

**FORM 2**

THE PATENT ACT 1970

(39 OF 1970)

AND

The patent rules, 2003

**PROVISIONAL SPECIFICATION**

(See section 10: rule 13)

**TITLE OF INVENTION**

System for automatic SIM card removal

**APPLICANT**

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**PREAMBLE TO THE DESCRIPTION**

**PROVISIONAL**

Following specification particularly describes the invention and the manner in which it is to be performed.

## **DESCRIPTION**

### **Technical field of invention:**

5 [001] The present invention in general relates to the field of electronics engineering and more specifically to automatic SIM card removal system which provide security to cell phone and protect data of mobile phone.

### **Prior art:**

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[002] Now a day's everyone is using phone and it becomes part of human life it contain or having storage of lots of private or secure data if someone stolen phone then it will be very difficult to trace the phone as thief remove the SIM card as soon possible hence there is need of such improved system, which does not allow any stranger to remove SIM card from phone and SIM tray not remove by any SIM eject tool, wherein SIM will eject only by command of owner. By this owner or police gets more time to trace phone, if someone stole phone or have lost it.

20 [003] CN203574181U discloses SIM card tray automatic ejection device and an electronic device thereof. The SIM card tray automatic ejection device comprises a card tray for placing a SIM card and a card support for accommodating the card tray. An ejection mechanism for ejecting the card tray is disposed at the bottom of the card tray. A locking mechanism and an unlocking mechanism are disposed on one side of the card tray. The card tray is provided with a locking groove for cooperating with the locking mechanism. The ejection mechanism includes a seat body and a card tray ejection member, wherein one end of the card tray ejection member presses against the seat body while the other end presses against the bottom of the card tray. The electronic device comprises the SIM card tray automatic ejection device. According to the SIM card tray automatic ejection device and the electronic device thereof, the electronic device adopting

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the SIM card tray automatic ejection device can realize automatic ejection of the SIM card tray; SIM card loading or unloading is convenient; the technology sense of using such an electronic device is improved; and at the same time, the service life and the elegance of the appearance of the electronic device are improved.

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[004] CN104953400A discloses an SIM (subscriber identity module) card connector having an automatic software driver ejection function and a terminal device comprising the SIM card connector. The SIM card connector having  
10 the automatic software driver ejection function comprises a base and a card holder for accommodating an SIM card, wherein the card holder is movably arranged on the base; a driving device, a push rod assembly and a detection device are further arranged on the base; when software receives a card holder ejection instruction, the driving device outputs power according to the card  
15 ejection instruction and drives the push rod assembly to move from a state in which the push rod assembly is locked with the card holder to a state in which the push rod assembly is unlocked with the card holder, a radial spring is arranged between the push rod assembly and the card holder, and the unlocked push rod assembly ejects the card holder out under the action of the radial spring; when the  
20 detection device detects insertion of the SIM card, the driving device outputs power according to a card insertion instruction and drives the push rod assembly to move from the state in which the push rod assembly is unlocked with the card holder to the state in which the push rod assembly is locked with the card holder, so that the SIM card is ejected out automatically in a software manner, a card  
25 retrieve pin is not needed, and the operation is more convenient.

[005] CN105187080A discloses an intelligent terminal capable of realizing automatic SIM card popup. The intelligent terminal comprises a card slot and a card holder, wherein the card slot accommodates the card holder, and  
30 the card holder is used for holding an SIM card. The intelligent terminal also comprises a user operation module used for obtaining an SIM card popup

command of a user; an automatic control module used for controlling the SIM card to be popped up automatically when receiving the SIM card popup command; and an electromagnetic relay connected with the card holder and used for driving the card holder holding the SIM card to be popped up automatically  
5 when being powered on through the control of the automatic control module. The intelligent terminal can control the popup of the card holder thereof through the APP, thereby allowing user operation to be easy, preventing mechanized operating mode, enabling the intelligent terminal to be further improved on the road of intelligentization, and providing better experience feeling for the users.

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**Object:**

[006] Primary object of the present invention is to provide system for automatic SIM card removal which gives security to cell phone and protect data in cell  
15 phone.

[007] Another object of the present invention is to provide or develop a system which takes input from the owner for ejection of SIM card.

20 [008] Other objects, features and advantages will become apparent from detail description and appended claims to those skilled in art.

**Summary of the invention :**

25 [009] Accordingly following invention provides system for automatic SIM card removal. The proposed invention is based on SIM tray slider which is driven either by a motor or, and different mechanism. This system works on programming and comprises of phone existing components i.e. finger print scanner with the combination of others. Along with additional small button, at the  
30 contact of or between phone and back panel which provides additional security if someone try to open it for remove the SIM then system gets activated.

**Detailed description of Invention:**

5 [0010] The present invention relates to system for automatic SIM card removal or ejection or insertion. Herein the system for phone and related to the SIM card tray in phone which carry SIM and memory card in phone is provided. The proposed invention is based on SIM tray slider which is driven either by a motor or, and different mechanism. The primary objective of proposed invention is to protect the phone owner data, this system works on programming and phone existing components i.e. finger print scanner with the combination of others.

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[0011] Herein system provided with a function if any stranger put his/ her finger on phone finger print scanner then phone automatically scan the finger print and forward the digital print of finger print on registered e mail address or, and any alternate account which is saved by owner.

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[0012] As the mobile phones will only shows the location till SIM card are in phone. Presently any one can remove SIM tray by SIM eject tool very easily and change SIM card which is most convenient way to track the location of phone hence if phone not allow to remove SIM without its owner inputs it becomes very helpful to get back phone . If someone tries to erase all date, have to start phone and till now SIM are inside of phone and by this owner or police can trace phone.

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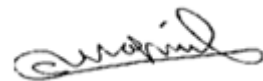
[0013] In the preferred embodiment of the present invention (system for SIM remove), user or owner have to give identity. SIM tray comes out from phone like c.d. drive panel and also gets back in phone. Only first time setup owner can change setting and add any setting to phone which also not allow anyone to access phone or change any internal setting. To remove SIM there user or owner can make setting>option>SIM>put finger>eject. So there is no another way to remove SIM without owner.

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[0014] Along with this there is additional arrangement is provided for making system more secure, a small button is provided at the contact of or between phone and back panel if someone try to open it for remove the SIM it active the system and send us the location if phone is switch off then this additional system gets activated .

[0015] Additional advantages and modification will readily occur to those skilled in art. Therefore, the invention in its broader aspect is not limited to specific details and representative embodiments shown and described herein. Accordingly various modifications may be made without departing from the spirit or scope of the general invention concept as defined by the appended claims and their equivalents.

**Dated this 09<sup>th</sup> day of Feb 2019**

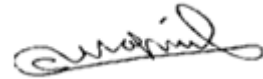


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## **ABSTRACT**

The present invention relates to system for automatic SIM card removal wherein SIM tray come out from phone and also get back in phone by software driver ejection function. The proposed system provides security to cell phone and protects data in cell phone in case of stolen or lost because phone owner have to set fingerprint for phone security that well also use for SIM eject from phone, SIM will eject only by command of owner.

**Dated this 09<sup>th</sup> day of Feb 2019**



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