

Human Identifier Tag

Device to identify and rescue humans

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Abstract—If every human becomes an identifier then the humans will form into data themselves. Every human when attached with a particular digital identification in their body, this will form internet of things among them. A sensing device which is kept in human body makes the human as an identifier. The identifier in the body will store some information which can be accessed by security servers. This device will be placed in human body such that the human won't face any problem. In today's world there are many devices that user wears or uses to connect to others. The Human Identifier Tag will let the humans to connect to each other without even carrying anything as the device would be placed in their body. Scientific studies have been conducted to prove the working of this device without proving any harm to humans.

Index Terms—Introduction, Methodology, Comparison, Discussion, Conclusion, Future Enhancement.

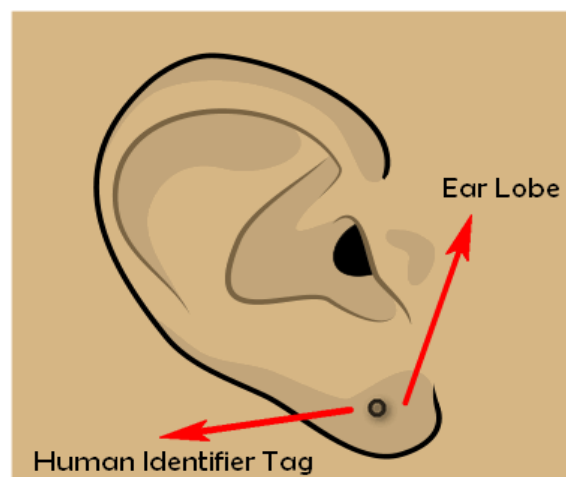
I. INTRODUCTION

Human Identifier Tag is a very tiny device which would be placed in a human's ear lobe. Ear lobe is a part of the body which found to be the best place to mount this device. This device can be placed once in human ear lobe and it can stay there forever. This part of human ear is safe and tested. The user will never feel any disturbance due to Human Identifier Tag.

The device is having a size of 0.3mm. As the size of device is very small, it does not harm or irritate user. The device has a signal receiving and sending section which manage the identifier tag. This device is accessed with a secure server through radio magnetic signals. This server shall be organized and maintained by government security officials.



This device stores user information into its memory. This information contains all details to verify the identity of the human. Each device is assigned with a unique identification number to distinguish with other devices connected to the same server.



II. METHODOLOGY

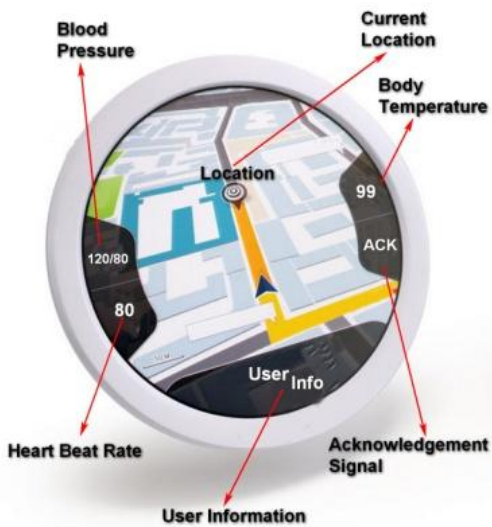
The approach which is used in the making of this device is purely based on scientific study and technical credibility.

Before discussing the working of the device, the design of the device is discussed.

A. Design

The device is circular in shape and has a size of 3mm. The device contains three sections.

- The sensing area
- The Memory
- Acknowledgement sender and receiver.



The sensing Area

The sensing area is a part of the device which senses and reads the heart rate, blood pressure and body temperature of the user. This area consists of a heat sensor and heart beat sensor. After sensing, it stores the respective result in the memory section.

The sensors keep sensing the required fields and warn the acknowledgement sender receiver if anything serious is sensed.

The Memory

This part of the device stores all the information about the human as well as it keeps updating the results from the sensing area. It erases the previous result from the sensing area when an updated value is available.

Acknowledgement Sender and Receiver

This section is responsible for the sending and receiving signals from the secure server. When the sensing device detects a heart beat which is too high or too low then it

commands the acknowledgement sender to pass the signal to the server. Same action is taken if uneven value of blood pressure and body temperature is detected. This section is also responsible for receiving signals from the server to provide the location of the device or the human.

B. Working

The working of the device can be discussed in reference to different scenario that the human may face.

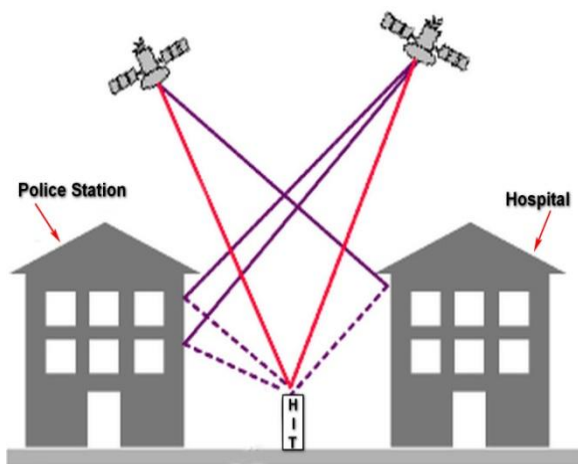
At the normal stage, the device monitor the heart beat, blood pressure and body temperature regularly. The device takes the body heat to work efficiently. The sensing area after collecting new information about human's condition, it updates the previously stored information.

The moment when the device detects too high or too low blood pressure, uneven heart rate and high body temperature, the device passes the command to acknowledgement sender. The acknowledge sender send a signal out of human body which is received by the nearest mobile tower. This signal finally reaches the secure server. At secure server, the inbuilt processor sends another acknowledgement signal to the human identifier tag. The Acknowledgement Receiver in Human Identifier Tag detects the signal.

This signal is passed to access the memory of the device. The processor at the server reads the memory in the tag and retrieves all details about the human condition. Now the server will find out whether the condition of human is normal or not. If it is not normal then the server immediately traces the location of the human through satellite mapping.

The server is already programmed to check the different conditions of human.

If the processor at the server detects the condition as a health issue, then the server automatically sends a message about the human to the nearest hospital from the location traced earlier.



If the processor at the server detects the condition as the human is in some danger, then the server automatically sends a message about the human to the nearest hospital and police station from the location traced earlier. The server also makes an automated phone call to the above. The server will keep tracking the location of the human to guide the police and hospital.

To understand the use of Human Identifier Tag in depth, two situations are considered.

During any natural disaster like tsunami and earthquake, it is very much difficult to trace humans. But if the human has the Human Identifier Tag, then it is easy to detect and save them.

Today there is a major issue with the women security. If the woman have the Human Identifier Tag and if someone attacks on her, then automatically the Human Identifier Tag will send signal to server for her rescue. The server will bring police quickly to the scene and even guide them with the exact location of the victim. The server also informs relatives and friends of the human immediately about the situation.

Only authorized secure server officials can access the device so there is no question about the security and privacy of the human.

III. COMPARISON

There are two other creations which resemble working of the Human Identifier Tag. A wrist band which tracks the human location and makes the human behave as an identifier. The other is software which sends message to friends and relative indicating that the human is in danger. The software also sends the current location of the human. The Human Identifier Tag is a permanent fix to a human

body and informs about the danger to the nearest police station, nearest hospital, relatives and friends.

IV. DISCUSSION

The band and the software mentioned above does the task but there are many limitations to them. The human always have to wear the band for getting traced. The human also have to carry mobile to send messages indicating danger. But in this case the human is not traced but the mobile phone will be traced. If the human lost the phone then the software will not do any good. Whereas the Human Identifier Tag do not require human to send messages as it will automatically sense the situation and takes the necessary actions. The human need not to carry anything to get help as the Human Identifier Tag is placed inside human body.

V. CONCLUSION

As mentioned above the human need not to wear or carry anything to ask for help. When the user is in danger, he might not know the contact details of nearest police station or hospital. In that case it is almost impossible for the human to get help. But the Human Identifier Tag senses the problem and automatically takes the necessary actions.

VI. FUTURE ENHANCEMENT

Human Identifier Tag can be used as a mandatory inclusion to human body such that every human can be traced at the time of disaster by the security department. It can be further enhanced by allowing all government departments to access the Human Identifier Tag for the verification of the human. This device can be placed in other animals also.

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