3. Objectives

3.1 The main objective

The main objective of this system is to alert the owner or user on illegal access to property on time.

3.2 Specific objectives

The specific objectives of the system is to reduce the crimes rate in Kenya and the world at large, to create thousands of jobs to thousands of technicians and installers, to safeguard property and livestock in cattle rustling areas and people lives.

4. Literature review

There are some of the security systems that exist, Examples of this are Biometric locks, key code locks and CCTV Systems. There are systems that exist but are more complex. That is if you were to monitor your property accesses, it will take you more time to do so. Take a case of biometrics, when an intruder bypasses the room via a window, the owner won't be able to notice but later only to realize that something wrong is going on or a personal electronics is missing. This RETSA system will be much simple to make the users maneuver it. So it's all complex security systems with lapse and thus the reason for coming up with this security systems to curb these challenges.

This challenges has led to coming up with this system to provide an excellent system capable of sending alert in less than a minute, the system needs a simple power source of 5 voltages, user friendly system capable of meeting and handling with ease challenges faced by the current system. The purpose of this project is to identify the effect that the other systems has on insecurity trends. In CCTV, It is tedious to follow the channels while working to know who entered your house or room via the internet protocol cameras. RETSA system will solve many challenges by ensuring that the owner is notified at the right time to make a response. In addition the system is able to notify unlimited number of users or co-owners thus more effective than current systems.

5. Methodology

The use of questionnaires allows the analysts to collect facts from large number of people while maintaining uniform responses. Both closed and open questionnaires are to be used to obtain mainly qualitative responses from the friends and the staffs. Open ended questionnaires will be used to give a chance for the respondent to give an opinion and to give useful insight to the problem.

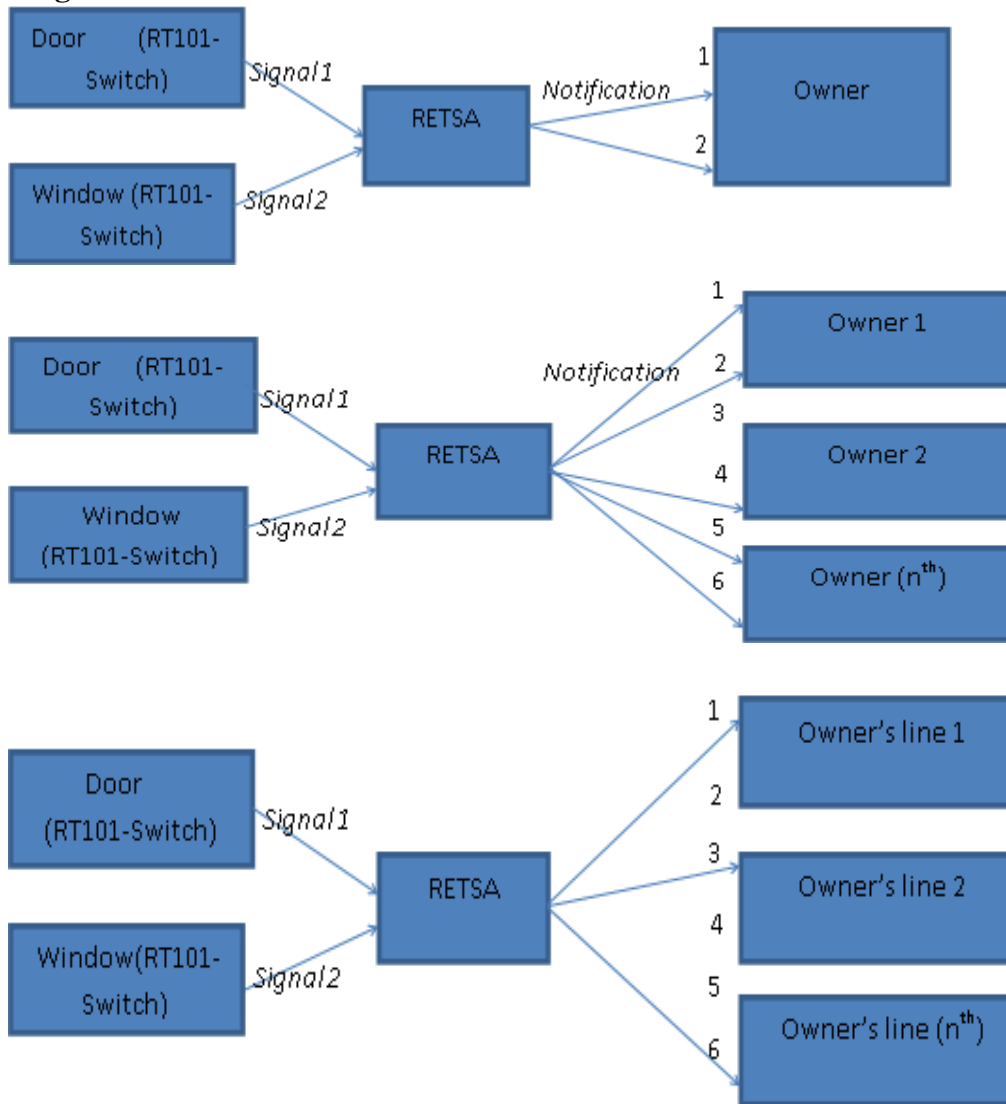
In observation method of data collection the researcher visits the proposed system and observes, records the flow of activities interested in. Observation will therefore bring more insight on how the manual system works.

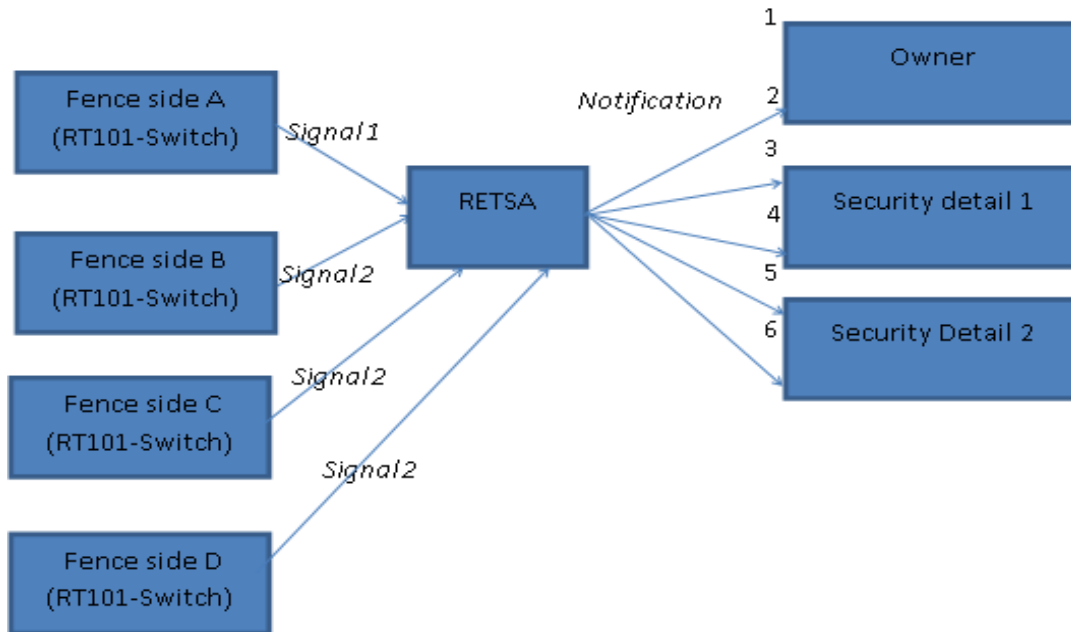


6. Results

This security system proves to be more effective than existing systems. It sends alert in less than a minute and also able to notify more than one person. RETSA is able to be implemented across many areas like; vehicle, homes, cow sheds, electronics and general plot fencing.

Diagrams





Recommendations and areas for further study

The national and county government, willing sponsors, partners and Kabarak University are urged to fully support an embrace this innovation to its full implementation like the RETSA system innovation. This will encourage students and innovators to innovate and invent thus improving livelihoods and one of the big four agenda of the government majorly industrialization. The areas for further study is; electronics and C programming to improve the whole system.

Conclusion

The developed system should be implemented for it meets the standards of security systems required in this current world and eliminates the limitations of the existing systems thus ensuring the security alert received within a shorter time than existing systems.