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RESOLUTE MOBILE CULPRIT IDENTIFIER AND ACQUIRER

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Abstract: *Smartphone plays an important role in ones day to day life. We have many smartphone tracker apps to find it when it get stolen but all those app fail to operate in switch off condition and even if we find the stolen smartphone we fail to identify the person who was responsible for the theft. Here in this paper we focused on finding our stolen smartphone and even the person who was responsible for the theft ,by using his fingerprint even when the smartphone is switched off by using touchscreen fingerprint sensor, GSM ,RTC,GPS.*

KEYWORDS: GPS, GSM, RTC, finger print sensor, code convertor

I INTRODUCTION

Smartphones is one of the essential gadget in today's day to day life .The smartphone theft had been increased during recent years, so to reduce the increase in smartphone theft we need to eliminate the root cause, the people who is responsible behind this action. During recent years the smart phone developers have come up with many antitheft or phone tracking apps but all those facilities fail to locate or find the culprit who stole the mobile. So to help the smartphone developers and users to locate the phone and culprit we came up with this solution.

II CONSTRUCTION

REAL TIME CLOCK
It works like a counter which is capable of running in background even when the smartphone is switched Off, we use it because of its accuracy, and its power and it can be run effetely by using low power battery or by the backup battery
GSM
Global System for Mobile communication (GSM), this technology helps in sending SMS to the backup mobile number, it's a second generation (2G) technology used in this device. This network technology is divided into BSS-base station subsystem NSS-Network switching subsystem

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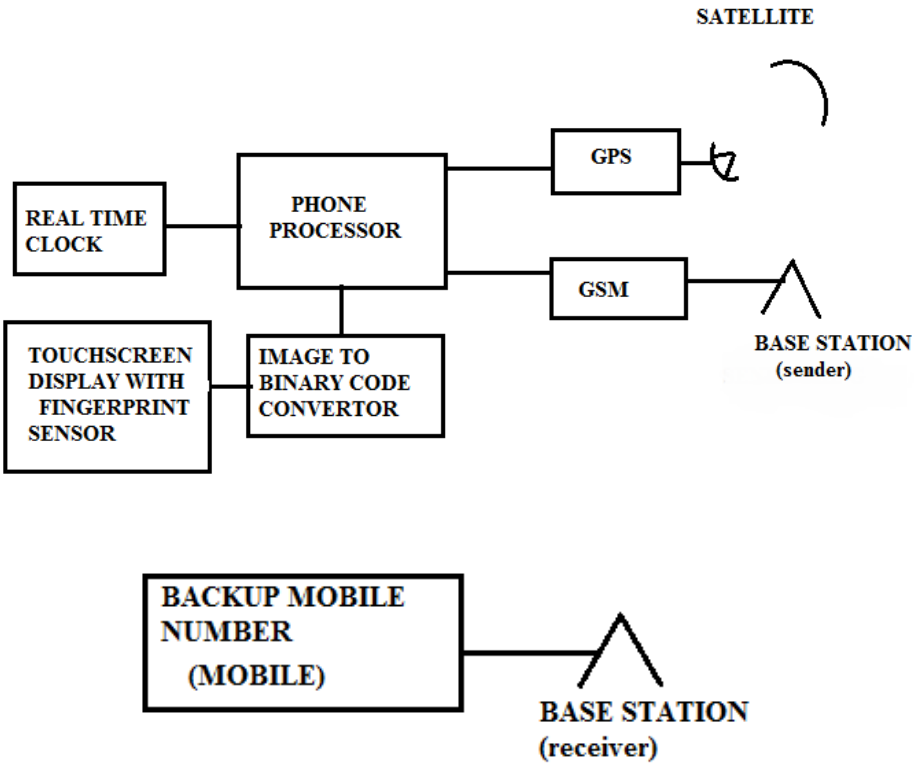

Fig 1: block diagram of mobile culprit identifier

NSS-Network switching subsystem

OSS-Operation support system

GPS

This technology is used for navigation, tracking purpose with help of the satellite. In this the smartphone uses this technology to get the GPS coordinates from the nearer satellite. The location coordinates will be in latitude and longitude.

TOUCHSCREEN DISPLAY FINGERPRINT SENSOR

Its main operation is to take necessary fingerprints of the person who stole the mobile. In this we use the whole smartphone screen as fingerprint sensor. So that it will be useful to take fingerprints. This rebuilds the image of the fingerprint.

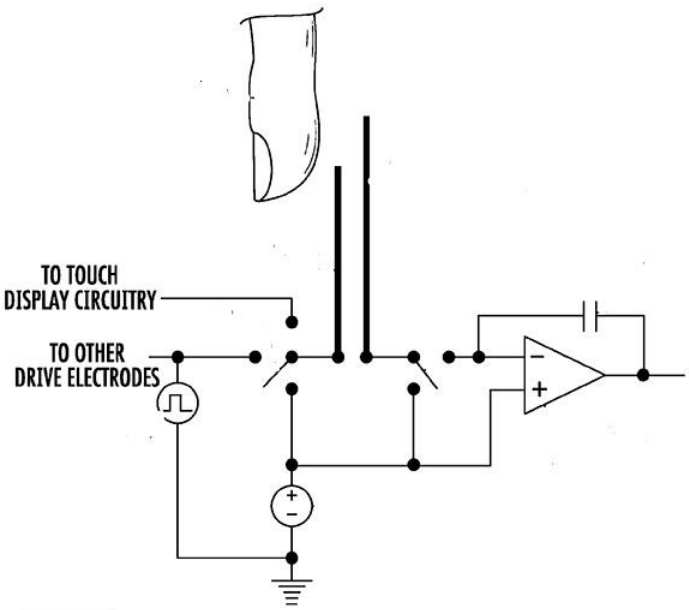

Fig 2: fingerprint sensor on the display screen.

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III WORKING:

In this when the smart phone device gets switched off .the RTC in the device starts to operate with help of backup battery In the device. RTC starts its counting operation and activates the GSM for every one hour. This GSM when activated checks for the base station. It verifies the present base station and the registered base station. If it is in registered base station location for the particular time period no action is taken place. If the device is not in registered location for the

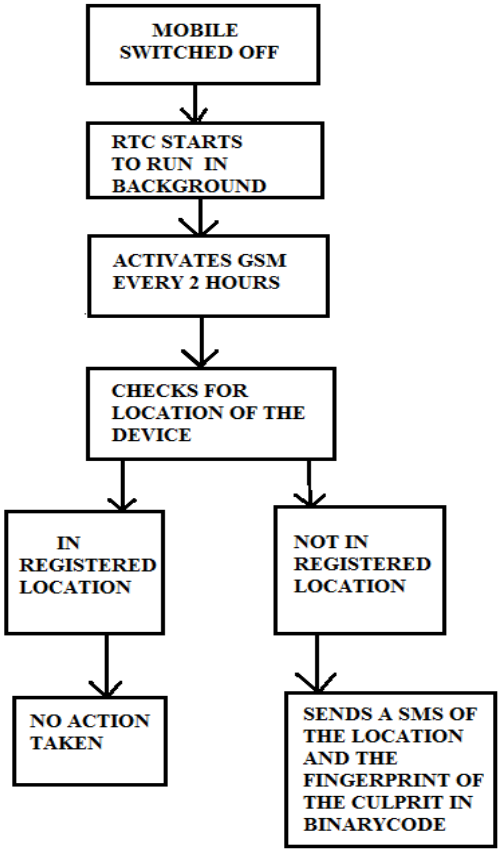

Fig 3: flow diagram of the mobile acquirer and culprit identifier.

Particular time period. Then the GPS gets activated and gets the necessary location coordinates of the phone and along with the fingerprint of the person who operated the phone after stolen. This fingerprint is converted into binary code like 0 and 1 by using code converter. After converting into binary number those code along with the GPS location is sent to the backup mobile number as SMS. So that by using those coordinates we can find the location and with help of the binary code we can convert into image and with help of this fingerprint image we can very it with id (voter ID, other ID issued by government).

IV RESULT

Before using the device the user of the smartphone must registered his details such as the location and timing of the smartphone in his device.

TIME	LOCATION
8am-10am	Gsm location a
10am -8pm	Gsm location b
8pm-10pm	Gsm location c

Table1: represents the location and time period of the device registered

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After entering the location and timing details, then the user have to enter the backup mobile number to which the details like location coordinates and the binary coded fingerprint image will be sent as SMS.

Fig 4: entering of back up mobile numbers

So, now when our mobile get stolen, and switched off by the person or switched off due to no battery. This activates the RTC and it starts it counting process , now here it get GPS coordinates or the positions of the stolen device along with the finger print which is converted into binary form and is sent as SMS to the backup mobile number as shown in figure

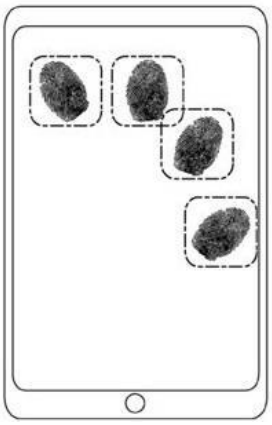

Fig 5: shows fingerprint of the culprit on the display.

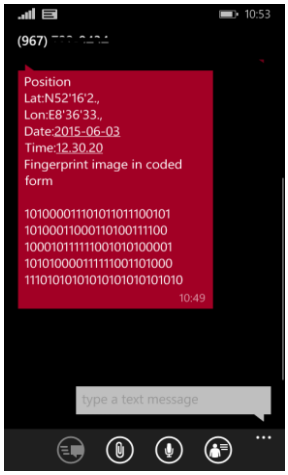

Fig 6: message received to the backup number from the stolen smart phone.

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Fig 7: shows the match found to the fingerprints on the smartphone screen.

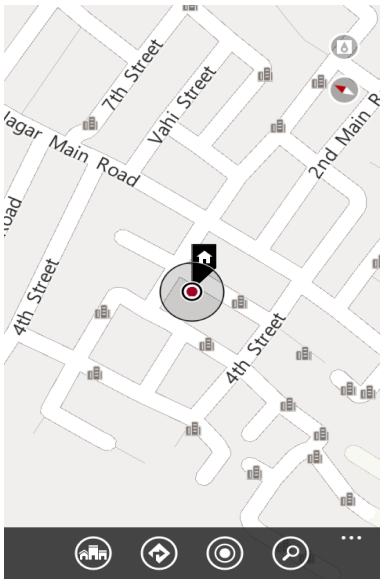

Fig 8: shows the location of the stolen mobile phone, which can be tracked using the GPS coordinates.

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