**Abstract:** The invention relates to a Central Equipment Identity and Registering System comprising; the mobile phone which gets service from the GSM network and determine from which GSM number and at which time they get service from the main terminal, send the service information and IMEI information to the database to match them, determine if there is any other device that gets service at the same time and matching, after the mentioned matching process if the mobile phone is indicated as a cloned one it is reported to the GSM Operators to prevent the service procurement of that cloned mobile phone.
CENTRAL EQUIPMENT IDENTITY AND REGISTER AND CONTROL SYSTEM

Technical Field

The invention relates to recording the IMEI numbers which include the mobile phones' information.

The invention particularly relates to preventing service procurement of the unregistered and stolen mobile phones by Central Equipment Identity and Register and Control System.

Background of the Invention

In the daily human life mobile phones have become indispensable. One of the most legal problems which is about the usage of the mobile phones is usage of unregistered devices.

Stolen Mobile phones which are not registered by the GSM operators can take advantage of the services such as; calls, SMS, MMS by using different sim-cards.

The phones which are brought by the importers and persons, who come from oversea, can become utilisable without paying any tax thus recording and trailing procedures become difficult.

Similarly stolen mobile phones can be available by using any sim-card, and preventing the usage of these mobile phones becomes impossible from time to time.

Unregistered device's usage damages to the national economy. For this reason these unregistered devices usage needs to be prevented. IMEI information includes mobile phones' brand and model acquirements. Every mobile phone has a unique IMEI and the phones can be identified by these IMEI information.
Current recording and trailing systems have too many deficiencies because of their software and hardware technologies and they cannot secure the requirements which are related to the speed and efficiency. Unregistered devices (CLONE) identification analyses are not adequate and this situation is unsafe for the system.

The wrong interaction methodology selection causes incoherencies between the environment units (such as GSM Operators and importers) and this brings about displeasure of service procurement.

In another CLONE (unregistered device) method converts low tax model mobile phones' IMEI's to high tax mobile devices by integrating them and old model devices usage are terminated. Because of terminating the old device unless making another CLONE from this number, mentioned devices identification is difficult.

Because of the disadvantages which are mentioned above, there has been a new seeking for the mobile devices IMEI numbers’ recording and trailing.

Object of the Invention

Object of the invention is introducing a system which eliminates the current disadvantages these are mentioned above.

Another object of the invention is preventing the unregistered service procurement and display a system which intercepts the national economy damage.

Another object of the invention is identification of the unregistered mobile phones and terminating the usage of the said phones. Another object of the invention is preventing the IMEI numbers cloning and develops a system that is unattractive of stealing the mentioned mobile phones.
Another object of the invention is convenience of the identification process of the mentioned cloned phones by securing the speed and reliability.

Another object of the invention is building a quick and reliable system which prevents to get service procurement form the GSM operators of the cloned phones.

**Description of the Figures**

Figure-1 Mobile device recording system's schematic view

**Reference Numbers**

1. Mobile Phones  
2. Main Terminal  
3. Database  
4. GSM Operator  
5. Office of the Public Prosecutor  
6. Identity Corroborant  
7. Importer databank

**Detailed Description of the Invention**

The invention relates to identification of the unregistered and stolen mobile phones and preventing the service procurement of them and it is called as mobile device recording and controlling system.

In Figure-1 mobile device recording system's schematic view is shown.

The invention consist of the mobile phone(1) which is determined by the IMEI Information, Main terminal(2) that determines when the mobile phone(1) gets the service procurement (such as Call, SMS, MMS) in which hour and second,
The database(3) which matches the IMEI numbers which are loaded to the IMEI information from mentioned main terminal, The GSM Operator(4) which secures preventing the service procurement when the mobile phone is identified as a cloned phone.

Database (3) is the center where the cloned phones are identified. IMEI and Identity information controlling take advantage of the database (3). Identity corroborates (6) make the control of the user identity. From the database which keeps the identity records according to the countries, controlling can be made momentarily. On the Mernis Database controlling system that is used in Turkey can be shown as an example. Importer databank (7) is the place where the device information is kept from device importer association.

The mentioned cloned mobile phones (1) can be taken service from the GSM operators (4) by several methods. One of the method is recorded IMEI numbers which can take service from the database (3) are accrued and nominated to the illegal mobile phones as the IMEI numbers. Another one is accruing of the illegal IMEI numbers which are not take place in the database.

Service procurements (such as SMS, GSM, GPRS) that belong to the mobile phones (1) which take service from over the GSM networks are being sent over at least one main terminal (2) to the database (3).

Every day's data are recorded as separate tables to the mentioned database (3). The histories which belong to each single IMEI are kept in the IMEI History Table, this table indicates which GSM number and at which time interval the mentioned mobile phone's (1) IMEI gets service and if is there exists any different GSM number and IMEIs that get service at the same time it means it is a cloned mobile phone (1).

The IMEI's which are determined as cloned are sent to the GSM operators again for preventing the service procurement and they take place in the black
list. The GSM operators (4) terminate to give service to the IMEI's which are in
the black list and the cloned mobile phone (1) information is forwarded to the
user by sending "SMS".

In the preferred invention's application the mobile phones' information which
use cloned IMEI are sent online to the GSM operators (4) and public prosecutor
(5) at the same time.

If the service terminated device is the actual owner of the mobile phone (1), the
service procurement is secured by matching process on the database (3) and
the device can be able to get service procurement again.

The IMEI's which are not take place on the said database (3) can be recorded
after they have the necessary provisions.

Another cloned mobile phone (1) producing method is very different from the
others and its identification method is difficult. In the mentioned method the
IMEI numbers which belong to the integrated old model mobile phones (1)by
the illegal ways and the old mobile phones (1) are not used.

To prevent the mentioned clone system there has been used a method which is
given below.

TAC number (which contains IMEI's first 6 or 8 section and determines the
mobile phones brand and model) is recorded on the database (3) at the time of
service procurement.

The said main terminal gets the TAC code of the mobile phone (1) and
forwards it to the database when the mentioned mobile phone (1) is connected
by the GPRS.
From the TAC codes which include the GPRS records of the IMEIs', it is searched from the database (3) that is there any mobile phone (1) which can give GPR service. If this TAC code is unable to give that service, it means the IMEI of the mobile phone (1) which secures GPRS connection is cloned and it is added to the black list and prevented to get service.

The protective scope of this application is determined in this section of the claims, and the scope may by no means be limited to the description above provided only for exemplary purposes. It is obvious that a person skilled in the art may provide the innovation put forward by the invention also by using the similar embodiments and/or may apply this embodiment to the other fields used in the relevant art for similar purposes. Consequently, such embodiments would obviously lack the criterion of the innovative step.
CLAIMS

1. A Central Equipment Identity and Registering Method for identifying and preventing of the service procurement of the unregistered and stolen mobile phones(1), comprising the steps of ; identifying the mobile phones (1) taking, service from other the GSM networks (3) from the least one main terminal (2), getting the service procurement (such as SMS, GSM, GPRS) at which GSM number and at which time interval, interrogating the loaded IMEI information that is gathered from the terminal (2) and after the interrogating process if the said mobile phone (1) is determined as a cloned device, there has been given a report to the GSM operator (4) which secures to terminate the service procurement of the said mobile device.

2. A Central Equipment Identity and Registering Method according to Claim 1, where in; recording the incoming data from the mobile phone (1) as separate tables to the said database.

3. A Central Equipment Identity and Registering Method according to Claim 1 and 2, where in; recording of every history about the service procurement of the mobile phones' IMEI to a table.

4. A Central Equipment Identity and Registering Method according to anyone of the preceding claims, where in; after the identification of the cloned mobile phones (1) sending them to the GSM Operators (4) and preventing the service procurement of them and concurrently reporting to the public prosecutor (5) and starting the legal procedure.

5. A Central Equipment Identity and Registering System for identifying and preventing of the service procurement of the unregistered and stolen
mobile phones (1), comprising: identified mobile phone (1), a main
terminal (2) which indicates when the mobile phone (1) gets Calls, SMS,
MMS), database (3) that matches the loaded IMEI information and IMEI
numbers, if the device will be identified as a cloned device to prevent
service procurement of the device there has been sent a report to the
GSM Operator (4).

6. A Central Equipment Identity and Registering Method for identifying and
preventing of the service procurement of the unregistered and stolen
mobile phones (1), comprising the steps of; when said mobile phone (1)
gets the service TAC numbers (consists of IMEI's first 6 or 8 units and
identifies the code of the mobile phone's brand and model), which is
connected by the GPRS connection with the mobile phone and
transmitting on at least one main terminal (2) to the said database (3),
from the IMEI's TAC codes which includes the GPRS records indicating
if the mobile phone (1) is able to give GPRS service from the database,
if the TAC code is unable to give service the mobile phone's (1)
information which secures GPRS connection are reported to the GSM
Operators (4) to prevent the service procurement of that mobile phones.

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